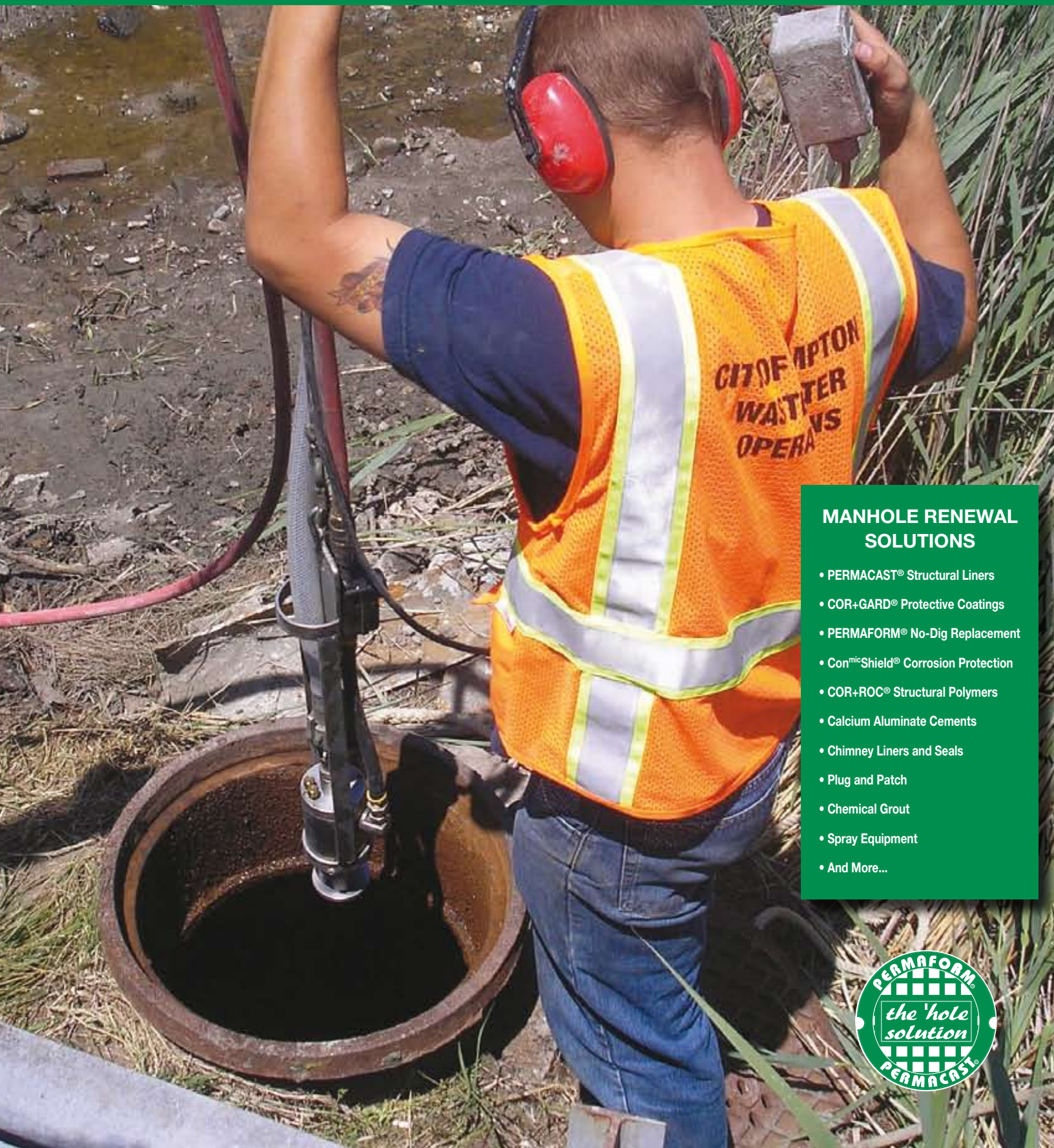


# MANHOLE RENEWAL TOOL BOX



## MANHOLE RENEWAL SOLUTIONS

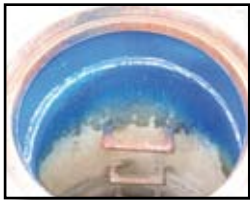
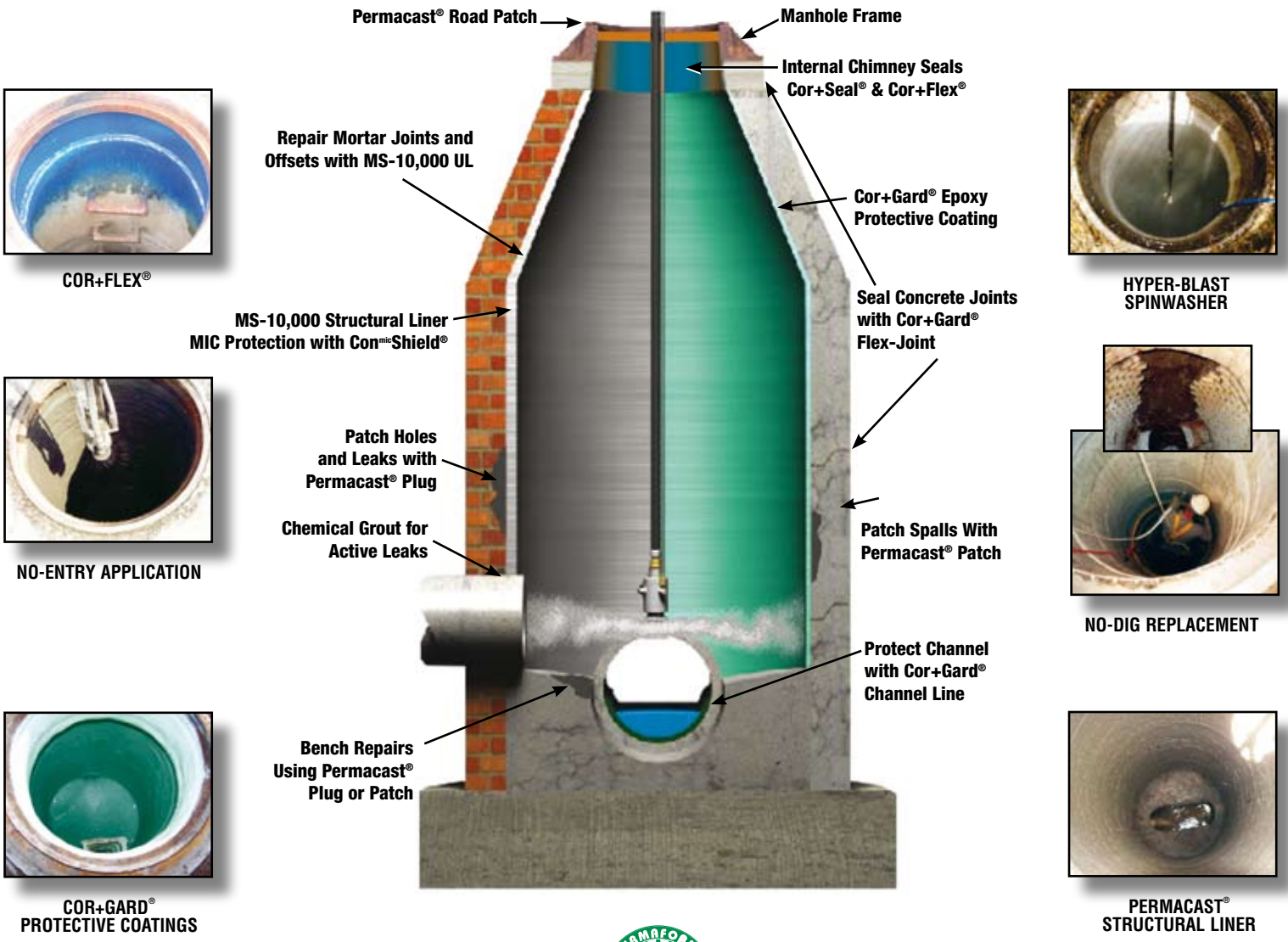
- PERMACAST® Structural Liners
- COR+GARD® Protective Coatings
- PERMAFORM® No-Dig Replacement
- Con<sup>m</sup>Shield® Corrosion Protection
- COR+ROC® Structural Polymers
- Calcium Aluminate Cements
- Chimney Liners and Seals
- Plug and Patch
- Chemical Grout
- Spray Equipment
- And More...



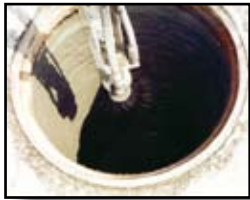
# FACT: 30%-50% OF INFLOW & INFILTRATION ENTERS THROUGH MANHOLES

"Wade & Associates: Study on I&I" 1999

## ... the 'hole Solution!'<sup>SM</sup>



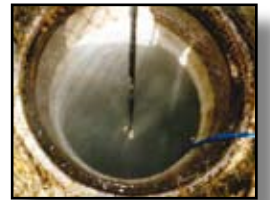
COR-FLEX®



NO-ENTRY APPLICATION



COR-GARD® PROTECTIVE COATINGS



HYPER-BLAST SPINWASHER



NO-DIG REPLACEMENT



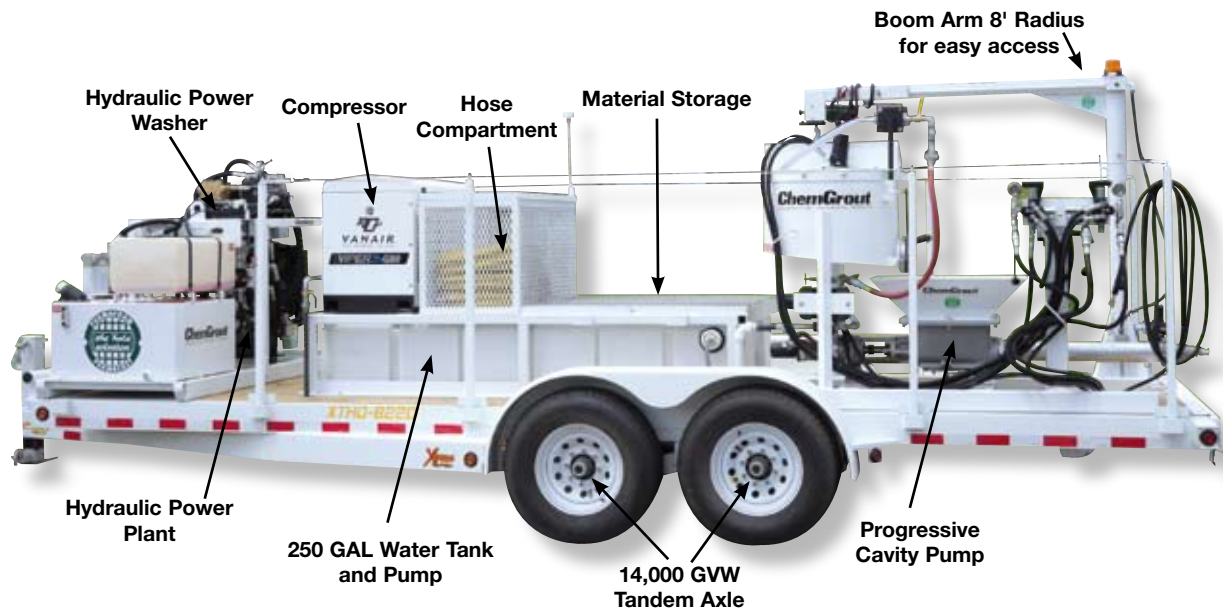
PERMACAST® STRUCTURAL LINER



# MANHOLE TOOLS FOR EVERY PROBLEM!

Over 40 years helping cities, engineers and contractors successfully solve manhole problems.

ALL THE TOOLS YOU WILL EVER NEED IN ONE PLACE.



**Disappointed with your current system?**

**Looking for a better solution?**

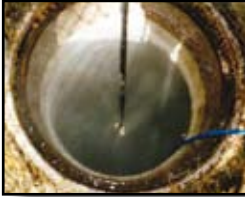
**Want all the tools you will ever need in one convenient system?**

## **Why Choose PERMACAST®?**

- One 3-man crew averages 6-8 manholes per day.
- The SpinCaster—not the man—works in the hole.
- The right tool for every problem in one place.
- Proven products for more than 40 years.
- Multiple plants for quick delivery and savings on freight.
- Technical support 24/7.

# QUICK • SAFE LONG LASTING • EASY

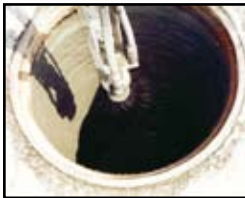
1-800-662-6465  
www.permaform.net



**Step 1 CLEAN** — High pressure spinwasher blasts loose material and debris to bottom blanket. Con<sup>MIC</sup>Shield<sup>®</sup> rinse eliminates residual bacteria from recolonizing behind the new liner.



**Step 2 SEAL** — Chemical grout injected to stop active infiltration. Flexible seal applied to the chimney-frame joint; flow channel lined, pipe-wall penetrations sealed and the bench rebuilt.



**Step 3 APPLY** — Bi-directional, centrifugal compaction of high strength liner per ASTM F-2551 with Con<sup>MIC</sup>Shield<sup>®</sup> microbiologically induced corrosion (MIC) protection. Precision placement at any thickness 1/2" to 2".



**Step 4 PROTECTED** — Apply CS IDENTIFIER curing sealer per ASTM C-1315 containing Con<sup>MIC</sup>Shield<sup>®</sup> for extra MIC protection. For chemical corrosion protection, topcoat with COR+GARD<sup>®</sup> 100% solids epoxy.

## WHAT'S IN YOUR TOOLBOX?

Contact us to evaluate whether the Permacast<sup>®</sup> System is right for you.



**"Using Permacast<sup>®</sup> for our I&I Reduction program saved us over \$100,000."**

**- City of Hampton, VA**

**"We do twice as many manholes every day since we switched to Permacast<sup>®</sup>."**

**- Terra Engineering Madison, WI**



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