

TRENCHLESS TOOLING AND ACCESSORIES

Vermeer™



QUICK CONNECT SYSTEMS

Tough, durable Quick Connect Systems

Get connected faster and easier with a Quick Connect System from Vermeer. There's a low-profile thread / hex collar system for general drilling and the new Hawkeye system from HammerHead® for a wider range of applications. The hex collar system is designed for use on NAVIGATOR® models D6x6 through D40x40. The Hawkeye system is designed for use on the NAVIGATOR models D7x11 through D100x120 Series II. All systems are built to the highest standards of strength and reliability.

The Hawkeye™ Quick Connect System from HammerHead

- Proprietary tapered coarse thread means quicker makeup and less chance of cross-threading or galling
- Eight flats increase the cross-section area, creating a stronger joint with the same collar outside diameter
- Two collar-lock bolts are positioned on the tool end for better protection during pullback in abrasive conditions
- Drilling fluid can be fed through the collar during pullback in sandy conditions, preventing and reducing collar wear
- Crossover and weldover subs are available to convert current tooling

Available in four sizes:

- 275 for D6x6 – D10x14
- 350 for D16x20 – D40x40
- 426 for D36x50 – D80x100 Series II (when using 2.875" [7.3 cm] drill stem)
- 502 for D50x100 – D100x120 Series II



Patented and field-proven SplineLok® II provides a non-threaded, non-torque solid pinned joint. Available for D16X20 through D40X40 NAVIGATOR drills.

Starter rods and collars are made from high-quality alloy steel and are heat-treated for strength and durability.

DRILL HEADS / HOUSINGS

You're in good hands with these heads

Steer with confidence when you use Vermeer drill heads. Designed to complement our rugged bits, these heads are built strong to last long.



Ideal for curb-to-house jobs, our mini-heads are available for D6x6 – D10x15 NAVIGATOR drills. Available with end load or side load for 8" (20.3 cm) sondes.

Our dirt heads are available for all NAVIGATOR drills, and many have replaceable rear connection subs. Side load or end load options are available for D6x6 – D100x120 Series II models.



Non-magnetic housing

- Developed for use with DCI SST Locating System
- Vented housing design eliminates danger of pressurizing sonde cavity
- Available with choice of TriHawk® or standard plate bit sub
- 15' (4.5 m) non-magnetic collars available



NEW



Housings for SubSite® electronics are available for D7x11 – D100x120 Series II.

Universal housings

- Available for D7x11 – D330x500
- Threaded front and rear for easy adaptability to specific applications and machines
- Side load offers easy access to the sonde
- Sewer kits for on-grade bores are available for D7x11 – D100x120 Series II
- Wireline capabilities for D16x20 – D330x500
- Longer housings for use with 19" (48.3 cm) wireline sondes and the new DCI EXP deep probe
- Available for D16x20 – D100x120 Series II
- High-flow capabilities are ideal for use with mud motors



ROCK DRILLING TOOLS

TriHawk modular drilling system: Advanced technology for the ultimate in versatility

One of the world's most advanced drilling systems, TriHawk rock tooling from HammerHead provides an integrated modular system that adapts easily to a variety of applications. The housing works with a variety of transmitters and wireline, while the threaded API adapters fit a multitude of connections. The whole line of bits installs in minutes, so you don't have to buy multiple housings for different applications.

If you've ever had a bolt come loose during a bore, you'll appreciate the TriHawk line's advanced boltless design, based on a patented spline bit retention system and transmitter housing roll-pin lid. The TriHawk also features multiple interchangeable bits, so you can tackle dirt, medium hard rock, hard-compacted cobble, and virtually everything in between.

All major components of the TriHawk line are manufactured from high-quality alloy steel and machined to tight tolerances to increase tool life and ensure that all components are interchangeable. Every transmitter housing incorporates the ability to install vibration isolators to help protect valuable transmitters from shock.

Additional Features

- Square drive spline allows fast bit installation
- Simple installation of boltless attachments: Just remove roll pins and slide on another bit
- Automatic indexing aligns steering plane to transmitter clock
- Integral o-ring fluid gallery behind all bits helps prevent fluid port clogging
- Transmitter isolators help protect against dynamic vibration, increasing transmitter and battery life
- Carbide grit welded in high wear areas helps extend bit life
- Replaceable teeth have full-depth carbide inserts and are copper brazed for longer life



Trihawk I

- Designed for soft rock and hard compacted soils
- 3 replaceable carbide-tipped teeth
- Teeth positioned to maximize production and minimize vibration



Trihawk II

- Designed for dry hard compacted soils, hardpan or hard clay
- Economical replacement bit design
- Effective T-mounted plate bit with two carbide-tipped teeth



Trihawk III

- Designed for medium-soft rock
- Oversized carbide-tipped teeth reducing tooth wear
- Unique center cut pattern for more effective penetration
- Pullback pin available replacing the middle tooth for quick shots

Trihawk IV

- Designed for use in heavy overburden cobble or fractured rock
- Chisel shaped carbide buttons serve to fracture rock
- Tapered nose feature designed to "pry" its path through cobble



Trihawk V

- Ideal bit for round rock cobble, river stone and loose fill
- Patented design enables greater control of bore path during operation
- Effective steering heal built into the cup shaped design



Dirt Bit Sub

- Splined connection enables quick change to dirt bits in easier boring conditions





R.A.T.T.™ (Rock Adaptable Terrain Tool)

- Single rod setup, no dual stem necessary
- Full pullback capabilities
- Drills through most soils and rock
- Automated through multi-function display system
- Available on D20x22 – D36x50 Series II current production models

Vermeer / Hunting Performance Mud Motors

- Exclusive Survey While Boring (SWB) with 5.75" (14.6 cm) for the D50x100 – D100x120 Series II and 6.75" (17.1 cm) for the D200x300 – D330x500
- Sonde is located within 40" (102 cm) of bit
- 2-degree bent sub for steering capability ease
- A 2.875" (7.3 cm) mongoose mud motor available for the D24x40 Series II – D36x50 Series II

AS4 RockFire Air Hammer

- Uses air and foam, requires no drilling mud, reduces mess
- Fast way to bore through solid rock



AS4

R.A.T.T.

ROCK DRILLING TOOLS

Rock pilot bore bits and rock reamers:
From small to jumbo rigs, Vermeer can
tackle the job



Rock pilot bore bits

- Top quality Tri-cone pilot bore bits are available from 4-3/4" – 17.5" (12.07 cm – 44.45 cm)



- Available with milled tooth cutting structure or tungsten carbide insert (TCI) to meet psi and abrasivity of rock



Rock reamers

- Offering economy, standard, and premium line of rock reamers ranging in size from 8-3/4" – 60" (22.23 cm – 152.4 cm)
- Available in mill tooth or TCI bit thirds
- Premium line available in random or standard cutting structure
- Hole centralizers can be custom built to specification



DRILL BITS



Vermeer drill bits: Stronger than dirt, stronger than rock

Vermeer offers advanced technology in the trenchless industry, but just as in any drilling application, it comes down to the strength of the bit. That's why our bits are manufactured from high-quality alloy steel. When the quality of the job depends on the quality of the bit, you can depend on Vermeer.

- Bolt-on bits are available in numerous styles, suitable for a wide range of soil conditions from sand to hardpan.
- TriHawk rock tooling from HammerHead is designed for tougher conditions. TriHawk I is a good all-around bit that can drill in some solid rock, while TriHawk II is built for dry, hard-packed soil. TriHawk III takes tooth diameter up a notch, and TriHawk IV can bore through such fractured rock types as glacial till and compacted cobbles. TriHawk V was born to bore in loose cobble conditions, yet still steers in most other soils.



REAMERS

Excellent performers in multi-surface applications

Built with high-quality alloy steel for strength and durability, Vermeer reamers offer a number of connection options, special sizes, and designs for all NAVIGATOR drills and drilling conditions — and can even be custom-built for your applications. Shark or rotary teeth are available, and a swivel can be built in.

- Fluted reamers from 4.5" – 54" (11.4 cm – 137 cm)
- Super Fluted available in sizes from 10" – 18" (25.4 – 38.1 cm)
 - Deeper flutes for greater flow of cuttings past reamer
 - Less weight than regular fluted reamers for easier handling
- Available with and without built-in swivel

- Bar cutter is available from 8" – 30" (20.3 cm – 76.2 cm)
- Ideal for dry compacted clay caliche

Custom tooling

Dedicated staff available to listen to customer needs and job requirements and design/manufacture the right tool matched to the overall ground conditions.





NEW

- The Diamond Wing Cutter™ reamer features an open design and over sized carbide teeth to maximize cutting potential in hard packed ground conditions and minimize tool wear
- Ranges from 6" – 60" (15 cm – 152 cm) in cutting diameter and connects to Firestick I, API, and Hawkeye quick connect systems

- Barrel reamer is available from 10" – 60" (25.4 cm – 152.4 cm)
- Designed and built with replaceable rotary teeth front and rear
- Designed to pack off and stabilize a bore for ease of product installation
- Good choice to use in conjunction with a Wing Cutter or Helical Plus reamer in the right conditions

- Round Wing Cutter is available from 10" – 60" (25.4 cm – 152.4 cm)
- Available with shark teeth or rotary carbide tooling

NEW

- The T-Rex™ fluted tri-wing reamer features oversized carbide teeth built with staggered steel plates, which creates a jagged edge for efficient cutting in soft rock, hard packed ground, and heavy cobble soils
- Available in 8" – 30" (20.3 cm – 76.2 cm) in diameter

- Helical Plus reamer is ideal for clay and tight loaming conditions
- Provides ultimate slurrification of bore path with less torque
- Available from 8" – 60" (20.3 cm – 152.4 cm)

FIRESTICK

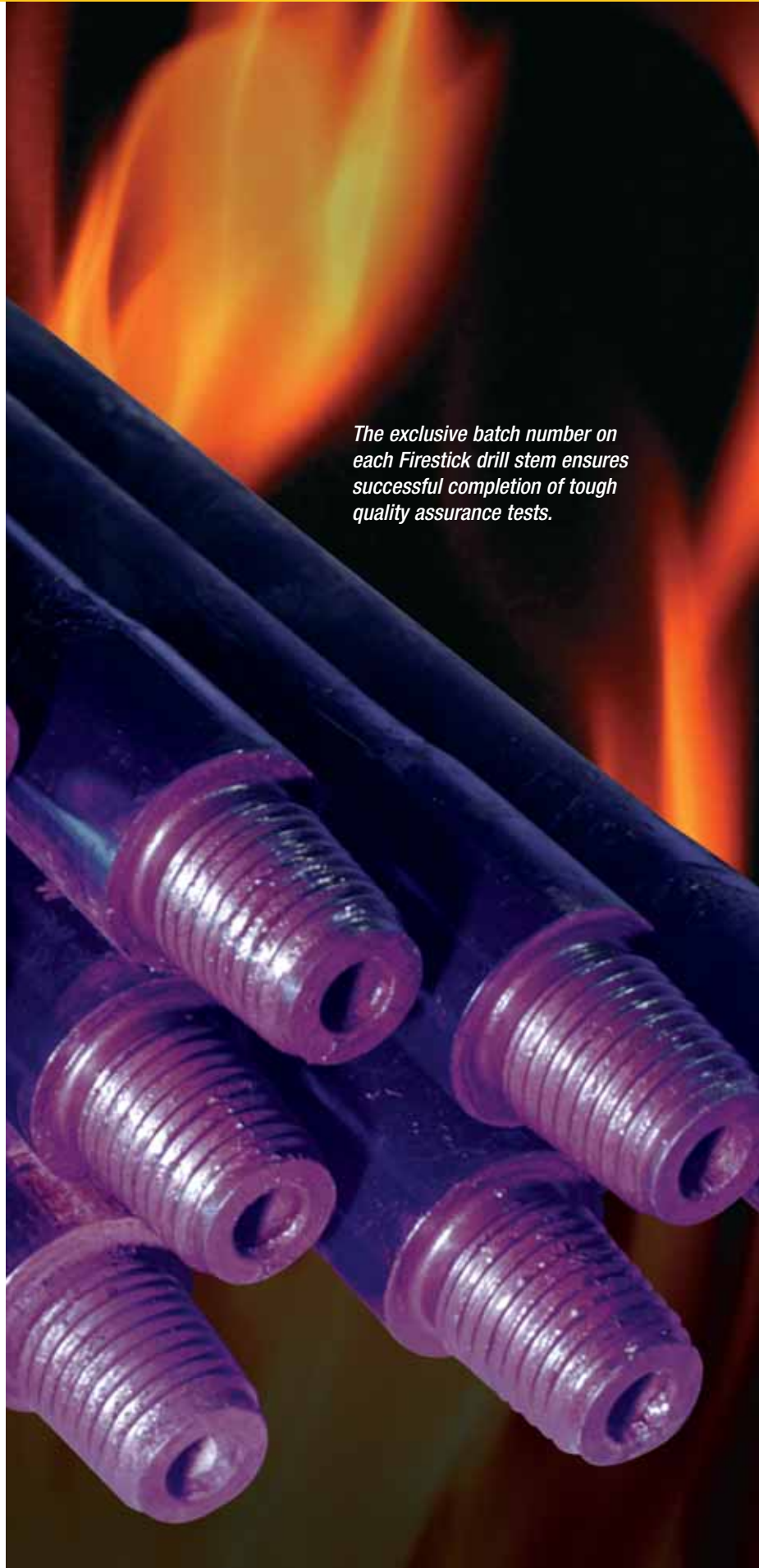
Vermeer Firestick drill stem — long-lasting drill stem for long-lasting value

In today's drill stem market, value isn't calculated by price, but by a product's quality, dependability, and longevity. The Firestick drill stem reduces the chance of broken or bent rods and lost tools downhole. Each Firestick drill stem is inspected for consistency to ensure it is ready to provide long-lasting performance. The result: Drill stem you can count on — job after job.



Original Firestick and Firestick II drill stems are constructed of industry-exclusive I-135 grade steel and alloy material, heat-treated and forged, measured to exacting tolerances, and rigorously inspected to ensure top-quality results. They are designed to handle high torque while retaining a large inside diameter for superior drilling fluid flow. Firestick threads are precision-machined for faster makeup and breakout, and longer joint life. Countless field-proven sections of Firestick drill stem are in the field today.

FIRESTICK[®]



The exclusive batch number on each Firestick drill stem ensures successful completion of tough quality assurance tests.

DRIVE CHUCKS / ADAPTERS / ACCESSORIES

Get connected with Vermeer crossover subs and adapters

- Firestick, Jet Trac, Astec, and many more threads available
- API regular, IF and full hole up to 6.625" (16.8 cm) joints
- All connections are machined and certified to exact tolerances for exceptional fit
- Machined from 4140 alloy heat-treated material



Drive Chucks

Vermeer drive chucks are designed to exact tolerances by the engineers who design our NAVIGATOR drills, providing a perfect fit. They're available with sub savers for every NAVIGATOR model.



Pulling Accessories

- Rod recyclers for trailing stem when pre-reaming
- Carrot pullers for smaller plastic type of product
- Taper pullers in many sizes, with or without sleeve
- Chinese fingers, shackles, and pulling eyes for many applications

The ultimate in trenchless accessories. Vermeer is as committed to HDD as you are, so our trenchless tools are built strong to provide long life and performance. Vermeer has a long-standing reputation for production, innovation, and dependability, so make sure you have the accessories to get the job done right: Make sure they're Vermeer.



Worldwide coverage with a local touch.

Your independent, authorized Vermeer dealer knows your local conditions and is ready to provide expert sales, support, service and parts — wherever your jobsite.



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