THE STATE OF THE INFRASTRUCTURE

On an international scale, water, sewer, gas and other utilities are in need of replacement. Most are located in congested urban areas, under buildings, roadways or expensive landscape, and are surrounded by other utilities. Worldwide, many systems have exceeded their useful life, have deteriorated and are in need of replacement.

WATER AND GAS LINES

Some systems are under capacity due to population growth. Many dilapidated systems are encrusted reducing capacity and pressure. Water systems that are corroded and leak, experience as much as a 40 percent loss of precious treated water into the ground. A small hole of only 1/4" can leak more than 3,000 gallons (11,356 l) of water per day.

SEWER LINES

Offset pipes, root intrusion and crowned and cracked pipes are causing system backups. Frequently, systems are under capacity due to urban expansion. Infiltration and inflow (often from rain) are taxing treatment plant capacities - increasing treatment costs and creating outflows of untreated sanitary sewage into lakes and streams.

Replacement by traditional open-trench methods is often not a viable or cost effective alternative.

SOLUTION: PIPE BURSTING, PROVEN METHOD OF REPLACEMENT

PIPE BURSTING ADVANTAGES:

- Proven replacement method that follows the existing utility path.
- Significant risk reduction in potential damage to adjacent utilities.
- Preferred trenchless technology for increasing pipe flow and diameter.
- Reduction in social and economic impact.
- Only rehabilitation method that installs new pipe of the same or larger diameter in the same path.
- Major reduction in engineering and design costs associated with utility reconstruction or relocation.
- Potential for increased flow rates with minimal increase in pipe diameter.

Pipe Bursting can reduce excavation on most projects up to 85%, decreasing costs associated with site restoration.

HammerHead is a proud member of the IPBA (International Pipe Bursting Association). Go to www.ipbaonline.org to find project specifications, process articles and information about membership.

Traditional open cut methods have inherent social, economic and political costs and disrupt traffic patterns.
A bursting head fitted to the HAMMERHEAD MOLE® tool combined with a HYDROGUIDE® cable winch, bursts damaged pipeline and pushes the fragments into surrounding soil. As the tool bursts the pipe, new product of the same or larger size is pulled in.

On larger or longer bursts, the use of specialized pilots assist in expansion and the use of lubrication can increase production and the bursting distance capability by reducing pipe friction.

The patented process of manhole retrieval of the burst head reduces excavation costs.*

*Manhole exiting is a patented process of Earth Tool Company LLC, US PATENT 6,299,382 B1.
TOUGH AND RELIABLE HAMMERS FOR YOUR PIPE BURSTING PROJECTS.
PIPE BURSTING
HAMMERS

With advanced computer modeling technology, high quality alloy steels, more than 170 patent claims and a straightforward, hardworking design, HammerHead Mole® pneumatic pipe bursting tools are your high performance, low maintenance solution for a variety of applications. HammerHead has the tools to make you both efficient and profitable.

Don’t settle for imitations. This original and field tested design provides for fast and easy field maintenance, the hallmark of the entire HammerHead Mole® bursting tool line. Provides 200% more clamp load and is the most secure and proven assembly available. This secure joint prevents rear assembly failure common in competitive designs that both damages the tool and halts production.

Wear rings eliminate metal to metal contact decreasing wear and offer a sustained level of performance. Made of a specially designed composite, these rings offer a very low coefficient of friction and have a higher abrasion resistance compared to Teflon® rings used in competitive tools.

Powerful and reliable true air reverse technology is controlled above ground preventing internal mechanism failure that is common in competitors’ tools. All HammerHead tools have a reverse feature that simplifies tool removal from burst tooling and allows for implementation of the manhole exit process.

Designed for pipe bursting projects as well as pipe ramming, culvert replacement, multiple HDD assist methods, piling installation and slick boring.

HammerHead has a wide range of tooling options including pipe bursting heads, pilots, tractor heads, and full body expanders. Sometimes, your project may call for specialized tooling or applications. The HammerHead engineering group can develop custom tooling or specialized applications to fit your project.

Interested in renting? HammerHead has several rental depots across the United States and Canada. Call for a quote.

HammerHead is committed to being your partner in trenchless. That’s why we provide free project consultations. Call today!
LEADING THE INDUSTRY WITH THE PATENTED SELF DEPLOYING BOOM.
PATENTED SELF DEPLOYING DOWNRIGGER
The HydroGuide HG12 winch has an industry first patented self deploying downrigger. Simplification through automation. The hydraulic self deploying down rigger simplifies setup and eliminates carrying large and heavy components down hole. The infinitely adjustable boom can easily be set to the depth required without jacking up the machine.

MINIMUM SETUP TIME, MAXIMUM EFFICIENCY
The HG12 winch is designed to maximize efficiency and minimize setup time and effort for your trenchless projects. Setup and tear-down can be done in minutes, not hours. The bottom line is less labor and more profit.

Remote control and a powerful down hole light put the operator in better control of the burst process.

PROVEN BULLWHEEL AND PLANETARY DRIVE SYSTEM
The solid dual capstan design offers constant pulling force over the entire cable length and helps reduce cable wear. A proven bullwheel and planetary drive system provides reliability on the job where it counts.

HYDRAULIC LEVELING JACKS
Optional leveling jacks are infinitely adjustable and increases efficiency at the end of your manhole exit projects.

The HG12AT track mounted winch reaches difficult areas on your jobsite where others can’t.

The pipe bursting method has replaced millions of feet of sewer, water and gas mains and services worldwide.

Over the next twenty years, in the US alone, an estimated one trillion dollars is required to replace its utility infrastructure.
SUPERIOR POWER FOR THE TOUGHEST OF TRENCHLESS PROJECTS.
HYDROGUIDE®

HG20 WINCH

SUPERIOR POWER FOR ALL THE REALLY TOUGH JOBS.
The HydroGuide HG20 winch has a compact design that increases maneuverability, simplifies transport and allows setup in tight areas. With 40,000 lbs (178 KN) of pull, the HG20 has the power to handle longer and larger pipe bursting 6–30" (150–750 mm) diameter pipe, slip lining, pipe pulling, cable pulling and swage lining jobs.

Like all HammerHead winches, the HG20 provides continuous tension on the cable while adjusting the line speed automatically.

DESIGNED FOR THE TRENCHLESS INDUSTRY.
Designed specifically for the trenchless industry, the HG20 can perform pipe bursting, slip lining, swage lining, cable and pipe pulling projects.

The solid dual capstan design offers constant pulling force over the entire cable length and helps reduce cable wear.

A proven bullwheel and planetary drive system provides superior reliability and performance on the job, where it counts.

CUSTOM BURSTING HEAD COMBINATIONS TO FIT YOUR JOB

Front mounted bursting-head combination
This combination facilitates manhole exits and reduces excavation costs. It is the preferred, and most common combination for size-on-size or one size upsize pipe replacement projects in congested urban environments.

Front mounted bursting head/pipe pilot combination
Front mounted bursting heads can be combined with pipe pilots when bursting in sandy conditions, or when working with collapsed lines or heavy root intrusion. In these circumstances, this combination reduces pipe plowing and soil plugs, thus increasing production and the bursting distance capability. Pipe pilots are also used on cast iron bursts.

Front mounted bursting head/ rear mounted pipe puller combination
When multiple upsizes are required, specially sized, front mounted bursting heads combined with rear mounted pipe pullers, allow tools larger than the new pipe to be used. This is important when working in tough conditions, or when a double or triple upsize is needed.

Front mounted bursting head/full body expander combination
This combination generates the "tractor effect." It effectively uses the tool’s energy to help complete difficult or longer bursts, or to perform larger upsizing projects.
PIPE BURSTING AND DRY BACKREAMING
WITH SMART HAMMER TECHNOLOGY.
The HammerHead® Impactor® line of Smart Hammers combines proven pneumatic hammer technology with the horizontal directional drill (HDD) to provide a revolutionary method of installing new pipe or replacing water and wastewater mainline pipes.

With HammerHead Impactor hammers, pipe can be installed or replaced at a faster rate than with traditional systems. And, you can do it with a reduction in the amount of manual labor required.

SMART HAMMER TECHNOLOGY™
The hammer is activated when pull force is applied to the hammer. Once the drill operator stops pulling, the air supply vents and shuts off the hammer.

FREE-FLOATING BODY AND STRIKER
The Impactor is designed to float on the distributor shaft, isolating the drill stem from impact.

MANHOLE EXIT
Excavation is significantly reduced in pipe bursting applications by retrieving the Impactor from the receiving manhole.

HIGH POWER AND PRODUCTION
With Smart Hammer Technology, the power increases as the job progresses producing up to 500 blows per minute at only 110–200 psi (8–14 bar).

VERSATILITY
Impactors can be adapted to a variety of other machines like static bursting systems, winches, cable pullers and various HDD manufacturer drills. Giving you more versatility and opening up new markets for your business.

<table>
<thead>
<tr>
<th>Model</th>
<th>8 (20) Air Impactor</th>
<th>12 (30) Air Impactor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length – in (cm)</td>
<td>32 (81), 36.5 (92.7)</td>
<td>36.7 (93.2), 46.8 (118.9)</td>
</tr>
<tr>
<td>w/thread stub</td>
<td>6–10 (150–250)</td>
<td>10–14 (250–350)</td>
</tr>
<tr>
<td>Pipe replacement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>range – in (cm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>w/locking sleeve</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diameter – in (cm)</td>
<td>11.44 (29.1)</td>
<td>14.75 (37.5)</td>
</tr>
<tr>
<td>Weight – lb (kg)</td>
<td>465 (211)</td>
<td>725 (329)</td>
</tr>
<tr>
<td>Cycles Per Minute</td>
<td>509</td>
<td>500</td>
</tr>
<tr>
<td>Operating Pressure –</td>
<td>110–200 (8–14)</td>
<td>110–200 (8–14)</td>
</tr>
<tr>
<td>psi (bar)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air – cfm (L/min)</td>
<td>300 (8,490)</td>
<td>500 (14,150)</td>
</tr>
<tr>
<td>Drill Class Pullback</td>
<td>24,000–33,000 (10,886–14,969)</td>
<td>24,000–33,000 (10,886–14,969)</td>
</tr>
<tr>
<td>Range – lb (kg)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### PNEUMATIC PIPE BURSTING HAMMER SPECIFICATIONS

<table>
<thead>
<tr>
<th>Diameter (in)</th>
<th>Length (cm)</th>
<th>Weight (lb)</th>
<th>Air cfm (L/min)</th>
<th>Pressure (psi/bar)</th>
<th>Recommended Product Size in (cm)</th>
<th>Recommended Winch Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.125&quot; SR</td>
<td>5.125 (130)</td>
<td>62 (158.1)</td>
<td>214 (97)</td>
<td>98 (2,800)</td>
<td>110 (7.6)</td>
<td>HG12, HG12AT</td>
</tr>
<tr>
<td>7&quot; AR</td>
<td>7.00 (180)</td>
<td>71 (180.9)</td>
<td>305 (138)</td>
<td>132 (3,700)</td>
<td>110 (7.6)</td>
<td>HG12, HG12AT</td>
</tr>
<tr>
<td>8&quot; AR</td>
<td>8.00 (200)</td>
<td>101 (256.3)</td>
<td>511 (232)</td>
<td>235 (6,700)</td>
<td>110 (7.6)</td>
<td>HG12, HG12AT, HG20</td>
</tr>
<tr>
<td>12&quot; AR</td>
<td>12.00 (300)</td>
<td>91 (231.4)</td>
<td>1,568 (711)</td>
<td>600 (17,000)</td>
<td>110 (7.6)</td>
<td>HG12, HG12AT, HG20</td>
</tr>
<tr>
<td>16&quot; AR</td>
<td>16.00 (400)</td>
<td>97 (245.1)</td>
<td>2,701 (1225)</td>
<td>1,050 (29,733)</td>
<td>110 (7.6)</td>
<td>HG20</td>
</tr>
<tr>
<td>20&quot; AR</td>
<td>20.00 (500)</td>
<td>108.4 (275.3)</td>
<td>5,750 (2,608)</td>
<td>1,290 (36.5)</td>
<td>110 (7.6)</td>
<td>HG20</td>
</tr>
<tr>
<td>24&quot; AR</td>
<td>24.00 (600)</td>
<td>117 (295.9)</td>
<td>9,831 (4459)</td>
<td>1,700 (48,100)</td>
<td>110 (7.6)</td>
<td>HG20</td>
</tr>
</tbody>
</table>

SR—Screw Reverse Tool, AR—Air Reverse Tool. *Dimensions do not include any optional accessories. **Weight without cable and/or optional accessories. ***Line speed automatically adjusts to burst speed. †Usable length of 2,000 ft (609 m).

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**BUYING OR RENTING, CALL US FOR A QUOTE TODAY. PREPARE TO BE IMPRESSED.**

When you rent bursting and ramming equipment, the cost of freight to your jobsite can be a large expense of the equipment rental. HammerHead has rental locations throughout North America putting the equipment you need closer to your job site. Reduce the freight... reduce your cost of renting!

**CALL 800.331.6653 FOR A FREE PROJECT CONSULTATION TODAY.**

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