

# Cleaner

FOR DRAIN AND PIPE CLEANING, INSPECTION AND REHABILITATION PROFESSIONALS

www.IFindLeaks.com | \$5.00 U.S. | MAY 2012

## CORE STRENGTH

TIGHTLY FOCUSED SERVICE OFFERINGS DRIVE  
FLORIDA CONTRACTOR'S SUCCESS **PAGE 12**

**RESIDENTIAL AND COMMERCIAL  
SEWER AND PIPE MAINTENANCE**

### **TECH PERSPECTIVE**

Understanding the real cost of doing business

### **TOUGH JOB**

Massive California lateral lining project

### **MONEY MACHINES**

Great branding multiplies fleet size

# Big Jet Power—No Trailer!



## JM-3080 Jet-Set™

**P**ut trailer jet power where you need it – even in hard to reach places. The powerful JM-3080 blasts grease, sediment and ice from 4" to 8" lines up to 300 ft. long. Tip the trim, precisely balanced jet onto the rear wheels and one person can easily maneuver it into position. Try that with a trailer jet! With a removable 300 ft. capacity hose reel, 20 hp (614 cc) Honda engine and 3000 psi/ 8 gpm pump, the JM-3080 is like a trailer jet – without the trailer!

Removable 300 ft. capacity hose reel is mounted on a heavy-duty frame.

12 gallon buffer tank protects the pump when there isn't enough water flow.



20 HP (614 cc) Honda engine drives 3000 psi/ 8 gpm pump through 2 to 1 gear reducer.

Vibra-pulse on-demand helps propel the hose down longer runs and tighter bends.

Precisely balanced jet makes it easy to maneuver the machine into position.

**General**  
**PIPE CLEANERS**  
[www.drainbrain.com](http://www.drainbrain.com)  
MADE IN USA

For more information, contact the Drain Brains® at 800-245-6200 or 412-771-6300 or visit [www.drainbrain.com/jets](http://www.drainbrain.com/jets).

**The toughest tools down the line.™**

© General Wire Spring 2012



Scan QR code to view Jet-Set video catalog.



# VAC-CON

**MORE POWER TO YOU**

## PRE-OWNED EQUIPMENT



**2005 VAC-CON V321LHAD**

- 2005 IH 7600
- CAT C-13 380 HP / 10-SPD
- 50 @ 3000 / DEUTZ 138 HP
- Mileage: 31,000

**\$195,500**



**2005 VAC-CON V312LHAE**

- 2006 INTERNATIONAL 7400
- 300 HP / ALLISON 3000RDS
- 80 @ 2000 / DEUTZ 138 HP
- Mileage: 76,600

RECONDITIONED **\$205,000**



**2001 VAC-CON V312LHA**

- 2002 Sterling LT7501
- CAT 275 HP / Allison MD3060
- 60 @ 2000 / Cummins 110 HP
- HYDRO-X PACKAGE

**- SOLD -**



**2007 VPD2130BHU/500**

- 2007 STERLING L7501
- CAT 300 HP / ALLISON 3000RDS
- 30 @ 3000

**\$120,000**



**2006 VAC-CON V312LHAD**

- 2007 STERLING LT7501
- CAT 275 HP / Allison 3000RDS
- 50 @ 3000 / DEUTZ 138 HP
- Mileage: 23,000

**\$209,500**



**2000 VAC-CON VPD3609SHA**

- 2001 IH 2654
- 275 HP / Allison MD3060
- 60 @ 2000 / John Deere 4045T
- Mileage: Approx 45,000

**\$145,000**



**2000 VAC-CON V312LHA/1000**

- 2001 International 2554
- 275 HP / Allison MD3060
- 50 @ 3000 / Cummins 110 HP

RECONDITIONED **\$135,000**



**2004 VAC-CON V311LHAD**

- 2004 Sterling LT7501
- CAT 275 HP / Allison MD3060
- 65 @ 3000 / DEUTZ 138 HP
- Mileage: 88,200

RECONDITIONED **\$195,000**



Ultimate Lease Hotline:  
**888-817-1757**

969 Hall Park Drive • Green Cove Springs, FL 32043 U.S.A.  
Tel: 904-284-4200 • Fax: 904-284-3305  
www.vac-con.com • vns@vac-con.com

**WARTHOG®**  
**WGP-1™**

**MAXIMUM  
 PULLING POWER**

**UP TO 40%  
 MORE PULLING  
 POWER**

**WGP-1™**  
 Maximum Puller

Our new **WGP-1™** is designed to produce up to 40% more pulling power than our **WG-1 CLASSIC™**. The rear facing jets are angled more sharply and the centralizer fins have been streamlined. We've also added two more centralizer fins for a total of six. The result is more pulling power to navigate longer lines and moderate inclines, plus easier retrieval of the tool.

Features 5 jet ports, with a boring jet offset at 15° and four jets at 155°, plus the inlet port is available in either 1" NPT or BSPP. This tool will greatly benefit contractors with operating pressures of 3000 psi or less (172 bar or less).

**KEY FEATURES:**

- **Up to 40% More Thrust**
- **Cleans 8"-36" Lines**
- **Up to 3000 PSI**
- **50-80 GPM Flows**
- **Durable Stainless Steel**

**NEW MODELS!**

Available in May 2012

**WHP-3/4 and WHP-1/2**

For cleaning 6-18" lines.



**WGP-1™ SPECIFICATIONS**

MODEL	WGP-1™	
Maximum Pressure	3000 psi	200 bar
Operating Pressure	1500-3000 psi	100-200 bar
Rotation Speed	150-300 rpm	
Flow	50-80 gpm	190-300 l/min
Flow Rating	4.6 Cv	
Pulling Force	100-140 lb	450-623 N
Inlet Connection	1 NPT or BSPP	
Length	9.1 in.	231 mm
Diameter Incl. Centralizer	4.8 in.	122 mm
Ports	5 x 1/8 NPT	
Weight Complete	10.9 lb	4.9 kg

**STONEAGE**  
 WATERBLAST TOOLS®

**Order the Industry's  
 strongest pulling sewer nozzle.**

**WWW.WARTHOGDEALERS.COM**

ROVER X™

# The Power of One



ROVER X 130 crawler and RCX90 camera accessorized with various combinations of lift, carriage, auxiliary lamps and 12 available wheel sets.

## One System Flexible Enough for Any Inspection.

Twelve wheel options—plus camera lift, carriage and lamp accessories—mean a single ROVER X™ crawler transforms in seconds to inspect any line six inches diameter and larger. Built on an expandable digital architecture, this system not only lets you perform side-scanning and laser-profiling, it adapts to support any capability you can think of ... even ones that haven't been invented yet.

## One Workflow in the Palm of Your Hand.

ROVER X's versatile pendant lets you do everything, from maneuvering to recording digital video and images, logging and measuring observations, and generating reports. Network connectivity allows remote diagnostics and maintenance, as well as automatic firmware updates. (The latest update adds tools to measure defect size, flow capacity, and lateral angle, plus macro for one-button crawler return.)



maneuver

view/record

measure

report

link

Get the Full Story

Send your mailing address to [rvx@envirosight.com](mailto:rvx@envirosight.com)



See ROVER X in action. Scan or visit us at:

[www.youtube.com/user/roverx](http://www.youtube.com/user/roverx)

# Envirosight

(866) 936-8476 • (973) 252-6700

[www.envirosight.com](http://www.envirosight.com)



VeriSight Pro



QuickView

features

**12 Core Strength**  
By Peter Kenter



**On the cover:** John McCormick, owner of I Find Leaks, has spun off three successful businesses from his original leak detection and jetting service. In six years he's gone from a one-man operation to employing 25. (Photography by Cliff McBride)

**32 Adapting to Change**  
California contractor maintains success by keeping a finger on the pulse of technology and new services.  
By Marian Bond

**42 Tech Perspective: Bidding for Success**  
Understanding the real cost of business will keep you profitable.  
By Jim Aanderud

**58 Portable Jetter & Cable Machine Company Directory**

departments

**10 From the Editor: Preventing Disaster**  
Educating customers on proper maintenance is a win-win proposition.  
By Luke Laggis

**22 Safety First: A Pound of Cure**  
Prevention programs yield safer workplaces with little hassle.  
By Luke Laggis

**26 Better Business: Buying a Building**  
Diligence with sales contract language can eliminate unpleasant surprises when it's time to purchase a new property.  
By Fred S. Steingold

**48 Money Machines: Multiplier Effect**  
Smartly branded trucks, a clever company name and marketing consistency boost a Texas drain cleaner's business.  
By Ken Wysocky

**54 Tough Job: Root of all Evil**  
Massive lateral lining project resolves eucalyptus nightmare.  
By Scottie Dayton

**62 Product Focus: Residential and Commercial Sewer and Pipe Maintenance**  
By Briana Jones

**72 Case Studies: Residential and Commercial Sewer and Pipe Maintenance**  
By Scottie Dayton

**74 Money Manager: The Loyalty Club**  
Rewarding regular customers for their business will help your bottom line.  
By Erik Gunn

**76 Industry News**

**78 Product News**  
Product Spotlight: Two-month resin adds flexibility to steam-cured lining  
By Ed Wodalski

COMING IN JUNE

**Special Issue: Municipal and Industrial Sewer and Pipe Maintenance**

- Tough Job: New lining process prevents disaster
- Money Manager: The best bets to collect on debt
- Money Machines: Gamajet system improves efficiency and safety
- Profile: Meeks Plumbing, Vero Beach, Fla.

Cleaner

FOR DRAIN AND PIPE CLEANING, INSPECTION AND REHABILITATION PROFESSIONALS

www.cleaner.com

Published monthly by:



1720 Maple Lake Dam Rd., PO Box 220  
Three Lakes, WI 54562

© Copyright 2012 COLE Publishing Inc.  
No part may be reproduced without permission of the publisher.

In U.S. or Canada call Toll-free 800-257-7222  
Elsewhere call 715-546-3346  
Email: info@cleaner.com Web: www.cleaner.com  
Fax: 715-546-3786

Office hours Mon- Fri., 7:30 a.m.-5 p.m. Central Time

**SUBSCRIPTION INFORMATION:** A one year (12 issue) subscription to *Cleaner* in the contiguous 48 U.S. states costs \$15.50 (24 issues for \$25; 36 issues for \$35). Subscriptions to Canada or Mexico cost \$27.50 per year (24 issues for \$52). Subscriptions to all other foreign countries cost \$150 per year. Subscribers are guaranteed monthly delivery of the paper. To subscribe, send company name, mailing address, phone number and check or money order (U.S. funds payable to COLE Publishing Inc.) to the address above. MasterCard, VISA, Amex and Discover are also accepted. Supply credit card information with your subscription order.

**CLASSIFIED ADVERTISING:** RATE: No Photo Classified \$25 for 20 words, each additional word \$1. All classified advertising must be PAID IN ADVANCE. DEADLINE: Classifieds must be received by the first of the month for insertion in the next month's edition. PHONE-IN ADS ARE NOT ACCEPTED. Ads may be faxed only when charging to MasterCard, VISA, Amex or Discover. Please supply all credit card information with faxed ads. Be sure to include your phone number (with area code) in your ad. Make checks payable to COLE Publishing Inc. and mail with classified ad to the address above. CLASSIFIED ADVERTISING APPEARS NATIONWIDE AND ON THE INTERNET. Not responsible for errors beyond first insertion.

Our subscriber list is occasionally made available to carefully selected companies whose products or services may be of interest to you. Your privacy is important to us. If you prefer not to be a part of these lists, please contact Nicole at nicole@colepublishing.com.

**DISPLAY ADVERTISING:** Contact one of our sales staff below at 800-994-7990. Publisher reserves the right to reject advertising which in its opinion is misleading, unfair or incompatible with the character of the publication.



Kayla Wilkowski Jim Koshuta

**REPRINTS AND BACK ISSUES:** Visit www.cleaner.com for options and pricing. To order reprints, call Jeff Lane at 800-257-7222 (715-546-3346) or email jeffl@colepublishing.com. To order back issues, call Nicole at 800-257-7222 (715-546-3346) or email nicolel@colepublishing.com.

**CIRCULATION:** Circulation averages 26,800 copies per month. This figure includes both U.S. and international distribution.



**PUMPER & CLEANER ENVIRONMENTAL EXPO INTERNATIONAL**

Education Day: February 25, 2013  
Exhibits Open: February 26 - 28, 2013

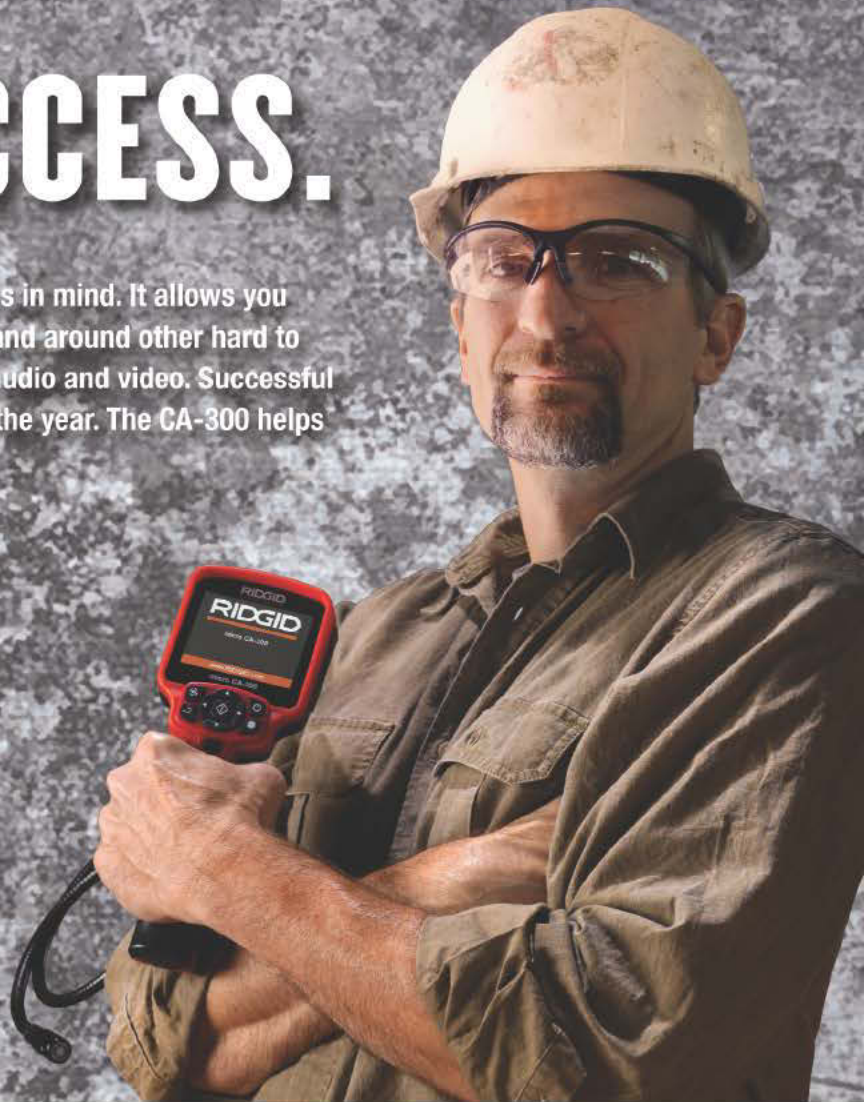
Indiana Convention Center  
www.pumpershow.com

# DOCUMENTED SUCCESS.

The RIDGID® micro CA-300 was developed with your success in mind. It allows you to get the perfect view behind walls, in pumps, near leaks, and around other hard to reach spaces. Easily document what you see with images, audio and video. Successful documentation today leads to successful jobs every day of the year. The CA-300 helps you work better, faster and smarter. See it. Find it. Solve it.®

Learn more and schedule demonstrations  
1-800-769-7743 or [RIDGID.com/CA300](http://RIDGID.com/CA300)

The Emerson logo is a trademark and service mark of Emerson Electric Co. ©2012, RIDGID, Inc.



email



Job Report



SD Card



RIDGIDConnect



Storage

We  
Build  
Reputations™

**RIDGID**

  
**EMERSON**  
Commercial & Residential Solutions

DIAGNOSTICS

PRESSING

PIPE & TUBE TOOLS

DRAIN MAINTENANCE

POWER TOOLS

# May 2012 Advertiser Index

## A

Allan J. Coleman Co. .... 13, 39



Amazing Machinery, Inc. .... 46



Aqua Mole Technologies, Inc. .... 77



Aries Industries, Inc. .... 47

Arthur Products Co. .... 61

## B



Bandlock Corp. .... 28



Bowman Tool Co. & Systems .... 73

## C

Cable Center, The ..... 19, 65



Cam Spray ..... 10



Central Oklahoma Winnelson ..... 73



Chempure Products Corp. .... 69

Cherne Industries, Inc. .... 35

CIPP Services, Inc. .... 60



Coast Manufacturing ..... 67

Coxreels ..... 57



CUES, Inc. .... 28

## D



Drainables Direct ..... 61

Dultmeier Sales ..... 24



Duracable Manufacturing Co. .... 30

## E

Easy Liner (Gadmon Ind.) 82, 83, 84



EasyCAM, LLC ..... 27



Electric Eel Mfg. .... 57



Electro Scan, Inc. .... 86



Envirosight, LLC ..... 5



Enz USA, Inc. .... 24

## F



F. S. Solutions ..... 45

Forbest Products Co. .... 67

Formadrain, Inc. .... 20

## G



GapVax, Inc. .... 87



Gardner Denver Waterjetting ..... 33



General Pipe Cleaners/  
General Wire Spring ..... 2



Gorlitz Sewer & Drain, Inc. .... 15



Guzzler Manufacturing, Inc. .... 17

## H

Hackney ..... 56



Hannay Reels ..... 49

Harben, Inc. .... 31



Hi-Vac Corporation ..... 37



Hot Jet USA ..... 21

Hurco Technologies, Inc. .... 27

## J



Jetstream of Houston ..... 53, 57, 63

Jetter Depot ..... 69

Jetters Northwest ..... 50

## K



Ken-Way Corporation ..... 76

## L

Lansas Products ..... 69

LaPlace Equipment Co. .... 76



Liberty Financial Group ..... 28

## M



Mesa Diversified LLC  
DBA Clog Hog ..... 22



Milwaukee Rubber Products ..... 63



MyTana Mfg. Company, Inc. .... 43

## N



NAWT, Inc. .... 61



NLB Corp. .... 41, 65



NozzTeq, Inc. .... 27

## O

Oceanquip, LLC ..... 52

## P



Pat's Pump & Blower, LLC ..... 60



Perma-Liner Industries ... 11, 55, 77



PipeLogix, Inc. .... 67

Piranha Hose Products ..... 52



Prototek Corporation ..... 50



Pulsar 2000, Inc. .... 20

## R



RapidView IBAK North America . 23



Ratech Electronics, Ltd. .... 53



Reelcraft Industries, Inc. .... 52



RIDGID ..... 7



RS Technical Services, Inc. .... 60

## S



Safety Corporation of America ... 53

Safety Sewer Drain ..... 69

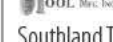
Savatech Corp. .... 60



Scooter Video ..... 51

Sentech Engineering Co. .... 77

Shark Pressure Washers ..... 38



Southland Tool Mfg., Inc. .... 29



Spartan Tool, LLC ..... 88

SPiR STAR ..... 63



Standard Equipment Company .. 84



StoneAge, Inc. .... 4

## T



T&T Tools, Inc. .... 46

The Soil Surgeon ..... 50



TRY TEK Machine Works, Inc. .... 60



TV Ferrett ..... 71

## U



US Jetting, LLC ..... 9

USB - Sewer Equip. Corp. .... 40

## V



Vac-Con, Inc. .... 3

Vacall ..... 25



Vacuum Sales, Inc. .... 56



Vivax-Metrotech Corp. .... 30

## W



Water Cannon, Inc. .... 71

Westmoor Ltd. .... 40

Woma Corp. .... 73

Marketplace ..... 80

Classifieds ..... 82

Start/Renew my subscription to Cleaner magazine.

Signature (required) \_\_\_\_\_ Date \_\_\_\_\_

Attention \_\_\_\_\_

Company Name \_\_\_\_\_

Mailing Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

E-Mail \_\_\_\_\_

# Cleaner

1 Year (12 issues)... \$15.50

2 Years (24 issues)... \$25.00

3 Years (36 issues)... \$35.00

(U.S. rates only. Call for intl. rates)

**METHOD OF PAYMENT** (please check one):

Check enclosed (payable to COLE Publishing Inc.)

Charge to VISA \_\_\_\_\_ MasterCard \_\_\_\_\_ Discover \_\_\_\_\_ Amex \_\_\_\_\_

Card # \_\_\_\_\_ V-Code \_\_\_\_\_

Cardholder Name \_\_\_\_\_ Exp. Date \_\_\_\_\_

Fax to **715-546-3786**

Mail to: COLE Publishing Inc.

PO Box 220, Three Lakes, WI 54562

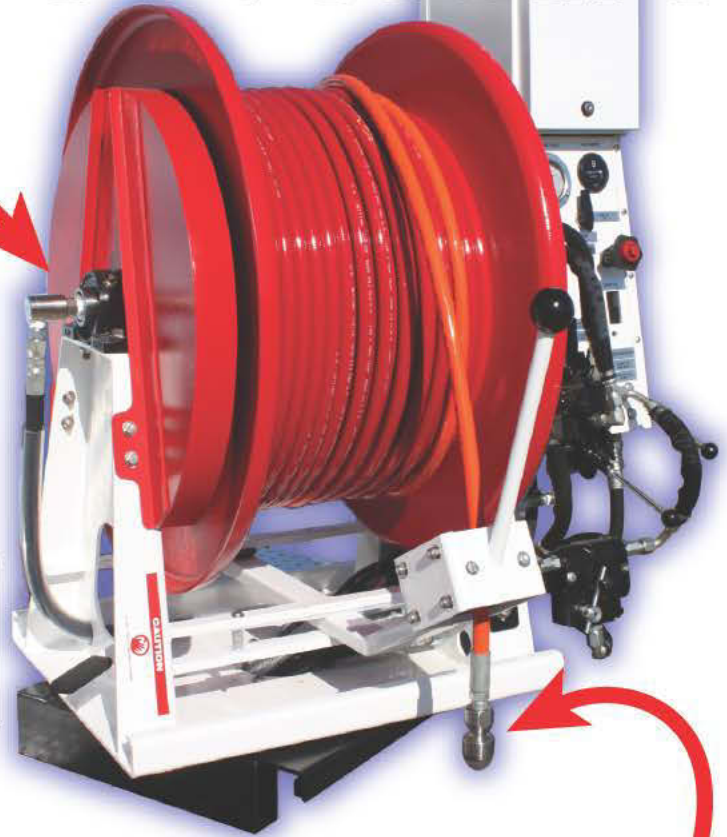
Phone **800-257-7222**

Online at **www.cleaner.com**



# Add **50%** More Pressure Here

The real benefit of our NEW US Jetting 6018 - 6,000 PSI Run Dry Pump is the increase in pressure at the nozzle. When maintaining the same water flow or GPM through 500 feet of high pressure jetting hose, pressure loss remains the same. Thus adding more pressure at the hose reel results in the same amount of increased pressure at the nozzle.



**Change Nozzles To Change Pressure & Maintain Full Flow**  
 Operate at 6,000 PSI @ 18 GPM or 5,000 PSI @ 18 GPM or 4,000 PSI @ 18 GPM or 3,000 PSI @ 18 GPM.

# Get **61%** More Pressure At The Nozzle



sales@usjetting.com 1-800-JETTING www.usjetting.com 1-800-538-8464

## May Jetting Hose Specials



3/4" x 500 Feet .. \$ 1395.00  
 1" x 500 Feet ..... \$ 1495.00  
 Includes Free Shipping - Continental US only  
 3,000 PSI Working Pressure  
 9,000 Min. Burst pressure  
 600' Lengths Available

**Economy Green Hose**  
 4,000 PSI Working Pressure,  
 12,000 Minimum Burst  
 Reg 895.00  
**Sale Price \$ 795.00**  
 Shipping Not Included



# Preventing Disaster

EDUCATING CUSTOMERS ON PROPER MAINTENANCE IS A WIN-WIN PROPOSITION

BY LUKE LAGGIS



Luke Laggis  
editor@cleaner.com

**T**he theme of this month's issue of *Cleaner* is Residential and Commercial Sewer and Pipe Maintenance. It's not a topic that sends adrenaline pumping through the veins of the average person, yet the topic is of great importance to virtually everyone.

It's been said many times and everyone in this business is well aware, underground utilities are typically out of sight and even further out of mind. Most people get up in the morning, use the bathroom, shower, brush their teeth and never give a thought to their wastewater. It flows down the drain, away from their houses and out of their minds forever. That is, until there's a problem.

You are typically well aware of the worry and panic your customers are feeling when a sewer lateral backs up into their basement. You respond quickly and go about the task of clearing the line and cleaning up the mess in a business-like fashion, even though this is far from business as usual for your customers. You're really pulling double duty, filling the role of plumber and first responder; these

are, after all, emergency situations.

Still, there's more you can do. Both of the contractors profiled in this issue of *Cleaner* know a thing or two about backed-up sewer lines and emergency drain cleaning jobs. I Find Leaks, located in Clearwater, Fla., and profiled on page 12, began with a very tight focus on leak detection. As the business has grown, additional services have been added, all focused on the follow-up to leak detection. Since household leaks often cause interior damage, remediation services were added. Now, I Find Leaks might diagnose a problem, fix it and handle all the peripheral repair work caused by the leak.

Southwood Plumbing & Heating of San Bruno, Calif., is also profiled in this issue. Owner Denis O'Halloran says the company responds to quite a few emergency calls. "When we arrive at a job, we are there to do the job, to take care of a problem," he says.

As capable contractors, you can resolve most emergency situations relatively quickly. Of course, taking proper care of drain lines can eliminate many emergencies before they arise, and that work is just as important – if undervalued by customers – as the proper handling of emergencies.

**When a customer experiences a sewage backup in their basement, they'll quickly realize the value of proper and regular maintenance, and that's good for your business.**

Prevention is almost always easier than dealing with emergencies, as I write about in this month's installment of Safety First, but maintenance and prevention don't instill the urgency of an emergency situation. I suppose it's that way in most matters, but you, the contractors of this industry, certainly know better. That's why the pipe maintenance theme is relevant and important; Understanding, recommending and carrying out quality maintenance procedures will save your customers the panic, financial pain and emotional stress of a plumbing emergency.

When a customer experiences a sewage backup in their basement, they'll quickly realize the value of proper and regular maintenance, and that's good for your business. So don't ignore the opportunity to educate customers on what can be done to prevent future emergencies when you're on site helping them with their current emergencies.

Likewise, use your experience to educate customers about the value of proper maintenance before they experience their own emergency. Don't use it as a heavy-handed sales tactic, but rather as an opportunity to educate customers on what's required to keep their system in good working order. You'll likely pick up some extra business and save them from some unpleasant situations down the road. You'll both come out ahead, and your customers will thank you for it.

Hopefully the stories in this month's issue can help you in that endeavor. It's all in a day's work, as they say. **c**

**Keep It Flowing!**

- Reliable Products
- Excellent Delivery
- Incredible Support
- Personal Service

**Manufacturing Drain and Sewer Jetting Equipment since 1985. Cold and hot water Portable, stationary and trailer mounted models for lines up to 24".**

**Custom built equipment to your specifications.**

**520 Brooks Road Iowa Falls, IA 50126 800-648-5011 www.CamSpray.com**

**CAM Spray**  
Working well under pressure

# TRENCHLESS PIPE REPAIR WITHOUT DIGGING.

Perma-Liner™ Industries, Inc. is a worldwide supplier of trenchless lining products. We offer the **Perma-Lateral™** air inversion method which is a single access pipe relining system and the lateral **Pull-In-Place** system to rehabilitate existing building service laterals without the need of extensive digging and liability. Ambient, Hot Water or Steam cure is available. It is no longer necessary to reline a pipe from manhole to manhole in order to address one section of pipe with the Perma-Liner™ **Sectional Point Repair™** system. Perma-Liner's™ **InnerSeal™ Innerwrap™ Lateral Connection Seal** repairs the lateral/main sewer connection with a structural and watertight seal that exceeds ASTM standards with Steam cure for multiple installs in a single day. Manhole to Manhole lining is performed with the **Perma-Main™** continuous lining "Top Gun" with Steam for cure times less than one hour. Perma-Liner™ now offers *fast curing* silicates with our **Perma-Patch** kits.

**Training & Certification**

**24/7 Technical Support**

**Marketing Support**

All materials proudly made in the USA!



**2012 Worldwide Trenchless Tour**  
 June 13th / St. Louis, MO  
 August 15th / Pittsburgh, PA  
 August 29th / Philadelphia, PA

**No Territories!**  
**No Franchise Fees!**  
**No Licensing Fees!**

**NEW!**

**The Stinger**  
 mini-steam unit  
 2" - 6" diameters



Turn-Key Trailers

**Now offering Perma-Patch Kits with FAST CURING Silicates!**

Visit [www.perma-liner.com](http://www.perma-liner.com)

Call **1-866-336-2568**



**PERMA-LINER™ INDUSTRIES, INC.**



**Perma-Lateral™**  
 Air Inversion & Pull In Place



**Perma-Main™**  
 Continuous Air Inversion



**Sectional Main Line Point Repair™**



**InnerSeal™ Innerwrap™**  
 Lateral Connection Seal

# CORE STRENGTH

FLORIDA CONTRACTOR QUICKLY GROWS FROM A ONE-MAN LEAK DETECTION SHOP TO A MULTI-FACETED BUSINESS EMPLOYING 25 BY PETER KENTER

Florida contractor John McCormick believes in sticking to a business plan. He founded the leak detection and jetting business I Find Leaks Inc. just six years ago. He now operates four successful brands that include emergency drying, mold removal and water damage reconstruction. His bottom line on business expansion: build logically on your core activity and avoid growth for growth's sake.

McCormick left the high-tech sector eight years ago, just before the tech bubble burst.

"I could see that it was crashing and started to look at different trades that would be in high demand regardless of the economic climate," he says. "I passed on electrical work because I didn't like the idea of getting shocked and dismissed roofing, because there was no way I wanted to fall off a roof. I finally looked at plumbing and realized that there was a market for forensic plumbing – not run-of-the-mill toilets and pipes, but solving leak detection problems where you need to use your brain to solve tough problems."

McCormick founded I Find Leaks in 2006 as a one-man operation, concentrating solely on property and premises water leaks for homeowners, business owners and property managers in the Clearwater area, on Florida's west central coast.

"My friends thought the name was kind of stupid, but it's worked out really well for marketing purposes," he says. "It tells the customer exactly  
(continued)



Leak detector Mark Hartstein, left, and senior leak detector Dave Richardson use a leak detector from Fisher Research Lab to locate a leak underneath a concrete slab. (Photography by Cliff McBride)

# Allan J. Coleman - Since 1905

Call us today! 773-728-2400

5725 North Ravenswood Avenue • Chicago, IL 60660 • www.allanjcoleman.com



**CALL FOR  
GENERAL  
SPECIALS**

**Special pricing  
on all  
General jetters,  
cameras and  
machines**

## StoneAge® Warthog® Nozzles



WD-1 1/4"  
(8-36" lines)



WG-1"  
(8-36" lines)



WH-1/2  
& 3/4"  
(6-18" lines)



WS-1/2"  
(4-8" lines)



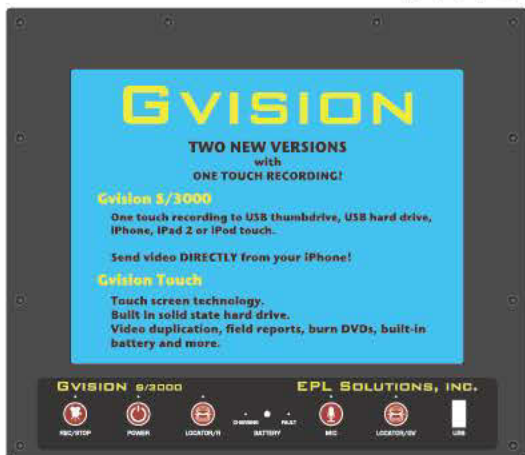
WT-3/8"  
(3-6" lines)



WV-1/4"  
(2-4" lines)

**Repair Center for: RIDGID SeeSnake, Gen-Eye, Radiodetection, Electric Eel, Vision Technology, Insight Vision & Spartan Cameras Fast Turnaround Time**

## UPGRADE your camera system to the GVISION. A Better System



**GVISION**

TWO NEW VERSIONS  
with  
ONE TOUCH RECORDING!

**Gvision 8/3000**

One touch recording to USB thumbdrive, USB hard drive, iPhone, iPad 2 or iPod touch.

Send video DIRECTLY from your iPhone!

**Gvision Touch**

Touch screen technology. Built in solid state hard drive. Video duplication, field reports, burn DVDs, built-in battery and more.

GVISION 9/3000

EPL SOLUTIONS, INC.

**GVISION**

Visit [www.ep solutions.net](http://www.ep solutions.net) for more details.



Ask what the  
**GPLAYER**  
can do for you?



JetSonde Carriers - P-Trap Cable Sonde Carriers

**Turn ANY push camera into a Jetter Camera with the JetCam Adapter.**

JetCam Adapter

JetSonde Nozzle Jetter Hose



**OLDEST NAME IN THE BUSINESS  
— Over 100 YEARS OLD —**

PHCC MEMBER



Sewer jetting technicians Camm Lancaster, left, and Danny Rubulcava prepare to jet out a cleanout.

## profile

### I FIND LEAKS INC., CLEARWATER, FLA.

**PRESIDENT:** John McCormick  
**FOUNDED:** 2006  
**EMPLOYEES:** 25  
**SPECIALTIES:** Leak detection, CCTV video inspection, jetting, mold removal, water damage restoration  
**SERVICE AREA:** West Central Florida  
**WEBSITE:** www.ifindleaks.com



what the company does, without ambiguity.”

McCormick outfitted himself with a Fisher XLT series leak detector and a Gen-Ear water leak detection system from General Pipe Cleaners.

“About 90 percent of Florida leaks are in copper piping, primarily running under the concrete floor slab,” says McCormick, “The soil is acidic and the water is fairly hard so the lines are being worn down on the inside as well as the outside.”

While some companies use line tracers before leaks are pinpointed, McCormick insists on doing the reverse. The company finds leaks acoustically, then traces the lines to ensure they intersect with the leak location.

**“That meant no plumbing repairs ever. We would recommend a reputable plumber but we would never want to be the company applying a jackhammer to the floor slab. Sticking to the core business was our recipe from the start.”**

**John McCormick**

## DEFINING THE BUSINESS

The company embarked on the venture with a strict definition of the services it would offer.

“That meant no plumbing repairs ever,” says McCormick. “We would recommend a reputable plumber but we would never want to be the company applying a jackhammer to the floor slab. Sticking to the core business was our recipe from the start.”

After the first year of operation, the company received requests for sewer camera inspections and purchased a Gen-Eye push camera from General Pipe Cleaners to scope lines.

“I also bought a RIDGID SeeSnake and, coming from the tech sector, I was quick to offer inspection recordings on DVD, burned from my laptop,” says McCormick.

In 2007, the company hired a second employee and added a jetter from Harben Inc.

The slate of offerings grew logically from the leak detection service. Typically, however, once the company had detected a leak and jetted out sewer lines, McCormick would be asked to recommend a contractor who could dry out the area to prevent mold formation, a major headache in Florida’s tropical climate. If the damage was severe, customers might also ask for a recommendation on a company that could rebuild the home after water-damaged building materials were removed.

“I had a lot of water-damage contractors offering me money to refer them, but I was having a hard time finding contractors I could trust,” says McCormick. “Some of them were taking a small job and turning it into a big job, removing too much drywall or taking out building components that didn’t need to be

removed. In some cases, the insurance adjusters wouldn’t even examine the extent of the damage before authorizing the work.”

## FROM LEAKS TO DRYING

A lucky run at a local casino in 2008 changed the nature of the business. McCormick won \$950 playing Texas hold ‘em and decided to risk \$50 of his winnings on a slot machine. His net winnings: \$128,000.

“I invested the entire windfall in drying equipment so that I could get the premises of a water-logged building ready for the construction contractors, drying up the carpets and the floors,” he says. “That way I could make sure that the customer understood the actual extent of the damage before getting a water-damage remediation contractor to come in.”

*(continued)*



# GORLITZ SEWER & DRAIN INC.

10132 Norwalk Blvd. • Santa Fe Springs, CA 90670

Tel: 562 944 3060

Fax: 562 944 7630

E-mail: Sales@Gorlitz.com

## Socket Fusion Kit For Water And Gas Lines From 3/4" to 2" Diameter

Complete set of adapters for 3/4", 1", 1-1/4", 1-1/2" and 2" Pipes and deburring tools for above pipe sizes Heater with temperature gauge, heater stand wrench, canvas storage bag (Bag not shown)



Deburring tool removes sharp edges at pipe end for ease assembly. All deburring tools are made of heat treated aluminum and O.D. knurled for a better grip. The cutting blades are hardened and replaceable.



Adapters are made entirely of Aluminum, Teflon coated and mounted directly to heater plate



Heater plate is made of aluminum, provided with thermostat, temperature gauge, large wooden handle and pigtail

Heater stand is provided with rubber feet and can be mounted onto larger plate for added stability

## Pistol Grip, Hand Held Electric Drain Cleaner From 1-1/4"-2" Diameter Pipes

MODEL GO 31 DRAIN CLEANER FEATURES are 120 volt, 1.6 amp, trigger action reversible motor, double insulated U/L approved, electric motor, 0-800 RPM adjustable built-in trigger with speed control dial, steel keyless chuck with heat treated jaws, heat treated chuck spindle, totally enclosed polished aluminum drum, watertight neoprene rubber sleeve, right hand cables included: 1/4" x 35' with bulb and 5/16" x 35' plain

Gorlitz All-steel Chuck Fits Other Manufacturers Hand Held Drain Cleaners



Your One Stop would not be complete without offering you Peterson Pressure Bags, General Augers, Piranha Hoses & Fittings, RIDGID Detectors and Cameras, Channel Lock Hand Tools, Kirkhill Plungers

## Drain Cleaning Machines



## Water Jetting Machines



## Trenchless Pipe Systems



Our inventory includes Pipe Bursting Equipment, Fusion Systems, Sink and Drain Cleaning Machines, High Pressure Water Jetters, Auger and Sewer Cables, Connectors, Knives and Blades, Leaders, Retrievers, Rooter Tools and Accessories related to the Drain Cleaning Industry.

www.Gorlitz.com

Engineering, Dedication, Quality and Service All In One Stop!





LEFT: Sewer jetting technician Chris Abbott uses a RIDGID SeeSnake to ensure a sewer pipe is clean and clear of debris after jetting. ABOVE: Senior leak locator Dave Richardson uses a FLIR E40bx infrared camera to identify areas of moisture in a bathroom.

The company's drying arsenal includes a series of massive exhaust fans, heaters, and dehumidifiers.

To promote the new activity, the company added a second brand, I Dry Leaks, to its public face. That same year, McCormick hired a full-time office employee and three more field workers.

However, even after drying out a job site, McCormick says that he was still finding it difficult to recommend contractors to clients.

"A lot of them simply would never arrive, or worse, take a deposit and never show up again," he says. "At the beginning of 2009, I brought in an employee with a general contractor's license who could handle construction as well. He brought two employees with him and they specialized in installing flooring and drywall, painting and installing cabinetry. By the summer I had nine people on staff. Each step of the expansion was based on a legitimate business interest that built logically on the others. I wasn't going to expand into an area that didn't fit the business model, even if it looked lucrative at that moment."

#### TEMPORARY SETBACK

In July of that year, a Jet Ski accident sidelined McCormick's expansion plans. "I fractured my sternum and was down for the count," he recalls. "I was on pain meds and out of reality for about three months. When I was well enough to leave the hospital, I drove out to the office and found a padlock on the door. Every piece of equipment I owned was gone. It seems that some of the people I'd hired hadn't looked out for the best interests of the business."

Just as bad, former clients were being courted by a copycat business. McCormick simply gritted his teeth and started over, employing his fiancée in the

office and starting again with two other employees.

"Surprisingly, with just a few employees, the business was running more efficiently than it had before," says McCormick. "It's hard to overstate how much more you can accomplish when you hire the right people. We were also more careful with accounting, so that money that was once disappearing down a rabbit hole was now being kept in the business. I took a pay cut, kept overhead to the bare minimum and re-invested all of the profits back into the business to rebuild our equipment stocks, and we did it relatively quickly."

**"Surprisingly, with just a few employees, the business was running more efficiently than it had before. It's hard to overstate how much more you can accomplish when you hire the right people."**  
**John McCormick**

By 2010, the company had rebooted the dry-out side of the business and hired another five workers. McCormick also hired another employee with a contractor's license, ushering in a new brand name: IDL Construction.

"Again, the core business model determines what kind of construction work we perform," says McCormick. "It's strictly streamlined – just cabinets, flooring, drywall, painting, and kitchen and bathroom cabinets. If we were asked to put a structural addition on a home we would turn that project down."

#### TAKING ON MOLD

The company next embarked on another business venture that built on the success of the others: I Destroy Mold.

"Mold remediation is a job that involves high risks and high rewards," says McCormick. "If you don't do the job right and someone gets sick, you're putting your reputation on the line and facing a possible lawsuit. Workers need to be licensed by the state of Florida to do the work and you need to hire workers who are committed to doing the job right."

Mold spores exist in the atmosphere around us, just waiting for the right conditions to grow. The spores can grow in Florida homes under normal conditions even if the relative humidity exceeds 60 percent. A flooded

*(continued)*



# WE ENHANCED THE LEGENDARY PRODUCTIVITY AND OFF-LOADED SOME OF THE PRICE.

Guzzler® and NX® are registered trademarks of Vapor Manufacturing, Effective 01/11. ©2011 Guzzler Manufacturing, Inc. Patent Number: 6,857,250 B2  
ISO 9001:2000, ISO 14001:2004



The **Guzzler NX** has been upgraded to work even harder, so you won't have to. A powerful new Robuschi® blower delivers 5,435 CFM, while the advanced VR Technology provides the production boost of a fully utilized tank capacity. Factor in the ultra-quiet, shroud-free design and simplified operating controls, and you've got everything you need to dominate the job site for less money.

To get your hands on an industry leader, visit [guzzler.com](http://guzzler.com)  
or call 800.627.3171 ext 298 for more information.

**GUZZLER<sup>®</sup> NX**  
Subsidiary of Federal Signal Corporation

The I Find Leaks team includes, from left, back row, Gabe Beattie, Danny Rubulcava, Frank Sanchez, Steve Hammett; second row, from left, John McCormick, Milivoje Jokic, Rich Martin, Wayne Santili, Chris Abbott, Mark Brennan, Charles Cassino, Dan Rutherford; front row, from left, Jeff Cooper, Anthony Mestas, Dave Richardson, Camm Lancaster, Mark Hartslein, Mary McQuade, Annsley Atkin, Kim McCormick, Jack Zolinerasski. (Photo courtesy of I Find Leaks)



Florida property provides enough moisture, humidity, darkness and warmth to spur accelerated growth. The most common spore found in the area is stachybotrys, a variety of black mold.

“The notion of contractors ‘killing mold’ is a bit misleading,” says McCormick. “Even if you kill a mold spore, the toxins left by the dead spore can create health problems, particularly in people who are allergic to them.”

“The websites are fun and professionally produced and probably inspire about 30 percent of our business. We know they’re effective because we get at least one call a day from people as far away as California, Utah or Michigan.”

### John McCormick

A project begins with finding the source of the moisture and mold using infrared cameras by FLIR. Once the source of the mold has been established, the area is placed under containment using a plastic sheeting enclosure under negative air pressure. A HEPA filter fitted on the enclosure exhaust traps particles down to three microns in size. Dedicated dehumidifiers used only on mold jobs are placed inside the enclosure and likewise fitted with removable HEPA filters to trap mold spores.

Workers don specially designed mold suits – white coveralls with supplied air respirators. They also use handheld HEPA vacuums to remove mold.

“Going in, they look a lot like the Ghostbusters,” says McCormick. “They remove drywall, flooring, cabinets and any other mold-affected material. Of course, you can’t take the studs out of the house, so we sand down the surfaces. Once all of the material is removed we kill the remaining mold and clean the remaining surface area. People think you need to use harsh chemicals or bleach to kill mold, but we find it effective to use a mild detergent and a damp rag.”

By that year’s end, McCormick employed nine workers. By the end of 2011, the company employed 25.

The current business mix is about 85 percent residential, with the rest of the projects coming from the commercial sector. Jobs range from simple leak detection or jetting alone, to a full suite of drying, mold remediation and construction.

Much of the business is generated by word of mouth, but the company also uses sources such as Angie’s List to generate leads.

### WEB PRESENCE CRITICAL

The company operates four websites, one for each brand. Each site first offers information on the subject associated with its name, then expands to highlight the offerings of the other three brands.

“The websites are fun and professionally produced and probably inspire about 30 percent of our business,” says McCormick. “We know they’re effective because we get at least one call a day from people as far away as California, Utah or Michigan.”

That’s a good sign. McCormick has copyrighted all of the individual names and logos with an eye to franchising the business. For now, however, the company continues to expand throughout west central Florida, operating in Tampa and St. Petersburg and through the adjoining Hillsborough, Pinellas, Pasco, Polk and Manatee counties along the state’s west coast. This year, the company will open an office further south in Sarasota County. Next year, McCormick hopes to expand north.

“We’ve started and expanded so many divisions, that we need to be disciplined,” he says. “The important thing is that they all need to operate at 100 percent all of the time and we can only do that by sticking to the core business with no distractions. Leak detection is water damage is mold removal is interior remodeling. You can’t take your eyes off the core business.”

### more info

**Fisher Research Laboratory**  
915/225-0333  
www.fisherlab.com

**FLIR Systems, Inc.**  
866/477-3687  
www.flir.com

**General Pipe Cleaners/  
General Wire Spring**  
800/245-6200  
www.drainbrain.com  
(See ad page 2)

**Harben, Inc.**  
800/327-5387  
www.harben.com  
(See ad page 31)

**RIDGID**  
800/769-7743  
www.ridgid.com  
(See ad page 7)

# THE CABLE CENTER • 1-800-257-7209



**24 HOUR TURNAROUND - MIDWEST'S LARGEST FACTORY AUTHORIZED  
REPAIR CENTER FOR GEN-EYE, GATORCAM & SEESNAKE**

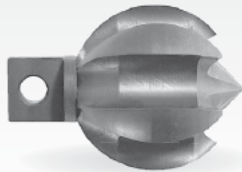
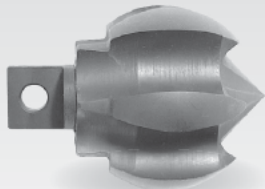


**CALL FOR  
PRICING!**

## ClogChopper™ Cutters



**NEW!**

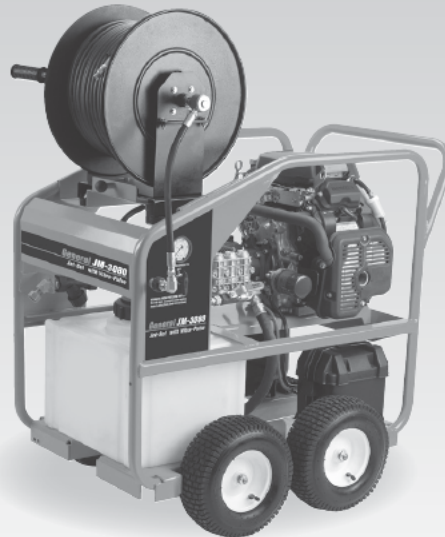


- Automatically negotiates multiple bends – maintaining a central line position and minimizing pipe wall, elbow, connection and joint damage
- Clears clogs and scrapes encrusted debris from inner walls
- Six inverted cutting edges run smoothly, without rattling or jumping
- Durable enough to handle years of demanding use
- Connectors for most popular brands of drain cleaning machines
- Self-sharpens while working

**FREE DELIVERY**

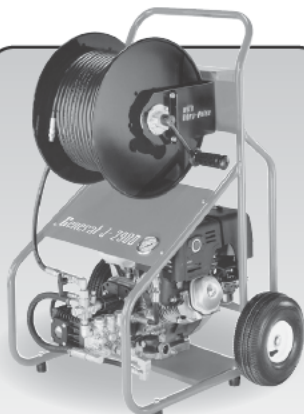
**CALL FOR  
PRICING!**

## JM-3080 Water Jet



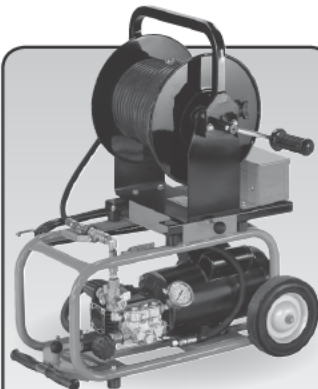
- Now with removable 300 ft capacity hose reel
- New maneuverable heavy duty frame
- 10 gallon buffer tank
- 3000 psi/8 gpm pump with Vibra-pulse
- 20 hp Honda Engine with gear reducer

**FREE DELIVERY**



**General J-2900**  
Basic Unit Machine Only

**\$2745**  
FREE DELIVERY



**General J-1450  
Portable Jetter**  
Basic Unit Machine Only

**\$1540**  
FREE DELIVERY



**Mini-Rooter XP™**  
Basic Unit Machine Only

**\$520**  
FREE DELIVERY



**General  
Speedroooter 92™**  
Basic Unit Machine Only

**\$1100**  
FREE DELIVERY



The liner is shipped pre-impregnated or prepared at your shop. You have a full two months to install it.

Introducing a Breakthrough in Steam Cured Lining

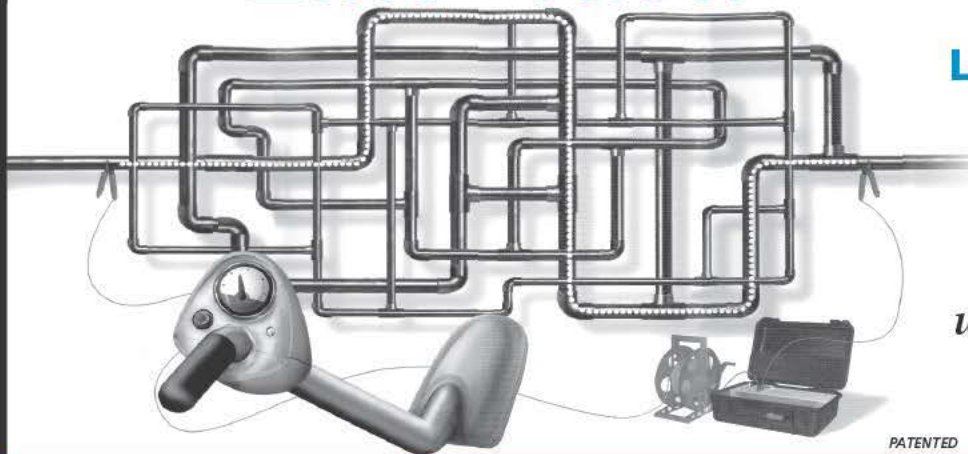


No Rush. No Hardening on you. Always Done Right.  
[formadrain.com/breakthrough](http://formadrain.com/breakthrough)

Or Call Steven Therrien at (866) 599-2429  
or e-mail [steven@formadrain.com](mailto:steven@formadrain.com)

Pulsar 2000

## Line Tracer



Locate Lines

Locate Water Leaks

Training Video

*It's a jumble out there.*

[www.Pulsar2000.com](http://www.Pulsar2000.com)

DISTRIBUTORS WANTED



PATENTED

The Pulsar 2000 line tracer is designed primarily to locate metallic pipes. The Pulsar 2000 is a directional line tracer. Connect the Pulsar's powerful and unique transmitter to your target pipe and locate only that pipe. Locating can be accomplished under floors, in walls and in ceilings. The Pulsar 2000 does not require grounding.

**Leak detection personnel...** The Pulsar 2000 is a **must have** locator. Now you can quickly identify the pipe location, thereby reducing the search area of the leak.

**100% satisfaction guarantee...** We are so sure that you will see the time

saving benefit of the Pulsar 2000, we will let you return it for a full refund if you are not satisfied. If you want to learn more about the Pulsar 2000 and our leak locating equipment, please call **1-888-752-5463** or e-mail [jsm11@aol.com](mailto:jsm11@aol.com) for a **free** demonstration video or CD and references of satisfied customers.

We have been using the Pulsar 2000 along with the XL2 fluid detector and Geophones since January 1989 in our leak locating business. Our leak locates are accurate 95% of the time, but I can honestly say, the line we trace is always there. Our equipment is user-friendly and requires very little training, as you will see on the video. Purchase the Pulsar 2000 line tracer, XL2 fluid detector and Geophones, and start locating leaks immediately.

# Quality • Performance • Value

"I wanted to add an entry level trailer jetter to my Rooter Company that didn't cost an arm and a leg. I looked at the \$30,000 and \$40,000 units and couldn't justify it. *I make money cleaning sewers not storm drains*, so I did not need a monster machine or a glorified Cart Jetter on a trailer. After doing my homework, Hot Jet just made sense." **John - Rhinoroooter, Brigham City, Utah**



All this for only  
**\$24,995**  
 Loaded!!  
 Regular price \$29,995  
 Good until May 31



## OFFERING NEW VALUE IN SEWER JETTING EQUIPMENT NEW COLD JET II - SALE

- Solid Diamond Steel Deck Trailer
- 2 - 3,500 lb tandem axles
- 35 HP Vanguard Engine
- Premium General Pump
- Operation 8.5 GPM @3,650 PSI
- Premium Cox Hose Reel Variable
- Lateral Package
- Hose Reel Guide
- 300' Cobra Hose
- Front and Side Tool Boxes
- Strobe Light
- Rear Lighting
- Side/Rear Signage or tool boxes
- Custom Drilled Nozzle Kit
- Custom Drilled Warthog Nozzle
- Full Remote Control

**All the bells and whistles are included on this - The Whole Enchilada!**

## For Questions Call Our Friendly Sales Staff



Denis "Denny" Graybill



Providence "Prov" Hall



Morris "Mo" Morgan

## Premium Drain Line Jetting Equipment



Over 25 years of  
 building quality equipment

Call For  
 Details **800.624.8186**

Dealer Inquiries  
 Welcome

[www.hotjetusa.com](http://www.hotjetusa.com)

# A Pound of Cure

PREVENTION PROGRAMS YIELD SAFER WORKPLACES WITH LITTLE HASSLE

BY LUKE LAGGIS

**N**o one plans to get injured on the job. Likewise, employers never want conditions to be unsafe for their workers. Still, tight deadlines, difficult circumstances and unpredictable work site conditions can all lead to situations that put workers at risk.

Injury and illness prevention programs are aimed at finding and fixing workplace hazards before workers are hurt. OSHA estimates that employers can expect up to six times a return on their investment for every dollar spent on injury and illness prevention. A recently released white paper details how to create a prevention program, how such programs work, and how they affect businesses and the workforce. It provides a good overview on the real costs of work-related injuries and the steps you can take to prevent them.

## SMALL BUSINESSES

For contractors with only a few employees, creating an injury prevention program may seem unnecessary, but the time and money that can be saved through injury prevention makes the effort worthwhile. After all, a two-person operation will suffer much more from a lost-time injury than a larger operation where a bigger pool of workers can absorb the workload.

There is strong evidence that injury and illness prevention programs can and do work for small businesses. For example, the Ohio Bureau of Workers' Compensation analyzed the policies of 16 employers over a 12-year period from 1999 to 2010. The study compared the employers' experience before and after entering into the OSHA Safety and Health Achievement Recognition Program (SHARP), which recognizes small employers that operate exemplary injury and illness prevention programs.

"The preliminary results of the study show that the average number of claims for these employers decreased by 52 percent, the average claim cost decreased by 80 percent and the average lost time per claim decreased by 87 percent," according to the paper.

## LOW-COST APPROACH

The OSHA paper acknowledges that for many small businesses, establishing an injury and illness prevention program can be daunting: "Any program based on formal structures can be difficult to establish in a small organization because of tight budgets.

"Yet simple, low-cost approaches have been shown to be effective in small businesses. Injury and illness prevention programs lend themselves to such low-cost approaches because they are highly flexible – the core elements can be implemented at a basic level suitable for the smallest business, as well as at a more advanced, structured level that may be needed in a larger, more complex organization."

OSHA estimates that employers who do not yet have safety and health programs can reduce injuries by 15 to 35 percent by implementing injury and illness prevention programs.

*Ultimately, safety needs to be part of the culture, not just an exercise in compliance, and OSHA cites several sources of research showing that prevention programs are effective in transforming workplace culture.*

"At the 15 percent program effectiveness level, this saves \$9 billion per year in workers' compensation costs; at the 35 percent effectiveness level the savings are \$23 billion per year," the paper states.

The paper notes two industry consensus standards for injury and illness prevention programs. The American National Standards Institute (ANSI) and American Industrial Hygiene Association (AIHA) have published a voluntary consensus standard, ANSI/AIHA Z10-2005 Occupational Safety and Health Management Systems. The Occupational Health and Safety Assessment Series (OHSAS) Project Group, has produced a similar document, OHSAS 18001-2007 Occupational Health and Safety Management Systems.

"When it comes to injury and illness prevention programs, every business is different, and one size certainly does not fit all," OSHA states. "Employers who implement injury and illness prevention programs scale and adapt these elements to meet the needs of their organizations, depending on size, industry sector or complexity of operations."

Ultimately, safety needs to be part of the culture, not just an exercise in compliance, and OSHA cites several sources of research showing that prevention programs are effective in transforming workplace culture. That in turn leads to a host of benefits.

The paper notes that, "Based on the positive experience of employers with existing programs, OSHA believes that injury and illness prevention programs provide the foundation for breakthrough changes in the way employers identify and control hazards, leading to significantly improved workplace health and safety environments."

The complete white paper can be viewed and downloaded from the OSHA website at [www.osha.gov/dsg/topics/safetyhealth](http://www.osha.gov/dsg/topics/safetyhealth). c

Unclog Drains with Your Pressure Washer

\$10 OFF

WEB COUPON  
CM94

100 Ft. Sewer Jetter Only \$129



Order Online

ClogHog.com

Or Call 877-992-5644

Made in the  
USA

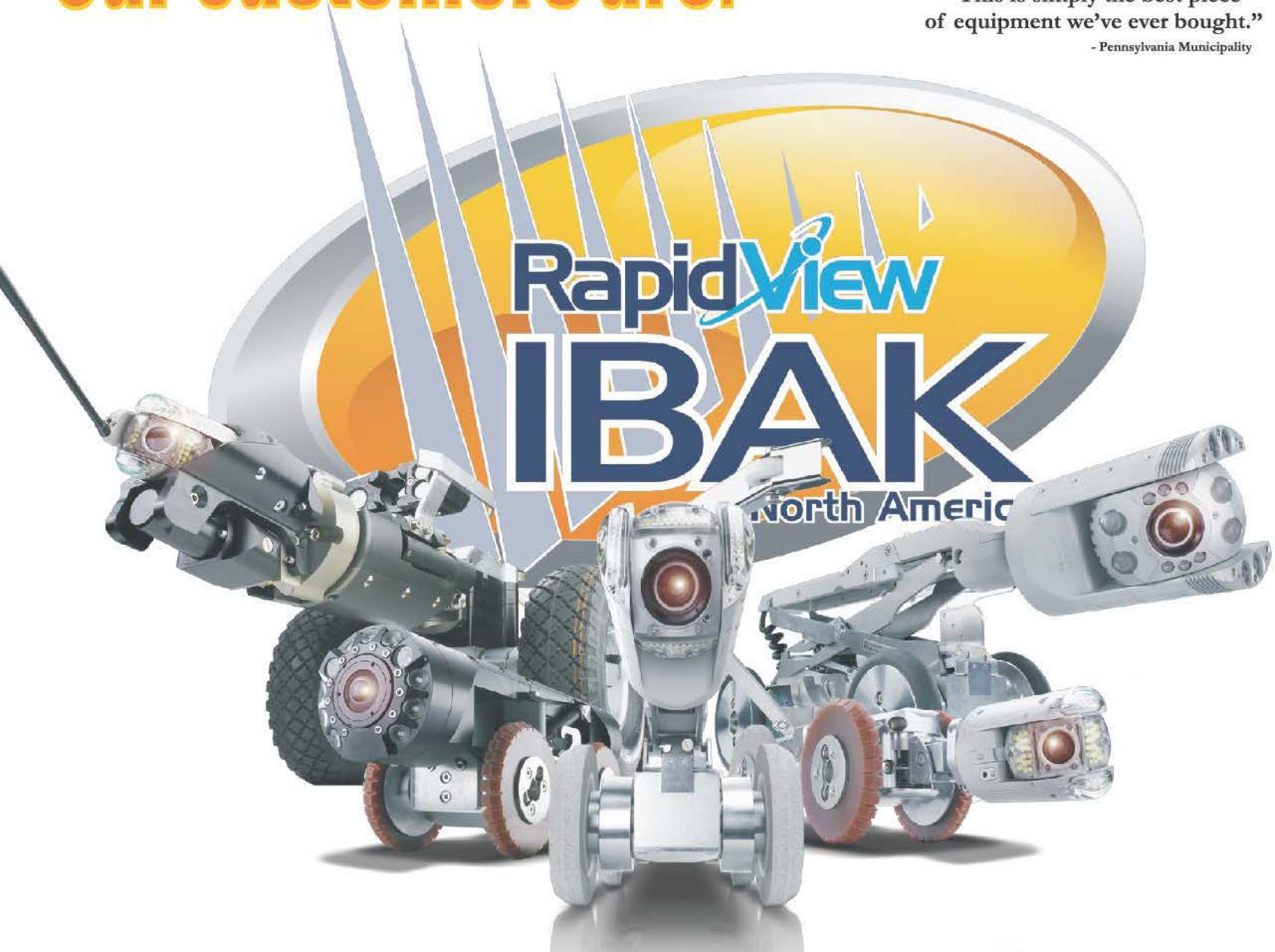
We're not saying we have the best  
equipment and service out there...  
**Our customers are.**

"We used to spend thousands  
of dollars a month on repairs,  
**NEVER AGAIN!"**

- Ontario Contractor

"This is simply the best piece  
of equipment we've ever bought."

- Pennsylvania Municipality



Quality pipeline inspection equipment since 1957.

Mainline | Drainline | Lateral Launch | Laser Profilers | PANORAMO 360° Pipeline and Manhole

IBAK has been working for over 50 years to make your job safer and give you less headaches at the end of the day. Our pipeline inspection equipment is *not* the cheapest equipment you can buy, but we will guarantee you it is the highest quality, most reliable investment you can make. We have the industry's largest research and development team with over 15% of IBAK devoted entirely to new product development. Adherence to core principles of quality and technological innovation have driven IBAK to remain the industry leader since we invented sewer cameras in 1957. Call us or visit [www.rapidview.com](http://www.rapidview.com) to find a dealer near you!



(800)-656-4225

[www.rapidview.com](http://www.rapidview.com)

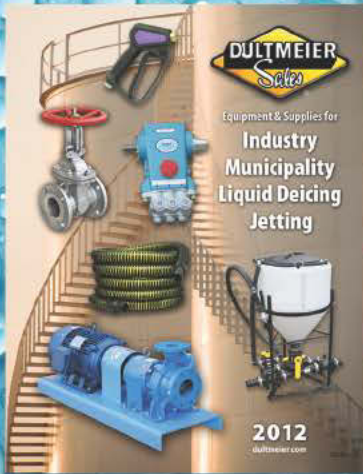
**FREE**

492 PAGE CATALOG.

**DULTMEIER**  
Sales

PARTS ■ SUPPLIES ■ EQUIPMENT

• Sewer / Jetter • High Pressure  
De-Watering



**DULTMEIER**  
Sales

Equipment & Supplies for  
Industry  
Municipality  
Liquid Deicing  
Jetting

2012

dultmeier.com



STORAGE TANKS

HOSE:  
• SUCTION • TRANSFER  
HIGH PRESSURE



HOSE REELS

JETTERS



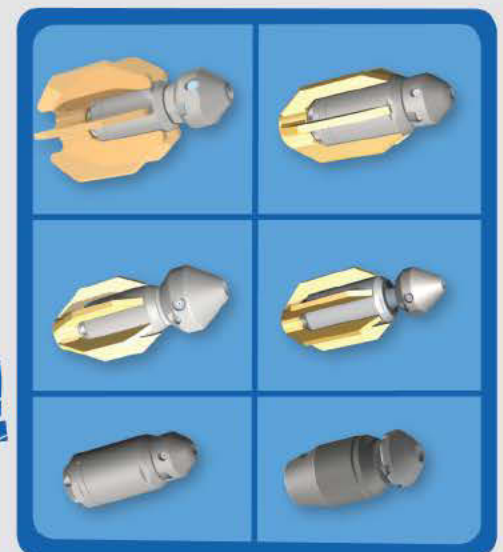
1-800-553-6975  
Davenport, IA

dultmeier.com

1-800-228-9666  
Omaha, NE

**UNCONDITIONAL 5 YEAR WARRANTY ON ORIFICE WEAR**

**Unleash the Bulldog!**  
Working pressure up to 3,000psi



Application range: 2.5 - 24

The Bulldog® Recycling Rotating Nozzles are on the prowl to provide the most efficient and economic pipe cleaning. With an all-purpose nozzle and broad application base, the Bulldog® is basically four tools in one—great for clearing roots, debris and blockages!

Enjoy the following Bulldog® advantages.

- Operates with both fresh and recycled water
- Oil-free braking system results in low wear and tear operation
- Easy to handle
- Extremely low maintenance
- Transport and water costs are noticeably reduced

**enz**®  **usa inc.**

1585 Beverly Ct., Unit 115 | Aurora, IL 60502

CALL 877-ENZUSA1 FOR  
(369-8721)  
A DEALER NEAR YOU  
www.enzusainc.com



**AllJetVac**  
P Series



**AllVac**

Liquid and solid industrial cleanup



Combination jet/vac sewer cleaner  
with front or rear mounted hose reel

## FOUR WAYS TO COPE WITH THE HIGH COST OF FUEL



**AllExcavate**

Hydro excavator for careful digging



**AllSweep**

For runways, lots, road work and streets

### OUR FULL-LINE SINGLE-ENGINE ADVANTAGE

ONLY VACALL GIVES YOU HIGH PERFORMANCE WITHOUT HIGH COST

**GREEN**  
THAT WORKS

Unlike other machines, Vacall models require only one engine to deliver superior vacuum and jetting action...a feature that reduces emissions and helps protect you from the rising cost of fuel. But there are other advantages, too. Like our AllSmartFlow™ intelligent system to manage jetting and vacuum power. And lifetime warranties on some of our standard and optional water and debris tanks. Not to mention the designed-in value of engineering by Gradall, known worldwide for uniquely productive, versatile equipment. See for yourself. Call 800-382-8302.

LEARN ABOUT THE VACALL SINGLE ENGINE ADVANTAGE ►  
[VACALLINDUSTRIES.COM/SINGLEENGINE](http://VACALLINDUSTRIES.COM/SINGLEENGINE)



**VACALL**™

INGENUITY AT WORK

Certified to ISO 9001:2008.

(800) 382-8302

[www.VACALLINDUSTRIES.COM](http://www.VACALLINDUSTRIES.COM)

**GRADALL**  
INDUSTRIES, INC.  
Where Ingenuity Works

ALAMO GROUP

# Building for Success

DILIGENCE WITH SALES CONTRACT LANGUAGE CAN ELIMINATE UNPLEASANT SURPRISES WHEN IT'S TIME TO PURCHASE A NEW PROPERTY

BY FRED S. STEINGOLD



Fred S. Steingold practices law in Ann Arbor, Mich. He is the author of *Legal Guide for Starting and Running a Small Business* and *The Employer's Legal Handbook*, published by Nolo.

**M**urphy said it best: "If something can go wrong, it will." Murphy's Law applies with full force when a business purchases a building. And, sad to say, much can go wrong.

You may, for example, sign a contract to buy a building but then learn that:

- Your bank won't approve the mortgage loan you were counting on to cover 90 percent of the purchase price.
- The seller doesn't own the next-door parking lot that you thought went with the building.
- The local zoning ordinance doesn't allow your kind of business at that location.
- Toxic chemicals have contaminated the ground outside the back door and you, as the buyer, have to pay for the environmental cleanup.
- The air-conditioning system will have to be replaced within six months.

Generally, the seller has the legal right to remove personal property, which basically is anything that's not nailed down. To avoid surprises, list the stuff that's going to stay, display counters in a retail store, for example, or window air-conditioners in an office.

The list could go on and on. Obviously, you need to protect your business legally. You don't want to wind up with a pile of nightmares instead of the building of your dreams.

## TWO APPROACHES

There are two main ways to get the protection you need. The first is to get an option to buy the building. You pay an option fee – say \$5,000 – for the right to buy the building at a specified price during the next 90 days (or whatever time period you and the seller agree to).

During the option period, you carefully check on the possible problems listed below. If you decide not to go ahead, you forfeit your option fee. *Tip:* Try for a clause in the option agreement stating that if you do buy the building, the option fee will be applied toward the purchase price.

The second and more common way to buy a building is to sign a sales contract, but one that lets you cancel the deal if details don't work out to your satisfaction. If that happens, you should have the right to get back your earnest money deposit. Your protection here comes in the form of contingency clauses, escape hatches that let you walk away from the deal with no obligation to the seller.

A lawyer can help you craft the precise wording of the contingency clauses.

For now, we'll concentrate on some concepts worth considering. The contract should allow you to cancel the purchase and get back your earnest money deposit if you don't get the following items within stated time limits:

- A *mortgage loan* for a designated percent of the purchase price, and at no higher an interest rate than you've specified.
- A *satisfactory survey* (at the seller's expense) showing exactly what you're buying. You want to be sure the building doesn't encroach on someone else's land and that the adjoining parking spaces are really within the property boundaries.
- A *contractor's inspection* (at your expense) resulting in a report that's acceptable to you. If it turns out the building needs a new roof or major plumbing work, you can cancel the sale or try to negotiate a lower price.
- An *environmental review* so you won't be faced with an expensive cleanup because of a leaking oil tank or chemical spill.

- A *certificate of occupancy* from the local building department stating that the building meets all city requirements and there are no problems with electrical, plumbing and heating systems, for example. You don't want to be closed down because some obscure code hasn't been complied with.

- *Zoning clearance* confirming that your business use will comply with the local zoning ordinance. A retail business may not be allowed in an office zone.

A manufacturing operation may not be allowed in a retail zone. You need to know that you can use the building the way you want to.

- Assurance that private *building and use restrictions* – sometimes called covenants, conditions and restrictions – won't prevent your intended use.
- Your lawyer's approval of the *title insurance commitment*. You want to be sure you're getting a clear title to the building with no construction liens, for example.

## OTHER CONTRACT TERMS

So much for contingencies. What else should go in the sales agreement? Consider covering these topics:

**Personal property.** Generally, the seller has the legal right to remove personal property, which basically is anything that's not nailed down. To avoid surprises, list the stuff that's going to stay, display counters in a retail store, for example, or window air-conditioners in an office.

**Utility bills.** As with taxes, you may have to apportion utility bills, since the closing date may fall in the middle of a billing period. Plan ahead for how to deal with all utility bills: electric, natural gas and water.



# NozzTeq®

Taking Science to the Sewer!®

Equipment Engineered for Long Lasting Performance™

## Blowing Toilets?

### BL Swiper™

For Pipes 15" & up



For Pipes 8' to 18"



Rental and Leasing Services Available!

Call For FREE DVD



[www.nozzteq.com](http://www.nozzteq.com)

Phone: 1.866.620.5915

Fax: 603.413.6744

Check out our online store at  
[cole-mart.com/nozzteq](http://cole-mart.com/nozzteq)

## WHY BUY AN EasyCAM II?

- ✓ American Made
- ✓ Rugged and dependable
- ✓ Designed by a Plumber
- ✓ Two year warranty
- ✓ Modular Components = Owner Repairable
- ✓ No Down Time, No Labor Cost
- ✓ Fair Pricing starting at \$3995

Color / 512 Hz Transmitter / Footage Counter / Voice Over / Cordless

### It just makes sense.

239-260-2056 Licensed Under Patent # 7,715,701 [www.PlumbersBestCamera.com](http://www.PlumbersBestCamera.com)

**Repairs by seller.** If the seller is going to repair or renovate the building before closing, list everything the seller will be doing and provide for final approval by an architect or contractor selected by you.

**Existing tenants.** If there are existing tenants or occupants in the building and you plan to move in right after closing, make clear in the contract that you'll get an empty building when your purchase closes.

**Damage to building.** State that any damage before closing (such as damage caused by fire, windstorm or flooding) is the seller's responsibility.

**Condition of building.** Specify that the building will be "broom clean" at closing. You don't want to haul a truckload of debris to the city dump. ☐

## Laboratory Tested Safe LiquiSmoke®

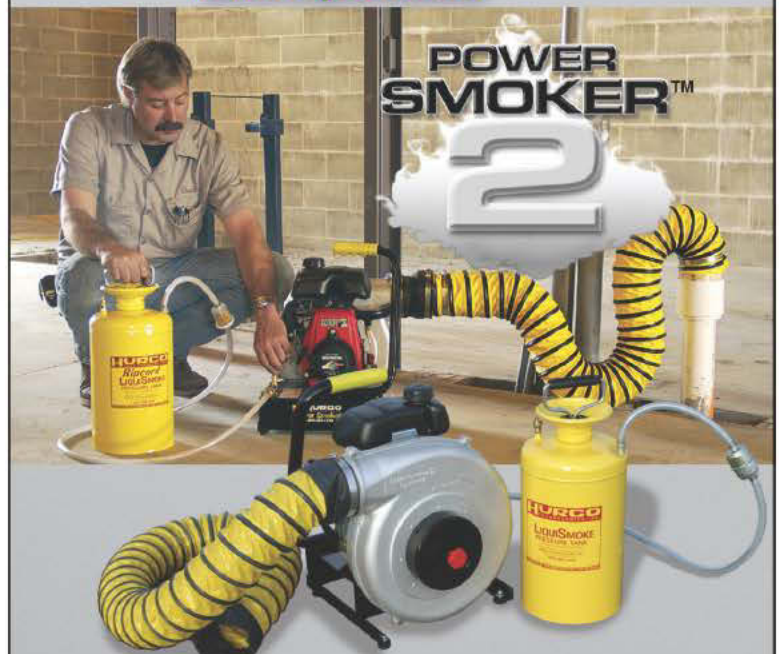
A smoke producing system that is so unique and cost efficient, it is covered by two United States Patents!

HURCO provides all you need to manage a complete smoke testing program better and more profitably.



# Power Smoker™

with LiquiSmoke®



## HURCO TECHNOLOGIES, INC.®

1-800-888-1436  
[www.gethurco.com](http://www.gethurco.com)

(Patents: 6,865,341, 7,050,709)



# DUC

CUES  
DIGITAL UNIVERSAL CAMERA



**IMPROVE THE OPERATIONAL, ENVIRONMENTAL, AND FINANCIAL PERFORMANCE OF YOUR WASTEWATER SYSTEM TODAY!**

The CUES Digital Universal Camera (DUC) is a semi-autonomous, high resolution, digital CCTV, side-scanning camera designed for rapid and detailed condition assessment of your wastewater system. When used in conjunction with CUES asset-based Granite XP decision support software, you can inspect and assess 5000 feet or more per day, increasing your revenue, while reducing your expenses. The system can be retrofitted to any industry standard multi-conductor truck or trailer-mounted system.

- The CUES Digital Universal Camera system produces a continuous hemispherical scan of internal pipe conditions in 6-60" pipe.
- The Digital Universal Camera operates at a constant speed in 6"-60" pipe without the need to stop or pan and tilt.
- Simply drive the unit on cruise control to the remote manhole or through multiple manholes for maximum efficiency.
- Rapid condition assessment via flat representation of the pipe; move the mouse to the area of interest, simply click, and the corresponding video appears; review and assign observations 5-10 times faster than traditional sequential video review.



The D.U.C. will outperform any autonomous robotic system. Call your CUES representative today!

800.327.7791    www.cuesinc.com    salesinfo@cuesinc.com

## Flexible and Affordable Financing Options

**Financing for New and Used Equipment**  
Trucks • Tanks • Trailers • Toilets • Cameras • Jetters  
Computer Hardware & Software



7 Church Road, Hatfield, PA 19440  
Phone: 800.422.1844  
Fax: 888.883.9380  
Visit our website: www.libertyfg.com

Call Michael DeGroat (ext 12)

**Commercial Equipment Financing Call 800-422-1844**

## Irrigation fittings are for irrigating – NOT vacuum. How many dollars are you spending **SUCKING AIR?**

Industry-proven, quality vacuum couplings from Bandlock will put money into your pockets.

4" to 12" Male Coupler    4" to 12" Female Coupler    Steel Crown 4", 6" and 8" Press End    Hazardous Material Profile Gaskets (Safety)    Rubber Gaskets

6" and 8" Aluminum Weldon    Aluminum & Steel Pipe

4" and 6" High Abrasive Bulk Nozzles    Special "Y" Reducers    BANDLOCK "Y" Reducers    Close Tolerance Couplers And Fittings Bring "Safety" To Your Work Place.

EZ Lift Clamps    Standard & International 4" to 12"    Wet Valve, 6", 360° Injected    Male and Female 4" to 12" End Plugs

**Recognized as the #1 Relief Valve in the World**

**BANDLOCK**  
AMESBURY GROUP    MADE IN THE U.S.A.

Download Catalog From Our Web Site!  
[www.bandlockcouplers.com](http://www.bandlockcouplers.com)

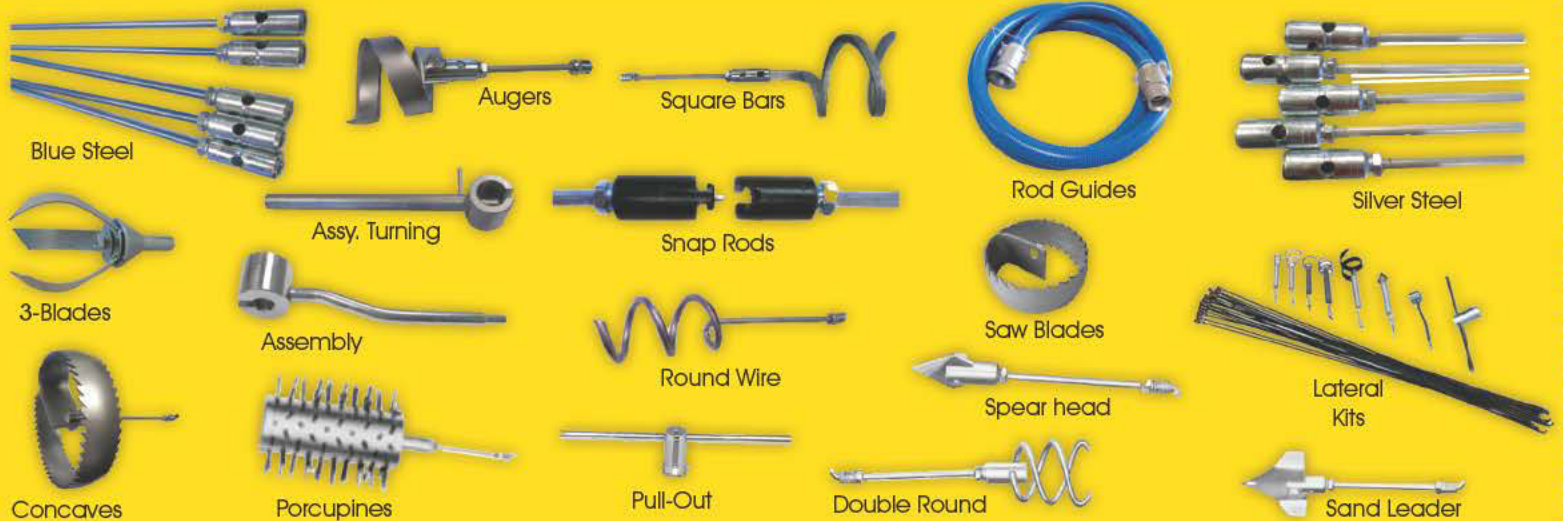
**1-800-659-2978**  
Superior "Quick" Connect Vacuum And Pressure Couplings And Accessories

# SOUTHLAND TOOL MFG. INC.

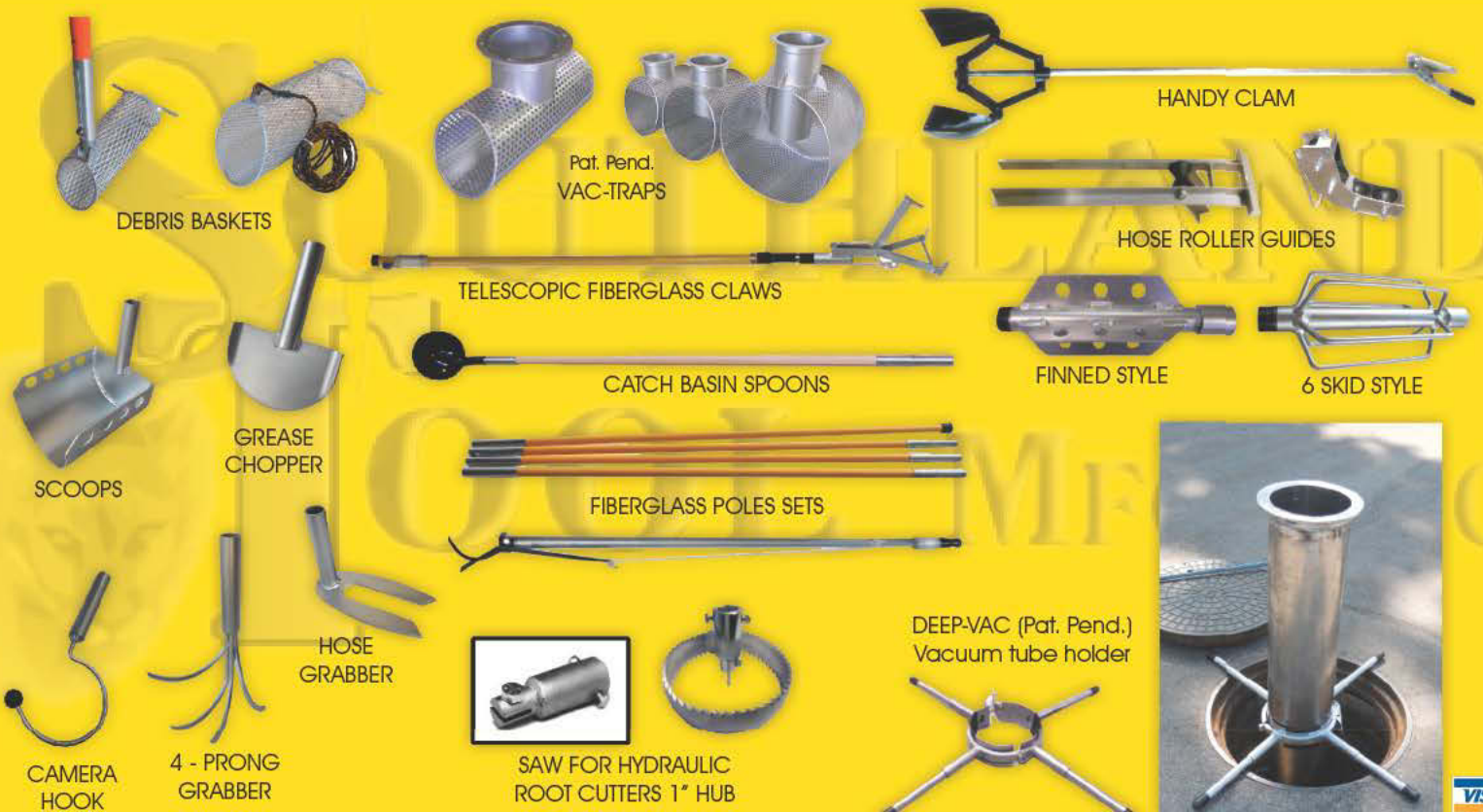
*Building Innovative Tools for Municipalities*



## SEWER RODDING TOOLS FOR YOUR SECTIONAL, CONTINUOUS OR HAND RODDING NEEDS



## PUMA MANHOLE EXTRACTION AND SERVICE TOOLS FOR YOUR COMBO



# vCam Series Inspection Systems

Onsite Training

Local Support

Camera Exchange Program



## vCamModular-R Control Module



- Record to 300GB HDD or SD card
- Transfer video and snapshots to USB Devices
- Internal Ni-MH rechargeable batteries
- 8" recessed color TFT LCD
- Full size alpha/numeric weather resistant keyboard
- 5 types of reels all work with 1 control module



**Please call for an on-site  
FREE demonstration!**

Vivax-Metrotech Corporation  
3251 Olcott Street, Santa Clara,  
CA 95054, USA

Toll Free : +1-800-446-3392  
Tel : +1-408-734-1400  
Fax : +1-408-734-1415  
Email : sales@vxmt.com

[www.vivax-metrotech.com](http://www.vivax-metrotech.com)

### Type-M Reel (100/200ft)



1" Standard



1.3" Self-Leveling

### Type-C Reel (200ft)



1.3" Self-Leveling



1.8" Self-Leveling

### Type-P Reel (400ft)



### vLocCam Camera Locator



- 512Hz, 33kHz frequencies
- Compass mode for easy locates
- Pushbutton depth reading
- Locates live power, CATV and telephone



**MODEL  
DM55**

# For Your Toughest Jobs!



**Call us today to find out how many  
different ways we can help you  
get what you want and need.**

**877-244-0556**

**colemart**

[www.cole-mart.com/duracable](http://www.cole-mart.com/duracable)

**Duracable**

Manufacturing Company

[www.duracable.com](http://www.duracable.com) • [sales@duracable.com](mailto:sales@duracable.com) • West Des Moines, IA 50265

# BULLET PROOF

Over 11,000 Customers Worldwide Agree!



*Jetters That Stand the Test of Time*

Experience the Harben difference

**QUALITY**

**VALUE**

**SERVICE**

**RELIABILITY**

Call today to schedule a demonstration. **1-800-327-5387**

 **HARBEN**®

**High Pressure Water Technology**

[www.harben.com](http://www.harben.com)

Scan the code below with your smart phone application



Journeyman HVAC technician Ed Fagalde jets a grease trap for a commercial kitchen at Magnolia of Millbrae retirement home. (Photography by Jason Doiy)

**WATCH THEM IN ACTION**

To learn more about Southwood Plumbing & Heating, view the video at [www.cleaner.com](http://www.cleaner.com).



# ADAPTING TO CHANGE

CALIFORNIA CONTRACTOR MAINTAINS SUCCESS BY KEEPING A FINGER ON THE PULSE OF TECHNOLOGY AND NEW SERVICES BY MARIAN BOND

It's been 48 years since Frank O'Halloran established Southwood Plumbing & Heating in San Bruno, Calif., serving primarily residential and public entities, but also industrial and commercial customers in nearby communities including South San Francisco.

Denis O'Halloran, son of the founder and current company president, notes that over the years they have seen some significant changes in their market area, not only with development and population growth but in the character of the residential market. He also points out that advances in technology and services have changed the industry.

"Our area has evolved in many ways," says O'Halloran, who has been sole owner since 1981. "A lot of people have moved out and have rented their homes, and we also have apartments, most all of this is handled by rental management companies. So we see our basic services in residential often coming from these associations, as well as those who still own their homes."

While Southwood continues to offer all the basic plumbing services, their menu has expanded to include drain cleaning, jetting, camera inspection and pipe bursting. O'Halloran notes that when they categorize and break down

## profile

### SOUTHWOOD PLUMBING & HEATING, SAN BRUNO, CALIF.



OWNER: Denis O'Halloran  
 YEARS IN BUSINESS: 48  
 EMPLOYEES: 6  
 SERVICES: Plumbing, jetting, drain cleaning, CCTV, pipe bursting, HVAC, backflow testing  
 AREA SERVED: 30-mile radius includes South San Francisco and six other communities  
 WEBSITE: [www.southwoodplumbingandheating.com](http://www.southwoodplumbingandheating.com)

(continued)



# TOUGH JOBS TOUGHHER TOOLS



## ONE CALL

# 1-800-231-3628

For all your water jetting needs.  
**ALL of them.**

# **GD**

**GARDNER DENVER™**  
WATER JETTING SYSTEMS, INC.

(1) 281-448-5800 **Phone**  
(1) 281-448-7500 **Fax**  
(1) 800-231-3628 **Toll-free U.S. & Canada**

[www.waterjetting.com](http://www.waterjetting.com)

percentages of services during the billing process, the results are often shocking.

"We will often be called out to take care of a stopped-up sink, but that can lead to other problems. We have seen 60 percent of the work coming from drain cleaning, hydrojetting and camera work. Pipe bursting, which we added in 2005, is bringing in 10 percent, HVAC 10 percent, and basic plumbing 20 percent, including backflow testing, an extremely important service because we are located right on the San Francisco Bay. Those testing results often lead to problems that have to be corrected and thus lead to further remedies."

### WELL EQUIPPED

In rating equipment and technology important to the operation, O'Halloran says he would have to put jetting and camera inspection at number one.

"Our first camera was an investment of \$18,000, and you have to wonder at first. You have this big expenditure and it's 'Oh my Gosh, will I ever be able to use this and pay for this?' But it's been that way with a lot of stuff. We now have four cameras. It's the same with other equipment. With the jetter, we bought one and it was \$6,000 and we thought, 'Will we ever pay for this?' We had the cart jetter, and then our current trailer jetter. I don't like to say which is most important, but having the trailer jetter and camera has helped, especially in getting commercial accounts. You go out and you have a nice piece of equipment and it gets the job done."



Owner Denis O'Halloran, left, and foreman Steve Stupi jet a line using the Gen-Eye SPECTRA video inspection system from General Pipe Cleaners.

"Training is big. When shopping for our current jetter we used US Jetting, and they had training classes provided locally. That was a huge factor in our choice."

**Denis O'Halloran**

When shopping for new equipment, O'Halloran says being able to get proper training is at the top of his priority list.



"That is the key for us. Training is big. When shopping for our current jetter we used US Jetting, and they had training classes provided locally. That was a huge factor in our choice. They let us know where we could get repairs here in California."

The stable of equipment that allows Southwood to serve their densely

Stupi jets a line at a retirement home in Millbrae, Calif., using the Gen-Eye SPECTRA video inspection system from General Pipe Cleaners.

populated area of Northern California includes: US Jetting 4018-300 trailer jetter, 4,000 psi/18 gpm; two MyTana MV80 3,000 psi/8 gpm cart jettors; two RIDGID standard SeeSnake pipe inspection cameras; RIDGID Mini-SeeSnake Plus pipe inspection camera; General Pipe Cleaners Gen-Eye Spectra color pipe inspection camera; RIDGID NaviTrack 11 locator; General Pipe Cleaners Gen-Eye GL-3 digital pipe locator; Goldak model 5600-SI pipe and cable locator/leak detector; Pipe Genie 40-ton pipe bursting system; and eight sewer machines from Gorlitz Sewer & Drain and Spartan Tool. Crews move from job to job in five Ford and Chevy service vans.

"When we arrive at a job, we are there to do the job, to take care of a problem," says O'Halloran. "We want to be equipped. We get a lot of emergency work in our area, which is densely populated. We are often called in when other plumbing contractors don't have the equipment, and we do get calls from many companies who simply do not have our capability. Sometimes they won't have a jetter hose of 500 feet. Maybe they will not have a camera, or pipe bursting equipment."

He says they do not go in as a subcontractor, as all of their trucks are clearly Southwood labeled. The customer knows who is doing the heavy-duty work.

While relining has not been in high demand, O'Halloran sees a growing interest in pipe bursting. He says adding a bursting system was an important step for the company.

*(continued)*



# Find Leaks Fast in Existing Sewer Systems

Cherne is not “blowing smoke” when it talks about the benefits of its AIR LOC Plumbing DWV Smoke Blower. Here’s why our system is better:

- > Liquid smoke atomized before heating – giving our system 100% atomization with no liquid residue.
- > No in-line filter required.
- > Smaller 2 gallon tank makes our unit more portable and easier to carry.
- > Air intake slider - superior design allows greater control of air flow.



  
[www.cherneind.com](http://www.cherneind.com)  
1.800.THE.PLUG

Stupi, left and Ed Fagalde unreel hose from the US Jetting jetter and feed it into a grease trap outside the commercial kitchen at Magnolia of Millbrae retirement home.



“With pipe bursting we deal with a lot of short lines in the residential jobs. Sometimes only 20 to 25 feet. This is challenging in that it is not as cost-effective as the longer lines. With church properties we see typically 50- to 100-foot lines. With school properties we will see lines as long as 500 feet. We have completed 150-foot-long pipe bursting jobs on some school properties. Schools have lots of sewers and they are long, average about 200 to 300 feet.”

For a typical pipe bursting job he says there will be four people involved over three days. They do hand excavating for the two 4x4-foot holes, and use appropriate shoring equipment. Lines are typically 3 1/2 to 6 feet deep, but he says they also see some 10 to 12 feet deep.

“In San Francisco we have really tight spaces and you can find utility lines going in four different directions. For safety we will hand dig to avoid problems.”

## FOOT IN THE DOOR

Securing commercial accounts has been an important element in the growth of Southwood Plumbing & Heating, and although offering backflow testing is more of a loss leader than a profit generator, it has opened some doors for the company.

Owner Denis O’Halloran notes this requires the Mid-West Instrument model 830 Backflow Test Kit.

“In San Francisco, the water department requires every commercial business where there is a potential for backflow to have devices to avoid contamination. This is a duplex gauge that takes water from one side of the check valve and allows us to check to be sure the device does not show a leak. They worry about the public water supply being contaminated.

“This gets us in the building – in the door, and other work often develops.”

Certification is required every three years and involves a 40-hour certification class.

“Commercial operations have bigger jobs, and we need these larger projects to keep our company going. Residential business is nice, but we want a certain number of larger projects to keep our company on the road and working.”

O’Halloran, who has taught in the PHCC, the state-approved apprenticeship course in the area, says the most important piece of advice he would pass on to others in the business is not to fear your competition.

“Work with your competitors. These relationships can work out very well in the long run. We sometimes will loan equipment. Make a referral when we can’t handle a job. When you come down to it, we are all in the same game.”

## NICHE MARKETING

Back in the early 1980s, Southwood Plumbing & Heating developed an important relationship with many area school districts. It was while backflow testing that these opportunities opened up. This included installation of sewer systems where schools were putting in portable trailers for extra classroom space due to the population explosion. Generally, 6-inch clay pipe was used on grounds, and under the buildings it was 3- and 4-inch cast iron. While the company is no longer doing any installation work, they do have an ongoing relationship with these school districts, offering camera inspection and jetting and frequently pipe bursting to deal with older pipe. Some of these installations go back to the 1960s, with typical problems involving cracked and crushed pipe and root intrusion.

**“When we arrive at a job, we are there to do the job, to take care of a problem. We want to be equipped.”**

**Denis O’Halloran**

“It’s strange in California, where the school districts can get money to put in these trailers, but not to build schools,” O’Halloran says. “It’s a lot of politics. We have not done installations for a long time.”

O’Halloran notes that there have been some exceptions as far as building, and one district rebuilt several schools. Southwood provided camera service on the sewers before construction started, and they maintain records so they can review and find solutions if problems occur.

A similar relationship has developed with many of the larger churches in the seven cities served by Southwood. These are older churches on large properties, and they have typical problems such as stopped up toilets and burnt out water heaters, but also issues with sewer lines that need to be inspected, cleaned and repaired or replaced.

In the residential section of their business they deal with a lot of older clay sewers and the concern is infiltration in the sewage treatment plants.

“As we are on the bay, when we have a large rain storm there is so much infiltration into the sewer system, sewage treatment plants can be flooded,” O’Halloran says. “And if this overflows into the bay you have a problem. There

*(continued)*

**Understand the difference and you'll understand the loyalty.**



**O'BRIEN®**  
A PRODUCT OF **HEVAC**



There is a saying in our industry: "Once an O'Brien user, always an O'Brien user."

If efficiency, power, and reliability are important to you, we know you'll agree.

To learn more about the O'Brien difference, call or visit us online.

800.638.1901 [www.obrienmfg.com](http://www.obrienmfg.com)

**AQUATECH**

**O'BRIEN**

**Hi-Vac**

**UltraVac**

**X-VAC**  
HYDRO EXCAVATOR



**Proven Design - Best Buy**



SJPE-1500

**With over  
15 YEARS EXPERIENCE  
manufacturing jetters and  
pressure washers!**



SJPE-1650



SGP Hot Water Pressure Washer



SJGDG-3016



**800-771-1881 | Info@SharkPW.com  
www.SharkPW.com/Jetters**

**The Most Trusted Name In  
Jetters You've Never Heard Of**



The Southwood Plumbing team includes, from left, Luis Gomez, journeyman plumber; Steve Stupi, foreman; Denis O'Halloran, owner; Matt Stupi, journeyman plumber; Ed Fagalde, journeyman HVAC technician; Kathy Stupi, office manager; and Scott Miller, journeyman plumber.

are huge fines for dumping sewage into the bay, and a lot of cities have been going through inspecting and even doing grants for homeowners to upgrade their sewers. One community had a \$2,500 grant for homeowners towards replacement of sewers with infiltration problems between the house and main. In order to qualify, homeowners were required to get three bids. We did some pipe bursting through that program since we had the equipment. We also do jetting and camera work where required.”

#### **MODEL FOR SUCCESS**

Southwood employs six people, and when it's time to add or replace a member of the team, O'Halloran says he likes to bring in ethical, experienced people and instill the Southwood standards that have been established over the years. He also says he tries to make sure the job and the schedule are workable for his employees. This is a number one priority when he walks into his office each morning – to check the schedule and make sure they have all the materials they need.

While the current economy has presented challenges, he says Southwood's diversity of services and quality equipment has carried the day for the operation.

“We have been blessed and I can't complain,” O'Halloran says. **C**

### **more info**

#### **General Pipe Cleaners/ General Wire Spring**

800/245-6200  
www.drainbrain.com  
(See ad page 2)

#### **Goldak, Inc.**

818/367-0149  
www.goldak.com

#### **Gorlitz Sewer & Drain, Inc.**

562/944-3060  
www.gorlitz.com  
(See ad page 15)

#### **Mid-West Instrument**

586/254-6500  
www.midwestinstrument.com

#### **MyTana Mfg. Company, Inc.**

800/328-8170  
www.mytana.com  
(See ad page 43)

#### **Pipe Genie Manufacturing**

877/411-7473  
www.trenchlessamerica.com

#### **RIDGID**

800/769-7743  
www.ridgid.com  
(See ad page 7)

#### **Spartan Tool, LLC**

800/435-3866  
www.spartantool.com  
(See ad page 88)

#### **US Jetting**

800/538-8464  
www.usjetting.com  
(See ad page 9)

# Allan J. Coleman – Since 1905

Call us today! 773-728-2400

5725 North Ravenswood Avenue • Chicago, IL 60660 • www.allanjcoleman.com

## OLDEST NAME IN THE BUSINESS — Over 100 YEARS OLD —

# RIDGID®

### Parts & Service

Having Trouble

## Finding

RIDGID Parts?

We **Have**

RIDGID Parts!



### NaviTrack® Scout®

Scout is designed to solve demanding remote transmitter (sonde) locates using multi-directional locating technology.

### SeekTech® SR-20

SeekTech uses omni-directional antennas, guidance arrows and an easy to read mapping display.



### THE BEST SERVICE AND PRICES TOO LOW TO LIST!



LT1000M

Authorized SeeSnake  
Repair Center

### SeeSnake® With LT1000

- Flexibility in recording, monitoring and reporting
- Compatible with all SeeSnake Reels
- SeeSnake HQ software included

**Fast Turn  
Around!**

### Convert your old VCR monitor to a USB recorder!



Contact us on  
how we can do it?

# RIDGID®

RIDGID Calendar  
Free With \$200  
Purchase

## If you buy the best, you are only sorry once!

PHCC MEMBER



# PRO-VAC

**We Listen and Respond !**

With years of positive customer feedback;  
the ProVac has evolved into the  
**Best Industrial Pumpout System**  
on the market today!

- *Ideal for GREASE TRAP PUMPING*
- *Light weight and extremely maneuverable*
- *User friendly/easy access front controls*
- *24" wide fits through any door*
- *Exhaust deodorizer*
- *Hose rack and tool holder*
- *Quiet operation, plugs into any 15 amp service*
- *120 gallon per minute pumping capacity*
- *Two 6" clean-outs, top and bottom*
- *25 foot retractable cord reel*



## PRO-CHOCK

Safely secures the ProVac  
on your trailer, pickup  
truck bed, lift gate, etc.,  
in seconds!

[www.westmoorltd.com](http://www.westmoorltd.com)

Toll Free: 800-367-0972 or 315-363-1500 Westmoor Ltd., P.O. Box 99, Sherrill, NY 13461



USB - SEC

# Often Imitated, Never Duplicated

## TURBO CHAIN CUTTERS

Since 1989 USB has lead the way in the development of the unique turbine driven chain cutter. These innovative highly reliable products offer superior performance and cleaning efficiency. The chain retainer is driven by a high performance turbine thus achieving unsurpassed results in the removal of roots, grease and mineral deposits from

4"-48" sewer lines. Turbo chain cutters with the flexible guide skid can be used in conjunction with a barrel cutter to remove protruding laterals. Offsets? No problem, Turbo chain cutters for 6" sewer lines and larger have a continuously adjustable guide skid. All of the Turbo chain cutters require no lubrication and are low maintenance. The Turbo chain cutters can be used with recycled water too!

**BEST BANG FOR YOUR BUCK!**



USB - SEC

### USB-Sewer Equipment Corporation

1700 Enterprise Way • Suite 116 • Marietta, GA 30067

Toll Free 866-408-2814 • PHONE 770-984-8880 • FAX 770-984-2802

Email [info@usbsec.com](mailto:info@usbsec.com) • Web [www.usbsec.com](http://www.usbsec.com)





# Save \$900 a year on cartridge changes – on 19 NLB accessories



## NLB accessories feature long-life, quick-change seals

If you're changing water jet seals every 40 hours, the cost of replacements adds up fast. But most NLB lances and foot controls (and other accessories: 19 in all) have a cartridge seal that typically lasts 280 hours. That can save you over \$900 a year.

The change itself takes only 60 seconds — just unscrew the cartridge and screw in a new one. You'll also like our patented instant pressure dump and a host of operator-friendly features.

For productivity that quickly pays for itself, choose NLB water jet accessories. Call 1-877-NLB-7988 or visit [www.nlbcorp.com](http://www.nlbcorp.com).

**NLB. The Leader in Water Jet Productivity.**



29830 Beck Road, Wixom, MI 48393 • [www.nlbcorp.com](http://www.nlbcorp.com)  
MI: (248) 624-5555, TX: (281) 471-7761, NJ: (856) 423-2211,  
LA: (225) 622-1666, CA: (562) 490-3277, e-mail: [nlbmktg@nlbusa.com](mailto:nlbmktg@nlbusa.com)

# Bidding for Success

UNDERSTANDING THE REAL COST OF BUSINESS WILL KEEP YOU PROFITABLE

BY JIM AANDERUD

**A**s contractors, we regularly face the challenge of coming up with the right numbers in order to win bids. We go back and forth and up and down trying to determine the magic number that is going to help us secure a project. After a lot of contemplation and soul searching, we finally settle on a number. We write it down on the bid papers, all the while questioning whether it is too high or too low.

Coming up with the right price is a challenge for everyone. We want to price it low enough to win the bid, but we don't want to bid it so low so that we end up losing money. This is a challenge that every contractor experiences, especially in today's competitive climate.

The biggest advantage you may have is the physical location of the project. If the job site is close to your operations yard, then this can be a significant benefit over your competition. Your backyard is where you should be most competitive because it allows you to be more aggressive with your pricing.

There are many factors that determine the "right price," but understanding our true cost of business is the most important factor. Unfortunately, many contractors have no idea what it costs them to run their businesses and they tend to chronically underprice their work because of it. This, of course, is a sure road to disaster.

Understanding what it costs to put a combination unit or a CCTV inspection van in the field is critical to the survival of any company. Without this understanding it is impossible to know whether we are making a profit or not. Bidding projects blindly will put us out of business quicker than anything else. We must know what our costs are in order to ensure that our trucks are making money every time they go out on a job.

## ACCOUNTING BASICS

Let's look at the areas that must be considered in determining the price for a job. Most of the costs we have in our business fall into three categories; fixed costs, fixed variable costs and variable costs.

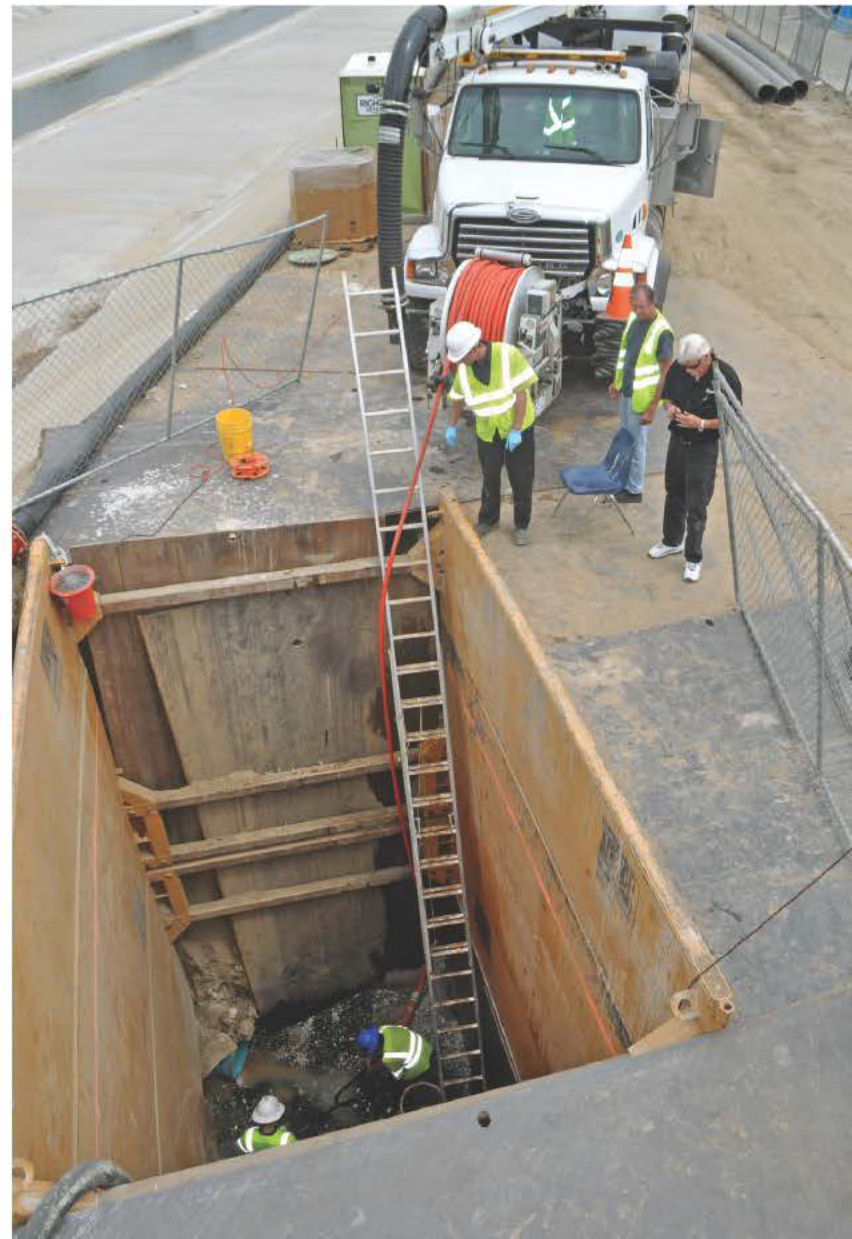
Fixed costs are the overhead that we incur as a company. Some examples are rent, equipment and salaries. These costs are pretty much predictable each month.


Ausitn Welch, Ed Lotz and Bill Houser oversee the insertion of a cleaning nozzle in an 18-inch exposed siphon. (Photos courtesy of Innerline Engineering)

Fixed variable costs are monthly expenses that we always have, but their cost varies from month to month. Things like phones, insurance, taxes and fuel fit into this category.

Variable costs, on the other hand, typically rise and fall in relation to our sales. These costs are made up of job materials, wages of part-time or temporary employees, maintenance, etc.

(continued)



 Made in the U.S.A.

# MyTana

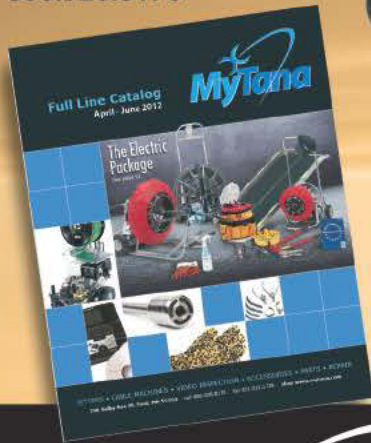
Professional grade tools for  
sewer & drain professionals

## The Contractors Package

includes the Electric, Jetter, &  
Video Inspect Packages shown.



Request your  
FREE, FULL LINE  
catalog today!  
800.328.8170



**Everything you'll need to  
get a good night's sleep!**

# MyTana

**FACTORY DIRECT CUSTOMER SERVICE**

Competent • Polite • Clear (M-F 7am-5pm CST)

toll free **800.328.8170** fax 651.222.1739

Cable Machines • Jetters • Push Cameras for Main Lines & Drain Lines • Locators • Related Parts • Accessories



Bill Houser fine-tunes a pipeline inspection and cleaning proposal. Knowing the real cost of operating your crew is critical to ensuring profitability.

Our cost of labor is also considered a variable cost. And since it is one of the largest expenses we have in business, we need to have a pretty good understanding of it. We must know exactly what an employee costs before we can accurately determine what it will cost us to operate on an hourly or daily basis. Remember that this cost isn't just their salary; we must also take into account their benefits, per diems, lodging and expense accounts.

Once we have an understanding of what our true cost of business is, we can begin to determine what it actually costs us to mobilize a crew. Understanding where our break-even point is will help us bid projects more accurately and help us factor in a known profit margin.

## PROPOSALS

Proposals can be submitted in a variety of ways. They may be hourly, daily or by the foot. But no matter what method is proposed, it all comes down to the same thing. What does it cost to operate a crew for an hour? Knowing this will also help us understand what it costs to operate on a daily, weekly and monthly basis.

Bidding by the foot is a little more complicated because we must be able to predict, with some certainty, how many feet we are able to clean or inspect in an hour or in a day. When we know this, we can then affix a per-foot dollar amount by dividing our cost per hour by the number of feet we can clean or inspect in that hour.

If we estimate low in the amount of feet we can complete in a day, then we have a problem. If, for example, we calculate our rates based on 4,000 feet per day, but only get 3,000 feet, then our calculations are out the window and we will take a loss on the project. However, if we can get to the point where we can predict our production consistently, then we can assure ourselves profitability.

Profit is one of the most important things in business. We must figure in a profit for every hour and every foot of work we do.

Profit is the lifeline of any business. Profit is the amount of money we add above our costs in order to make the job worthwhile. Unfortunately, the media has demonized this word. They have made it synonymous with corporate greed and ill-gotten gain. But let me assure you, anyone who makes this kind of statement has no idea how business works. In fact, they are completely unaware of its importance to our economy.

Without a profit, no company will succeed. If they were to charge just enough to cover their costs, then it would only be a matter of time before they went out of business. Why? Because eventually there would not be enough money to cover their operating costs. Cash flow would dry up and bankruptcy would be knocking at the door.

Profit is what helps us build a reserve. It gives us some breathing room when receivables are slow in coming. It is also what helps us weather unanticipated catastrophes. If, for example, a combination unit goes down and a very expensive repair is needed, a cash reserve would be needed in order to cover the cost. If there is no reserve, then the combo truck won't be fixed, the job won't be completed and the money supply will just dry up. That is why we must charge a little extra on each job in order to build the cash reserve we need.

## STAYING COMPETITIVE

In order to secure more bids, we must figure out how to be more competitive with our prices. By identifying areas where we have an advantage over our competition we can begin to chip away at our lowest price.

Perhaps you have invested in tools that help you increase production. Maybe you have procedures in place that make you more efficient. Or, maybe it's the knowledge and experience you have that helps you operate more profitably. Any advantage you can develop will help you be more competitive.

The biggest advantage you may have is the physical location of the project. If the job site is close to your operations yard, then this can be a significant benefit over your competition. Your backyard is where you should be most competitive because it allows you to be more aggressive with your pricing. If the distance that you travel to the job site is shorter than your competitors, then your cost of business is less. You are paying less for fuel and less labor time to get to the job site. It can be a major advantage when your competition is figuring in mobilization costs that you don't have to. Your savings on this alone can be significant, especially on long projects.

Being more organized than your competition can pay dividends as well. By keeping track of past bids, you may get an insight into where your competitor's numbers might be.

Training can also work to your advantage. Employees who know what they are doing and are able to perform their jobs more efficiently will help your bottom line.

An effective system of accountability can be an advantage as well. Having proper oversight on the job will ensure that employees are working more efficiently. Every wasted minute affects your bottom line. Maximizing your labor will increase your profit margins extensively.

## CONCLUSION

Adding an accounting firm to your team is one of the best investments you can make as a company. Accountants can help make your finances understandable and can even spot negative company trends long before they affect your bottom line. Having financial professionals on hand to advise you can add significantly to your success.

We cannot become complacent and expect our income to remain steady. We must keep our eye on the ball and realize that the market is constantly changing. If we simply react to it, we may be too late. We must be proactive and take steps to adapt before our competition does.

By gaining a thorough understanding of our company finances, we can guarantee that decisions are based on fact and not emotion. When we bid on emotions, we tend to throw out numbers that are unsustainable. However, when we bid with facts, and know exactly where our bottom line is, we are able to bid aggressively while still remaining profitable. ■

**ABOUT THE AUTHOR** Jim Aanderud is owner of Innerline Engineering, a video pipeline inspection company based in Corona, Calif.

Greg Parker  
Leeds, AL Service Center  
23 Years of Dedicated Service

**WE DON'T  
FIX PROBLEMS.  
WE ELIMINATE  
THEM.**



**Make Your Next Repair Last  
By Repairing The Problem,  
Not Just The Symptoms.**

Machines break, parts wear down. And it always happens at the worst possible time. Don't gamble on a quick fix that only patches the problem, it will end up costing you more money and opportunities in the long run. Our team of experts will repair or maintain your airmoving or waterblasting equipment (all makes—all models) quickly to keep you going strong for the long haul. Find the FS Solutions Service Center nearest you at [www.fssolutionsgroup.com](http://www.fssolutionsgroup.com) or call 1-800-822-8785.

© 2011 Federal Signal Corporation



SERVICE



PARTS



REBUILDS



RENTALS



TRAINING

## Drain Cable Sale

1/4" Cable: 35' \$21.95 / 50' \$27.95  
 3/8" Cable: 50' \$45.95 / 100' \$92.95  
 1/2" Cable: 75' \$79.95 / 100' \$99.95  
 3/4" Cable: 75' \$132.95 / 100' \$174.95

We carry **Locators**

### Cameras

As Low As  
**\$399**

36 Models To Choose From



Video Online



**Conversion Kits**  
**\$299**

Convert A Pressure Washer To A Jetter

No Compromise  
 Best Service/Best Price



Celebrating 15 years

**1-800-504-7435**

[www.AmazingMachinery.com](http://www.AmazingMachinery.com)



**Jetters**  
 Starting At  
**\$7195**

3500 psi & 5.5 gpm  
 Also Available Up To 4000 psi & 22 gpm

Starting At  
**\$1549**

4000 psi & 4 gpm  
 Also Available Up To 4000 psi & 12 gpm



## Jetter Hose Sale

1/8" Hose: 50' \$39.95 / 100' \$64.95  
 1/4" Hose: 100' \$89.95 / 200' \$169.95  
 3/8" Hose: 150' \$199.95 / 250' \$329.95  
 1/2" Hose: 200' \$409.95 / 400' \$689.95

### Cable Machines

**\$419**  
 1/3 hp



**\$1499**

3/4 hp

### Jetter Nozzles

From  
**\$16.95**

Custom Drilled 2-25 Orifices



**Generators / Air Compressors / Pressure Washers / Trash Pumps**

**T&T TOOLS**

**T&T Tools, Inc.**

Fax: 800.521.3260

Email: [sales@tandttools.com](mailto:sales@tandttools.com)

**800.521.6893**  
**[www.MightyProbe.com](http://www.MightyProbe.com)**

Call for a FREE Catalog



Call for a FREE Catalog

### HOOKS...

- > Several different styles of heat-treated hooks are available
- > Top Poppers are great to open manhole covers
- > The Handy Hooks allow two handed use

### PROBES...

- > Insulated, standard, and specialty soil probes
- > Metal shaft sizes: 3/8" round, 3/8" hex, or 7/16" hex
- > Replaceable tips are threaded on and hardened
- > A "slide" allows the handle to pound the shaft into the ground

# MEET BIG BROTHER



**Pathfinder XL**  
(8" Relined and Larger)

**Pathfinder**  
(6"-24")

**ARIES INTRODUCES THE PATHFINDER XL**, our newest product in the widely used Pathfinder series of sewer inspection equipment. This feature-packed transporter offers, as standard, a remote camera lift, rear-facing camera and powerful six-wheel, steerable drive to navigate the toughest obstacles quickly and efficiently.

Whether you choose the Pathfinder or Pathfinder XL, you will inspect with the most versatile and technologically advanced transporters available today.

Meet the family, contact your Aries dealer or Sales Representative today.

**ARIES**  
INDUSTRIES, INC.

Proudly Manufactured in the U.S.A. | [ARIESINDUSTRIES.com](http://ARIESINDUSTRIES.com) | (800) 234-7205

# Multiplier Effect

SMARTLY BRANDED TRUCKS, A CLEVER COMPANY NAME AND MARKETING CONSISTENCY BOOST A TEXAS DRAIN CLEANER'S BUSINESS

BY KEN WYSOCKY

**H**assell Free Plumbing in Gun Barrel City, Texas, owns just four service vehicles. But people who live in and around the large, three-county area the company services in East Texas think the company owns a much larger fleet of trucks.

Why? Company co-owner Sandi Hassell credits what she calls the multiplier effect. It's created by stamping each vehicle with the same strong brand identity through a smart-looking vinyl wrap that prominently features the company's name – a clever, playful take on the Hassell name.

"People think we have 10 or 15 trucks on the road because they all look the same," explains Sandi, who owns the company with her husband, David. "I get that all the time ... people say, 'I see your trucks everywhere.' You don't get that if you have two trucks that look completely different."

In economic terms, a multiplier effect is defined as an increase in spending that spurs a boost in income greater than the initial investment. That definition fits the bill at Hassell Free, where an initial investment of about \$20,000 for the four vinyl wraps has created a tidy return on investment.

*"They've more than paid for themselves. I'll do it for every truck we ever buy – they really get people to notice our vehicles. I'd estimate that 20 percent of our service calls come from people who say they know about us because they've noticed our trucks."*

## Sandi Hassell

"They've more than paid for themselves," Sandi says of the wraps, which were designed by her son, Benjamin, and produced by Florida-based SignZoo. "I'll do it for every truck we ever buy – they really get people to notice our vehicles. I'd estimate that 20 percent of our service calls come from people who say they know about us because they've noticed our trucks."

Hassell Free owns a 2009 and 2011 Isuzu NPR HD, featuring sleek, cab-over design and spacious Hackney bodies. The other two vehicles are 2008 and 2009 Chevrolet Silverado pickup trucks that each tow a cargo trailer: one a 16-footer made by Contract Manufacturer LLC and an 18-footer made by H&H Trailers LLC. The trailers carry equipment for residential plumbing installations.

The trucks' eye-catching design testifies to the power of effective branding. First of all, there's the clever name, the brainchild of Sandi and David. "We couldn't use Hassell Plumbing, right?" she quips. "And to use a first name – say, David's Plumbing – just sounded too 'Bubba' to us. We wanted something more professional and catchy.

"Consistency was important to us, too," she continues. "If you see a company with business cards, letterheads, (refrigerator) magnets and trucks that all look the same – everything is consistent – people recognize your company more easily.



Hassell Free Plumbing's eye-catching trucks testify to the power of effective branding. The clever name is the brainchild of owners Sandi and David Hassell. (Photos courtesy of Hassell Free Plumbing)

## money machines

<b>OWNER:</b>	Hassell Free Plumbing, Gun Barrel City, Texas
<b>VEHICLES:</b>	Two Isuzu NPR HD trucks with Hackney bodies 800/763-0700 www.hackneyservice.com
<b>FUNCTION:</b>	Carrying service equipment and spare parts for plumbing repair and drain cleaning
<b>COST:</b>	About \$42,000 to \$45,000

"Major corporations do it so people associate their product with their name, so why should plumbing be any different?" she asks. "It's a good way to set yourself apart. Plus, people are more likely to call someone who looks like they have it all together."

Because "hassle-free" is such a popular catch phrase, the Hassells took the extra step of obtaining registered trademarks for the company name and wrap design to protect against unauthorized copycat use.

"Even the little man on the trucks is registered, because everyone was using it after we put it on our old vehicles," Sandi notes. "If something works, everyone wants to ride on your coattails."

The two service vehicles also help the company increase productivity and



profitability by keeping parts and equipment well organized and easy to access. Before, the company owned traditional cargo vans that couldn't hold as much equipment and restricted access.

"We couldn't carry a 50- or 60-gallon water heater tank upright, and we could only carry one, and we had to slide it in on the floor," Sandi notes. "The Hackney storage system is made specifically for plumbing ... all the drawers have dividers so every little fitting and parts aren't just thrown together."

"There are specific places to store our sewer machine and video camera," she adds. "And with the self-storing, slide-out ramp in back, one man can unload all of our equipment with just a dolly."

Sandi also points out that the ability to carry a full array of repair parts has increased the company's net profitability by about 40 percent. That's because sprawling Cedar Creek Lake – a 32,623-acre, 18-mile-long body of water that's the fourth-largest lake in Texas, with 320 miles of shoreline – makes back-and-forth trips to a supply house a daunting, time-consuming proposition.

"I'd say we're 90 percent more efficient than before," she says. "If you're on one side of the lake and the supply house is on the other side, you're looking at an hour to an hour-and-a-half round trip to go get parts and then come back and do a job."

"Having everything right there saves a lot of gas and a lot of drive time – and time in general," she



Because "hassle-free" is such a popular phrase, the Hassells took the extra step of obtaining registered trademarks for the company name and wrap design to protect against unauthorized copycat use.

notes. "We might get in one or two more service calls per day in the time we otherwise would've spent running for parts."

More service calls in the same amount of time: It all adds up to another nice, Hassell Free multiplier effect. ☐

## SHOW US THE MONEY (MACHINE)

Money Machines, a feature in *Cleaner*, reports on innovative work vehicles that help contractors operate more efficiently, satisfy customers and earn more profit. We'd like to know about your Money Machine — be it a service van, camera truck, jetting rig, vacuum unit or any vehicle that really helps drive your business. To nominate your vehicle for a feature in this column, send an email to [editor@cleaner.com](mailto:editor@cleaner.com). Tell us briefly but specifically what features make it a great producer. And send a picture — because appearance counts. We look forward to seeing your Money Machine.

# Only one reel can handle the toughest treatment.



At Hannay Reels, we know the tough conditions you face every day. So we build reels that help you increase safety and efficiency – even in the harshest environments.

### Count on Hannay Reels for:

- Reels built to spec – for washdown, jetting, pipeline inspection and more
- Heavy-duty design and construction
- All products made in the USA

Let Hannay solve your reel issues, so your crew can get back to business. Visit [hannay.com](http://hannay.com) or call 877-467-3357 for a reel solution.



Find the reel you need at the new [hannay.com](http://hannay.com)



# FROM 16 TO 100 IN ONE RECEIVER.



**The LF2200 Receiver** is our top-of-the-line Linefinder. It is more sensitive, quiet to the ear and best of all, works with just about **any frequency—even our competitors' transmitters**. It can lock onto any frequency from 16 Hz to over 100 KHz.

**Transmit this:** Prototek has been making and servicing locating tools since 1990. Our transmitters are tiny, huge, versatile, flushable and they'll transmit through just about any material. They're simply the best performing transmitters and receivers in the industry because we've built our business by listening to our best advisers: our customers.

**Visit** our web site or give us a call.

**You've got questions.  
We've got answers.**



**"Blow your competition  
away with Prototek."**

**800-541-9123**

Web: [www.prototek.net](http://www.prototek.net)

Email: [prototeksales@prototek.net](mailto:prototeksales@prototek.net)



## The SOIL SURGEON™



Get the patented  
design that **WORKS**

where water ring bores inward to cut  
the soil and outward to get tube down

The **MOST POWERFUL**  
**HYDRO-EXCAVATING TOOL**  
**ON THE MARKET!**

Use your sewer combination truck to:

- **LINE LOCATE** • **POTHOLE**
- **TRENCH** • **BASIN CLEAN**

(within minutes)

**Features include:**

- 6-foot tube
- 1" water connection
- Handles for easy maneuvering
- Bumpers on bottom to protect tips and line

- Fits all truck manufacture designs
- Quick connects to 8- or 6-inch boom
- You control water flow pressure and power with the truck's controls
- Is designed to cut through all types of soil

Call For A Free Video and Info. on Your Nearest Distributor

**949-363-1401** • [www.soilsurgeoninc.com](http://www.soilsurgeoninc.com)

[www.JETTERS NORTHWEST.com](http://www.JETTERS NORTHWEST.com)

**JETTERS**  
www.jettersnorthwest.com  
**NORTHWEST**



**BIG-BRUTE**  
High Flow Jetter

**8.5 gpm**  
**4000 psi**

- Portable 4-Wheel Cart or Mountable Skid
- Includes 300' of Hose and 4 Jetting-Nozzles
- Gasoline or Propane fueled OHV-engines

**JETTERS: CARTS • TRAILERS • MOUNTABLE SKIDS**

You Can Expect Personal  
Service and Expertise!

Call: **1-877-901-1936**

email: [info@jettersnorthwest.com](mailto:info@jettersnorthwest.com)

# SCOOTER

VIDEO  
INSPECTION SYSTEMS

20843 Santa Lucia • Tehachapi, CA 93561 • Fax: 661.822.8917

**"Simplify your life!"**

SCOOTERS ARE EASY TO USE, TOUGH AND DEPENDABLE.  
DON'T LEAVE THE SHOP WITHOUT ONE.

## SPECIAL PACKAGE

### Scooter 200

- Color
- Attaché DVD
- Locator Transmitter
- Voice Over
- FREE SHIPPING

Complete Package **\$4,995**



10" Color Monitor

DVD Recorders

Storage

We still make the  
**ORIGINAL  
ATTACHÉ**  
with **DVD Recorder!**

Call for SPECIAL PRICING on  
ATTACHÉ II & III

800.772.6165  
[www.tvinspection.com](http://www.tvinspection.com)



# Rely on Reelcraft



Cast aluminum  
hose reels  
Series 8000

Photo courtesy of Vector, a subsidiary  
of Federal Signal Corporation

**New!**

Compact, heavy  
duty dual pedestal  
hose reels

Series DP5000/DP7000

Made in USA



## Built better to perform better



**New!**

Turn-key  
jetter hose  
reels built to  
your specs

Nordic Series

Made in USA

**REELCRAFT**

www.reelcraft.com | 800-444-3134

# Need Jetting Hoses?



Jetting/Lateral Line Hoses

Large Diameter Hoses Up To 1-1/2"

Piranha® Standard High Pressure Sewer Cleaning Hoses

Piranha Armor Belt® Sewer Cleaning Hoses

Piranha® Slither™ High Pressure Sewer Cleaning Hoses

Twin/Multi Lines

For samples, literature and more information contact us at



Piranha Hose Products, Inc.,  
Cadillac, MI

1-800-250-5132

www.piranhahose.com

# Get Connected

CONNECTORS • CABLES



**INTEGRITY, QUALITY,  
SERVICE, LOWER PRICES**

Seacon/  
Turck



Reinforced • Tougher Cables/Connectors  
Poly U • Fiber Optic



504 738 7833 p/f  
jfowler307@aol.com  
OceanquipLLC.com

# INNOVATION ON A WHOLE OTHER LEVEL.

Trust the industry's most advanced family of products

For over 30 years now, Ratech Electronics has been an industry leader in the development, manufacturing and servicing of CCTV video pipeline inspection camera systems and equipment.

Turn to Ratech for innovative and durable equipment.

- The smallest micro cameras in the industry
- Premium Gel Rod™ Push Cable on all systems
- Battery operated units
- Sun-Viewable LCD monitors
- Self leveling cameras available
- A wide range of recording options - DVD, SD Card, USB, Hard-drive, Laptop



FAST PEEK™



INSPECTOR PC - Xi™



LAPTOP INTERFACE



ULTRA MICRO™  
5/8", 3/4", 1" Available



STAINLESS STEEL REEL



ELITE SD™



LOCATORS

Toll Free: (800) 461-9200 Tel: (905) 660-7072 Fax: (905) 660-1519  
sales@ratech-electronics.com

www.ratech-electronics.com



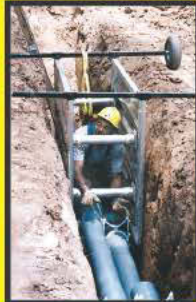
**Ratech**  
Electronics  
Video Pipeline Inspection Systems.

ultra ultra ultra  
**LIGHT – VERSATILE – SAFE**

**ultraSHORE**  
P R O D U C T S



Quick to Install.  
As light as 130lbs.



Roll Your Own.  
Optional wheel kit.



Stacks easily with  
2' & 4' high panels.

**This is What Aluminum Shoring Was Meant to be!**



1-800-683-8837

**1-800-SHORING**

CALL TOLL-FREE NATIONWIDE • 1-800-746-7464

**www.shoring.com**

WATERBLASTING WIN #1

**SAME-DAY SHIPPING ADVICE.  
PROBLEM SOLVING.  
MAKING IT  
HAPPEN.**

We're here with whatever you need  
when the pressure's on.

Your one-stop shop  
for success on the job.

**Jetstream**  
There's A Way. ✨

The waterblasting source for parts, service & expertise waterblast.com

# Root of all Evil

MASSIVE LATERAL LINING PROJECT RESOLVES EUCALYPTUS NIGHTMARE

BY SCOTTIE DAYTON

**G**roves of eucalyptus trees in the City of Lake Forest, Calif., provided abundant landscaping for residents and severe root problems for the Irvine Ranch Water District. Despite crews cleaning hot spots three times per month and treating roots with chemical foam, blockages continued to surcharge manholes and back up sewage into homes.

In 2010, the city requested proposals to line 8- to 10-inch clay sewer mains, manholes, and 780 4-inch clay laterals. Insituform Technologies won the bid and subcontracted Quality Pipe Services of Denver, Colo., to line the service connections. About 70 percent of them had massive root balls where they tied into the gravity mains.

"Eucalyptus roots grow fast and are very fine, enabling them to form huge, dense clumps," says operations manager Larry Kammerlohr. "It's a problem you can't appreciate until you see it, and I hope I don't see something like that again for a really long time." His six men worked six months to complete the Woods Project successfully.

"It's a problem you can't appreciate until you see it, and I hope I don't see something like that again for a really long time."

**Larry Kammerlohr**

## MULTIPLE EFFORT

As Insituform finished lining the mains with cured-in-place pipe, Kammerlohr's team notified homeowners that the lining process would block their service for about an hour. Then his cleaning crew worked for two days to always stay ahead of the lining crew.

Armand Moinzad lubricates the lateral bladder with solid shortening so it retracts into the tube and inverts properly with air pressure. RIGHT: Operations manager Larry Kammerlohr adjusts the air pressure while foreman Wayne Powers packs the BLD service connection seal into the bladder. (Photos courtesy of Quality Pipe Services and Suzan Chin)



Working manhole to manhole, one man operated the OmniEYE 3 main-line camera on a TransSTAR wheeled transporter in the RS Technical Services inspection van, while the other attacked the roots with a Warthog nozzle from

## tough job

**PROJECT:** Remove roots and line 780 laterals

**CUSTOMER:** City of Lake Forest, Calif.

**CONTRACTOR:** Quality Pipe Services, Denver, Colo.

**EQUIPMENT:** BLD Service Connection Seal + Lateral process, BLD Services  
504/466-1344  
www.blidllc.net

**RESULTS:** No more surcharging manholes and sewage backups





“It can go the distance,” he says. “The polyester felt liner also has a semi-ridged flange on which we apply hydrophilic caulking to create a watertight seal.”

Lining the laterals required the inspection van, BLD wet-out trailer, a pull-behind trailer with a 385 Ingersoll Rand air compressor and winches for the air hose and lateral launch assembly cable, and four workers. After Chad Ritter inspected the lateral for debris using the mainline camera, Tony Bergipen and foreman Wayne Powers vacuum impregnated a liner in the wet-out trailer. They kept the resin refrigerated to give the crew 30 minutes of working time.

Meanwhile, Kammerlohr attached the cable and air hose to a pressure tube and inflated the lateral bladder. Armand Moinzad lubricated it with solid shortening so it retracted into the tube and inverted properly with air pressure. They then caulked the backside of the flange on the liner and loaded it into the inversion bladder.

Following OSHA confined-space entry standards, Powers and Moinzad lowered the assembly to Bergipen in the manhole. After he positioned the unit in the main, a camera mounted on the tube enabled Ritter to control the speed of the winch and position the launcher at the opening of the lateral. Air pressure at 18 psi propelled the liner up the lateral and held it in place until the resin ambient-cured in 45 to 60 minutes. Ritter then deflated the inversion bladder and retracted the tube.

“We also did a couple of installs on 10- and 15-inch mains where we had to bypass and work at night,” says Kammerlohr. “We were in subdivisions or easements, so traffic wasn’t an issue.”

The team lined five or six laterals per day and completed the project in just less than six months. The district now inspects the mains monthly. **c**



**ABOVE:** Armand Moinzad guides the winch cable over a pulley as he lowers the lateral launch assembly down the manhole. **LEFT:** Tony Bergipen (left) and foreman Wayne Powers vacuum impregnate resin into a BLD service connection seal.

StoneAge Tools. A 300-gallon trailer-mounted Model 183 jetter from Mongoose Jetters supplied water at 18 gpm/3,000 psi. A screen in the downstream manhole caught the debris, which was stored in a 55-gallon trash can and emptied in a dumpster at the end of each day.

“The guys spent 20 to 25 minutes cutting roots for 24

inches up each lateral,” says Kammerlohr. “They got the pipe 85 to 90 percent clean. In most cases, it was in good condition except for the root infiltration.”

Many trunk lines were in easements along a creek bed. “We could drive to the creek, but the manholes were 100 feet away,” says Kammerlohr. “It took 90 minutes or more to carry in all the equipment and set it up.”

### LATERAL LINING TRAIN

Because the contract specified lining 18 to 24 inches to cover the first two joints of the laterals, Kammerlohr selected the BLD service connection seal from BLD Services.

## TRENCHLESS PIPE REPAIR WITHOUT DIGGING.

Now offering Perma-Patch Kits with **FAST CURING** Silicate Resins!

### Repair Kit Sizes:

2' repairs from 3" to 24"

4' repairs from 4" to 24"

### Each Kit Includes:

- Two-Part Ready To Mix Resin Bag
- Bladder Protection Sleeve
- Fiberglass Mat
- Trowel
- Ground Protection
- Hand Protection Gloves
- Zip Ties
- Perma-Patch Instructions
- Complete Equipment Packages

Also Available

Installation Bladder, Hose Reels, Push Rods & more



Visit [www.perma-liner.com](http://www.perma-liner.com)  
Call 1-866-336-2568



Take a step forward with

**Hackney**

www.hackneyservice.com



Visit  
Our New  
Web Site

**Better organization for your existing truck**  
Hackney Bins & Shelving Kits

- Infinitely Adjustable Shelves on Vertical Tracks
- Plastic Parts Trays with Adjustable Dividers & Snap-on Label Holders
- Long Top Shelves for Pipe and Ladders
- Custom Layouts for Plumbing, HVAC, and Electrical

**Best combination for your new truck**  
Hackney "Performer" Supertruck

- All Aluminum "Remountable" Body
- Aluminum Pull-out Ramp
- Drop Floor in Rear for 3-Step Walk-in Access
- Modern Profile with Smooth Side Panels for Impact Graphics
- Famous Hackney Bin and Shelving System – INCLUDED!

Call Hackney Parts toll free **1-877-238-7278**

Call Linda or Kathy toll free **1-800-763-0700**

**VSI**  Rentals, LLC.

51 Stone Road Lindenwold, NJ 08021  
888-VAC-UNIT Fax: 856-627-3044



2008 Sterling truck mounted combination vacuum and jetter units  
**3 Available**  
Price by Request



2008 Condor, dual steer truck mounted, large capacity sweeper with dual sweep gear and catch basin cleaner unit  
Price by Request

**ALL UNITS AVAILABLE FOR RENT OR PURCHASE**  
**888-VAC-UNIT**



2008 International truck mounted, industrial wet/dry vacuum loaders with 27" Hg blowers  
**2 Available**  
Price by Request



2006 GMC (very low mileage) truck mounted high pressure jetter unit with TV inspection and vacuum system  
Price by Request





**NEW!!**

# CAM

**DURABILITY ...**

**RELIABILITY ...**

**ADVANCED TECHNOLOGY ...**

**SUPERIOR PERFORMANCE**



### **CAM ACE™**

- Rugged stainless steel housed color camera
- 125 FT of 1/2" kevlar braided 1/2" push rod
- "available with smaller 1.2" color camera for inspecting 1-1/2" -4" lines (negotiates 2" "P" traps)
- 5.4" LCD monitor with AR film
- Video output jack for recording option
- Heavy duty steel frame and secure locking wheel brake



### **CAM PRO™**

- State of the art inspection system for 3"-10" lines
- Rugged, stainless steel SELF LEVELING color camera
- Negotiates 3" "P" traps
- 512 HZ Sonde
- One touch recording to a built-in 320GB hard drive or USB flash drive
- Detachable 8.4" LCD monitor with AR film for optimal viewing in sunlight
- 200 ft kevlar braided 1/2" diameter push rod
- 8" wheels and secure locking wheel brake

*Electric Eel®*

**1.800.833.1212**  
[www.electriceel.com](http://www.electriceel.com)

**COXREELS®**

**FOR PROFESSIONALS WHO WANT MORE**

USA SINCE 1923

THE MOST COMPLETE LINE OF HOSE, CORD & CABLE REELS

[www.COXREELS.com](http://www.COXREELS.com)  
800.269.7335 • [info@coxreels.com](mailto:info@coxreels.com)

WATERBLASTING WIN #32

**GREAT.**  
**THE NOZZLE YOU REALLY NEED IS THE ONE YOU DON'T HAVE.**

Until tomorrow AM.

Same-day shipping that really delivers.


**Jetstream**  
There's A Way.

The waterblasting source for parts, service & expertise [waterblast.com](http://waterblast.com)

# PORTABLE JETTER & CABLE MACHINE COMPANY DIRECTORY 2012

	MAN./DIST. OF PORTABLE JETTERS	MAN./DIST. OF CABLE MACHINES	DRUM/REEL CAPACITY RANGE	PIPE DIAMETER RANGE	PRESSURE RANGE	VOLUME RANGE
See ads pages 13, 39 	Yes	Yes	25 to 200 feet	1 1/4 to 10 inches	1350 to 4000 PSI	1.3 to 65 GPM
See ad page 46 	Yes	Yes	25 to 300 feet	2 to 12 inches	1000 to 4000 PSI	2.1 to 22 GPM
See ad page 10 	Yes				1000 to 7000 PSI	2 to 12 GPM
See ad page 73 	Yes	Yes	25 to 300 feet	1 1/4 to 8 inches	1350 to 3100 PSI	1.4 to 5.5 GPM
See ad page 69 	Yes		100 to 400 feet	2 to 12 inches		
See ad page 63 		Yes	35 to 150 feet	10 to 35 inches		
See ad page 61 	Yes	Yes	25 to 250 feet	12 inches to 25 feet	1450 to 3000 PSI	2 to 11 GPM
See ad page 30 	Yes	Yes	0 to 150 feet	0 to 10 inches	0 to 3000 PSI	0 to 8 GPM
See ad page 57 	Yes	Yes	100 to 300 feet	1 inch to 24 inches	1500 to 3000 PSI	2 to 5 GPM
See ad page 2 	Yes	Yes	Drum - 25 to 150 feet Reel - 30 to 400 feet	1 1/4 to 10 inches	1500 to 3000 PSI	1.7 to 12 GPM
See ad page 15 	Yes	Yes	35 to 150 feet	8 to 35 inches	1500 to 3500 PSI	2.2 to 5.5 GPM
See ad page 37 	Yes		0 to 300 feet	2 to 6 inches	0 to 3000 PSI	0 to 4.8 GPM

# PORTABLE JETTER & CABLE MACHINE

	MAN./DIST. OF PORTABLE JETTERS	MAN./DIST. OF CABLE MACHINES	DRUM/REEL CAPACITY RANGE	PIPE DIAMETER RANGE	PRESSURE RANGE	VOLUME RANGE
See ad page 69 <b>Jetter Depot</b> 678-549-2621 sales@jetterdepot.com www.jetterdepot.com	Yes	Yes	50 to 400 feet		1000 to 4000 PSI	2 to 12 GPM
 See ad page 50 <b>JETTERS NORTHWEST</b> 206-283-5252 steve@jettersnorthwest.com www.jettersnorthwest.com	Yes		25 to 500 feet	1 to 12 inches	1100 to 5000 PSI	1.4 to 24 GPM
See ad page 76 <b>Ken-Way Corporation</b> 800-533-0551 info@ken-way.com www.ken-way.com	Yes	Yes	Drum - 0 to 25 feet Reel - 100 to 200 feet	1 1/4 to 8 inches	1500 to 3000 PSI	1.8 to 5.5 GPM
See ad page 80 <b>M Tech</b> 440-646-0996 sales@mtechcompany.com www.mtechcompany.com	Yes	Yes	300 to 600 feet	4 to 60 inches	2000 to 4000 PSI	12 to 80 GPM
See ad page 43 <b>MyTana Mfg. Company, Inc.</b> 800-328-8170 mytana@mytana.com www.mytana.com	Yes	Yes	15 to 125 feet	1 1/2 to 8 inches	1500 to 3000 PSI	2 to 8 GPM
See ads pages 41, 65 <b>NLB Corp.</b> 800-441-5059 nlbmtg@nlbusa.com www.nlbcorp.com	Yes		0 to 500 feet	.375 to 50 inches	4000 to 40000 PSI	5 to 200 GPM
See ad page 60 <b>Pat's Pump &amp; Blower</b> 800-359-7867 patspump@aol.com www.patspump.com	Yes		100 to 700 feet	2 to 72 inches	1000 to 4000 PSI	5 to 80 GPM
See ad page 7 <b>RIDGID</b> 440-323-5581 info@ridgid.com www.RIDGID.com	Yes	Yes	25 to 300 feet	3/4 to 10 inches	1350 to 3000 PSI	1.4 to 4 GPM
See ad page 88 <b>Spartan Tool LLC</b> 800-435-3866 customerservice@spartantool.com www.spartantool.com	Yes	Yes	15 to 300 feet	1 to 12 inches	1250 to 4000 PSI	2.2 to 5 GPM
See ads pages 19, 65 <b>The Cable Center</b> 800-257-7209 thecablecenter@yahoo.com	Yes	Yes	50 to 400 feet	1 to 12 inches	1500 to 3000 PSI	1.7 to 12 GPM
See ad page 71 <b>Water Cannon</b> 800-333-9274 sales@watercannon.com www.jetteronline.com	Yes				1500 to 4000 PSI	2.2 to 4 GPM



[www.cleaner.com](http://www.cleaner.com)

Place a classified ad, read the current e-zine, discussion forums on hot topics, shop the classifieds, ...

# CIPP

Services, Inc.

La Salle, Illinois



## Steam & Hot Water Boiler Trucks

Fully Enclosed Units For Weather Protection & Security

- Wet-Out Tables
- Air Inverters
- Static Resin Mixers
- 53' Reefer - Hydraulic CIPP Liner Unloader Trailers

Phone: 815 - 712 - 8708 Fax: 815 - 220 - 1920  
E-Mail: sales@cipp-services.com

## FAST PIPE LINING

Ready To Install,  
Resin Saturated  
Cured-In-Place Pipe Liners

PH: 815-715-8708 E-Mail: sales@fastpipelining.com

www.CIPP-SERVICES.COM www.FASTPIPELINING.COM

This is your bolt in Replacement  
Save Time and Money  
with the 3-Stage Turbo Blower  
by Dunbar Kapple

The Original  
Fan Manufacturer

dk  
vac-u-vator

- Need a Turbo Fan for your VAC truck
- NEW coated housing for longer life
- Easy-open ports for inspection and clean out



PAT'S  
PUMP +  
BLOWER  
www.PatsPump.com  
Sales & Repair

Orlando, Florida  
800-359-7867  
(t) 407-841-7867  
(f) 407-648-2096

## GEN2 ZOOM



800.767.1974 | rstechserv.com

Mainline +  
Lateral Launch System

conductor  
THE SINGLE SOLUTION

Inspect mainlines and laterals with amazing ease and speed!!!

- Inspect 6" - 24" mainlines, 3" and larger laterals
- 100' push cable
- Auto-upright lateral camera with 512Hz sonde
- Launch actuator for easy insertion into 90° laterals
- Dual 90 watt motors for incredible push force

For more information about this inspection tool and our full range of inspection equipment solutions, call or visit us online today.



RS Technical Services Inc.  
Design and Manufacture of Video Pipeline Inspection Systems

Sava

pipe plugs - pipe rehab - plug kits - hoses  
inflation controllers - remote adapters - accessories



888.436.9778 | page@savatech.com | www.savatech.com



TRY TEK  
MACHINE WORKS, INC.

FAST DELIVERY  
on  
replacement parts



We accept most  
major credit cards



Contact us for more information:  
Phone: 717-428-1477  
Fax: 717-428-2865  
Email: trytek@trytek.com  
250 N. Main St.  
Jacobus, PA 17407 USA

Hundreds  
in use! www.trytek.com  
6" to 15" Tap Cutter

Serving the  
industry for over  
25 years

**DRAINABLES**  
*direct*



**RIDGID**  
800.421.4580 | draincables.com

**View What's New!**

**DRAINABLES**  
*direct*

- Cables & Blades
- Drain Cleaning Machines
- Video Inspection Equipment
- Jetters, Hoses & Nozzles

Download our 2012  
**CATALOG**  
draincables.com

**800.421.4580**



4370 Moline Martin Rd. Millbury, Ohio 43447  
7918 W. Doe Ave. Ste. A Visalia, California 93291

**NAWT**

NATIONAL ASSOCIATION OF  
WASTEWATER TRANSPORTERS, INC.



**UPCOMING TRAINING & EVENTS**

**Inspector Training & Certification:**

April 27-28, 2012 - Helena, MT

Montana DEQ & NAWT  
Contact: Solid Waste Section at (406) 444-5300

May 30-31, 2012 - Sonoma, CA

Instructors: Jacque Sommers and Kit Rosefield  
Go to [www.COWA.org](http://www.COWA.org)

June 14-15, 2012 - Waco, TX

Instructors: Jim Anderson and Dave Gustafson  
Go to [www.NAWT.org](http://www.NAWT.org)

August 27-28 - (TBA) Arizona

Univ. of AZ - NAWT  
Contact: Kitt Farrell-Poe at (520) 621-7221

**Installer Workshops**

June 27, 2012 - San Diego, CA

Re-Certification Installation of OWTS - NEHA 2012 AEP  
Instructors: Jim Anderson and Dave Gustafson

October 8, 2102 - Dover, DE

DOWRA Conference Contact Hollis Warren at  
(302) 284-9070 or [Htwarren43@aol.com](mailto:Htwarren43@aol.com)

**Installer Workshops Continued...**

October 25-26, 2012 - Lakewood, CO

CHURCH Onsite Wastewater Consultants  
Contact Kim Seipp at (303) 622-4126

**Operation & Maintenance  
Training Certification:**

September 12-13, 2012 - Mill Valley, California

Operation & Maintenance, Level 1  
Instructors: Mike Treinen or Kit Rosefield  
Go to [www.COWA.org](http://www.COWA.org)

November, 2012 - (TBA) California

Operation & Maintenance, Level 2 - Instructors:  
Nick Weigel or Kit Rosefield - Go to [www.COWA.org](http://www.COWA.org)

WATCH THE NAWT WEBSITE AND  
INDUSTRY MAGAZINES FOR UPDATES

FOR MORE INFORMATION CALL  
**800-236-6298**

**For Those Tight Places**

*Art-r.* **KUT**  
ELITE



**mini**

Phone: 1.800.322.0510  
E-Mail: [apc@apclsq.com](mailto:apc@apclsq.com)  
Website: [www.arthurproducts.com](http://www.arthurproducts.com)



ARTHUR PRODUCTS CO.  
an LSQ Mfg Company

**WWW.NAWT.ORG** YOUR SOURCE FOR REAL LEARNING

# Residential and Commercial Sewer and Pipe Maintenance

BY BRIANA JONES



## 1. COMPONENT CAMERA SYSTEM

The Quick View camera system from Amazing Machinery is equipped with commercial grade camera head and cable. The unit has a 7-inch flat-screen LCD in an ABS case, and records to an SD card. The high-quality color camera head is 1 3/8-inch in diameter and has a built-in 512 Hz sonde transmitter. The stainless steel camera body with sapphire lens makes the head durable. The camera head is waterproof to 500 feet, and equipped with 10 white LEDs, a dimmer control and an 11-inch steel spring loader.

The system has a 130-foot-long, 3/8-inch super slick push cable, with a 20-inch layflat storage reel. The component-based system allows the user to change the camera head, recorder or monitor if it is damaged. 800/504-7435; [www.amazingmachinery.com](http://www.amazingmachinery.com).

## 2. MID-RANGE TRAILER JETTER

The 58 series trailer-mounted jetter from American Jetter includes user-friendly controls and Kohler power up to 40 hp, allowing it to cover a wide range of cleaning jobs. Available flow ranges from 7 to 20 gpm allow flushing from large pipes, and pressures to 5,000 psi allow root and scale removal. The main powered reel holds up to 500 feet of 3/8- or 1/2-inch jetting hose. A portable jet reel holds up to 200 feet of 3/8-inch or smaller hose and can be used indoors with included foot valve.

Optional antifreeze and recirculation systems allow for use in cold climates, and an oversized toolbox offers ample tool or camera storage. Low oil and water shutoff prevent engine and pump damage. The mid-range jetter has a 2,900-pound full-tank tow weight and a 1,300-pound empty weight, and standard 2-inch hitch. 866/944-3569; [www.americanjetter.com](http://www.americanjetter.com).

## 3. ECONOMY TRAILER JETTERS

EJT series economy trailer jetters from Cam Spray come with a 28 hp Honda engine with 7 gpm flow at 4,000 psi or 11.5 gpm at 2,700 psi. Both models feature a manual reel with 250 feet of 3/8- or 1/2-inch hose. The units allow for jetting 6- to 10-inch lines. Standard features include a 5-gallon fuel tank, industrial three-plunger pump with stainless valves and ceramic plungers, power pulse valve, air purge, and recirculation for freeze protection.

The heavy-duty trailer includes close-tube frame and full metal deck on a 3,500-pound axle, and includes road-ready wiring and lights with 2-inch ball hitch. A 150-gallon water tank includes auto shutoff if the tank runs dry. Also included is a set of four nozzles, storage box, tip cleaner, tiger tail, safety face shield, rubber gloves and high-vision safety vest. 800/648-5011; [www.camspray.com](http://www.camspray.com).

## 4. CCTV INSPECTION SYSTEM

The CUES K2 series portable CCTV inspection system can be used to inspect waterlines from 4 inches and larger. The unit can be mounted in ATVs, vans and trailers, or used as a stand-alone system. It includes ergonomic wireless handheld control that can operate all CUES transporters and pan-and-tilt/zoom cameras. The unit features built-in diagnostics for the entire system, including the video cable.

The portable video cable reel includes automatic payout to minimize cable drag and maximize pull distance while inspecting 4- to 120-inch-diameter pipes. Increased video cable reel capacity (1,200 feet) maximizes distance for runs. The base station can be mounted on the built-in docking port of the K2 reel, staged independently, or in a weatherproof enclosure. The system can be used with the Granite XP Asset Inspection/Decision Support software to integrate data with enterprise asset management systems. 800/327-7791; [www.cuesinc.com](http://www.cuesinc.com).

## 5. DRAIN TREATMENT CLEANER

Drainbo drain treatment and cleaner is an all-natural alternative to toxic drain products. It is a biological drain opener and cleaner formulated for use in home drains. Naturally grown bacillus digest household waste such as grease, soap film, oils, proteins and fats found in the waste stream. The product will maintain and clean drains, and it is safe to use with septic systems. It will enhance septic system performance by increasing digestion in the tank through its seven-strain formulation and by digesting and removing sludge deposited in the leach system. The cleaner is a USDA-certified biobased product. 877/372-4626; [www.drainbo.com](http://www.drainbo.com).

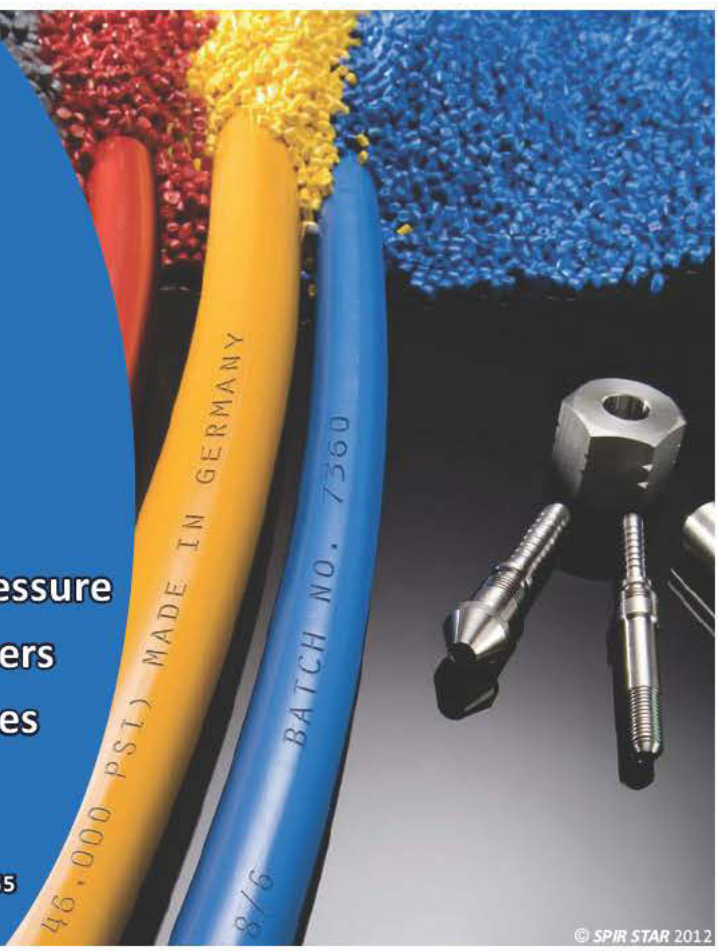
(continued)



# Proven Products Proven Solutions

Your Source for Ultra High Pressure  
Hose | Fittings | Adapters  
Quick Disconnects | Valves

[www.spirstar.com](http://www.spirstar.com)  
Toll Free: 800.890.7827 • Fax: 888.893.1255  
ISO 9001:2008 Certified



© SPIR STAR 2012

## SAFETY FIRST!

### 12" Plastic Axial Blower

**NEW** *The ONLY 12" Plastic Blower With A Canister On The Market!*

The polyethylene housing and canister assembly are designed to be light weight and super quiet. Made of corrosion, UV and chemical resistant polyethylene in "safety orange." The quick-connect clipping system allows attaching the canister to the input side for powerful extraction or output side for ventilation. Plus molded carrying handle and 25' of PVC coated vinyl and polyester ducting which stores within the storage canister.

FREE AIR	ONE 90° BEND	TWO 90° BENDS
1842 cfm	1004 cfm	933 cfm
28 lbs.	1 hp	110/220 V AC
		50/60 Hz

### GasAlert Systems



The MicroClip gas detectors

**On Sale \$595\***



The Quattro multi-gas detectors.

**On Sale \$695\***



Call Toll-Free  
**1.800.325.3730**  
[www.MilwaukeeRubber.com](http://www.MilwaukeeRubber.com)

\* Sale ends May 31, 2012

WATERBLASTING WIN #78

# THE JOB JUST WENT FROM COMPLICATED TO DAMN NEAR IMPOSSIBLE.

Reinforcements with real solutions await.

Equipment and know-how to get it done.



The waterblasting source for parts, service & expertise [waterblast.com](http://waterblast.com)



6



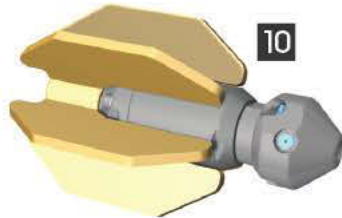
7



8



9



10



11



12

## 6. DOUBLE WOUND CABLE

Double wound cable from Draincables Direct is available in 0.55 and 0.66 diameters. The cable is manufactured with two strands of oil-tempered wire and is designed for tough blockages. Both size cables offer flexibility and rigidity to maneuver up to the blockage and power through it. Cable is available in 25- and 50-foot lengths. Anchor cables and a flexible leader are also available. 800/421-4580; [www.draincables.com](http://www.draincables.com).

## 7. COMPACT CLEANER

The DM125 drain cleaning machine from Duracable Mfg. is designed for small residential lines, sink drains, bathtubs, and shower drains. It is equipped with a 1/6 hp motor, which operates at 230 rpm and features a heavy-duty 20-amp switch. The frame is made from high-strength aluminum alloy, making the unit lightweight and durable. The machine comes with a heavy-duty, casted, self-aligning head bearing, and the reel maintains proper alignment while in operation. The head bearing also holds the reel in place and allows a quick-change reel.

The easy-to-manuever machine can be operated in horizontal and vertical positions. It is equipped with non-marring rubber pads to protect the work surface, and a standard guide tube is included to help eliminate surface damage to bathtubs and countertops from the rotating cable. 877/244-0556; [www.duracable.com](http://www.duracable.com).

## 8. MODULAR INSPECTION

The EasyCAM inspection camera uses a modular design to allow for fast and easy owner reparability. The unit comes with a steerable color camera head, 512 Hz transmitter, onboard monitor with recordable DVR, on-screen footage counter, powder-coated aluminum modular frame and onboard lighting for night operation. It is offered with 150 or 200 feet of Hytrel push cable. 239/260-2056; [www.plumbersbestcamera.com](http://www.plumbersbestcamera.com).

## 9. DRAIN CLEANING MACHINE

The model Z5-P drain cleaning machine from Electric Eel cleans 1 1/4-inch- to 3-inch-diameter lines up to 100 feet while running galvanized aircraft wire inner core (IC) cable. Features include built-in drum shaft slip clutch and an upright frame on large 10-inch wheels with folding handle. The rear bar shields the motor and allows for two-position operation.

The Z5-P-K-3/8IC50 kit comes with the Z5-P-DU drain cleaning machine with 1/3 hp motor, 3/8IC50 aircraft IC cable, DH-TS three-piece tool set, EK-TB tool bag, THW18 1/8-inch T-wrench, and leather gloves. The Z5-P-K-3/8IC75 kit comes with the same components as the previous kit with optional 3/8IC75 IC cable. The Z5-P-K-3/8IC100 comes with the standard components and optional 3/8IC100 IC cable. The Z5-P-K-1/2IC50 comes with the Z5-P-DU drain cleaning machine with 1/3 hp motor, 1/2IC50 IC cable, DN-TS5 five-piece tool set, EK-TB tool bag, THW18 1/8-inch T-wrench and leather gloves. The Z5-P-K-1/2IC75 comes with the same components as the previous kit with optional 1/2IC75 IC cable. The Z5-P-K-1/2IC100 comes with the same components as the 1/2IC50 with optional 1/2IC100 IC cable. 800/833-1212; [www.electriceel.com](http://www.electriceel.com).

## 10. ROTATING NOZZLE

The golden jet Bulldog rotating nozzle from Enz USA is designed for operation with recycling water and freshwater. An integrated oil-free braking system results in low wear and tear, and in controlled numbers of rotation. The nozzle cleans root intrusions, grease, solids and heavy debris. It is available in 1/2- to 1 1/4-inch connecting threads. The cleaning pipe diameter ranges from 2.5 to 24 inches. 877/369-8721; [www.enzusainc.com](http://www.enzusainc.com).

## 11. WIRELESS INSPECTION SYSTEM

Wireless video inspection cameras from Forbest can transmit images up to 500 feet to control stations or laptop computers for viewing over the Internet, enabling multiple users at various locations to simultaneously view video from a single camera. 650/757-4786; [www.forbestusa.net](http://www.forbestusa.net).

## 12. WET-ONLY VAC TRUCK

The GapVax MC Series unit for hydroexcavation, jetting, waterblasting, flushing out sewer lines, and maintenance is made of 3/16-inch ASTM A572 Grade 50 Exten steel. Debris bodies range from 5 to 12 cubic yards. The wet-only vacuum truck has a unitized stainless steel 2,000-gallon water and debris tank with a double subframe. A heavy-duty, double-acting, single-lift cylinder provides a 50-degree dump angle. Vacuum pump options range from 3,500 to 5,000 cfm and up to 27 inches Hg.

The truck comes equipped with an 8-foot, front-mounted, telescopic boom with dual lift cylinders, reaching 26 feet with a 270-degree rotation. The

(continued)



# A feature you don't see here can save you \$900 a year

One of the best features of NLB lances isn't visible at a glance. Our cartridge seal typically lasts 180 hours — twice as long as others. That can save you as much as \$900 a year.

This quick-change (60 seconds) seal is standard on 10 user-friendly NLB lances, from 10,000 to 40,000 psi. For details of this and all our great features, call 877-NLB-7988. Or visit [www.nlbcorp.com](http://www.nlbcorp.com).



Download our latest catalog



**NLB. The Leader in Water Jet Productivity.**



29830 Beck Road, Wixom, MI 48393 • [www.nlbcorp.com](http://www.nlbcorp.com)  
 MI: (248) 624-5555, TX: (281) 471-7761, NJ: (856) 423-2211,  
 LA: (225) 622-1666, CA: (562) 490-3277, e-mail: [nlbmtkg@nlbusa.com](mailto:nlbmtkg@nlbusa.com)

## THE CABLE CENTER 1-800-257-7209

MIDWEST'S LARGEST FACTORY AUTHORIZED  
REPAIR CENTER FOR GATORCAM, GEN-EYE & SEESNAKE

**24**  
HOUR  
TURNAROUND

**FREE  
DELIVERY  
ON ALL RIDGID  
CAMERA  
KITS**

### RIDGID's NEW CS10 Digital Recording Monitor

- USB Thumb Drive
- 12.1" Daylight Readable Display
- Multi Mode Recording  
take snapshots, record full video & lean video
- Software Integrations  
with SeeSnake HQ & RIDGIDConnect™



• THE CABLE CENTER • 8318 OLIVE BLVD. • ST. LOUIS, MO 63132 • 314-993-3099 •



13



14



15



16



17



18

front-mounted hose reel has an 800-foot by 1-inch hose capacity. The standard water pump is rated at 80 gpm/2,000 psi. Options include a washdown system; hydroexcavation package; extra storage space; heated boxes; liquid-level load indicators; remote pendants and wireless remotes for boom, vacuum break, and water controls; additional work lights and tube racks. 888/442-7829; [www.gapvax.com](http://www.gapvax.com).

### 13. TRAILER JET

The Typhoon trailer jet from General Pipe Cleaners delivers 12 gpm at 2,500 psi to clean grease, sediment and debris. A 200-gallon holding tank carries enough water to handle remote applications where access to water is limited. Two rear-mounted hose reels (a jet hose reel with 400 feet of 1/2-inch capacity featuring variable-speed electric rewind, and a water supply hose reel carrying 150 feet of 3/4-inch hose) are located next to the pressure gauge and output valve. Engine controls, including an hour meter, are mounted within easy reach in the lockable toolbox with slide action doors just below the reels.

The unit includes electric brakes, safety strobe light, three safety cones with holder, rear fold-down stabilizer jacks, retractable hose guide arm, and antifreeze system. A 24 hp Honda engine with electric start powers the durable triplex pump with Vibra-pulse to help slide the nozzle around tight bends and propel the hose down long lines. 800/245-6200; [www.drainbrain.com/jets](http://www.drainbrain.com/jets).

### 14. HEAVY-DUTY REELS

Hannay 6000 series reels are designed for a variety of pumping and cleaning applications including spray operations, water supply, and suction and transfer. The heavy-duty construction provides efficient handling of long lengths of hose and features either a manual gear-driven crank rewind or a chain and sprocket drive powered by an electric, hydraulic or compressed air motor. Reels can be customized to meet specific needs. 877/467-3357; [www.hannay.com](http://www.hannay.com).

### 15. VAN JETTER

The Van Pack waterjetter from Harben allows operators to put a full-size jetter into an enclosed and heated van. Users can mount a 4,000 psi/18 gpm unit in a powder-coated, lightweight folded steel skid/frame measuring 75 inches long by 53 inches wide by 61 inches high. It has a dry weight of 1,600 pounds. The system comes standard with the Harben P Pump; a 108-gallon water tank (additional tanks available based on van payload); a 48 hp Kubota water-cooled

diesel engine; 500-foot capacity hydraulic hose reel; and a hinged, telescoping manual garden hose reel.

Available options include the jump jet pulsation system, antifreeze system, MK II dump washdown gun, 1/4-inch mini jet kit, strobe, manhole and workstation lights, and a range of nozzles and accessories. A complete setup will allow cleaning of drains from 2 to 8 inches in diameter. 800/327-5387; [www.harben.com](http://www.harben.com).

### 16. DVR MODULE

The Magnum DVR command module from Hathorn Corporation features USB recording and a navigation menu that is simple to use and easy to learn. Images can be seen clearly in bright sunlight with the 10.4-inch daylight readable monitor. The system features a full-size keyboard, 16 pages of text writing, 8X zoom, microphone and speaker, and two-hour built-in battery with smart charger. Several reel options and three camera head sizes are available. 905/886-2835; [www.hathorncorp.com](http://www.hathorncorp.com).

### 17. CART JETTERS

O'Brien cart jettors (available in three models) from Hi-Vac Corp. clean up to 8-inch residential and commercial sewer lines. An optional lateral cleaning kit allows users to leave the engine outside the building while cleaning an inside line. The automatic throttle valve enables the engine to respond to water usage, revving up to increase flow and idling down to reduce noise, pump and engine wear. The 1220-J electric jetter cleans 4-inch or smaller lines, while the 2511-J has an 11 hp, electric-start gasoline engine and triplex pump that delivers 4 gpm at 3,000 psi. The 13 hp 2513-J jetter has a manual-start gasoline engine and triplex pump that delivers 4.8 gpm at 3,000 psi. 800/752-2400; [www.obrienmfg.com](http://www.obrienmfg.com).

### 18. MIDSIZE CAMERA

The MS11 midsize push camera from MyTana features self-leveling and is suitable for 3- to 4-inch lines. The unit comes with 150 feet of mid-sized pushrod, and has a built-in 512 Hz transmitter. The one-piece system contains the reel, camera head, monitor and control box in a single package. The inspection camera also features a daylight readable monitor, which is scratch and shatter resistant. Power is supplied by a standard 110V battery or by an onboard rechargeable battery with two-hour life.

(continued)

**FORBEST**Tel (USA): 650 757 4786 Tel (Canada): 905 604 6226 forbestusa@gmail.com  
315 Harbor Way, #B, South San Francisco, CA 94080, USA

FB-PIC4188



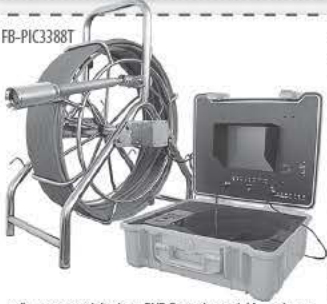
- 10" monitor with built-in DVD Recorder and Microphone
- Color camera with a built-in 512 Hz transmitter
- 130 FT (40 M) / 5.2 mm push cable with heavy duty case

FB-PIC3288T



- 10" monitor with built-in DVD Recorder and Microphone
- Self-leveling color camera with a 512HZ built-in transmitter
- 300 FT (95M) or 380 Ft (120M) / 9mm push cable
- Waterproof heavy duty case

FB-PIC3388T



- 10" monitor with built-in DVD Recorder and Microphone
- Self-leveling color camera with a 512HZ built-in Transmitter
- 190 FT (60 M) / 7 mm push cable
- Waterproof heavy duty case

CHDR-C06



- 6 mm color camera with 100' push cable, can work with all Forbest color monitors

CHDR-C12



- 12 mm color camera with 100' or 130' push cable, can work with all Forbest color monitors

FORBEST Products Co [www.forbestusa.net](http://www.forbestusa.net)

# COAST MANUFACTURING

**Professional-Grade Drain Cleaning Machines, Cables & Accessories**

### Drain Cleaning Machines

- ▶ Heavy duty construction
- ▶ The most powerful motor in the industry
- ▶ Quick and easy reel changeover
- ▶ A one year rock-solid warranty



### Cables

- ▶ Fabricated from high quality wire
- ▶ Most ends & couplings available
- ▶ All sizes and lengths
- ▶ Innercore available

**COAST MANUFACTURING**[www.coastmanufacturing.com](http://www.coastmanufacturing.com)  
**1.800.541.7015**

# Everyone talks about creating a greener environment.

You actually *do it*.

Find the tools you need to keep your communities **green** at

[www.colepublishing.com](http://www.colepublishing.com). *Publishing environmental trade magazines since 1979.*

## Ever feel abandoned by your tech support?

### Real time issues deserve real time answers.

PIPELOGIX® Tech Support is a real person on the other end of the phone that talks you through your problem and gets you working as quickly as possible.

Call today to learn more about the industry's best after-sales support program for pipe survey pros! (Just ask our customers.)

866.299.3150 · [WWW.PIPELOGIX.COM](http://WWW.PIPELOGIX.COM)

# PIPELOGIX®

CAPTURE. ANALYZE. COLLABORATE.



**19****20****21****22****23****24**

The control box provides output in two formats: RCA jacks provide the analog signal and the USB port provides a digital video signal for transfer to a customer's laptop. The Slim Ball is also included, providing protection and reduced friction navigation. Available accessories include a mini DVD recorder, AccuStic 512 receiver locator, and mainline and sink line inspection systems. 800/328-8170; [www.mytana.com](http://www.mytana.com).

### 19. THRUSTING NOZZLE

The BL Swiper nozzle from NozzTeq is available in a large version that cleans 12- to 30-inch pipes and a small version that cleans 8- to 18-inch pipes. The unit uses water flow from the jets and airflow in the pipe. The water flow, through the pressure in the jets, creates a jet stream that creates thrust through air channels. The number of air channels is equal to the number of water jets. The channels are placed in the center of the nozzle, meaning the total force generated by the nozzle, both air and water force, are used to clean the pipe. By increasing water pressure, the thrust power will also accelerate, decreasing total cleaning time. 866/620-5915; [www.nozzteq.com](http://www.nozzteq.com).

### 20. PNEUMATIC CUTTER

The Micro-Cutter from Nu Flow Technologies is a pneumatic cutter used to clean and remove calcite and roots from the inside of a variety of pipes including steel, cast iron and Orangeburg. The system rotates at 1,500 rpm in 1 1/2- to 6-inch pipes in lengths up to 100 feet, and will negotiate turns of 90 degrees in pipes down to 2 inches in diameter.

The cutter runs at 40 cfm and allows for multiple cutting heads. The heads can cut through dense corrosion and root intrusion. The drill tip has an adjustable spline available in various sizes to match different pipe diameters. 800/834-9597; [www.nuflowtech.com](http://www.nuflowtech.com).

### 21. SEWER CLEANING HOSE

The 1 1/2-inch 2,500 psi sewer cleaning hose from Piranha Hose Products consists of a yellow, polyolefin tube, a double layer of high tensile synthetic braid reinforcement, and an abrasion-resistant orange cover. The temperature range is from -40 degrees to more than 150 degrees F. The ultra slick Slither cover is available for tough sewer bends. 800/250-5132; [www.piranhahose.com](http://www.piranhahose.com).

### PUSH CAMERAS

The DELTA and DELTA-Pro push systems from Rausch Electronics feature a forward-facing SAT42 camera with an auto-upright function. The systems work in pipes as small as 2 inches. The DELTA-Pro system features the full pan-and-tilt KS60CL camera, which can examine and focus on any part of the pipe. The systems include up to 250 feet of cable and an integrated sonde used to locate the camera. An integrated monitor allows users to see the pipe immediately, and integrated controls provide no exterior interference. Both systems are rugged and portable, and include a lightweight carrying case and wheels. PC and software are optional. 717/709-1005; [www.rauschtv-usa.com](http://www.rauschtv-usa.com).

### 22. PORTABLE INSPECTION

The Pan n' Tilt push camera from Ratech Electronics is a portable inspection system for pipes and drains as small as 3 inches in diameter. Users can choose the type of camera to use with the push system: black and white, color, self-leveling, micro, or pan n' tilt. The camera can be retrofitted to the company's existing systems or as a stand-alone unit. It rotates 330 degrees vertically and 220 degrees horizontally. The cost-efficient unit is adaptable to the company's Jet Cam.

Combining the camera with the company's control unit, such as the Elite SD, gives recording capability using SD/USB drive and allows MPEG video capture and JPEG image capture. Also included is an on-screen display overlay system providing electronic distance counter, time, date and eight pages of memory for listing problems and displaying of company information. Standard 200-foot gel-rod cable is included. 800/461-9200; [www.ratech-electronics.com](http://www.ratech-electronics.com).

### 23. JETTER REEL SYSTEM

The custom-engineered and built jetter reel turnkey system from Reelcraft offers the complete solution for jetter applications. Systems are designed in-house and built to customer specification. The system is designed to fit inside a standard truck bed. It includes a hydraulic power pack with 8 hp motor, special hose for well cleaning applications, directional control valves and air pressure manifold. 800/444-3134; [www.reelcraft.com](http://www.reelcraft.com).

### 24. ELECTRIC JETTER

The SJPE-1500 electric jetter from Shark Pressure Washers is portable, compact and includes a detachable hose reel. Rated at 1.7 gpm at 1,500 psi, the unit operates on 115-volt electricity and comes standard with a 35-foot

*(continued)*



Go online  
and find out  
why we're the best  
kept secret in the  
Sewer!



**Nozzles - Hoses - Accessories**  
678 549 2621 • [www.jetterdepot.com](http://www.jetterdepot.com)

**This Is The Nozzle You've Been Waiting For**

*\*Patented*  
**Root Rat**  **root cutter nozzle**  
MADE IN THE USA

**1/2" 3/8" 3/4-1"**



**7-35 gpm/1500-10,000 psi 3-10 gpm/2000-7500 psi 40-160 gpm/1500-4000 psi**

**Custom Built Jetters**

**Root Rat Combo Kit**



Hot or cold water jetters from 4 gpm at 4000 psi to 12 gpm at 4000 psi, skid or cart frames or small trailer systems.

"The Root Rat is the easiest and most versatile root cutter nozzle I have ever used. The Root Rat works where other nozzles fail."  
Tim Jones, owner of Eastern Sewer Jetting



3/4" - 1" root rat combo kit. Use a reducer adapter to go from 1" to 3/4".

**WE SELL AND SERVICE COLD WATER JETTERS**  
WE SELL PARTS, PUMPS, UNLOADERS, HOSES, JET TIPS, ETC.

**CHEMPURE PRODUCTS CORP.**  
1-800-288-7873 • 330.874.4300

Visa, Mastercard, Discover, AmEx Accepted

[www.chempure.com](http://www.chempure.com)

**lansas**® PRODUCTS  
MANUFACTURED BY VANDERLANS AND SONS, INC.

*Custom Designs Are Always™ Available*



**VANDERLANS AND SONS, INC.**

California 1-800-452-4902 • Atlanta 1-770-509-9309  
Minneapolis 1-763-428-9290  
[www.lansas.com](http://www.lansas.com)

**SAFETY SEWER DRAIN**



- Safety Risk Reduced
- Professional Image
- Less Mess
- Contamination Reduced
- Pays For Itself
- Easy To Use



Ingalls, Michigan

**906.753.4002**

[www.SafetySewerDrain.com](http://www.SafetySewerDrain.com)



25



26



27



28



29

power cord with GFCI. The slide-in handle accommodates loading and unloading, while providing easy maneuverability around work sites. The detachable hose reel allows for convenient operation. The unit also features the company's Pulse Technology on demand, which propels the hose through the line and around tight curves to break through clogs. 800/771-1881; [www.sharkpw.com](http://www.sharkpw.com).

## 25. ROOT SAWS

Super-duty large-diameter root saws for hydraulic root cutters from Southland Tool Mfg. are available in 12- to 24-inch diameters. The extra-thick concave saws are reinforced with three rigid spokes and a center-long hub that attaches to the root cutter. The saw stays centered in the line and does not get caught on offsets because there is no opening. The saws are circumferentially correct to maximize cutting in the middle of the pipe. Large root cutter skids are also available. 714/632-8198; [www.southlandtool.com](http://www.southlandtool.com).

## 26. MINI PUSHROD

The Snake Eye mini pushrod camera system from TV Ferret features a stainless steel frame and low-friction multiconductor push cable. The system comes standard with a 10.4-inch color LCD monitor, DVR, footage counter and built-in microphone housed in a hard portable case. The mobile push camera comes with its own self-charging power source, allowing it to operate when no electrical power source is available. The unit comes with a self-leveling head and variable LED lights. A sonde for locating is optional. 518/399-2211; [www.tvferret.com](http://www.tvferret.com).

## 27. ONE-PIECE NOZZLES

One-piece cleaning nozzles from USB-Sewer Equipment Corporation are not bonded or screwed together. The latest technology enhances strength and reduces chances of failure under pressure for safety and optimum performance. Advanced, Optimized 3D HydroMechanics, located in the lower part of the chamber, eliminate pressure in the upper portion of the nozzle and prevent explosion in a sewer line or manhole.

The water coming from a pressurized hose is immediately guided directly into channels and into ceramic nozzle inserts, which do not require winglets or flow-straighteners. The result is a highly efficient jet pattern. The nozzles are precision-engineered and manufactured according to DIN EN ISO 9001:2000.

They include the Antiblaster Nozzle 3D, the Flying Nozzle 3D, the Cleaning Nozzle 3D, and the FJ Penetrator Nozzle 3D. 866/408-2814; [www.usbsec.com](http://www.usbsec.com).

## 28. INSPECTION CAMERA

The Inspector Cam from Vac-Con expands the application for the company's combination sewer cleaners. The camera illuminates and uncovers the following from inside the pipe: broken pipes, protruding laterals, off-grade pipes, offset joints, leaking joints, recessed taps, cracked pipes, blockages, corrosion, grease buildup, root infiltration, collapsed pipes, cleanouts, drain lines, service laterals, vent stacks, waterlines, internal plumbing systems and utility ducts.

The display features a high-definition LCD color monitor mounted on a pivot-style assembly, enabling the operator to adjust to various applications. The self-leveling camera head is propelled by the high-pressure water system and hose on the combination sewer cleaner. The white LED cluster lights provide a 160-degree angle of illumination with variable settings. The hose reel-mounted video cable reel has a capacity of 600 feet. The video reel is hydraulically operated in sequence with the sewer hose reel. 888/491-5762; [www.vac-con.com/inspector\\_cam.html](http://www.vac-con.com/inspector_cam.html).

## 29. COMBO CLEANER

The AJV R series combination sewer cleaner from Vacall Industries is powered by a single chassis engine and has a rear-mounted hose reel, reducing noise and contact with engine heat and allowing for an unobstructed view of the job site. The hose reel delivers jetting action in any direction and can be locked into any position with the flip of a switch.

The standard 8-foot, 6-inch telescoping boom is located at the rear of the chassis and is able to front-load debris, producing even load distribution and eliminating material from piling up against the tailgate decant port or optional sump-pump port. The unit has a low-profile design, reducing overhead clearance to 11 1/2 feet. High-quality, aluminum water tanks have capacities of 1,000, 1,200 and 1,500 gallons. The rugged debris body's oval shape with cylindrical sides creates extra strength and efficient dumping. An optional flush system is available. 800/382-8302; [www.vacallindustries.com](http://www.vacallindustries.com).



30



31



32

### 30. TRUCK-MOUNTED JETTER

The truck-mounted Ramjet jetter from Vactor Manufacturing breaks up blockages in sanitary lines and flushes out debris. The unit comes with a 2,500-gallon stainless steel water tank and delivers flows of 60 to 100 gpm at 2,000 or 2,500 psi. The jet rodder is a single-piston, hydraulically driven, dual-acting water pump that delivers a jack hammer action water flow. A single operator can quickly drive to each job site with the unit. It can be configured with a front- or rear-mounted hose reel. The auto-wind hose guide allows hands-free operation from the control panel for a clean, tight wrap. 800/627-3171; [www.vactor.com](http://www.vactor.com).

### 31. MODULAR INSPECTION CAMERA

The vCam inspection system from Vivax-Metrotech includes a modular control module with an 8-inch color LCD, dual-frequency transmitting sonde, digital recording to an internal hard drive or SD card, full function keyboard, internal microphone, AC/DC power, rechargeable batteries, USB interface, RCA jacks for video and audio, distance counter, and camera LED brightness control. The modular design makes it field-serviceable. A range of reels allows for inspection of diameters ranging from 3 to 12 inches and distances from 60 to 400 feet. The reels are fitted with field-serviceable camera terminations as standard equipment. 800/446-3392; [www.vxmt.com](http://www.vxmt.com).

### 32. COMPLETE JETTER

The complete XT jetter from Water Cannon cross-functions as a drain cleaner and high-power pressure washer. The unit is available with power up to 5.5 gpm and pressure up to 4,200 psi. A Honda GX 630 engine and choice of Annovi Reverberi or General Pump brand pump drive the jetter. Standard features include a selective hydropulse feature for pulsation on demand; an adjustable throttle to control operating pressures from 100 psi upward; and a ball valve shutoff component for protection.

A 15-gallon fuel tank, electric key start and portable wheel kit are included. The system also includes a Hosetract hose reel to house an included 300-foot-long 3/8-inch Piranha brand hose; an additional 125-foot, 1/4-inch Piranha hose; four stainless steel nozzles; and a 50-foot super kit that offers the option to pressure wash and expands the jobs where the jetter can be used. 800/333-9274; [www.watercannon.com](http://www.watercannon.com).

- **Steerable** stainless steel crawler body
- Solid ribbed urethane drive tracks
- High intensity LEDs illuminate up to 36"
- Fully portable, DC powered system

**Snake Eye Push Camera**

- 10.4" color LCD monitor
- Variable intensity LED light control
- Operates off its own self charging battery

Under New Ownership - Dealerships Available in Select Areas

[www.tvferret.com](http://www.tvferret.com)

[info@tvferret.com](mailto:info@tvferret.com)

**518.399.2211**

Welcome to your **one-stop shop** for **hot water cleaning equipment** for cold weather jobs.



8 GPM at  
3500 PSI  
Hot Honda  
Pressure  
Washer

SKU# 19H19



[watercannon.com](http://watercannon.com)  
**1-800-333-9274**

## RESIDENTIAL AND COMMERCIAL SEWER AND PIPE MAINTENANCE

BY SCOTTIE DAYTON

### ROTARY ACTION ELIMINATES GREASE

#### PROBLEM

Grease clogs in the three major wet wells of Culver City, Calif., backed up the sanitary sewers. Officials needed a way to resolve the issue without demanding more manpower or budget.

#### SOLUTION

Representatives from **Gamajet Cleaning Systems** demonstrated the **Gamajet VIII rotary impingement tank cleaner** to authorities. A standard city jetter powered the fluid-driven machine at 65 gpm/300 psi. After lowering it into a lift station, two high-impact jets blasted grease from the walls and bottom in a 360-degree pattern. The emulsified grease then flowed downstream to a waiting cleaning crew.



#### RESULT

The station was grease-free in 12 minutes. The facility supervisor says it was the cleanest he has ever seen it. The city bought a machine, scheduled the stations for regular cleaning and eliminated the clogging problem. **877/426-2538; www.gamajet.com.**

### WATERJETTER CUTS ROOTS

#### PROBLEM

Root-clogged laterals caused innumerable problems for property managers in the Baltimore, Md., area. The residential equipment used by local plumber Samuel Perlman of TUFFGUY Plumbing lacked sufficient power to be effective.

#### SOLUTION

A product demonstration at a property Perlman services introduced him to the **KJ-3100 waterjetter** from **RIDGID**. Operating at 5.5 gpm/3,000 psi, the unit cleared blockages in 2- to 10-inch drains. Perlman says the line probably remained open for a month.



#### RESULT

Perlman purchased the jetter with a Root Ranger 3000 nozzle. "I'm a firm believer in RIDGID," he says. "As far as trade tools, RIDGID is by far the way to go." **800/769-7743; www.ridgid.com.**

### BIOREMEDIATION DISSOLVES GREASE

#### PROBLEM


The high cost of removing grease from 79 lift stations in Charlotte, N.C., prompted Stuart Rosenberger, station manager at Charlotte-Mecklenburg Utilities, to search for another approach.

#### SOLUTION

In 2011, Rosenberger agreed to a pilot study using **BioPlug** from **Vaporooter**. The 100 percent bacterial formula converts grease into carbon dioxide and water. Crews changed the plugs monthly and noticed how the product reduced the time they spent cleaning the structures. At the end of the study, the utilities purchased BioPlug for problematic stations.



#### RESULT

"This is the first product I've seen that actually slowed grease accumulation and reduced costs," says Rosenberger. **800/841-1444; www.vaporooter.com.** 



CENTRAL OKLAHOMA

**Winnelson**  
COMPANY

**YOUR SOURCE FOR  
RIDGID**



micro CA-100  
Inspection Camera



CS10  
Digital  
Recording  
Monitor  
with Flash Drive



LT1000 Laptop  
Interface System



microDrain Reel



DVDPak

**8% ONE YEAR FINANCING AVAILABLE!**  
Longer lease rates also available. Call Keith for details.

**BUYING A SEESNAKE?**

**CALL US FOR  
GREAT PRICING &  
FREE SHIPPING!**

**WE  
WILL NOT BE  
UNDERSOLD**

- Call Us Evenings and Weekends -

Keith: 405-602-9155 &

Jim: 405-205-3974

**CALL TOLL FREE: 888-947-8761**

5037 NW 10th  
Oklahoma City, OK 73127

[www.centralwinnelson.com](http://www.centralwinnelson.com)



**HOME OF THE  
DOMINATOR® CUTTER**



**Dominator®  
Cutters**

- » Generation II Infinite Controls
- » Streamlined Air Motors Ranging from .7 HP- 2.5 HP
- » Air Motor Rebuilds
- » Classic 615 & Jumbo 1236 Repair Parts & Service
- » Free Training at Our Facility on Our Products

**Bowman Line Of  
Tool Steel Geared  
Drive Motors For**



- » Dominator® 4-30 Cutters
- » Aries Cutters
- » Bowman 615 Cutters
- » TryTek Cutters

**LEADERS IN CUTTING TECHNOLOGY**

717-432-1403 • [www.bowmantool.com](http://www.bowmantool.com) • [bowmantoolco@earthlink.net](mailto:bowmantoolco@earthlink.net)



"water as a tool"

**WOMA**  
CORPORATION

**WOMA High Pressure Systems**

help solve almost any Industrial cleaning, maintenance and decontamination problem.

- HIGH PRESSURE PUMPS TO 40,000 PSI
- 25-600 HP HIGH PRESSURE UNITS
- ACCESSORIES TO MEET ANY APPLICATION

Let us help you more effectively use "water as a tool."

When quality, performance and reliability matter...

PHONE: 800-258-5530 . FAX: 732-417-0015

# The Loyalty Club

REWARDING REGULAR CUSTOMERS FOR THEIR BUSINESS WILL HELP YOUR BOTTOM LINE

BY ERIK GUNN



*Erik Gunn is a magazine writer and editor in Racine, Wis., where he operates Great Lakes Editorial Services, consulting for businesses, nonprofits and individuals. Readers may direct inquiries to him by contacting this publication at 800/257-7222 or emailing editor@cleaner.com.*

**C**ustomer loyalty programs were pioneered in the airline industry in the form of frequent flyer programs that enabled heavy travelers to earn free airline trips in return for sticking with the same carrier. Now they've spread to all sorts of businesses – hotel chains, grocery stores and other retailers, just to name a few. There's a hot dog and hamburger spot around the corner from my office that gives out free meals for every 10 that I buy.

With some tweaks in how they're designed, loyalty programs can benefit service contractors like drain cleaners and septic pumpers as well.

Simply put, a loyalty program rewards the customer for coming back. It creates an incentive that translates into a certain base of customers – and their dollars.

Unless you're in the rare situation of having no competitors, any time a customer rings your phone, you've effectively won a lottery.

**THE CALLER COULD JUST AS EASILY HAVE DIALED THE NUMBER OF YOUR RIVAL ACROSS TOWN OR ACROSS THE COUNTY.**

That's nothing to dismiss. Unless you're in the rare situation of having no competitors, any time a customer rings your phone, you've effectively won a lottery. The caller could just as easily have dialed the number of your rival across town or across the county.

## DISCOUNTS, SPECIALS AND POINTS

Some loyalty programs are free to the customer and give discounts or specials based on the number of purchases. That makes sense in fields like retailing, where traffic is frequent. And it could work in some service businesses. For instance, a septic pumper might set up a program in which a customer gets a free inspection with, say, every fourth or fifth visit.

A very simple approach would be to give repeat customers a small discount, perhaps 5 percent or 10 percent. In a similar vein – although it's not strictly a loyalty reward – many contractors discount the bill by 5 percent or so if the customer pays at the time of service.

Typically, though, such contractors aren't going to see the same customers all that frequently. That makes it hard for customers to rack up "points" toward some kind of free or discounted service.

That doesn't mean you have to scrap the idea entirely. You could consider a loyalty program that your customer buys into – in the form of a fixed annual fee.

For example, my car mechanic sells a yearly program that costs about the same as four oil changes. The customer gets a punch card that offers four free oil changes, plus discounts on other specific service items.

## CLEANER INDUSTRY MODEL

One approach is used by Ashton Service Group in Vancouver, B.C., a service contractor covering plumbing, heating, air conditioning and gas in the residential and commercial market.

For \$89 a year, homeowners can join the firm's Ashton Value Plan program. With membership, they get an annual plumbing and drain safety inspection. Shutoff valves for incoming water service and water heaters are tagged to make it easier for homeowners to find them in an emergency. In addition, members get priority scheduling and a 15 percent discount on service work. Diagnostic fees and overtime charges are waived as well, and members get access to special discounts advertised on the Ashton Service website. They also get two \$25 gift certificates for the company's services that they can share with friends or relatives.

Customers can sign up through the company's website, and the sales department offers it as a service when calling customers. A customer can even sign up when Ashton comes to their home for a major piece of service work, such as replacing a hot water heater, so they can get the discount right away.

The program has been in place for a couple years. Ashton's controller, David Fung, said the price was set to help make it affordable in light of the benefits and discounts involved.

The program "gets our foot in the door, and other work will spin off from it," says Fung. Once a person has signed up, "they'll call us instead of flipping through the Yellow Pages or their iPhone looking for a contractor."

## MAKING IT WORK

That might be a good template for others, but remember: every business is a little different, and there's not going to be a "one size fits all" solution. Still, if you want to set up a program for your own business, you can take the same general steps.

- 1) Review all the services you offer and determine which ones are frequent enough to anchor your loyalty program.
- 2) Calculate what sort of discount you can afford to offer and still make a profit on the other services you provide.
- 3) Consider some alternative designs, and run some projections to see which ones will work best for your bottom line.
- 4) Once you decide to offer the program, market it aggressively. If your customers don't know about it, it won't be worth the time to set it up in the first place.

There's a not-so-hidden message in these four steps. If it's going to benefit your business, a loyalty program has to be sustainable. It has to help you make money in the long run – not cost you money.

A loyalty program that collapses not only defeats the purpose, it's worse than no loyalty program at all. But if properly designed and monitored, a customer loyalty program can help you build a stable of repeat business that flows directly to your bottom line.

Or, to put a twist on an old saying, it can make loyalty its own reward – for your customers and for you. **c**

What you learn on these pages could be worth \$1,000s.  
It's all yours for less than \$1 a month. Subscribe today.

Three Years (36 issues) \$35  
www.cleaner.com 800-257-7222

**Cleaner**

# SOLD

## Sell your equipment in *Cleaner* classifieds

Reach over 26,000 potential buyers each month when you list your equipment in the classified section. Plus, your listing is placed automatically online at the *Cleaner* website. In addition, your ad will be placed in the *Pumper e-Trader*, an electronic magazine that is e-mailed to readers. That's three ways to move your equipment out of the yard!

## Why wait?

Go to  
[Cleaner.com/classifieds/place\\_ad](http://Cleaner.com/classifieds/place_ad)



Scan the code with your smartphone.

# ENTER HERE

# EXIT

Way ahead of the competition

Join 25,000 of your industry peers each month who welcome *Cleaner*, for the unlimited value it brings them. Each issue will show you new tools, tips to save on expenses, money-saving deals and much more.

Subscribe Today!  
[cleaner.com/order/subscription](http://cleaner.com/order/subscription)

Scan this code with your smartphone to go to [cleaner.com/order/subscription](http://cleaner.com/order/subscription)

**VERMEER LAUNCHES HDD TOOLING ONLINE WAREHOUSE**

The BORESTORE tooling and accessories warehouse from Vermeer Corp. ([www.boystore.com](http://www.boystore.com)) makes the company's horizontal drill tooling and accessories available to contractors 24/7.

**SIoux CORP REDESIGNS WEBSITE**

Sioux Corp., manufacturer of pressure washers, steam cleaners and steam generators, redesigned its website, [www.sioux.com](http://www.sioux.com), adding videos, slide shows and related content.



**STONEAGE EXPANDS DEALER MODEL**

StoneAge Tools expanded its dealer model, offering products for sale only through its distribution network. The tools division includes waterblast tools and mechanized systems, Wārthog sewer cleaning tools and Spincat downhole cleaning tools.

**IPR MANAGERS ELECTED TO NUCA BOARD**

Ben Goodall, Texas business development manager for IPR, and Reed Rohrbach, Mid-Atlantic area business manager, were elected to their respective National Utility Contractor Association chapter board of directors. Both helped form new chapters as part of NUCA's Chapter-In-Development program initiative.

**RELIABLE PUMPS NAMES WOODWARD SENIOR SALES CONSULTANT**

Reliable Pumps Consultants Inc. has named Mike Woodward senior sales consultant. He has over 30 years of experience in engineering, management and sales and is an expert in the field of high-pressure water jetting. c



Mike Woodward

**cleaner.com**

FOR DRAIN AND PIPE CLEANING, INSPECTION AND REHABILITATION PROFESSIONALS

It's A **Bag Full**



**cleaner.com**

- > Classifieds
- > Articles
- > E-zines
- > Product Categories

Scan the code with your smartphone.



**KEN-WAY Beats the Others DAY-IN • DAY-OUT**

And they have for over 50 years

**KEN-WAY CABLE CLEANERS**

for cleaning sewer, drain or process lines from one to ten inches, up to 75 feet with the Junior and up to a full length of 300 feet with the Model 400



**KEN-WAY Exclusive Built Cables**



- Heat Treated
- Inner-Core or Non-Core
- Fit Most Other Brands
- Interchangeable with Most Brands
- Coupling or Blade Holding Types



Leasing plans available. Call for details.  
**1-800-533-0551**

930 ROBERTS ROAD, SPARTA, WI 54656  
[www.ken-way.com](http://www.ken-way.com) • E-mail: [info@ken-way.com](mailto:info@ken-way.com)

**LA PLACE EQUIPMENT**

RENTALS, SALES & SERVICE

- **WATERBLASTERS:**  
PRESSURE TO 40K,  
FLOW TO 100 GPM
- WATER JETTING TOOLS
- HYDRO-MOWERS
- 3D NOZZLES
- ROTATING NOZZLES
- HIGH PRESSURE HOSES
- LANCES
- FITTINGS
- TIPS
- SUPPLIES
- EXPERIENCED TEAM FOR PLANNING, TRAINING & SETUP

CALL  
985.652.5210  
FOR YOUR  
WATERBLAST  
PROJECT  
SOLUTIONS  
[WWW.H2OBLAST.COM](http://WWW.H2OBLAST.COM)



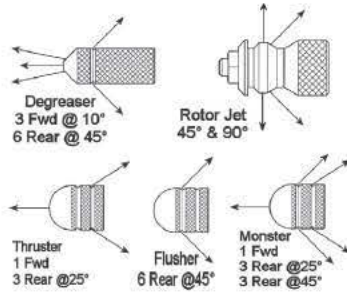
# CUSTOM DRILLED NOZZLES

## SEWER SQUAD PREMIUM KIT™

### A Value Priced Nozzle Kit



• Each nozzle is custom drilled to match your pump's flow and pressure specs for optimized nozzle performance.



NPT Size	Price	Savings*
1/8"	\$207	\$37
1/4"	\$235	\$42
3/8"	\$272	\$50
1/2"	\$345	\$62
3/4"	\$463	\$80

\*Compared to individual prices

• Each nozzle is made with heat treated 416 stainless steel for superior corrosion and wear resistance, and rated up to 10,000 psi.

• Most orders shipped within one business day.

• 100% satisfaction guarantee.

**CALL TOLL FREE: 877-457-2782**

North Royalton, OH 44133 • [www.aquamole.com](http://www.aquamole.com) • Fax: 440-237-2987

# INDEPENDENT SALES REPS:

ARE YOU LOOKING TO BE PART OF THE INDUSTRY'S #1 CIPP MANUFACTURER & SUPPLIER?

ESTABLISHED INDUSTRY REPS WANTED IN EVERY STATE!

AREAS WILL GO FAST - CALL NOW!

1-866-336-2568 / Rob Larsen  
or email  
[rob@perma-liner.com](mailto:rob@perma-liner.com)



Visit [www.perma-liner.com](http://www.perma-liner.com)  
Call 1-866-336-2568

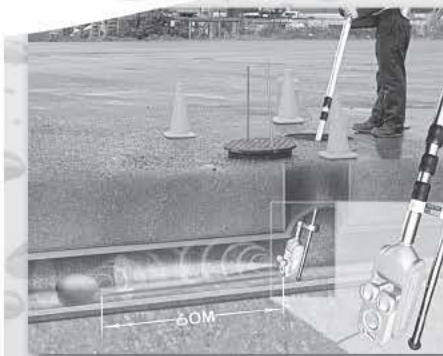


# SENTECH ENGINEERING CO., LTD.

[www.sentech.cn](http://www.sentech.cn)  
[sentech@sentech.cn](mailto:sentech@sentech.cn) • [sentech\\_info@yahoo.com](mailto:sentech_info@yahoo.com)

### Quick-Video "SP-100"

- Laser ranging and position obstacles;
- Digital video recording;
- Standard configuration with maximum 10M depth work



Easily transported by a single person, and easy to use! Friendly and reliable operation!



### BLOWER FANS

Model	Measurements (CM)	Power (HZ)	Output Volume (m³/h)	Unit Price (USD)
200	32×27×36	230	1500-1700	\$950
250	38×31×36	320	2500-2700	\$1,000
300	42×36×43	520	3500-4000	\$1,100
350	53×43×43	750	4500-5000	\$1,250

### ARMORED CABLE

(resistance to friction and wear)

The high-quality armored cable withstands daily abuse in normal working conditions.

Featured in an article?

# Make the most of it!

REPRINTS AVAILABLE

We offer:  
Hard copy color reprints  
Electronic reprints

Visit [cleaner.com/order/reprint](http://cleaner.com/order/reprint)  
for articles and pricing

## Two-month resin adds flexibility to steam-cured lining

BY ED WODALSKI

Formadrain Inc.'s new epoxy resin features a two-month shelf life that adds flexibility to trenchless pipelining repairs. The process features Durapox technology that keeps the resin in a pre-cured state for up to eight weeks until steam is applied during the installation process. The epoxy contains no styrene-based polyester resins and fully cures in 60 minutes.

The extended shelf life widens the window for pipelining repairs, says Carl Marc-Aurele, process engineer for Formadrain. "Most of the steam-cured resins available now, once you mix both parts of the chemical, have a pot life of one to four hours," he says. "What that means is once you mix the chemicals, you only have one to four hours to prepare the liner, put it over the batter, put it over the bladder, put it in the ground and cure it. That's a rough process, and sometimes it can harden on you before it's in the pipe. In some ambient cure processes you have even less than an hour to do all this work."

The longer shelf life enables the contractor to have linings prepared up to a week in advance. "We're able to mix it, put it in a pail and ship it. There's no more weight ratio, thus less chance of mistakes," Marc-Aurele says.



While some ultraviolet lining systems might match or exceed Formadrain's two-month shelf life, these systems can be more expensive and/or emit volatile chemicals and odors that might not be suitable for various applications, Marc-Aurele says. "Epoxy resins do not have volatile compounds in them; they're odorless."

Being able to order fully prepared assemblies of any length of liner in advance also enables contractors to make repairs that might not have been previously possible for smaller contractors.

"Let's say you need to do a 100-foot repair," Marc-Aurele says. "You need 100 feet of liner to lay flat. Not every contractor has that much space, be we're set up for that at the shop."

The pre-wetted liner can be used in the repair of both laterals and mains from 4 to 48 inches in diameter. It also can be used to repair tees and wyes. 888/337-6764; [www.formadrain.com](http://www.formadrain.com).

### RIDGID LEVELS, TAPE MEASURES

Aluminum machined levels and locking steel tape measures from RIDGID are the latest additions to its line of hand tools. The four levels (4-Vial Aluminum Machined Torpedo, model 400UM; 5-Vial Aluminum Machined Torpedo Level, model 500UM; 5-Vial Aluminum Machined Laser Level, model 800LMI; and U-Shape, V-Grove 10-Function Aluminum Machined Level, model F-10) are built from a solid block of aluminum and come with v-grooved Earth magnets for stability on pipe or magnetic surfaces. The laser level is tested to last up to 10,000 hours and provides accuracy of 1/4 inch at 100 feet. The tape measures are available in 16-foot (model 616) or 25-foot (model 325) versions. 800/769-7743; [www.ridgid.com](http://www.ridgid.com).



### GENERAL PIPE WATERJET DRAIN CLEANER

The JM-3055 Jet Set waterjet drain cleaning machine from General Pipe Cleaners delivers 3,000 psi and 5.5 gpm for cleaning stubborn stoppages, including grease, sand and ice. The unit has a 300-foot capacity hose reel, tubular frame, four pneumatic tires and wheel brake. Other features include 16 hp Briggs and Stratton Vanguard electric-start engine, 2:1 gear reducer and triplex pump. Vibra-pulse on demand helps the hose slide down long runs and around tight bends. Safety features include thermal relief valve, backflow check valve and inlet filter. A toolbox, spray wand and chemical injector are included. 800/245-6200; [www.drainbrain.com](http://www.drainbrain.com).



### GP HYDRAFLOW DROP BOXES

Standard and Space Saver drop boxes from GP HydraFlow LLC are available for 8- to 24-inch outlets with custom sizes available. Configured to discharge wastewater along the interior wall of the lift station, the drop boxes move solids, while reducing their tendency to separate from the water and collect at the surface. Built with T304 stainless steel, the boxes fit any lift station or manhole. 317/403-2700; [www.gphydraflow.com](http://www.gphydraflow.com).



### PRESTO LIFTS HAND PALLET TRUCKS

Roll-Lift hand pallet trucks from Presto Lifts Inc. have a lift capacity of 4,500 to 6,500 pounds and fork length from 48 to 72 inches. Standard and heavy duty models are available in 20.5- and 27-inch widths. 800/343-9322; [www.presto-lifts.com](http://www.presto-lifts.com).



### SUBSURFACE SUPPLY INDUSTRIAL VACUUM SYSTEM

The IVAC PV500 sand, sump, rock, slurry and water handling industrial vacuum system from Subsurface Supply Inc. is capable of moving materials in industrial and environmental cleanups. The skid-mounted unit weighs 1,800 pounds, is 72 inches long, 36 inches wide and 74 inches high. The system delivers up to 100 psi, 500 cfm and 24 inches Hg. Discharge pressure is fully adjustable (1-100 psi). It has a vertical vacuum lift up to 150 feet, vertical discharge up to 500 feet and horizontal



discharge up to 10,000 feet. The control panel can be powered by a 12-volt DC or 120-volt AC source. An intrinsically SAFE option is available for hazardous environments. 605/838-8384; [www.subsurfacesupply.com](http://www.subsurfacesupply.com).

### **KNAACK WEATHER GUARD LADDER RACK SYSTEM**

The Weather Guard Quick Clamp Ladder Rack and Nissan NV Ladder Rack from Knaack LLC are designed for commercial vans and minivans. Quick Clamp features include extended and outward angled ladder hooks on the front end of the side rails for easier loading in tight spaces, 3/16-inch extruded aluminum rails, stainless steel gutter clamps, anti-wear protection and adjustable sway braces for easy ladder change out. The NV ladder rack features the EZ-Glide system that enables one person to load or unload ladders through the use of an ergonomic drive arm. 800/456-7865; [www.knaack.com](http://www.knaack.com).



### **HONDA INDUSTRIAL SERIES GENERATOR**

The EB1000 industrial series generator from Honda has a maximum output of 10,000 watts, narrow-shaped design and centralized exhaust. The generator operates at 72 decibels at 23 feet. The digital auto voltage regulator (DAVR) holds voltage stable within one percent during standard operation. The i-Monitor digital operation system offers at a glance total used hours, generating voltage (when error detected), battery condition, Oil Alert and AVR (auto voltage regulator) error code. 770/497-6400; [www.hondapowerequipment.com](http://www.hondapowerequipment.com).



### **REED MANUFACTURING RAPID CUT, BEVEL MACHINE**

The rapid cut and bevel machine from Reed Manufacturing Co. cut and bevel up to 24-inch PVC or PE pipe in one pass. The pneumatic-powered machines are portable to the jobsite and are designed for use above ground, in water or in trenches. 800/66-3691; [www.reedmfgco.com](http://www.reedmfgco.com).



### **CLEAR COMPUTING CLOUD-BASED TAC**

Cloud-based TAC online operations management system from Clear Computing enables users to choose the number of accounts needed, with pricing on a per-user basis and month-to-month subscriptions. The system is designed for businesses with multiple locations, owner operators who run their business from home, office and vehicle, seasonal variations and outside sales. 888/332-5327; [www.clearcomputing.com](http://www.clearcomputing.com).



### **HANNAY PW-2 SERIES REELS**

PW-2 series reels from Hannay Reels are designed to mount to most pressure washers. Made of 12- and 14-gauge steel with black powder-coat finish, the reels have a pressure rating of up to 4,000 psi. Features include adjustable split bearing brake assembly and permanent attached direct crank rewind. 877/467-3357; [www.hannay.com](http://www.hannay.com).



## Every day is Earth Day.™

“We must be one of the earliest plants to employ full-scale UV. We’re proud of the fact that we are not adding chemicals to our discharge. We maximize the biological activity — let the microbes do their thing. Engineers design the best plant they know how to, and contractors build it as well as they can. In the end, though, it’s the operators who make it work.”

**Joni Emrick**  
An Original Environmentalist

WATER RESOURCE MANAGER  
Kalispell (Mont.) Wastewater  
Treatment Plant

Get your **FREE subscription** and read about original environmentalists like Joni each month in *Treatment Plant Operator*.

**tpo**

COLE PUBLISHING INC.  
[tpomag.com](http://tpomag.com)  
800-257-7222

Proudly Serving the  
Environmental Service Industry  
Since 1979

# Cleaner Marketplace Advertising

## WATER JETS FOR RENT



- Units from 4,000 to 40,000 psi, including convertibles
- 60-600 hp, diesel or electric
- Rent, buy or lease
- Branches in MI, TX, NJ, CA, LA

**NLB Corp.** 1-877-NLB-7996  
www.nlbcorp.com



## Cua Claws

A Simple Solution for  
Slippery PVC Pipe -  
**The Right Wheels**  
We now resurface all makes  
of steel transport wheels

CALL JERRY AT 714-697-8697  
www.cuaclaws.com



## BUSTER GETS A BONE FOR EVERY REPAIR!

▶ We service push rod reels, cameras and command modules. We repair most brands.  
▶ We are an authorized service center for General Wire, Ratch, Vision and Ridgid.  
▶ Your equipment is very expensive and we would be happy to supply references on our quality work. Just call Chuck!

Electronic Repair Co. • 205-836-0454 • servicewithasmile.com

## Master-Lateral Pipeline Renewal System



Transform a problem pipe into a new, strong,  
leak-proof system in a matter of hours

**1.888.DIG.FREE**  
(888.344.3733)  
www.masterliner.com

## THE "ORIGINAL" LIQUID SMOKE



### Turbo Fog M45:

- Versatile
- Light Weight
- Compact
- Creates Dense Smoke



www.turbo-fog.com • 1-800-394-0678



TOLL FREE: 1.800.992.0222

## Best Products Best Prices 24/7

Cherna • Pelican • Ridgid • Sreco • Vacall • Stoneage • Shamrock • Surefire  
www.AdvancedWorld.com

Join The Rooter-Man Team: [www.RooterManFranchise.com](http://www.RooterManFranchise.com)



"To The Rescue"

NO ROYALTY ON PERCENTAGE OF SALES

Franchise Package \$7,950

RESERVE YOUR EXCLUSIVE TERRITORY • Call 1-800-700-8062

## You Can Install Sewer and Water Lines (Without Digging A Trench)

### Pipe Genies Do It All!

Ductile & Cast Iron, Clay & Concrete, ABS, PE & PVC

### Pipe Genies Pull Any Pipe!

System Power From 20 Tons to 240 Tons!  
(Rated for 1/2" - 30" Pipe)

### Pipe Genies Work Anywhere!

The Most Compact Systems Available!

We have everything you need to get started  
making profits with pipe bursting!



www.TrenchlessAmerica.com

Toll Free 1 877 411 7473

## CHECK OUT THE LATEST PRODUCT NEWS

AT

[WWW.WASTEWATERPR.COM](http://WWW.WASTEWATERPR.COM)

View all the Product News

It's your  
magazine.  
Tell us  
your story.

## Cleaner



At Cleaner, we're looking for  
service companies with  
interesting stories to tell.  
If you'd like to share your  
story, send us a note at  
[editor@cleaner.com](mailto:editor@cleaner.com).

## T&T Tools, Inc. 800.521.6893



Insulated  
Soil Probes  
(for locating)

Heat-Treated  
Hooks  
(for covers, lids, etc)

www.mightyprobe.com



**Superior® SMOKE**  
for Sewer Testing

Fast • Inexpensive • Easy



MADE IN THE USA

Superior® Smoke Testing  
the most cost effective method  
to find sources of inflow

Choose Candles or Fluid

800-945-TEST  
www.SuperiorSignal.com

**Trailer Jetters**  
Gas or Diesel



More Power  
per  
GPM!

AmericanJetter.com  
866-9HI-FLOW

Out With The OLD...  
In With The NEW!

Replace Water Services in  
Less time for Less Money!



Split or Pull Out Copper,  
Galvanized and Plastic Pipe.  
**THINK TRENCHLESS!**

Call us toll free:  
1-888-737-3668  
Or visit us at:  
www.footagetools.com



**DYNAMIC  
CABLE  
REPAIR**

**We Repair:**

General Wire, Ratch, RIDGID,  
Aries, Insight Vision, Electric Eel,  
GatorCams, Plumbers Depot, UEMSI,  
Vision Intruders, Vivax, Inspection Cameras,  
Locators, Command Modules and Cables

**Rental Equipment Available**  
Daily & Weekly Rates

**48-Hr. Turn  
Around  
Time**

**INSPECTION CAMERAS  
ARE OUR  
ONLY BUSINESS!**

**973-478-0893**

**DYNAMIC REPAIRS**  
40 Arnot St., Unit 20  
Lodi, NJ 07644  
www.dynamicrepairs.net



It's A  
**Big Full**

cleaner.com

- > Classifieds
- > E-zines
- > Product Categories

**DYE TRACERS**



Solutions  
for:

- Infiltration
- Septic Systems
- Cross Connection
- Leaks and more...

**BRIGHT  
DYES**  
Division of Kingscote Chemicals

www.brightdyes.com FREE SAMPLE 1-800-394-0678

**Waterblaster  
Rentals & Sales**

Houston, Texas



**Boatman Industries**  
1K to 50K psi  
60 hp to 1000 hp  
Waterblasters & Accessories  
Used Equipment Sales  
**713-641-6006**  
www.boatmanind.com

www.PipeburstingAmerica.com

**408.224.7777**  
SALES - TRAINING

**Map It!**



Cleaner classified ads are pinpointed  
on a map for conveniently locating  
where the equipment is.

Go to  
cleaner.com/  
classifieds/  
place\_ad

Scan the  
code  
with your  
smart-  
phone.



**ATTRACT  
ATTENTION**  
Marketplace ads are available in color.  
Call today to get started 800.994.7990

**ERICKSON  
Tank & Pump**

**509.785.2955**  
CALL FOR UPDATED LIST OF  
**EQUIPMENT**  
WWW.ERICKSONTANK.COM

**Masport®**  
PUMPS & QUALITY COMPONENTS  
800 Rd. P.5 S.W. / Quincy, WA 98848  
fax: 509.785.3770  
e-mail: sales@ericksontank.com  
"TANKS" FOR YOUR BUSINESS!

WE  
TAKE  
TRADES

**CONFINED  
SPACE  
ENTRY  
PACKAGE  
ONLY \$2,995**

The best package on the  
market includes:

- 4-Gas Air Monitor
- 7' Tripod
- 3-Way Fall Protection
- Work Winch
- Full Body Harness



Add a Blower with 15' of duct for only \$350!  
Add a 5 Minute Escape Respirator for only \$500!

**MTECH. 800.362.0240**  
www.mtechcompany.com

# classifieds

see photos in color at [www.cleaner.com](http://www.cleaner.com)

## BLOWERS

One (1) very good used Roots 824 PD blower. [www.VacuumSalesInc.com](http://www.VacuumSalesInc.com), (888) VAC-UNIT (822-8648). (CMBM)

## BUCKET MACHINES

BUCKET MACHINES, refurbished units, ready to work. Training and parts available. 416-248-4990. (C05)

## BUSINESSES

EXCITING LICENSING OPPORTUNITY! Be among the first to join the NEW BRAND! Go to [www.rooterNOW.com](http://www.rooterNOW.com) and click on LICENSEES. (C06)

## BUSINESS OPPORTUNITIES

[www.RooterMan.com](http://www.RooterMan.com). Franchises available with low flat fee. New concept. Visit web site or call 1-800-700-8062 x26. (CPBM)

## CATCH BASIN CLEANER

2008 American La France Condor with a new VacAll VS10DC, 10-yr debris body, dual steer, dual sweep street sweeper and catch basin cleaner. (Stock #1791V) [www.VacuumSalesInc.com](http://www.VacuumSalesInc.com), (888) VAC-UNIT (822-8648). (CMBM)

## COMPUTER SOFTWARE

FreeServiceReminderSoftware.com, FreeServiceDispatchSoftware.com. (C05)

## DEWATERING

4" Percussion Milling Cutter, Enz Golden Jet for 3/4" - 1" hose version 14.100. LIKE NEW, used on one job! \$3,500. Plumbing Anytime, Inc. 307-733-3534. (CMBM)

## HAZARDOUS WASTE UNITS

2006 Peterbilt 335 with a Presvac 3,200: Carbon steel D.O.T., 412 full open rear door, dump type unit, Presvac PV750 pump. (Stock #8189C) [www.VacuumSalesInc.com](http://www.VacuumSalesInc.com), (888) VAC-UNIT (822-8648). (CBM)

2005 Peterbilt 335 cab & chassis with a 2004 Presvac, 3,300 U.S. gallon carbon steel, D.O.T. vacuum tank unit. (Stock #5427C) [www.VacuumSalesInc.com](http://www.VacuumSalesInc.com), (888) VAC-UNIT (822-8648). (CBM)

Pre Owned 2009 Acro, 6,500 U.S. gallon, aluminum, D.O.T. 412 vacuum tank trailer. (Stock #50368C) [www.VacuumSalesInc.com](http://www.VacuumSalesInc.com), (888) VAC-UNIT (822-8648). (CBM)

New 3,200 U.S. gallon, carbon steel, D.O.T. certified 407/412 vacuum tank; dump type with full open rear door and a Presvac PVB 750 vacuum-pressure pump installed on a 2012 Peterbilt, 348 cab and chassis. (Stock #13511V) [www.VacuumSalesInc.com](http://www.VacuumSalesInc.com), (888) VAC-UNIT (822-8648). (CBM)

1999 Sterling cab & chassis with a Cusco Turbovac 3800 industrial loader with a jetting system. (Stock #3163C) [www.VacuumSalesInc.com](http://www.VacuumSalesInc.com), (888) VAC-UNIT (822-8648). (CBM)

1998 Mack RD6885 with a 3,000 U.S. gallon, DOT certified, carbon steel vacuum tank unit. (Stock# 6653V) [www.VacuumSalesInc.com](http://www.VacuumSalesInc.com), (888) VAC-UNIT (822-8648). (CBM)

POWERVAC 3800, 3,250 gallons, carbon steel vacuum tanker with a Hibon PD blower, 3800 SCFM with vacuum to 27" Mercury. Dump type; DOT 407/412 regulations installed on a 2009 Sterling tri-axle. (Stock #4931) [www.VacuumSalesInc.com](http://www.VacuumSalesInc.com), (888) VAC-UNIT (822-8648). (CBM)

## HAZARDOUS WASTE UNITS

POWERVAC 3800, 3,000 U.S. gallon, carbon steel vacuum tanker with a Hibon PD blower 3800 SCFM with vacuum to 28" mercury. High Dump Type; D.O.T. 407/412 regulations. Mounted on 2012 Peterbilt 365 Triaxle. (Stock #13478V) [www.VacuumSalesInc.com](http://www.VacuumSalesInc.com), (888) VAC-UNIT (822-8648). (CMBM)

## JETTERS-TRAILER



**Xtreme Flow Hot/Cold Jetter!** Model# HJ2TA8536, tandem axle trailer, 35 hp Vanguard 8.5 gpm @ 3,600 psi, 325 gallon water tank, 300' hose, General pump. List \$34,995. On sale for \$29,995. Fully loaded! Call for special pricing!

800-213-3272  
[www.hotjetusa.com](http://www.hotjetusa.com) CPBM

## JETTERS-TRUCK

2006 GMC TC6500 cab and chassis with Pipe Hunter Trunk Mounted Jetting Unit, 3,000 psi @ 50 gpm with a 1,000-gallon water tank, rear mounted hose reel with JET EYE Camera System. **6,800 original miles, like new. \$119,000 sale price. (Retail for \$210,000)** (Stock #13234V) [www.VacuumSalesInc.com](http://www.VacuumSalesInc.com), (888) VAC-UNIT (822-8648). (CBM)

Jack Doheny Supplies Inc. offers a full range of late model combo units and DOT industrial vacuum loaders. Call us @ 1-800-3DOHENY. (CPBM)

1997 Vac-Con Hot Shot truck mount jet truck: 11,000 miles on chassis, 250 hp Cat, 1,200 hours on John Deere aux engine, new 5-speed manual transmission, 50 gpm @ 3,000 psi quintiplex pump, 1,600-gallon water tank, no leaks, tool boxes, runs and works, great municipal owned. \$18,000. Call 303-898-9475. (C05)

## JET VACS

2002 Sterling cab and chassis, Vac-Con industrial machine mounted on a pre owned. (Stock #6917C) [www.VacuumSalesInc.com](http://www.VacuumSalesInc.com), (888) VAC-UNIT (822-8648). (CBM)



**2002 Model V311LHAD Sterling Vac-con LT7500:** Brand new 7.2L 439 CID L6 Caterpillar motor as of 2/29/12. Allison automatic trans, Cummins B3.9 jet motor @ 80 gpm, 3 stage vacuum to 11 yard hi-low debris tank, 1,000-gallon water capacity. 60,000 base load cap. SHOP SERVICED! MANY NEW PARTS! EVERYTHING WORKS GREAT! Comparable to vehicles \$140,000 or more, priced to sell.....\$92,000/OBO

Call 201-788-5282 or email [Stuart@drainbusters.com](mailto:Stuart@drainbusters.com) for more info C07

2000 Sterling cab and chassis, Vactor series 2110 industrial machine mounted on a pre owned. (Stock #5358C) [www.VacuumSalesInc.com](http://www.VacuumSalesInc.com), (888) VAC-UNIT (822-8648). (CBM)



**2003 Sterling L7500 Vac Truck:** Cat 3125 @ 315 hp, A/T, 55K miles, spring susp., 2003 Vac-Con V390LHAD, 3 compressor fans, 10' telescopic boom, HS drive, articulating hose reel, hi-dump debris tank.....\$99,500

715-546-2680 WI CBM

## \$SAVING TRANSITIONS

### Transition CIPP LINER

Fed up with that pile of remnants from pre-configured transition liners taking up your shop space? Suffer Waste No More!!! Use a liner that fits ALL Sizes. Transition Liner will give 50% diametric expansion without loss in cross-sectional

866 535 3694 | [www.gadmon.com](http://www.gadmon.com)



## 60 SECOND CURE TIME

### InstaCureRez CIPP RESIN

Put an end to crews waiting. Generous 90 minute working time and nearly dormant at temperatures under 48° F. Just add heat and transfer 100° F for a lightening fast instant cure.

866 535 3694 | [www.gadmon.com](http://www.gadmon.com)



## JET VACS

For Sale 1999 VAC-CON: Factory rebuilt engine 6/2005, 80 gpm, 2,000 psi, PD, Spicer trans., one owner, 9,968 hours, 78,175 miles. \$68,000, OBO. 1-800-664-3937, PA. (C06)

2005 Vac-Con Sterling combo unit, C-10 Cat engine, 335 horsepower, Myers dp 80 gpm @ 2,000 psi, 3 stage fan, 12-yard debris tank, 126,000 miles. \$98,000. Good shape, ready to work. 813-489-3108, FL. (C05)

2004 Vac-Con Sterling combo unit, new C-7 Cat engine, 2.5 year warranty on engine, 12-yard debris tank, 3 stage fan, 80 gpm/2,000 psi, Myers dp pump. 125,000 miles, 2,100 hours. \$95,000. 813-489-3108, FL. (C05)



**1988 Ford L8000 Vac:** Ford @ 210 hp, A/T, 81K miles, 6K hours, spring susp., spoke wheels, Vac-Con body, Cummins showing 1,292 hours, s/n: V290T-0488186.....\$22,500  
**715-546-2680 WI** CBM

2008 Sterling LT7501 with a VacAll AJV1015, 10-yd debris body, 1,500-gallon water, combination vacuum/jetting unit. (Stock #13366) [www.VacuumSalesInc.com](http://www.VacuumSalesInc.com), (888) VAC-UNIT (822-8648). (CMBM)

## LEASE/FINANCING

**North Star Commercial Credit:** Commercial loans for trucks or equipment. Flexible purchase programs to fit your budget. 21 years in the industry. Contact **Tom Myers - 877-804-2274**. (CPBM)

## NOZZLES

**SAPPHIRE NOZZLES** for UHP, laser-etched, heat treated, excellent quality, fantastic savings! 772-286-1218. [info@alljetting.com](mailto:info@alljetting.com); [www.alljetting.com](http://www.alljetting.com). (CBM)

## NOZZLES

**SAPPHIRE NOZZLES** to 60,000 psi for all major UHP units. Factory direct. Wholesale price. Apex Waterjetting Technologies. 772-260-1100. (CBM)

## PARTS & COMPONENTS

US Jetting provides aftermarket rebuilding services and **replacement parts for Harben® pumps**. Low prices, fast response. Why pay more? Call today. 1-800-538-8464, ext 25 or 18. (CBM)

## PIPELINE REHABILITATION

One trade-in model of Pipe Genie heavy duty, pipe bursting equipment. Excellent condition, looks new. 30-ton, 100 feet cable, full 2-year warranty. 877-411-7473. (CBM)

## PORTABLE RESTROOM TRUCKS



**2005 GMC 5500:** 4x4 Duramax w/ crescent tank, 6 to 8 units, 750 waste, 350 water, vac pump, Masport HXL3F, 106 cfm, 139,000 miles. ....\$19,900  
**614-837-3010 OH** C05

## POSITIONS AVAILABLE

Now hiring for the following positions in Tampa, Florida: CCTV Operator, Vac Operator, Grout Truck Operator, Concrete Spraying and Man-hole Coatings. Top pay and benefits, overtime always available. Experience a must. Equal Employment opportunity Employer. 813-489-3108. [Broese@vac-vision.com](mailto:Broese@vac-vision.com). (C06)

## POSITIONS AVAILABLE

**SALES REPS:** Looking for energetic and motivated, centrally located on East Coast. Sound transportation desired but not required. Send resumes to [resume@nozzteq.com](mailto:resume@nozzteq.com), or call 815-482-0600. (C05)

## PUMPS

**Buy & Sell** all makes and models, **new & used** vacuum pumps & high pressure water pumps, and good used replacement parts. Call for an inventory sheet and save. [www.VacuumSalesInc.com](http://www.VacuumSalesInc.com), (888) VAC-UNIT (822-8648). (CBM)

## PUMPS-HIGH PRESSURE

FOR SALE: Fully rebuilt Myers DP80-20, 80 gpm @ 2,000 psi. \$8,750. Also selling Vaccon parts. Contact Ralph at 866-599-7378. (C05)

## RENTAL EQUIPMENT

Liquid vacs, wet/dry industrial vacs, combination jetter/vacs, vacuum street sweeper & catch basin cleaner, truck & trailer mounted jetters. All available for daily, weekly, monthly, and yearly rentals. **VSI Rentals, LLC, (888) VAC-UNIT (822-8648) www.vsirentalsllc.com**. (CBM)

## SEPTIC TRUCKS



**1978 Mack Vac Truck:** Mack diesel, M/T, 10,500/19,040 axles, camelback susp., spoke wheels, 22.5 tires. ....\$24,500  
**715-546-2680 WI** CBM

## SEPTIC TRUCKS



**2008 Ford F550:** 123,000 miles, 950-gallon waste/300-gallon fresh water.  
**Contact Pat Kelly 513-582-1322** C05



**2006 Sterling LT9500 Vac Truck:** Acert C-13, Fuller 8LL, lockers, 18/40 axles, 4x6 drive, air ride, 24K miles, 208" WB, 227" frame behind cab, 22.5 tires, engine brake, disc wheels, 2006 Presvac tank, s/n: APV-4000-0705-7052, 4,000-gallon tank, Masport pump. ....\$89,500  
**715-546-2680 WI** CBM

1999 Freightliner pump truck: P.T.O. engaged vacuum pump, 1,200-gallon tank. 985-640-6190 or [jblanchard24@yahoo.com](mailto:jblanchard24@yahoo.com). \$18,000. Call or email for pictures. (CP05)

## SERVICE/REPAIR

\*\*\*[www.servicewithasmile.com](http://www.servicewithasmile.com)\*\*\*  
**Sewer Cam Reel and Camera Repair:** Authorized for General Wire, Ratch, Vision & Ridgid. Quality service on all brands. Need more info? Give Chuck a call. **Electronic Repair Co., Birmingham, AL 35206. 205-836-0454; email: [part@servicewithasmile.com](mailto:part@servicewithasmile.com)**. (CBM)

# Nationwide SAME DAY CIPP Supplies

**Easy Liner**

Same Day Shipment\* with Next Business Day Delivery on all orders placed before 12:00 PM EST, M-F

888-639-7717 | [www.easy-liner.com](http://www.easy-liner.com)

CIPP RESINS + LINERS + BLADDERS + FIBERGLASS LINERS + FIBERGLASS SHEETS



Mention this ad & get FREE Shipping on your 1st order

\*Subject to Product Availability

## SERVICE/REPAIR

**Dynamic Repairs - Inspection Camera Repairs:** 48 hour turn-around time. General Wire, Ratch, Ridgid, Electric Eel, Gator Cams, Insight Vision, Vision Intruders. Quality service on all brands. **Rental equipment available.** For more info. call Jack at 973-478-0893. Lodi, New Jersey. (CMPBM)

## TOOLS

**T&T Tools:** Probes, hooks. Probes feature steel shafts with threaded and hardened tips. The insulated **Mighty Probe™** tested to 50,000 volts. **Top Poppers™** open manhole covers easily. Free catalog. **www.TandTtools.com.** Phone **800-521-6893.** (CPBM)

## TV INSPECTION

**Aries Lets II:** Camera and tractor, includes control launcher and 2 cables, used on 1 job, setup can be converted to Cues camera as well. \$8,500. 813-489-3108, FL. (C06)

**RST TV System:** It includes a mainline cable reel and controller motor, tractor, and an Omni 2 camera. All equipment is in working condition. \$7,500. Pictures at [www.empire-equip.com](http://www.empire-equip.com). 714-639-8352. (CPBM)

**1998 Cues Mainline TV System:** GMC Savanna 3500, Cues with Pro-Data on-screen titler, Honda generator, Sony combo DVD/VHS, 1,700' of M/C cable, pan & tilt camera with shorty transporter. \$39,500. 608-835-7767, WI. (CBM)

**2005 Aries CCTV van,** pan and tilt camera, 2 tractors (wheel and track) oversize tire kit, 1300LF single conductor steel braided cable, Wincan software, mounted on 95 E350 box truck. \$16,500. 813-489-3108, FL. (C06)

**ARA inspection equipment inventory reduction blowout!** Complete used portable Pearpoint crawler systems from \$10,000, mainline systems from \$25,000. Several systems to choose from, tons of extras available. Call **717-512-4151.** (C05)

**RST MAILINE SYSTEM:** Mailine reel, tractor, monitor, Omni 2 camera, controller, full portable working system, ex-municipal unit. \$4,900. 1-800-627-0778. (C05)

## TV INSPECTION

Factory refurbished and updated Cyclops Valu-Pac: Straight-view color camera, transporter, frame and reel, reel motor box, DVD rec/player, 17" LCD color monitor, 420' excellent used TV/tow cable, controller with on screen footage and data and new manhole hardware. Plug and play upgrade to pan and tilt is possible. All this for only \$12,500. Call 830-249-9756 and talk to the guys that build 'em, or email us at [cycloptv@beecreek.net](mailto:cycloptv@beecreek.net). (C05)

**2008 Ford E-150 HD** with 2005 Cyclops equipment (VN-004), color, pan, tilt, zoom over 700 ft. cable. Nice van 73k, 5.4 gas, automatic, AC, with rear heat and AC. Just sent unit to Cyclops factory in Texas for updates and service. Ready to make money for you. Nice compact unit. See more at: <http://www.truckpaper.com/listingsdetail/detail.aspx?OHD=2650751&dlr=1&pcid=2000801049> (stock #08-01). \$39,500. 719-338-3767 (more cctv vans from \$24,950. (C06P05)

**TV Ferret:** Complete used, pan & tilt system, 600 foot cable, 6" crawler. More turn-key systems. Starting at \$20,000. [www.tvferret.com](http://www.tvferret.com). 518-399-2211. (CBM)

**2004 Cues Ingle Conductor cctv truck:** G3500 hi-cube van, Ultra shorty21 crawler, OZII pan and tilt color camera, partitioned office space, sink w/ washdown hose, nice truck. \$65,000. 678-758-1267. (C05)

## VACUUM EQUIPMENT



**1997 Ford LTS-9000 PRES-VAC:** 5300 wet-dry vac, 3,450-gallon stainless tank, PRES-VAC PV-750 pump, Detroit 11.1 365 8-speed trans., 46 rears, only 62,096 miles.

**814-696-4343** CP05

See our full inventory at [www.StandardEquipment.com](http://www.StandardEquipment.com)

# STANDARD



**2007 Sterling/Vactor 2115,** 18" PD, 80 GPM/2,500 PSI, Accumulator, Multiflow, tele rotating reel, low hours and miles.



**2006 Vactor 2110,** 80GPM/2,500 PSI, Multiflow, Accumulator, 1,300 gallon water capacity, Hydroex kit, 4' teleboom, Rotating hose reel, 2006 IH 6x4, 310 HP, Automatic transmission, EXTREMELY LOW HOURS & MILES 4,700 miles/150 Hours



**1993 Vactor 2110,** single stage, 60 GPM/ 2,000 PSI, accumulator, winter recirc, tele rotating reel, ex-muni unit rebuilt by Vactor dealer, less than 45,000 miles/3,000 hours. Price just reduced.



**Reconditioned Vutek push camera,** 200 feet of push rod, 8.4" color monitor, recorder with USB port, 512 Sonde

**312-706-9678**

**Would you do this?**

**Probably not.** So why not seek out the "right" tools and materials for your CIPP projects?

In the **real world** of CIPP lining projects, we know **one size doesn't fit all.**

So come explore Gadmon's **numerous tools and options** to make that next CIPP installation a lot easier than trying to paint your house with a toothbrush.

**The Right Tools. The Easy Option. Gadmon.**

**GADMON INDUSTRIES**

**VACUUM LOADERS**



**1999 Supersucker 6227 industrial vacuum loader:** 1999 Sterling 9513, CAT 3406-410 hp, EF trans., roots blower, 248k miles, 6k hours. ....\$170,000  
**Call Matt @ 330-270-0700 X108**  
 CP05

1998 Sterling cab & chassis with a Cusco Mastervac 3800 wet & dry industrial loader. (Stock #5088C) **www.VacuumSalesInc.com, (888) VAC-UNIT (822-8648).** (CBM)

**VACUUM LOADERS**

POWERVAC 3800, 3,250 gallons, carbon steel vacuum tanker with a Hibon PD blower, 3800 SCFM with vacuum to 27" Mercury. Dump type; DOT 407/412 regulations installed on a 2009 Sterling tri-axle. (Stock #4931) **www.VacuumSalesInc.com, (888) VAC-UNIT (822-8648).** (CBM)

1999 Sterling cab & chassis with a Cusco Turbovac 3800 industrial loader with a jetting system. (Stock #3163C) **www.VacuumSalesInc.com, (888) VAC-UNIT (822-8648).** (CBM)

POWERVAC 3800, 3,000 U.S. gallon, carbon steel vacuum tanker with a Hibon PD blower 3800 SCFM with vacuum to 28" mercury. High Dump Type; D.O.T. 407/412 regulations (Stock #13478V) **www.VacuumSalesInc.com, (888) VAC-UNIT (822-8648).** (CBM)

**WANTED**

**WANTED:** We buy sewer trucks. Any year, any condition. Results immediately. 915-239-2266 or mmachinerymexico@gmail.com. (CBM)

**Wanted to Buy:** Vactor 2100s and late model Guzzlers. Cash. 800-336-4369. (CPBM)

Florida Pipe Restoration Company looking for seasoned CIPP installers. Must have experience with small diameter pipe lining 2-8." DFWP. email info@fixmyleaks.com. (C07)

**WATERBLASTING**

NLB 10-325, 10K max, 51 gpm max, NLB 10-235, 10K @ 34 gpm, THE-500UH, 50K bareshaft pump. Wheatley 125, 10K @ 20 gpm, Jetstream 4220, 20K psi @ 17 gpm, Aqua-Dyne C 450-DS, 20K @ 33 gpm, Allis-Chalmers 10x8x22, 700 hp. Boatman Ind. 713-641-6006. View @ www.boatmanind.com. (CPBM)

**WATERBLASTING**

40,000 psi Sapphire Nozzles, UHP hoses & replacement parts. Excellent quality & prices. 772-286-1218, info@alljetting.com, www.alljetting.com. (CBM)

Used and rebuilt water jetters in stock. General J-2900, J-1450, RIDGID KJ-1750, Spartan 717. 800-257-7209. (CBM)

If you are using an  
**800 NUMBER**

in your ad, be sure it can be used in all areas nationwide.

It's **Quick and Secure!**

www.cleaner.com

SUBMIT YOUR CLASSIFIED AD NOW!!

Just click on "Classifieds" — "Place a Classified Ad"

Cleaner

Fill in the online form!

View Latest Issue »

SUBSCRIBE NOW

NEW EQUIPMENT
CLASSIFIEDS
ARTICLES
ADVERTISING
INTERACT
SUBSCRIBE

Google™ Custom Search

SEARCH

General

PIPE CLEANERS

The toughest tools down the line.

Rates: \$25 minimum charge (up to 20 words) - \$1.00 per each additional word. Include a photo for an additional \$125.

The LT1000 Laptop Interface Combines the flexibility of your laptop with your SeeSnake® Reel.

Giving Back Big

Cover Story

Digital Edition

Current Issue in Ezine Format

Classifieds

Buy and Sell Used Equipment

Buyer's Guide

Manufacturers and Dealers

In The Latest Issue

Industries as

Avoid 'Energy Vampires'

The right behaviors can help you keep

KEEP IT FLOWING!

Quality Pressure Washers & Jetters

CCTV  
CAMERAS  
OUTDATED BY  
ELECTRO SCAN

THE NEXT GENERATION IN SEWER LEAK DETECTION



electro<sup>3</sup>scaninc.

WWW.ELECTROSCAN.COM

Manufacturing Combo JetVacs, Hydro-Excavators, Industrial Vac Loaders, Specialty Skid-mounted Vac units and so much more since 1989!

# GapVax®

**PARTSEXPRESS**

1<sup>ST</sup> PLACE PERFORMANCE

WWW.GAPVAX.COM 888-492-7829



**ASK ABOUT OUR MC SERIES  
ADVANCED NUVU SYSTEM THAT  
ALLOWS YOU TO REMOTE ACCESS  
YOUR TRUCK AND SEE WHAT  
IT'S DOING AND WHERE  
IT'S AT. WE ARE THE ONLY  
COMPANY OFFERING FULLY  
PROPORTIONAL CONTROLS.  
SO MANY OPTIONS, CALL TODAY!**



**SPARTAN TALKS TOUGH.**

Joel Anderson, Washington  
SPARTAN REP SINCE 1996

**NOW**  
Available In  
**Propane Version**  
For Indoor Use

**“I’M ABLE TO HELP MY CUSTOMERS  
UNDERSTAND WHAT THEY NEED AND WHY.”**



**SPARTAN**  
FOR TOUGH CUSTOMERS.  
SINCE 1943

I was with a customer yesterday who wanted to be able to do up to 6" lines and wanted to get an electric jetter. Well, we talked it over, and I suggested that for jobs that size, it'd be easier and safer to have the additional gallons and pressure of the gas-powered 727. That's a big benefit of being out here in the field. I'm glad I'm able to really help my customers understand what they need and why.

**Tough Customer Preferred Product: 727 Mini Jet**

With all the power and speed of larger water jets, this machine is ideal for heavy-duty jobs including cloth, paper, grease, lime, sand and sediment.

- Pipe sizes: 1¼" – 6" diameter
- Pressure: 3,000 PSI
- Flow: 4 GPM

