

HAMMERHEAD[®]

PNEUMATIC PIPE BURSTING SYSTEMS



CRISIS: WORLDWIDE DETERIORATING INFRASTRUCTURE

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.

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.

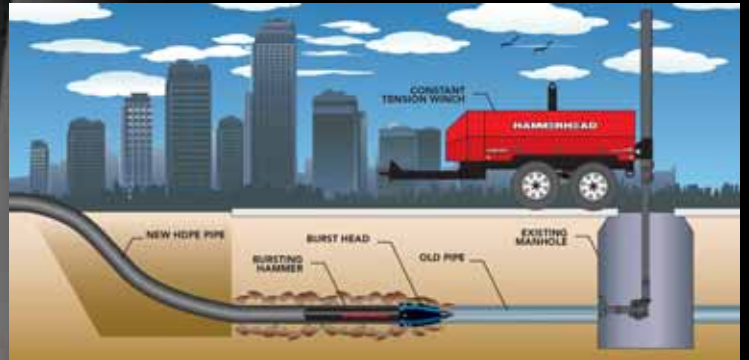


Traditional open cut methods have inherent social, economic and political costs and disrupt traffic patterns



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

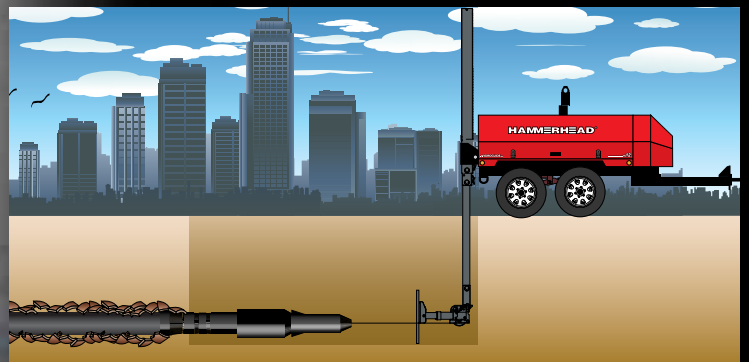
PNEUMATIC PIPE BURSTING PROCESS



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.



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



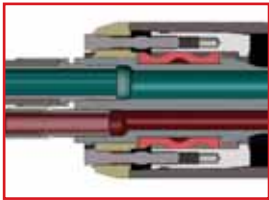
On larger or longer bursts, the use of specialized pilots assist in expansion and the use of lubrication can increase production and the bursting distance capability by reducing pipe friction.

*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.**

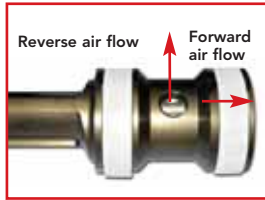
PIPE BURSTING HAMMERS



Secure, clamped rear anvil prevents assembly failure.



Wear rings increase tool performance and durability.



Dependable true air reverse controlled above ground.



Full line of pipe bursting accessories.



Specialized tooling available to fit your project.



Field replaceable whip hoses to keep you on the job.*

Rear mount puller option.

One piece body construction for strength and durability.

Heaviest striker in the industry means more power per blow!

Highest operating pressure in the industry means more bursting power!

Advanced Design

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.

Original Clamped Rear Anvil

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.

Composite Wear Rings

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.

Patented True Air Reverse

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.

Versatility

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

Tooling Options

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.

HammerHead is committed to being your partner in trenchless. That's why we provide free project consultations. Call today!



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



**LEADING THE INDUSTRY WITH THE
PATENTED SELF DEPLOYING BOOM.**

HYDROGUIDE®

HG12 WINCH



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.

Over the next twenty years, in the US alone, an estimated one trillion dollars is required to replace its utility infrastructure.



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



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 man-hole 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.**

HDD PIPE BURSTING & DRY BACKREAMING AIR IMPACTOR®

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.

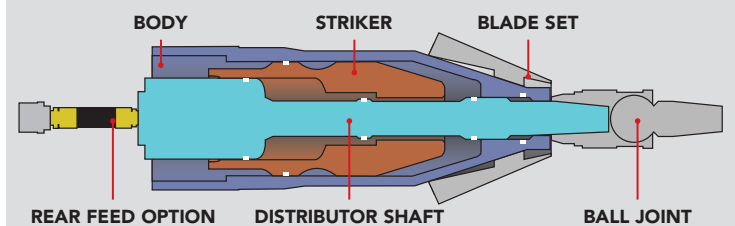
HIGH POWER AND PRODUCTION

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

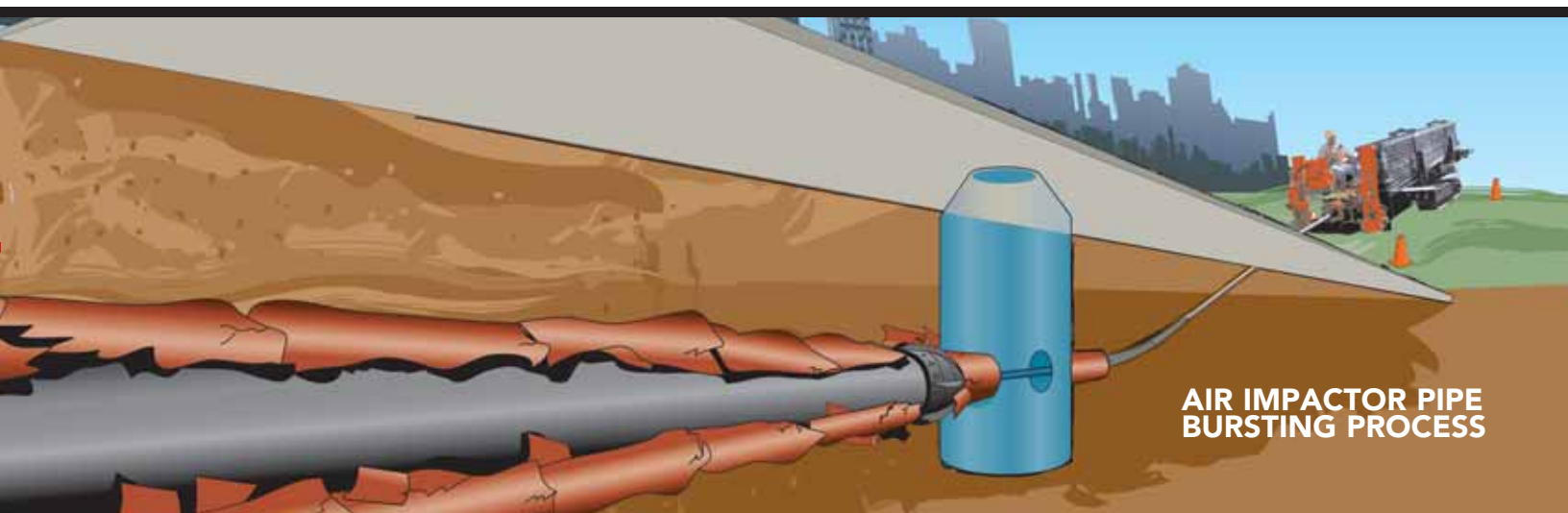
Impactors can be adapted to a variety of other machines like static bursting systems, winches, cable pullers and various HDD manufacturer drills. Giving you more versatility and opening up new markets for your business.

A SIMPLE AND RELIABLE DESIGN.



AIR IMPACTOR SPECIFICATIONS

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



PNEUMATIC PIPE BURSTING HAMMER SPECIFICATIONS

Model	Diameter in (mm)	Length in (cm)	Weight lb (kg)	Air cfm (L/min)	Pressure psi (bar)	Recommended Product Size in (cm)	Recommended Winch Model
5.125" SR	5.125 (130)	62 (158.1)	214 (97)	98 (2,800)	110 (7.6)	6 (15)	HG12, HG12AT
5.75" SR	5.75 (145)	71 (180.9)	305 (138)	132 (3,700)	110 (7.6)	6-8 (15-20)	HG12, HG12AT
7" AR	7.00 (180)	77 (195.6)	511 (232)	235 (6,700)	110 (7.6)	8-10 (20-25)	HG12, HG12AT
8" AR	8.00 (200)	101 (256.3)	900 (408)	308 (8,700)	110 (7.6)	8-14 (20-36)	HG12, HG12AT, HG20
12" AR	12.00 (300)	91 (231.4)	1,568 (711)	600 (17,000)	110 (7.6)	12-18 (30-46)	HG12, HG12AT, HG20
16" AR	16.00 (400)	97 (245.1)	2,701 (1225)	1,050 (29,733)	110 (7.6)	16-24 (41-61)	HG20
20" AR	20.00 (500)	108.4 (275.3)	5,750 (2,608)	1,290 (36.5)	110 (7.6)	18-28 (45-71)	HG20
24" AR	24.00 (600)	117 (295.9)	9,831 (4459)	1,700 (48,100)	110 (7.6)	24 (61) and larger	HG20

	HG12 WINCH	HG12AT WINCH	HG20 WINCH
Rig Size L/W/H – in (m)*	171/70/67 (4.34/1.78/1.69)	171/70/67 (4.34/1.78/1.69)	159/81/66 (4.04/2.06/1.68)
Weight – lb (kg)**	6,002 (2,722)	6,502 (2,949)	8,780 (3,983)
Max. pulling force – tons (t)	12 (11)	12 (11)	20 (18.1)
Max. Line Speed – fpm (mpm)***	47 (14.3)	47 (14.3)	28 (8.5)
Engine Manufacturer/Model	Kubota V1505, Diesel	Kubota V1505, Diesel	Kubota V1505, Diesel
Cooling System	Water cooled	Water cooled	Water cooled
Engine – HP (kw)	36 (26.5)	36 (26.5)	36 (26.5)
Downrigger Length – ft (m)	18 (5.49)	18 (5.49)	19 (5.79)
Cable Diameter – in (mm)	.625 (16)	.625 (16)	.875 (22)
Cable Weight – lb (kg)	1,498 (679)	1,498 (679)	2,840 (1,288)
Cable Capacity – ft (m)	2,080 (634)†	2,080 (634)†	2,080 (634)†
Hydraulic Downrigger	Standard	Standard	Not available
Multi Position Leveling Jacks	Standard, manual (1 front, 2 rear)	Standard, manual (1 front, 2 rear)	Standard, manual (1 front, 2 rear)
Hydraulic Leveling Jacks	Optional, (1 front, 2 rear)	Optional, (1 front, 2 rear)	Not available
Remote Hydraulics	Standard	Standard	Standard
Downrigger Light	Standard	Standard	Not available
Electric Start	Standard	Standard	Standard
Auxiliary Hydraulic Connection	Standard	Standard	Not available
All Terrain Track Mount	Available on the HG12AT	Standard	Not available
Downrigger Mast Extension	Optional	Optional	Optional

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).

**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.**

★ USA
MADE IN THE

HAMMERHEAD
TRENCHLESS EQUIPMENT

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