



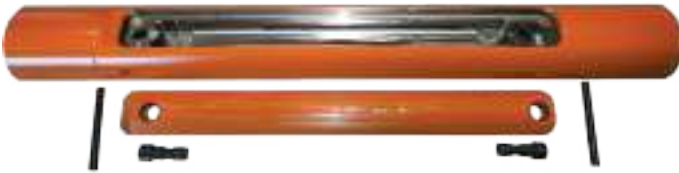
2018-19

**COMPLETE
UNDERGROUND TECHNOLOGY
HDD PRODUCTS**

FOR THE PROFESSIONAL UNDERGROUND CONSTRUCTION INDUSTRY



What's New At Triple D



Locking Door Sounde Housings - Pgs. - 6 and 12



Cobble Boss II- Pg. 15



Bolt-On Replacement Swivels- Pg. 15



H.D. Directional Drilling Swivels - Pg. 45



Hellcat "Premium" Steep Taper Bit Pg. 27



"Wildcat" Bit - Pg. 27

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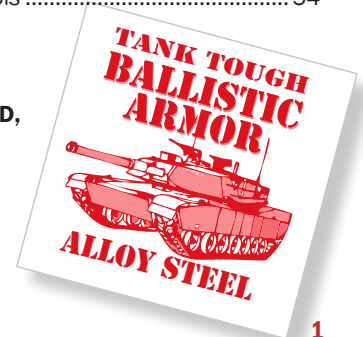
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Terms and Conditions of Sale

TERMS OF PAYMENT

Unless otherwise stated in writing, terms of payment are Net 30 days from date of invoice. Credit and delivery of products shall be subject to the approval of the Seller to whom all bills are payable and who reserves the right to alter the terms and set a limit of credit. If the Buyer fails to fulfill the terms of payment, the Seller at its option may defer shipments until payment is received. In case of multiple shipments, billings will be made as shipments progress. No cash discount will be allowed on freight items or other net sales.

TERMS AND CONDITIONS

If terms and conditions contained in Buyer's purchase order are inconsistent in the terms and conditions of Seller, the Seller's terms and conditions shall govern.

LATE PENALTY

All unpaid items will be charged at 11/2% per month late penalty beginning the second month following shipment, such charge not to exceed the maximum permitted by law.

FREIGHT POLICY

All merchandise orders are shipped F.O.B. Southampton, NJ (Buyer pays .all freight charges).

TITLE

Unless otherwise stated in writing, title and all risks of loss and damages shall pass to Buyer upon delivery of the products to the common carrier, even where freight may be prepaid or allowed to destination. Buyer must file claim with carrier when loss or damage occurs.

SHORTAGE CLAIMS

Shortages or discrepancies must be reported within ten (10) days after receipt of shipment.

DELIVERY

Triple D will make every reasonable effort to meet shipping dates promised. However, Triple D is not liable for claims of damage due to failure, for any reason, to meet such scheduled dates.

RETURNS

Any item (except special order, design or chute blades) may be returned with authorization only, for credit or ex-change within 15 days. Shipping and handling charges are not refundable. All such returns must be in unused and resalable condition. Before returning any items, contact us for authorization. Returns that are not the result of our error are subject to a 10% handling and restocking charge. Return shipments must be sent Freight Prepaid. DO NOT return merchandise C.O.D. or Collect. If the return is the result of our error, we will repay you for the shipping charges.

PRICES

Prices and shipping and handling rates are subject to change without notice. We reserve the right to correct pricing errors.

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Waiver by Seller or Buyer of any breach of these provisions shall not be construed as a waiver of any other breach.

SEVERABILITY

The invalidity or unenforceability of any provision or term hereof shall not affect in any way the remainder of these provisions or terms.

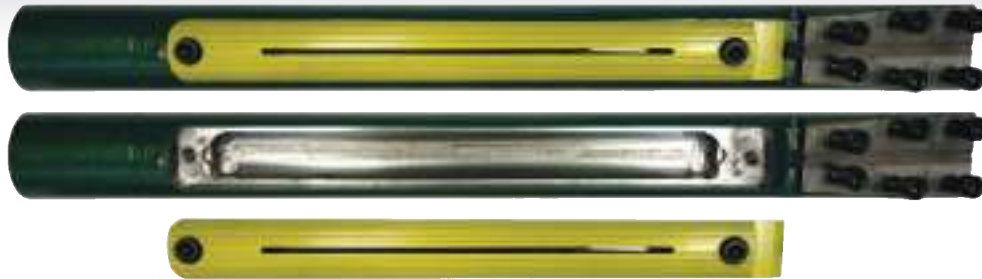
IMPORTANT NOTICE

Triple D Enterprises, Inc. reserves the right to make changes in engineering, design, materials and specifications, add improvements, or discontinue manufacture at any time without notice and without incurring any obligation related to such changes.

NOTE: All manufacturers' names, symbols and descriptions are used for reference purposes only, and none of the products listed are the products of these manufacturers.

Vermeer® Compatible Products

Side Load, Slant Face, Transmitter Housings for Digitrak Transmitters



Triple D's side load sonde housings are manufactured from 153,000 psi chrome-moly steel for superior strength and durability. The side load feature provides quick and easy field installation and removal of transmitter sonde and batteries. All sizes feature:

1. Replaceable tailpieces for long life,
2. Sealed transmitter slots
3. Screw-in, heat treated replaceable nozzles for maximum durability and steering,
4. Accepts all styles of OEM type bolt-on pilot bits (paddle bits).

Vermeer® Compatible (Slant Face) Transmitter Housings	
Part No.	Description
260025030	2.625" Dia. Side Load, 6-Hole, Vermeer, 2.00" API IF (B) Fits Drill Rig Models 7x11, 10x15
260025020	2.750" Dia. Side Load, 6-Hole, Vermeer, 2.00" API IF (B) Fits Drill Rig Models 16x20 - 24x26
260025200	3.00" Dia. Side Load, 6-Hole, Vermeer, 2.375" API REG (B) Fits Drill Rig Models 24x40 - 40x40
260025000	3.250" Dia. Side Load, 6-Hole, Vermeer, 2.375" API REG (B) Fits Drill Rig Models 24x40 - 40x40
260025001	3.50" Dia. Side Load, 6-Hole (5/8" -11 bolts) Vermeer, 2.375" API REG (B) Fits Drill Rig Models 24x40 - 50x100 -Severe Duty Model
260040100	4.250" Dia. Side Load, 6-Hole (5/8" -11 bolts) Vermeer, 2-7/8" API IF (B) Fits Drill Rig Models 36x50 - 100x120.
260025400	3.250" Dia. Side Load, 6-Hole, Vermeer, #600 (B) Fits Drill Rig Models 24x40 - 40x40
260025040	2.750" Dia. Side Load, 6-Hole, Vermeer, #400 (B) Fits Drill Rig Models 16x20 - 24x26
260025005	Replacement Cover - Fits all above transmitter housings.
260025100	Bolt for above Housing Covers - 1/2"-13 x 3/4" (2 req'd.)
260025110	Safety Bolt for above Housing Covers - 3/8"-16 x 3/4" (1 req'd.)

Batteries for above Housings	
Part No.	Description
261080000	Extended Life Lithium battery for Digitrak & Subsite

Water Nozzles for Triple D Slant Face Housings	
Part No.	Description
260027000	1/8" Nozzle, Fits all Triple D Sonde Housings
260027005	3/16" Nozzle, Fits all Triple D Sonde Housings

Nylon Pellet Door Bolts - Vermeer	
Item No.	Description
260025100	1/2" X 13 X 3/4" Socket Head Cap Screw (each)
260025110	3/8" X 16 X 3/4" Socket Head Cap Screw (each)



Water Nozzle



Nylon Pellet Door Bolt

Vermeer® Compatible Products

Side Load, (B) x (B), High-Strength, High Flow Transmitter Housings* for 15" DigiTrak Transmitter With Double Locking Doors



Triple D's High-Strength, High-Flow (Box X Box) transmitter housings are manufactured from a single billet of 4142 heat treated chrome-moly steel with a **tensile strength of 150,000 psi**. These housings are designed for use with Dirt Bit Subs, Rock Bits, Cobble Bits, Tri-cone Bits and Mud Motors. Key features are:

- 1. Double Locking Door
- 2. Sealed transmitter slots
- 3. Hi-Flow, Twin Fluid Ports
- 4. Replaceable Tail Pieces

Triple High-Strength, (Box X Box) Transmitter Housings	
Part No.	Description
260038005	2.750" Dia., Box x Box Side Load Housing, 2" IF x 2" IF, Fits Drill Rigs 16x20 thru 24x26.
260038008	3.0" Dia., Box x Box Side Load Housing, 2.375" REG x 2.375" REG, Fits Drill Rigs 16x20 thru 36x50.
260038010	3.250" Dia., Box x Box Side Load Housing, 2.375" REG x 2.375" REG, Fits Drill Rigs 24x40 thru 36x50.
260038015	3.500" Dia., Box x Box Side Load Housing, 2.375" REG x 2.375" REG, Fits Drill Rigs 24x40 thru 40x40.
260038020	4.250" Dia., Box x Box Side Load Housing, 2.875" REG x 2.875" IF, Fits Drill Rigs 50x100 thru 80x120.
260038025	5.00" Dia., Box x Box Side Load Housing, 3.500" REG x 3.500" IF, Fits Drill Rigs 100x120 thru 100x140.
260038000	Replacement Door with Hardware - Fits all of the above.

* For use with 2-cell DigiTrak transmitters with "Roll Calibration capabilities" - no mechanical clocking mechanism.

Vermeer® Compatible Products

Side Load, (B) x (B), “High-Strength”, Transmitter Housings* (HI-FLOW Design) for 15” & 19” DigiTrak Transmitter



Triple D's “High Strength”, High-Flow rock housings are manufactured, in house, from a single billet of heat treated 4140/42 steel with a **tensile strength of 150,000 psi**. They are designed to drill rock 24/7. These housings are designed to work with Rock Bits, Cobble Bits, Steering Shoes and Roller Cone Bits, and have twin fluid ports (for added flow). Also, all housings **feature our new door locking “Cross Pin Assembly” for positive door retention**. All 3.25” thru 6.50” housings have a sonde cavity that will accept 15” & 19” DigiTrak and Subsite 86 series transmitters, as well as wireline systems. Contractors may switch between DigiTrak and Subsite transmitters by simply changing the sonde clocking mechanism.

Vermeer® Compatible (15” & 19” DigiTrak) Transmitter Housings	
Part No.	Description
500-275*	2.750" Dia., Ultra-High Strength Rock Housing - 2" IF (B) x 2" IF (B)*
500-325	3.250" Dia., Ultra-High Strength Rock Housing - 2" IF (B) x 2-3/8" REG (B)
500-350	3.50" Dia., Ultra-High Strength Rock Housing - 2-3/8" Reg (B) x 2-7/8" REG (B)
500-450	4.50" Dia., Ultra-High Strength Rock Housing - 2-7/8" Reg (B) x 2-7/8" IF (B)
500-500	5.00" Dia., Ultra-High Strength Rock Housing - 3-1/2" Reg (B) x 3-1/2" IF (B)
500-650	6.50" Dia., Ultra-High Strength Rock Housing - 4-1/2" Reg (B) x 4-1/2" IF (B)

* Uses 15” DigiTrak only.

Sonde Timing Mechanism - DigiTrak	
Part No.	Description
520-400	Sonde Retainer
520-410	Sonde Clocking Assembly - DigiTrak
520-415	Sonde Spacer Block - for 15" Sonde
520-500	Complete Assembly (all above parts)

Sonde Timing Mechanism - Subsite 86 Series	
Part No.	Description
520-400	Sonde Retainer
620-410	Sonde Clocking Assembly - Subsite 86 Series
620-415	Sonde Spacer Block - for Subsite 86 Series
620-500	Complete Assembly (all above parts)



520-410

520-400

Vermeer® Dirt Subs (Blade Adapters)***	
Part No.	Description
501-200	Vermeer 6 bolt (1/2" - 13 blade adapter w/2" IF Pin, 3-1/4" dia.
501-210	Vermeer 6 bolt (1/2" - 13 blade adapter w/2-3/8" Reg Pin, 3-1/4" dia.
501-220	Vermeer 6 bolt (5/8" - 11 blade adapter w/2-7/8" Reg Pin, 4" dia.
501-230	Vermeer 6 bolt (5/8" - 11 blade adapter w/3-1/2" Reg Pin, 4-1/2" dia.
501-240	Vermeer 6 bolt (5/8" - 11 blade adapter w/4-1/2" Reg Pin, 5-1/2" dia.

*** For use in Box x Box housings - Side or End Load

Vermeer® Compatible Products

Extreme Duty, High Flow End Load Housings



Clocking Mechanism



Manufactured, **TOTALLY IN-HOUSE**, from a single bar of heat treated nickel steel alloy, Triple D housings offer the strength and versatility required by the professional contractor. Triple D housings are designed to work with steering shoes, mud motors, tri-cone bits and hammers. The multiple gun drill fluid holes insure high-flow capabilities required to accomplish even the most strenuous of bores.

The Triple D 6-1/2" housing features a side wall thickness, around the fluid holes, of 1-1/2" for exceptional strength and durability.

All five sizes are in stock and ready for immediate delivery.

Sizes from 3-5/8" Dia. up to 7.0" Dia., Triple D manufactures housings for some of the largest drills working today.

8" diameter housing coming soon.

"Maximum Strength" End Load Rock Housings (ONE-PIECE HI-FLOW Design) Accepts 15" or 19" Digitrak Transmitters

Part No.	Description
100032238	3.250" Dia. Hi-Flow, End Load Housing - 2-3/8" API REG x 2-3/8" API REG
100035236	3.625" Dia. Hi-Flow, End Load Housing - 2-3/8" API REG x 2-3/8" API REG
100035238	3.625" Dia. Hi-Flow, End Load Housing - 2-3/8" API REG x 2-3/8" IF
100042278	4.25" Dia. Hi-Flow, End Load Housing - 2-7/8" API REG x 2-7/8" IF
100048350	5.00" Dia. Hi-Flow, End Load Housing - 3-1/2" API REG x 3-1/2" IF
100063450	6.375" Dia. Hi-Flow, End Load Housing - 4-1/2" API REG x 4-1/2" IF
100070550	7.00" Dia. Hi-Flow, End Load Housing - 4-1/2" API REG x 5-1/2" DSFH
100083660	8.25" Dia. Hi-Flow, End Load Housing - 6-5/8" API REG x 6-5/8" DSFH

Clocking Mechanism for End Load Rock Housing

Part No.	Description
100010010	Clocking Assembly - Complete
100010015	"O" Ring Set (2), for Clocking Assembly
100010020	Clocking Assembly Wrench
100010025	4" Spacer for 15" DigiTrak
100010030	Zero Spacer for 19" DigiTrak
100010035	Spacer Retaining Screw
100010040	Transmitter Retaining Cap
100010045	Transmitter Retaining Cap Plug
100010050	Transmitter Retaining Cap Elastomer
100010055	Transmitter Retaining Cap "O" Ring Set (2)
100010100	Sonde Battery Cap
100010150	Sonde Removal Tool

Vermeer Drive Chucks

ONE PIECE CONSTRUCTION - NOT WELDED

All Triple D Drive Chucks are machined from a solid billet of super heat treated chrome-moly steel for maximum strength and performance.



ONE PIECE CONSTRUCTION - NOT WELDED

Drive Chucks for VERMEER RIGS

Item No.	Description
420001500	Fits 7x11, 7x11A - 1.66" pipe - #200
420001505	Fits 10x14, 10x15 - 1.66" pipe - #200
420001510	Fits 16x20, 18x22, 20x22 - 1.9" pipe - #250
420001525	Fits 16x20, 18x22, 20x22 - 2.06" pipe - #400
420001540	Fits 24x40, 40x40 - 2.375" pipe - #600
420001550	Fits 50x100, 80x100 - 2.875" pipe - #900
420001555	Fits 50x100, 80x100 - 3.500" pipe - #800

Vermeer® Compatible Products

Vermeer Sub Savers

Sub Savers for Vermeer® Rigs

Protect your drive chuck and drill rod investment with one of Triple D's direct replacement Sub Savers. Now you can protect your drive chuck by simply unscrewing and replacing your worn out Sub Saver with a new super heat treated, chrome steel unit from Triple D.

Vermeer Sub-Savers	
Item No.	Description
420002500	Fits 7x11, 7x11A, 10x14, 10x15 - 1.66" pipe - #200
420002505	Fits 7x11 Series II - 1.66" pipe - #200
420002520	Fits 16x20, 18x22, 20x22 - 1.90" pipe - #250
420002525	Fits 16x20, 18x22, 20x22 - 2.06" pipe - #400
420002540	Fits 24x40 - S/N 383 & below - 7.5" OAL - 2.375" pipe - #600
420002545	Fits 24x40 - S/N 384 & above - 9.5" OAL - 2.375" pipe - #600
420002546	Fits 24x40 Series II- 12.0" OAL - 2.375" pipe - #600
420002549	Fits 24x40 Series III- 12.5" OAL - 2.375" pipe - #600
420002547	Fits 33x44, 36x50 - 2.375" pipe - #650
420002548	Fits 36x50 - 2.625" pipe - #700
420002550	Fits 50x100, 80x100 - 2.875" pipe - #900
420002555	Fits 50x100, 80x100 - 3.500" pipe - #800
420002560	Fits 100x120 - 3.50" pipe - #1000



Vermeer Tail Pieces

TAIL PIECES - extend the life and versatility of your Sonde Housing. Triple D's tail pieces are CNC machined from heat treated chrome-moly alloy steel for durability and value.



Vermeer® Compatible (Slant Face) Transmitter Housings	
Part No.	Description
220301625	Tail Piece, 1.625" LP Hex (P) x 2.00" API IF (P) Fits Drill Rig Models 7x11 - 10x15
220401625	Tail Piece, 1.625" LP Hex (P) x 2.375" API REG (P) Fits Drill Rig Models 7x11 - 10x15
220302125	Tail Piece, 2.125" LP Hex (P) x 2.00" API IF (P) Fits Drill Rig Models 16x20 - 24x40
220402125	Tail Piece, 2.125" LP Hex (P) x 2.375" API REG (P) Fits Drill Rig Models 7x11 - 40x40
250050055	Tail Piece, #350-API H90S** (P) x 2.00" API IF (P) Fits Drill Rig Models 16x20 - 24x40
250050050	Tail Piece, #350-API H90S** (P) x 2.375" API REG (P) Fits Drill Rig Models 7X11 - 40x40
250050060	Tail Piece, #390-API H90S** (P) x 2.375" API REG (P) Fits Drill Rig Models 7X11 - 40x40
250050065	Tail Piece, #390-API H90S** (P) x 2.875" API REG (P) Fits Drill Rig Models 7X11 - 40x40
250050070	Tail Piece, QF 400 (P)*** x 2.00" API IF (P) Fits Drill Rig Models 16x20 - 20x22
250050073	Tail Piece, QF 400 (P)*** x 2.375" API REG (P) Fits Drill Rig Models 16x20 - 40x40
250050083	Tail Piece, QF 460 (P)*** x 2.375" API REG (P) Fits Drill Rig Models 16x20 - 20x22
250050085	Tail Piece, QF 460 (P)*** x 2.875" API REG (P) Fits Drill Rig Models 16x20 - 40x40

** #350 & #390 API H90S are compatible with #350 & #390 HAWKEYE connections.

*** QF #400 & #460 are compatible with Vermeer Quickfire #400 & #460 connections.

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Vermeer® Compatible Products

Vermeer Standard Starter Rods

All Vermeer compatible Triple D Starter Rods are built from heat treated Alloy Steel which gives a significantly stronger lead rod for use under the stresses of Horizontal Directional Drilling projects.



(Standard) Vermeer Starter Rods (CHROME-MOLY STEEL -- 152,000 psi tensile strength)	
Part No.	Description
260030210	Fits Vermeer 36x50, 36x50 Series II, FST 1 #700 x 2.125" LPT
260030200	Fits Vermeer 36x50, 36x50 Series II, FST 1 #650 x 2.125" LPT
260030001	Fits Vermeer 24x40 - 40x40, FST 1 #600 x 2.125" LPT
260030006	Fits Vermeer 16x20 - 20x22, FST 1 #400 x 2.125" LPT
260030005	Fits Vermeer 16x20 - 20x22, FST 1 #250 x 2.125" LPT
260030010	Fits Vermeer 7x11, 10x15 - FST 1 #200 x 1.625" LPT
260010300	Fits Vermeer 24x40, 40x40 - FST 1 #600 x QF #400***
260010310	Fits Vermeer 20x22, 20x22 Series II - FST 1 #400 x QF #400***
260010320	Fits Vermeer 16x20, 20x22 S III - FST 1 #250 x QF #400***
260010420	Fits 36x50, 36x50 Series II, FST 1 #700 X QF 460***
260010410	Fits 36x50, 36x50 Seies II, FST 1 #650 X QF 460***
260010400	Fits 24x40, 24x40 Series II, FST 1 #600 X QF 460***
260010240	#350-API H90S x #700, Fits 36x50 - 33x44 -1/2" X 13 X 3/4" Bolt**
260010220	#350-API H90S x #600, Fits 24x40 - 40x40 -1/2" X 13 X 3/4" Bolt**
260010230	#350-API H90S x #400, Fits 16x20 - 20x22 -1/2" X 13 X 3/4" Bolt**

Vermeer Starter Rod Drawbars	
(Chrome-Moly Steel -- 153,000 Psi Tensile Strength)	
Item No.	Description
260010500	2.125" LPT/HEX PIN X DRAWBAR W/fluid holes
260010505	1.625" LPT/HEX PIN x DRAWBAR W/fluid holes



Vermeer® Compatible Products

Replacement Drive Collars



Replacement Drive Collars For Vermeer Rigs		
Item No.	Id Size	Description
260060105	2.00"	Hex Collar w/ Hardfacing for 1.625" LPT
260060107	2.00"	Hex Collar w/ Carbide Buttons for 1.625" LPT
260060109	2.00"	Hex Collar w/ Shark Teeth & Hardfacing for 1.625" LPT
260060155	2.50"	Hex Collar w/ Hardfacing for 2.125" LPT
260060157	2.50"	Hex Collar w/ Carbide Buttons for 2.125" LPT
260060159	2.50"	Hex Collar w/ SharkTeeth & Hardfacing for 2.125" LPT
260060275	2.625"	Octagon Collar w/ Hardfacing for QF #400***
260060285	2.625"	Octagon Collar w/ Shark Teeth & Hardfacing for QF #400***
260060375	3.00"	Octagon Collar w/ Hardfacing for QF #460***
260060385	3.00"	Octagon Collar w/ Shark Teeth & Hardfacing for QF #460***
260060165	2.625"	Octagon Collar w/ Hardfacing for HE #350**
260060170	2.625"	Octagon Collar w/ Shark Teeth & Hardfacing for HE #350**
260060390	3.00"	Octagon Collar w/ Hardfacing for HE #390**
260060395	3.00"	Octagon Collar w/ Shark Teeth & Hardfacing for HE #390**

** #350 & #390 API H90S are compatible with #350 & #390 HAWKEYE connections.

*** QF #400 & #460 are compatable with Vermeer Quickfire #400 & #460 connections.

Ditch Witch® Compatible Products

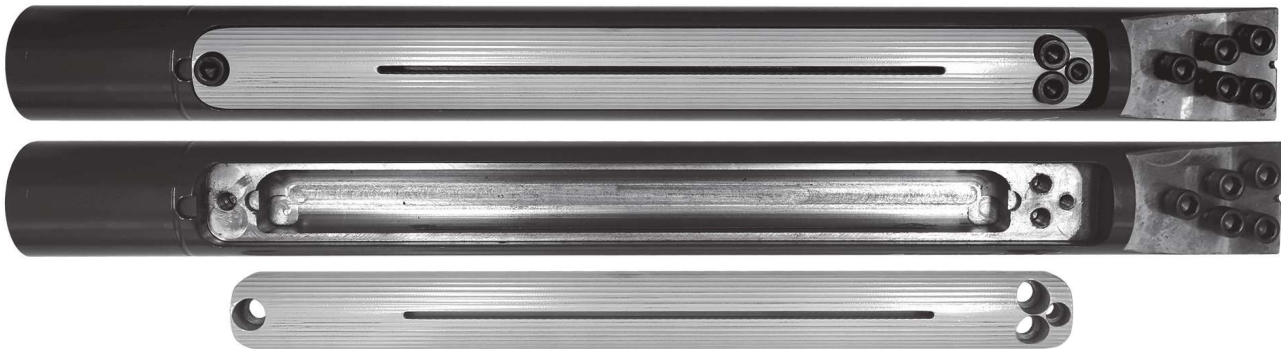
Transmitter Housings

Side Load, Slant Face, Transmitter Housings for Ditch Witch Subsite® Beacon

Triple D's side load sonde housings are manufactured from 153,000 psi chrome-moly steel for superior strength and durability. The side load feature provides quick and easy field installation and removal of transmitter sonde and batteries.

All sizes feature:

- 1) Replaceable tailpieces for long life,
- 2) Sealed transmitter slots
- 3) Screw-in, heat treated replaceable nozzles for maximum durability and steering, and
- 4) Accepts all styles of OEM type bolt-on pilot bits (paddle bits).



Ditch Witch® Compatible Transmitter Housings	
Part No.	Description
260035050	2.0" Dia., 3-Hole DW - 12mm, DW 1.10-5 Thread (B), 88B series - Fits JT5 / JT520
260035051	Replacement Cover - Fits above transmitter housing.
260035025	2.750" Dia. , 5-Hole DW - 12mm, 2.00" API IF (B), 86 series - Fits JT922 - JT2720M1
260035015	3.00" Dia. , 5-Hole DW - 12mm, 2.375" API REG (B), 86 series - Fits JT20 - JT4020M1
260035005	3.250" Dia. , 6-Hole DW - 16mm, 2.375" API REG (B), 86 series - Fits JT20 - JT4020M1
260035002	4.250" Dia. , 6-Hole DW - 20mm, 2-7/8" API IF (B), 86 series
260035010	Replacement Cover - Fits all above transmitter housings.
260025100	Bolt (large) for above Housing Covers - 1/2"-13 x 3/4" (3 req'd.)
260025110	Bolt (small) for above Housing Covers - 3/8"-16 x 3/4" (1 req'd.)

Batteries for above Housings	
Part No.	Description
261080000	Extended Life Lithium battery for DigiTrak & Subsite

Water Nozzles for Triple D Slant Face Housings	
Part No.	Description
260027000	1/8" Nozzle, Fits all Triple D Sonde Housings
260027005	3/16" Nozzle, Fits all Triple D Sonde Housings



Water Nozzle

Ditch Witch® Compatible Products

Side Load, (B) x (B), High-Strength, High Flow Transmitter Housings* With “Double” Locking Doors



Triple D's High-Strength, Hi-Flow, (Box X Box) transmitter housings are manufactured from a single billet of 4142 heat treated chrome-moly steel with a **tensile strength of 150,000 psi**. These housings are designed for use with Dirt Bit Subs, Rock Bits, Cobble Bits, Tri-cone Bits and Mud Motors. Also, these housings feature our new door locking “Cross Pin Assembly” for positive door retention.

All sizes feature:

- 1) Replaceable tailpieces for long life,
- 2) Sealed transmitter slots
- 3) Screw-in, heat treated replaceable nozzles for maximum durability and steering, and
- 4) Accepts all styles of OEM type bolt-on pilot bits (paddle bits).

* For use with Subsite 86 Series transmitters with “Roll Calibration capabilities”- no mechanical clocking mechanism.

Ditch Witch® Compatible Transmitter Housings*	
Part No.	Description
260037005	2.750" Dia., Box x Box Side Load Housing, 2" IF x 2" IF - Fits Drill Rigs JT920 thru JT2020.
260037007	3.0" Dia., Box x Box Side Load Housing, 2" IF x 2" IF - Fits Drill Rigs JT2020 thru JT3020M1.
260037010	3.250" Dia., Box x Box Side Load Housing, 2.375" REG x 2.375" REG - Fits Drill Rigs JT2020 thru JT3020M1.
260037015	3.500" Dia., Box x Box Side Load Housing, 2.375" REG x 2.375" REG - Fits Drill Rigs JT3020M1 thru JT4020M1.
260037020	4.250" Dia., Box x Box Side Load Housing, 2.875" REG x 2.875" IF - Fits Drill Rigs JT60 thru JT100.
260037000	Replacement Door with Hardware - Fits all of the above.

Dirt Subs (Blade Adapters)



Ditch Witch® Dirt Subs (Blade Adapters)***	
Part No.	Description
602-200	Ditch Witch 5 bolt (12MM) blade adapter w/2" IF Pin, 3-1/4" dia.
602-210	Ditch Witch 5 bolt (12MM) blade adapter w/2-3/8" Reg Pin, 3-1/4" dia.
602-220	Ditch Witch 6 bolt (16MM) blade adapter w/2-3/8" Reg Pin, 3-1/4" dia.
602-230	Ditch Witch 6 bolt (16MM) blade adapter w/2-7/8" Reg Pin, 4" dia.
602-240	Ditch Witch 6 bolt (16MM) blade adapter w/3-1/2" Reg Pin, 4-1/2" dia.

Ditch Witch® Compatible Products

Side Load, (B) x (B), “High-Strength”, Transmitter Housings* (HI-FLOW Design) for 86 Series Sublite Beacon



Triple D’s “High Strength”, High-Flow rock housings are manufactured, in house, from a single billet of heat treated 4140/42 steel alloy with a **tensile strength of 150,000 psi**. They are designed to drill rock 24/7. These housings are designed to work with Rock Bits, Cobble Bits, Steering Shoes and Roller Cone Bits, and have twin fluid ports (for added flow). Also, all housings **feature our new door locking “Cross Pin Assembly” for positive door retention**. All 3.25” thru 6.50” housings have a sonde cavity that will accept 15” & 19” DigiTrac and Subsite 86 series transmitters, as well as wireline systems. Contractors may switch between DigiTrac and Subsite transmitters by simply changing the sonde clocking mechanism.

** Uses Subsite 86 Series only.

Ditch Witch® Compatible (Subsite - 86 Series) Transmitter Housings	
Part No.	Description
600-275**	2.750" Dia., Ultra-High Strength Rock Housing - 2" IF (B) x 2" IF (B)*
600-325	3.250" Dia., Ultra-High Strength Rock Housing - 2" IF (B) x 2-3/8" REG (B)
600-350	3.50" Dia., Ultra-High Strength Rock Housing - 2-3/8" Reg (B) x 2-7/8" REG (B)
600-450	4.50" Dia., Ultra-High Strength Rock Housing - 2-7/8" Reg (B) x 2-7/8" IF (B)
600-500	5.00" Dia., Ultra-High Strength Rock Housing - 3-1/2" Reg (B) x 3-1/2" IF (B)
600-650	6.50" Dia., Ultra-High Strength Rock Housing - 4-1/2" Reg (B) x 4-1/2" IF (B)

Sonde Timing Mechanism - DigiTrac	
Part No.	Description
520-400	Sonde Retainer
520-410	Sonde Clocking Assembly - DigiTrac
520-415	Sonde Spacer Block - for 15" Sonde
520-500	Complete Assembly (all above parts)

Sonde Timing Mechanism - Subsite 86 Series	
Part No.	Description
520-400	Sonde Retainer
620-410	Sonde Clocking Assembly - Subsite 86 Series
620-415	Sonde Spacer Block - for Subsite 86 Series
620-500	Complete Assembly (all above parts)



520-410

520-400

*** For use in Box x Box housings - Side or End Load

Ditch Witch® Compatible Products

Ditch Witch Tail Pieces

TAIL PIECES - extend the life and versatility of your Sonde Housing. Triple D's tail pieces are CNC machined from heat treated chrome-moly alloy steel for durability and value.



Tail Pieces (Housing Savers) DW Housings	
Part No.	Description
220320200	DW 920, 920L, 921, 922 EZ-2 (B) X 2.0" IF (P)
220420200	DW 920, 920L, 921, 922 EZ-2 (B) X 2.375" API REG (P)
220320300	DW 1220M1 EZ-3 (B) X 2.0" IF (P)
220420300	DW 1220M1 EZ-3 (B) X 2.375" API REG (P)
220320400	DW 1720, 1720M1, 2020M1, 2720 EZ-2 (B) X 2.0" IF (P)
220420400	DW 1720, 1720M1, 2020M1, 2720 EZ-2 (B) X 2.375" API REG (P)
220320500	DW 2720M1 EZ-3 (B) X 2.0" IF (P)
220420500	DW 2720M1 EZ-3 (B) X 2.375" API REG (P)
220320600	DW 3020M1 EZ-3 (B) X 2.0" IF (P)
220420600	DW 3020M1 EZ-3 (B) X 2.375" API REG (P)
220520600	DW 3020M1 EZ-3 (B) X 2.875" IF (P)
220420700	DW 4020M1 EZ-2 (B) X 2.375" API REG (P)
220520700	DW 4020M1 EZ-2 (B) X 2.875" IF (P)
220324200	DW 920, 920L, 921, 922 -- 1.41-6 (P) X 2.0" IF (P)
220324300	DW 1220M1 -- 1.47-4 (P) X 2.0" IF (P)
220324400	DW 1720, 1720M1 -- 1.69-6 (P) X 2.0" IF (P)
220421400	DW 1720, 1720M1 -- 1.69-6 (P) X 2.375" API REG (P)
220324500	DW 2720, 2020, 2020M1, JT20 -- 1.94-4 (P) X 2.0" IF (P)
220421500	DW 2720, 2020, 2020M1, JT20 -- 1.94-4 (P) X 2.375" API REG (P)
220324600	DW 2720M1, 3020M1, JT25, JT30 -- 2.11-4 (P) X 2.0" IF (P)
220421600	DW 2720M1, 3020M1, JT25, JT30 -- 2.11-4 (P) X 2.375" API REG (P)
220521600	DW 2720M1, 3020M1, JT25, JT30 -- 2.11-4 (P) X 2.875" IF (P)
220421700	DW 4020 -- 2.40-4 (P) X 2.375" API REG (P)
220521700	DW 4020 -- 2.40-4 (P) X 2.875" IF (P)
220421800	DW 4020M1 -- 2.59-4 X 2.375" API REG (P)
220521800	DW 4020M1 -- 2.59-4 X 2.875" IF (P)
250050055	Tail Piece, #350-API H90S** (P) x 2.00" API IF (P) - Fits Drill Rig Models JT1220, JT2020, JT20
250050050	Tail Piece, #350-API H90S** (P) x 2.375" API REG (P) - Fits Drill Rig Models JT1720, JT2020, JT20, JT25, JT2720, JT3020, JT30
250050060	Tail Piece, #390-API H90S** (P) x 2.375" API REG (P) - Fits Drill Rig Models JT1720, JT2020, JT20, JT25, JT2720, JT3020, JT30
250050065	Tail Piece, #390-API H90S** (P) x 2.875" API REG (P) - Fits Drill Rig Models JT4020, JT7020, JT8020, JT100

** #350 & #390 API H90S are compatible with #350 & #390 HAWKEYE connections.

Ditch Witch® Compatible Products

Drive Chucks

ONE PIECE CONSTRUCTION - NOT WELDED

All Triple D Drive Chucks are machined from a solid billet of super heat treated chrome-moly steel for maximum strength and performance.

Drive Chucks for Ditch Witch Rigs	
Item No.	Description
420001605	Fits JT1220M1, 1.47-4 THD
420001615	Fits JT2020M1, 1.94-4 THD
420001600	Fits JT2720, 1.94-4 THD
420001610	Fits JT1720, JT1720M1, 1.69-6 THD
420001620	Fits JT920, JT920L, 1.41-6 THD



Transition Rods and "O" Rings

Ditch Witch "EZ Connect" Transition Subs & "O" Rings (CHROME-MOLY STEEL -- 152,000 psi tensile strength)	
Part No.	Description
260010015	Fits JT 520 -- 1.21 (P) x 1.31 EZ2 (P)
260010030	Fits JT920, 920L, 921, 922 -- 1.41 (P) X 1.63 EZ2 (P)
260010027	Fits JT1220M1 -- 1.47 (P) X 1.88 EZ3 (P)
260010025	Fits JT1720, JT1720M1 -- 1.69 (P) X 2.0 EZ2 (P)
260010037	Fits JT2020M1, JT20 -- 1.94 (P) X 2.0 EZ2 (P)
260010020	Fits JT2720 -- 1.94 (P) X 2.0 EZ2 (P)
260010040	Fits JT2720M1 -- 2.11 (P) X 2.25 EZ3 (P)
260010047	Fits JT3020M1, JT25, JT30 -- 2.11 (P) X 2.25 EZ3 (P)
260010057	Fits JT4020M1 -- 2.59 (P) X 2.63 EZ2 (P)
260036012	"O" Ring for 260010015, JT 520
260036010	"O" Ring for 260010030, JT 920
260036020	"O" Ring for 260010027, JT 1220 M1
260036030	"O" Ring for 260010037, JT 2020 M1, 1720, 2720
260036040	"O" Ring for 260010047, JT 3020 M1
260036050	"O" Ring for 260010057, JT 4020 M1

Transition Rods and "O" Rings (cont.)

Ditch Witch Transition Subs (CHROME-MOLY STEEL -- 152,000 psi tensile strength)	
Part No.	Description
260020010	Fits JT5, 1.10 - 5 Pin x 1.10 - 5 Pin
260020012	Fits JT520, 1.10 - 5 Pin x 1.21 - 6 Pin

Drive Collar Bolts - Ditch Witch	
Part No.	Description
260025100	1/2" X 13 X 3/4" Socket Head Cap Screw (each)
260025110	3/8" X 16 X 3/4" Socket Head Cap Screw (each)
260025115	5/8" X 11 X 3/4" Socket Head Cap Screw (each)
260025130	8MM x 1.25 x 12MM Socket Head Cap Screw (each)
260025120	12MM X 1.75 X 20MM Socket Head Cap Screw (each)
260025300	3/4" x 16 x 3/4" Socket Head Special Screw fits HE 350 & 390 (2/PK)

All Ditch Witch type Triple D Transition Subs are built with heat treated 4140 chrome-moly steel for strength and durability.



Ditch Witch® Compatible Products

Replacement Drive Collars



Replacement Drive Collars For Ditch Witch Rigs		
Item No.	Id Size	Description
260060205	1.56"	Octagon Collar w/ Hardfacing for EZ-2 - JT520
260060215	2.00"	Octagon Collar w/ Hardfacing for EZ-2 - JT920, JT920L, JT921, JT922
260060225	2.25"	Octagon Collar w/ Hardfacing for EZ-3 - JT1220 M1
260060227	2.25"	Octagon Collar w/ Carbide Buttons for EZ-3 - JT1220 M1
260060235	2.50"	Octagon Collar w/ Hardfacing for EZ-2 - JT1720 M1, JT2020 M1, JT2720
260060237	2.50"	Octagon Collar w/ Carbide Buttons for EZ-2 - JT1720 M1, JT2020 M1, JT2720
260060245	2.75"	Octagon Collar w/ Hardfacing for EZ-2 - JT2720 M1
260060265	2.75"	Octagon Collar w/ Hardfacing for EZ-3 - JT2720 AT, JT3020 AT; JT3020 M1
260060255	3.15"	Octagon Collar w/ Hardfacing for EZ-2 - JT4020 M1, JT2720 AT, JT3020 AT
260060275	3.15"	Collar w/ Shark Teeth & HF for EZ-2 - JT4020 M1, JT2720 AT, JT3020 AT
260060165	2.625"	Octagon Collar w/ Hardfacing for HE #350**
260060170	2.625"	Octagon Collar w/ Shark Teeth & Hardfacing for HE #350**
260060390	3.00"	Octagon Collar w/ Hardfacing for HE #390**
260060395	3.00"	Octagon Collar w/ Shark Teeth & Hardfacing for HE #390**

Note: All Drive Collars are manufactured "in-house" from heat treated chrome-moly steel for durability.

*** For use in Box x Box housings - Side or End Load

Triple D Enterprises, Inc. • (609) 859-3000 • www.triplednj.com

Rock Drilling Tools

Cobble Boss I



Shown: Cobble Boss I With Aggressive Cutters, 5" cut with 2-3/8" API Reg Pin - 510-500-A shown

Cobble Boss II



Shown: Cobble Boss II With Aggressive Cutters, 5" cut with 2-3/8" API Reg Pin - 610-500-A shown

Cobble Boss I With Aggressive Cutters*	
Part No.	Description
510-400A	4" cut with 2.0" IF Pin
510-500A	5" cut with 2-3/8" API Reg Pin
510-600A	6" cut with 2-7/8" API Reg Pin

Cobble Boss I With Dome Cutters*	
Part No.	Description
510-400D	4" cut with 2.0" IF Pin
510-500D	5" cut with 2-3/8" API Reg Pin
510-600D	6" cut with 2-7/8" API Reg Pin

Cobble Boss I "Front" Replacement Cutters	
Part No.	Description
510-50AC	Aggressive Carbide Cutter Set - Left & Right Bars
510-50DC	Dome Carbide Cutter Set - Left & Right Bars

Cobble Boss I "Side" Replacement Cutters	
Part No.	Description
510-60AC	Side Cutter Bar - Each Segment

* For use in Box x Box housings

COBBLE BOSS II with Chisel Style Cutters*	
Part No.	Description
610-400CH	4" cut with 2.0" IF Pin
610-500CH	5" cut with 2-3/8" API Reg Pin
610-600CH	6" cut with 2-7/8" API Reg Pin
610-610CH	6" cut with 3-1/2" API Reg Pin
610-700CH	7" cut with 3-1/2" API Reg Pin

COBBLE BOSS II with Dome Style Cutters*	
Part No.	Description
610-400C0	4" cut with 2.0" IF Pin
610-500C0	5" cut with 2-3/8" API Reg Pin
610-600C0	6" cut with 2-7/8" API Reg Pin
610-610C0	6" cut with 3-1/2" API Reg Pin
610-700C0	7" cut with 3-1/2" API Reg Pin

* For use in Box x Box housings

Rock Drilling Bits

Terra-Cut Rock Bits*

Triple D Rock Bits are designed for use in a variety of soils, from sand to medium rock. The large face aids in steering corrections. The rock bit incorporates carbide rubble and hard metal in critical wear locations to ensure the longest life tools available.

Available in soft rock or medium rock options.
Fits both Side-Load and End-Load Rock Housings



Terra-Cut Rock Bits*	
Part No.	Description
502-400	Terra-Cut 4.0" hole x 2.0" IF Pin - Std. Cut
502-450	Terra-Cut 4-1/2" hole x 2.0" IF Pin - Std. Cut
502-550	Terra-Cut 5-1/4" hole x 2-3/8" API REG Pin - Std. Cut
502-650	Terra-Cut 6-1/4" hole x 2-7/8" API REG Pin - Std. Cut
502-750	Terra-Cut 7-1/4" hole x 3-1/2" API REG Pin - Std. Cut
502-850	Terra-Cut 8-1/4" hole x 4-1/2" API REG Pin - Std. Cut
502-1250	Terra-Cut 12-1/4" hole x 4-1/2" API REG Pin - Std. Cut
505-400	Terra-Cut 4.0" hole x 2.0" IF Pin - Aggressive Cut
505-450	Terra-Cut 4-1/2" hole x 2.0" IF Pin - Aggressive Cut
505-550	Terra-Cut 5-1/4" hole x 2-3/8" API REG Pin - Aggressive Cut
505-650	Terra-Cut 6-1/4" hole x 2-7/8" API REG Pin - Aggressive Cut
505-750	Terra-Cut 7-1/4" hole x 3-1/2" API REG Pin - Aggressive Cut
505-850	Terra-Cut 8-1/4" hole x 4-1/2" API REG Pin - Aggressive Cut

* Fits both Side-Load and End-Load Rock Housings.

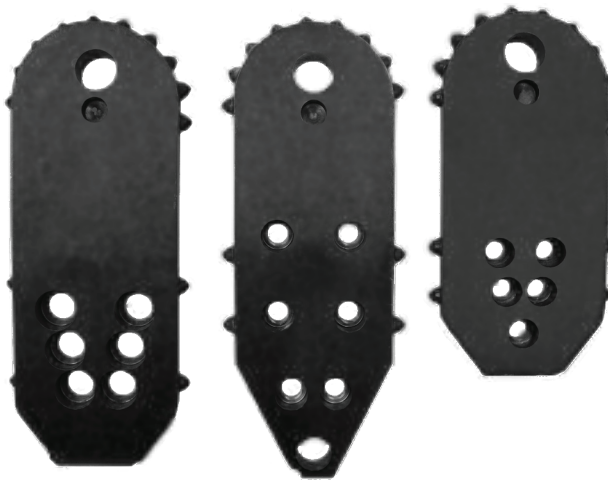
Replacement teeth for Terra-Cut Rock Bits	
Part No.	Description
503-100	Small- 3/4" shank, fits 4" thru 5-1/4" Rock Bits
503-200	Large - 1-1/8" shank, fits 6-1/4" thru 8-1/4" Rock Bits
503-250	X-Large - 1-1/2" shank, fits 12-1/4" Rock Bit

Paddle Bits

Triple D's HDD Pilot Bits are manufactured from domestically produced **Ballistic Armor Plate** on "in-house" state-of-the-art CNC machines. We do not use low cost imported castings or inexpensive high carbon steels. Our carefully selected Armor Plate has greater abrasion resistant characteristics than standard AR rated steels. The conical bits, teeth and carbide buttons used on our HDD bits are quality manufactured in the USA for long service life. For the ultimate in abrasion resistance, Triple D uses the Tungsten Carbide Embedding Hardfacing Process. The result of the process is a tool steel weld deposit filled with Tungsten Carbide particles. This process offers a 2 to 8 times better wear life than typical hardfacing alloys.

Radius Button Bit

Radius Button Bit (Pull Back Hole Std.) For Rocky & Abrasive Soil			
Item No.	Hole Pattern	Width	Thk.
DH-06-P5-35-RB	5-Hole Ditch Witch – 12 MM	3.5"	3/4"
DH-06-P5-40-RB	5-Hole Ditch Witch – 12 MM	4.0"	3/4"
DH-06-P5-45-RB	5-Hole Ditch Witch – 12 MM	4.5"	3/4"
DH-06-P5-50-RB	5-Hole Ditch Witch – 12 MM	5.0"	3/4"
DH-06-P6-40-RB	6-Hole Ditch Witch – 16 MM	4.0"	3/4"
DH-06-P6-45-RB	6-Hole Ditch Witch – 16 MM	4.5"	3/4"
DH-06-P6-50-RB	6-Hole Ditch Witch – 16 MM	5.0"	3/4"
DH-06-P6-60-RB	6-Hole Ditch Witch – 16 MM	6.0"	3/4"
DH-08-P6-50-RB	6-Hole Ditch Witch – 16 MM	5.0"	1.0"
DH-08-P6-60-RB	6-Hole Ditch Witch – 16 MM	6.0"	1.0"
DH-08-P6A-50-RB	6-Hole Ditch Witch – 20 MM	5.0"	1.0"
DH-08-P6A-60-RB	6-Hole Ditch Witch – 20 MM	6.0"	1.0"
DH-04-P2-40-RB	5-Hole Vermeer – 3/8" x 16	4.0"	1/2"
DH-06-P7-35-RB	7-Hole Vermeer – 1/2" x 13	3.5"	3/4"
DH-06-P7-40-RB	7-Hole Vermeer – 1/2" x 13	4.0"	3/4"
DH-06-P7-45-RB	7-Hole Vermeer – 1/2" x 13	4.5"	3/4"
DH-06-P7-50-RB	7-Hole Vermeer – 1/2" x 13	5.0"	3/4"
DH-06-P7-60-RB	7-Hole Vermeer – 1/2" x 13	6.0"	3/4"
DH-08-P7-50-RB	7-Hole Vermeer – 1/2" x 13	5.0"	1.0"
DH-08-P7-60-RB	7-Hole Vermeer – 1/2" x 13	6.0"	1.0"
DH-08-P8-50-RB	7-Hole Vermeer – 5/8" x 11	5.0"	1.0"
DH-08-P8-60-RB	7-Hole Vermeer – 5/8" x 11	6.0"	1.0"



Paddle Bits

Angled Conical Claw Bit



**Angled Conical Claw Bit
(Pull Back Hole Std.) **
For Rocky & Abrasive Soil**

Item No.	Hole Pattern	Width	Thk.
DH-04-P3-25-ACC	3-Hole Ditch Witch – 12 MM	2.5"	1/2"
DH-04-P3-30-ACC	3-Hole Ditch Witch – 12 MM	3.0"	1/2"
DH-04-P3-35-ACC	3-Hole Ditch Witch – 12 MM	3.5"	1/2"
DH-06-P5-35-ACC	5-Hole Ditch Witch – 12 MM	3.5"	3/4"
DH-06-P5-40-ACC	5-Hole Ditch Witch – 12 MM	4.0"	3/4"
DH-06-P5-50-ACC	5-Hole Ditch Witch – 12 MM	5.0"	3/4"
DH-06-P6-40-ACC	6-Hole Ditch Witch – 16 MM	4.0"	3/4"
DH-06-P6-50-ACC	6-Hole Ditch Witch – 16 MM	5.0"	3/4"
DH-06-P6-60-ACC	6-Hole Ditch Witch – 16 MM	6.0"	3/4"
DH-08-P6-40-ACC	6-Hole Ditch Witch – 16 MM	4.0"	1.0"
DH-08-P6-50-ACC	6-Hole Ditch Witch – 16 MM	5.0"	1.0"
DH-08-P6A-50-ACC	6-Hole Ditch Witch – 20 MM	5.0"	1.0"
DH-08-P6A-60-ACC	6-Hole Ditch Witch – 20 MM	6.0"	1.0"
DH-04-P2-40-ACC	5-Hole Vermeer – 3/8" x 16	4.0"	4.0"
DH-06-P7-35-ACC	7-Hole Vermeer – 1/2" x 13	3.5"	3.5"
DH-06-P7-40-ACC	7-Hole Vermeer – 1/2" x 13	4.0"	4.0"
DH-06-P7-45-ACC	7-Hole Vermeer – 1/2" x 13	4.5"	4.5"
DH-06-P7-50-ACC	7-Hole Vermeer – 1/2" x 13	5.0"	5.0"
DH-06-P7-60-ACC	7-Hole Vermeer – 1/2" x 13	6.0"	6.0"
DH-08-P7-40-ACC	7-Hole Vermeer – 1/2" x 13	4.0"	4.0"
DH-08-P7-45-ACC	7-Hole Vermeer – 1/2" x 13	4.5"	4.5"
DH-08-P7-50-ACC	7-Hole Vermeer – 1/2" x 13	5.0"	5.0"
DH-08-P7-60-ACC	7-Hole Vermeer – 1/2" x 13	6.0"	6.0"
DH-08-P8-50-ACC	7-Hole Vermeer – 5/8" x 11	5.0"	5.0"
DH-08-P8-60-ACC	7-Hole Vermeer – 5/8" x 11	6.0"	6.0"
DH-08-P8-80-ACC	7-Hole Vermeer – 5/8" x 11	8.0"	8.0"

** Includes Tungsten Carbide Embedded Hardfacing

Steep Taper Angled Conical Claw Bit

**(Pull Back Hole Std.) **
For Rocky & Abrasive Soil**

Item No.	Hole Pattern	Width	Thk.
DH-06-P5-40-ACS	5-Hole Ditch Witch – 12 MM	4.0"	3/4"
DH-06-P5-50-ACS	5-Hole Ditch Witch – 12 MM	5.0"	3/4"
DH-06-P6-40-ACS	6-Hole Ditch Witch – 16 MM	4.0"	3/4"
DH-06-P6-50-ACS	6-Hole Ditch Witch – 16 MM	5.0"	3/4"
DH-06-P6-60-ACS	6-Hole Ditch Witch – 16 MM	6.0"	3/4"
DH-08-P6-50-ACS	6-Hole Ditch Witch – 16 MM	5.0"	1"
DH-08-P6-60-ACS	6-Hole Ditch Witch – 16 MM	6.0"	1"
DH-06-P7-35-ACS	7-Hole Vermeer – 1/2" x 13	3.5"	3/4"
DH-06-P7-40-ACS	7-Hole Vermeer – 1/2" x 13	4.0"	3/4"
DH-06-P7-45-ACS	7-Hole Vermeer – 1/2" x 13	4.5"	3/4"
DH-06-P7-50-ACS	7-Hole Vermeer – 1/2" x 13	5.0"	3/4"
DH-06-P7-55-ACS	7-Hole Vermeer – 1/2" x 13	5.5"	3/4"
DH-08-P8-50-ACS	7-Hole Vermeer – 5/8" x 11	5.0"	1"
DH-08-P8-60-ACS	7-Hole Vermeer – 5/8" x 11	6.0"	1"



** Includes Tungsten Carbide Embedded Hardfacing

Paddle Bits

“Roughneck” Ripper Bit

“Roughneck” Ripper Bit ** For Sedimentary Rock, Hardpan, Dry Clay & Compacted Soil			
Item No.	Hole Pattern	Width	Thk.
DH-04-P3-25-SR	3-Hole Ditch Witch – 12 MM	2.5"	1/2"
DH-04-P3-30-SR	3-Hole Ditch Witch – 12 MM	3.0"	1/2"
DH-04-P3-35-SR	3-Hole Ditch Witch – 12 MM	3.5"	1/2"
DH-06-P5-40-SR	5-Hole Ditch Witch – 12 MM	4.0"	3/4"
DH-06-P5-45-SR	5-Hole Ditch Witch – 12 MM	4.5"	3/4"
DH-06-P5-50-SR	5-Hole Ditch Witch – 12 MM	5.0"	3/4"
DH-06-P6-45-SR	6-Hole Ditch Witch – 16 MM	4.5"	3/4"
DH-06-P6-50-SR	6-Hole Ditch Witch – 16 MM	5.0"	3/4"
DH-06-P6-60-SR	6-Hole Ditch Witch – 16 MM	6.0"	3/4"
DH-08-P6A-50-SR	6-Hole Ditch Witch – 20 MM	5.0"	1.0"
DH-08-P6A-60-SR	6-Hole Ditch Witch – 20 MM	6.0"	1.0"
DH-06-P7-40-SR	7-Hole Vermeer – 1/2" x 13	4.0"	3/4"
DH-06-P7-50-SR	7-Hole Vermeer – 1/2" x 13	5.0"	3/4"
DH-06-P7-60-SR	7-Hole Vermeer – 1/2" x 13	6.0"	3/4"
DH-08-P7-50-SR	7-Hole Vermeer – 1/2" x 13	5.0"	1.0"
DH-08-P7-60-SR	7-Hole Vermeer – 1/2" x 13	6.0"	1.0"
DH-08-P8-50-SR	7-Hole Vermeer – 5/8" x 11	5.0"	1.0"
DH-08-P8-60-SR	7-Hole Vermeer – 5/8" x 11	6.0"	1.0"
DH-08-P8-80-SR	7-Hole Vermeer – 5/8" x 11	8.0"	1.0"
DH-08-P8-50-SR	7-Hole Vermeer – 5/8" x 11	5.0"	1.0"
DH-08-P8-60-SR	7-Hole Vermeer – 5/8" x 11	6.0"	1.0"
DH-08-P6A-50-SR	6-Hole Ditch Witch – 20 MM	5.0"	1.0"
DH-08-P6A-60-SR	6-Hole Ditch Witch – 20 MM	6.0"	1.0"

** Includes Tungsten Carbide Embedded Hardfacing



“Roughneck” Steep Taper Ripper Bit

Hardfaced Taper Chisel Bit** For Sand & Sandy Loam			
Item No.	Hole Pattern	Width	Thk.
DH-06-P5-40-XR	5-Hole Ditch Witch – 12 MM	4.0"	3/4"
DH-06-P5-45-XR	5-Hole Ditch Witch – 12 MM	4.5"	3/4"
DH-06-P5-50-XR	5-Hole Ditch Witch – 12 MM	5.0"	3/4"
DH-06-P6-40-XR	6-Hole Ditch Witch – 16 MM	4.0"	3/4"
DH-06-P6-50-XR	6-Hole Ditch Witch – 16 MM	5.0"	3/4"
DH-08-P6A-50-XR	6-Hole Ditch Witch – 20 MM	5.0"	1.0"
DH-08-P6A-60-XR	6-Hole Ditch Witch – 20 MM	6.0"	1.0"
DH-08-P6A-80-XR	6-Hole Ditch Witch – 20MM	8"	1.0"
DH-06-P7-40-XR	7-Hole Vermeer – 1/2" x 13	4.0"	3/4"
DH-06-P7-45-XR	7-Hole Vermeer – 1/2" x 13	4.5"	3/4"
DH-06-P7-50-XR	7-Hole Vermeer – 1/2" x 13	5.0"	3/4"
DH-06-P7-60-XR	7-Hole Vermeer – 1/2" x 13	6.0"	3/4"
DH-08-P8-40-XR	7-Hole Vermeer – 5/8" x 11	4.0"	1.0"
DH-08-P8-45-XR	7-Hole Vermeer – 5/8" x 11	4.5"	1.0"
DH-08-P8-50-XR	7-Hole Vermeer – 5/8" x 11	5.0"	1.0"
DH-08-P8-60-XR	7-Hole Vermeer – 5/8" x 11	6.0"	1.0"

** Includes Tungsten Carbide Embedded Hardfacing



Paddle Bits

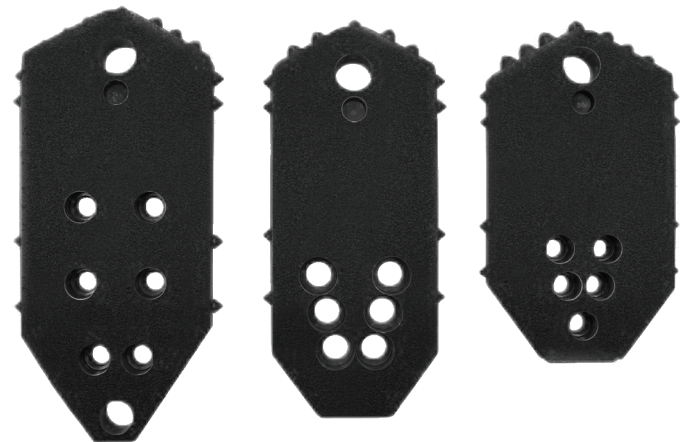
Button Chisel Bit

Button Chisel Bit (Pull Back Hole Std.) For Hard, Rocky Soil			
Item No.	Hole Pattern	Width	Thk.
DH-06-P5-35-CB	5-Hole Ditch Witch -- 12 MM	3.5"	3/4"
DH-06-P5-40-CB	5-Hole Ditch Witch -- 12 MM	4.0"	3/4"
DH-06-P5-45-CB	5-Hole Ditch Witch -- 12 MM	4.5"	3/4"
DH-06-P5-50-CB	5-Hole Ditch Witch -- 12 MM	5.0"	3/4"
DH-06-P6-40-CB	6-Hole Ditch Witch -- 16 MM	4.0"	3/4"
DH-06-P6-45-CB	6-Hole Ditch Witch -- 16 MM	4.5"	3/4"
DH-06-P6-50-CB	6-Hole Ditch Witch -- 16 MM	5.0"	3/4"
DH-06-P7-35-CB	7-Hole Vermeer -- 1/2" x 13	3.5"	3/4"
DH-06-P7-40-CB	7-Hole Vermeer -- 1/2" x 13	4.0"	3/4"
DH-06-P7-45-CB	7-Hole Vermeer -- 1/2" x 13	4.5"	3/4"
DH-06-P7-50-CB	7-Hole Vermeer -- 1/2" x 13	5.0"	3/4"
DH-08-P7-50-CB	7-Hole Vermeer -- 5/8" x 11	5.0"	1"



Button Taper Bit

Button Taper Bit (Pull Back Hole Std.) For Hard, Rocky Soil			
Item No.	Hole Pattern	Width	Thk.
DH-06-P5-35-TB	5-Hole Ditch Witch -- 12 MM	3.5"	3/4"
DH-06-P5-40-TB	5-Hole Ditch Witch -- 12 MM	4.0"	3/4"
DH-06-P5-45-TB	5-Hole Ditch Witch -- 12 MM	4.5"	3/4"
DH-06-P5-50-TB	5-Hole Ditch Witch -- 12 MM	5.0"	3/4"
DH-06-P6-40-TB	6-Hole Ditch Witch -- 16 MM	4.0"	3/4"
DH-06-P6-45-TB	6-Hole Ditch Witch -- 16 MM	4.5"	3/4"
DH-06-P6-50-TB	6-Hole Ditch Witch -- 16 MM	5.0"	3/4"
DH-06-P6-60-TB	6-Hole Ditch Witch -- 16 MM	6.0"	3/4"
DH-06-P7-35-TB	7-Hole Vermeer -- 1/2" x 13	3.5"	3/4"
DH-06-P7-40-TB	7-Hole Vermeer -- 1/2" x 13	4.0"	3/4"
DH-06-P7-45-TB	7-Hole Vermeer -- 1/2" x 13	4.5"	3/4"
DH-06-P7-50-TB	7-Hole Vermeer -- 1/2" x 13	5.0"	3/4"
DH-08-P8-60-TB	7-Hole Vermeer -- 5/8" x 11	6.0"	1"



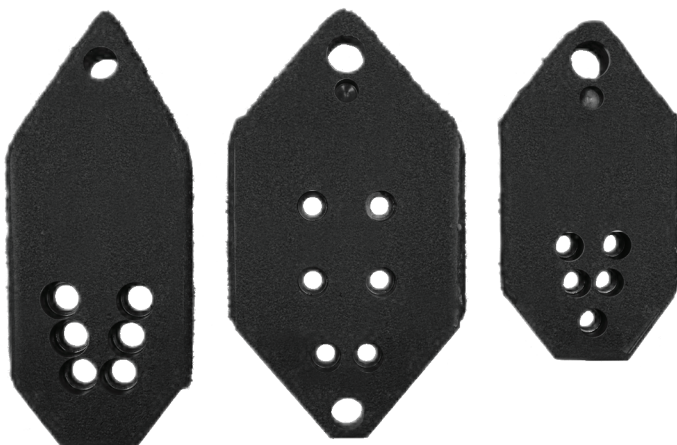
Paddle Bits

Hardfaced Steep Taper Bit

Hardfaced Steep Taper Bit (Pull Back Hole Std.) ** For Sand, Wet Clay w/Cobble			
Item No.	Hole Pattern		Thk.
DH-04-P3-25-STH	3-Hole Ditch Witch -- 12 MM	2.5"	1/2"
DH-04-P3-30-STH	3-Hole Ditch Witch -- 12 MM	3.0"	1/2"
DH-04-P3-35-STH	3-Hole Ditch Witch -- 12 MM	3.5"	1/2"
DH-06-P5-35-STH	5-Hole Ditch Witch -- 12 MM	3.5"	3/4"
DH-06-P5-40-STH	5-Hole Ditch Witch -- 12 MM	4.0"	3/4"
DH-06-P5-45-STH	5-Hole Ditch Witch -- 12 MM	4.5"	3/4"
DH-06-P5-50-STH	5-Hole Ditch Witch -- 12 MM	5.0"	3/4"
DH-06-P6-40-STH	6-Hole Ditch Witch -- 16 MM	4.0"	3/4"
DH-06-P6-45-STH	6-Hole Ditch Witch -- 16 MM	4.5"	3/4"
DH-06-P6-50-STH	6-Hole Ditch Witch -- 16 MM	5.0"	3/4"
DH-06-P6-60-STH	6-Hole Ditch Witch -- 16 MM	6.0"	3/4"
DH-06-P6A-50-STH	6-Hole Ditch Witch -- 20 MM	5.0"	1.0"
DH-06-P6A-60-STH	6-Hole Ditch Witch -- 20 MM	6.0"	1.0"
DH-06-P6A-80-STH	6-Hole Ditch Witch -- 20 MM	8.0"	1.0"
DH-06-P7-35-STH	7-Hole Vermeer -- 1/2" x 13	3.5"	3/4"
DH-06-P7-40-STH	7-Hole Vermeer -- 1/2" x 13	4.0"	3/4"
DH-06-P7-45-STH	7-Hole Vermeer -- 1/2" x 13	4.5"	3/4"
DH-06-P7-50-STH	7-Hole Vermeer -- 1/2" x 13	5.0"	3/4"
DH-06-P7-60-STH	7-Hole Vermeer -- 1/2" x 13	6.0"	3/4"
DH-08-P8-50-STH	7-Hole Vermeer -- 5/8" x 11	5.0"	1.0"
DH-08-P8-60-STH	7-Hole Vermeer -- 5/8" x 11	6.0"	1.0"

Economy Chisel Bit

Economy Chisel Bit (Pull Back Hole Std.) For Normal Soil Conditions			
Item No.	Hole Pattern	Width	Thk.
DH-04-P3-25-CE	3-Hole Ditch Witch -- 12 MM	2.5"	1/2"
DH-04-P3-30-CE	3-Hole Ditch Witch -- 12 MM	3.0"	1/2"
DH-04-P3-35-CE	3-Hole Ditch Witch -- 12 MM	3.5"	1/2"
DH-06-P5-35-CE	5-Hole Ditch Witch -- 12 MM	3.5"	3/4"
DH-06-P5-40-CE	5-Hole Ditch Witch -- 12 MM	4.0"	3/4"
DH-06-P5-45-CE	5-Hole Ditch Witch -- 12 MM	4.5"	3/4"
DH-06-P5-50-CE	5-Hole Ditch Witch -- 12 MM	5.0"	3/4"
DH-06-P6-40-CE	6-Hole Ditch Witch -- 16 MM	4.0"	3/4"
DH-06-P6-45-CE	6-Hole Ditch Witch -- 16 MM	4.5"	3/4"
DH-06-P6-50-CE	6-Hole Ditch Witch -- 16 MM	5.0"	3/4"
DH-06-P6-60-CE	6-Hole Ditch Witch -- 16 MM	6.0"	3/4"
DH-04-P2-25-CE	5-Hole Vermeer -- 3/8" x 16	2.5"	1/2"
DH-04-P2-30-CE	5-Hole Vermeer -- 3/8" x 16	3.0"	1/2"
DH-04-P2-35-CE	5-Hole Vermeer -- 3/8" x 16	3.5"	1/2"
DH-04-P2-40-CE	5-Hole Vermeer -- 3/8" x 16	4.0"	1/2"
DH-06-P7-35-CE	7-Hole Vermeer -- 1/2" x 13	3.5"	3/4"
DH-06-P7-40-CE	7-Hole Vermeer -- 1/2" x 13	4.0"	3/4"
DH-06-P7-45-CE	7-Hole Vermeer -- 1/2" x 13	4.5"	3/4"
DH-06-P7-50-CE	7-Hole Vermeer -- 1/2" x 13	5.0"	3/4"
DH-06-P7-60-CE	7-Hole Vermeer -- 1/2" x 13	6.0"	3/4"



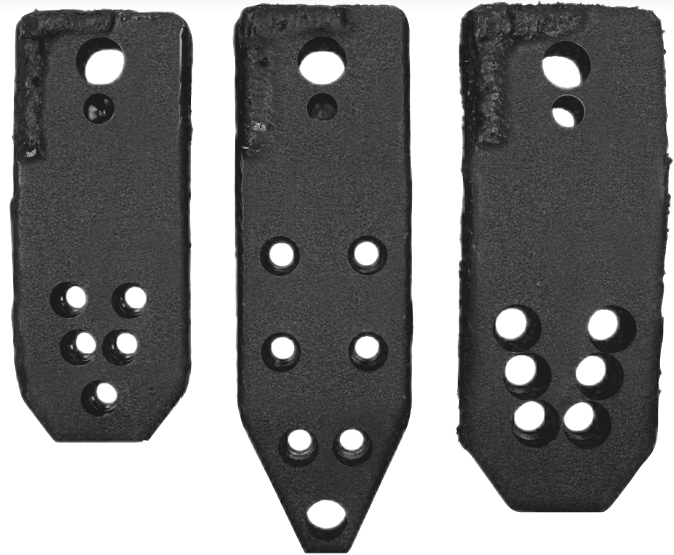
** Includes Tungsten Carbide Embedded Hardfacing

Paddle Bits

Carbide “Rubble” Hardfaced Chisel Bit

Carbide “Rubble” Hardfaced Chisel Bit (Pull Back Hole Std.) ** For Sand & Sandy Loam			
Item No.	Hole Pattern	Width	Thk.
DH-04-P3-25-CH	3-Hole Ditch Witch – 12 MM	2.5"	1/2"
DH-04-P3-30-CH	3-Hole Ditch Witch – 12 MM	3.0"	1/2"
DH-04-P3-35-CH	3-Hole Ditch Witch – 12 MM	3.5"	1/2"
DH-06-P5-35-CH	5-Hole Ditch Witch – 12 MM	3.5"	3/4"
DH-06-P5-40-CH	5-Hole Ditch Witch – 12 MM	4.0"	3/4"
DH-06-P5-45-CH	5-Hole Ditch Witch – 12 MM	4.5"	3/4"
DH-06-P5-50-CH	5-Hole Ditch Witch – 12 MM	5.0"	3/4"
DH-06-P6-40-CH	6-Hole Ditch Witch – 16 MM	4.0"	3/4"
DH-06-P6-45-CH	6-Hole Ditch Witch – 16 MM	4.5"	3/4"
DH-06-P6-50-CH	6-Hole Ditch Witch – 16 MM	5.0"	3/4"
DH-06-P6-60-CH	6-Hole Ditch Witch – 16 MM	6.0"	3/4"
DH-08-P6A-50-CH	6-Hole Ditch Witch – 20 MM	5.0"	1.0"
DH-08-P6A-60-CH	6-Hole Ditch Witch – 20 MM	6.0"	1.0"
DH-04-P2-25-CH	5-Hole Vermeer – 3/8" x 16	2.5"	1/2"
DH-04-P2-30-CH	5-Hole Vermeer – 3/8" x 16	3.0"	1/2"
DH-04-P2-35-CH	5-Hole Vermeer – 3/8" x 16	3.5"	1/2"
DH-04-P2-40-CH	5-Hole Vermeer – 3/8" x 16	4.0"	1/2"
DH-06-P7-35-CH	7-Hole Vermeer – 1/2" x 13	3.5"	3/4"
DH-06-P7-40-CH	7-Hole Vermeer – 1/2" x 13	4.0"	3/4"
DH-06-P7-45-CH	7-Hole Vermeer – 1/2" x 13	4.5"	3/4"
DH-06-P7-50-CH	7-Hole Vermeer – 1/2" x 13	5.0"	3/4"
DH-06-P7-60-CH	7-Hole Vermeer – 1/2" x 13	6.0"	3/4"
DH-08-P7-40-CH	7-Hole Vermeer – 1/2" x 13	4.0"	1.0"
DH-08-P7-45-CH	7-Hole Vermeer – 1/2" x 13	4.5"	1.0"
DH-08-P7-50-CH	7-Hole Vermeer – 1/2" x 13	5.0"	1.0"
DH-08-P7-60-CH	7-Hole Vermeer – 1/2" x 13	6.0"	1.0"
DH-08-P8-50-CH	7-Hole Vermeer – 5/8" x 11	5.0"	1.0"
DH-08-P8-60-CH	7-Hole Vermeer – 5/8" x 11	6.0"	1.0"

** Includes Tungsten Carbide Embedded Hardfacing



Paddle Bits

Hardfaced Chisel Bit

Hardfaced Chisel Bit (Pull Back Hole Std.) For Sand & Sandy Loam			
Item No.	Hole Pattern	Width	Thk.
DH-04-P3-25-CHX	3-Hole Ditch Witch – 12 MM	2.5"	1/2"
DH-04-P3-30-CHX	3-Hole Ditch Witch – 12 MM	3.0"	1/2"
DH-04-P3-35-CHX	3-Hole Ditch Witch – 12 MM	3.5"	1/2"
DH-06-P5-35-CHX	5-Hole Ditch Witch – 12 MM	3.5"	3/4"
DH-06-P5-40-CHX	5-Hole Ditch Witch – 12 MM	4.0"	3/4"
DH-06-P5-45-CHX	5-Hole Ditch Witch – 12 MM	4.5"	3/4"
DH-06-P5-50-CHX	5-Hole Ditch Witch – 12 MM	5.0"	3/4"
DH-06-P6-40-CHX	6-Hole Ditch Witch – 16 MM	4.0"	3/4"
DH-06-P6-45-CHX	6-Hole Ditch Witch – 16 MM	4.5"	3/4"
DH-06-P6-50-CHX	6-Hole Ditch Witch – 16 MM	5.0"	3/4"
DH-06-P6-60-CHX	6-Hole Ditch Witch – 16 MM	6.0"	3/4"
DH-08-P6A-50-CHX	6-Hole Ditch Witch – 20 MM	5.0"	1.0"
DH-08-P6A-60-CHX	6-Hole Ditch Witch – 20 MM	6.0"	1.0"
DH-04-P2-25-CHX	5-Hole Vermeer – 3/8" x 16	2.5"	1/2"
DH-04-P2-30-CHX	5-Hole Vermeer – 3/8" x 16	3.0"	1/2"
DH-04-P2-35-CHX	5-Hole Vermeer – 3/8" x 16	3.5"	1/2"
DH-04-P2-40-CHX	5-Hole Vermeer – 3/8" x 16	4.0"	1/2"
DH-06-P7-35-CHX	7-Hole Vermeer – 1/2" x 13	3.5"	3/4"
DH-06-P7-40-CHX	7-Hole Vermeer – 1/2" x 13	4.0"	3/4"
DH-06-P7-45-CHX	7-Hole Vermeer – 1/2" x 13	4.5"	3/4"
DH-06-P7-50-CHX	7-Hole Vermeer – 1/2" x 13	5.0"	3/4"
DH-06-P7-60-CHX	7-Hole Vermeer – 1/2" x 13	6.0"	3/4"
DH-08-P7-40-CHX	7-Hole Vermeer – 1/2" x 13	4.0"	1.0"
DH-08-P7-45-CHX	7-Hole Vermeer – 1/2" x 13	4.5"	1.0"
DH-08-P7-50-CHX	7-Hole Vermeer – 1/2" x 13	5.0"	1.0"
DH-08-P7-60-CHX	7-Hole Vermeer – 1/2" x 13	6.0"	1.0"
DH-08-P8-50-CHX	7-Hole Vermeer – 5/8" x 11	5.0"	1.0"
DH-08-P8-60-CHX	7-Hole Vermeer – 5/8" x 11	6.0"	1.0"

Hardfaced Taper Chisel Bit

Hardfaced Taper Chisel Bit (Pull Back Hole Std.) For Sand & Sandy Loam			
Item No.	Hole Pattern	Width	Thk.
DH-06-P5-40-TCH	5-Hole Ditch Witch – 12 MM	4.0"	3/4"
DH-06-P5-50-TCH	5-Hole Ditch Witch – 12 MM	5.0"	3/4"
DH-06-P6-50-TCH	6-Hole Ditch Witch – 16 MM	5.0"	3/4"
DH-06-P6-60-TCH	6-Hole Ditch Witch – 16 MM	6.0"	3/4"
DH-06-P7-40-TCH	7-Hole Vermeer – 1/2" x 13	4.0"	3/4"
DH-06-P7-50-TCH	7-Hole Vermeer – 1/2" x 13	5.0"	3/4"
DH-06-P7-60-TCH	7-Hole Vermeer – 1/2" x 13	6.0"	3/4"



Paddle Bits

Steep Taper Clay Bit

Steep Taper Clay Bit (Pull Back Hole Std.) ** For Hardpan, Dry Clay & Compacted Soil			
Item No.	Hole Pattern	Width	Thk.
DH-06-P5-35-ARS	5-Hole Ditch Witch – 12 MM	3.5"	3/4"
DH-06-P5-40-ARS	5-Hole Ditch Witch – 12 MM	4.0"	3/4"
DH-06-P5-45-ARS	5-Hole Ditch Witch – 12 MM	4.5"	3/4"
DH-06-P7-35-ARS	7-Hole Vermeer – 1/2" x 13	3.5"	3/4"
DH-06-P7-40-ARS	7-Hole Vermeer – 1/2" x 13	4.0"	3/4"
DH-06-P7-45-ARS	7-Hole Vermeer – 1/2" x 13	4.5"	3/4"
DH-06-P7-50-ARS	7-Hole Vermeer – 1/2" x 13	5.0"	3/4"
DH-06-P7-60-ARS	7-Hole Vermeer – 1/2" x 13	6.0"	3/4"

** Includes Tungsten Carbide Embedded Hardfacing



Hellcat “Premium” Steep Taper Bit



Hellcat “Premium” Steep Taper Bit (Pull Back Hole Std.) ** For Hardpan, Cemented Cobble and Softer Shale			
Item No.	Hole Pattern	Width	Thk.
DH-06-P5-40-HCS	5-Hole Ditch Witch – 12 MM	4.0"	3/4"
DH-06-P5-50-HCS	5-Hole Ditch Witch – 12 MM	5.0"	3/4"
DH-06-P6-40-HCS	6-Hole Ditch Witch – 16 MM	4.0"	3/4"
DH-06-P6-50-HCS	6-Hole Ditch Witch – 16 MM	5.0"	3/4"
DH-06-P6-60-HCS	6-Hole Ditch Witch – 16 MM	6.0"	3/4"
DH-08-P6A-60-HCS	6-Hole Ditch Witch – 20 MM	6.0"	1.0"
DH-06-P7-40-HCS	7-Hole Vermeer – 1/2" x 13	4.0"	3/4"
DH-06-P7-45-HCS	7-Hole Vermeer – 1/2" x 13	4.0"	3/4"
DH-06-P7-50-HCS	7-Hole Vermeer – 1/2" x 13	5.0"	3/4"
DH-06-P7-60-HCS	7-Hole Vermeer – 1/2" x 13	6.0"	3/4"

** Includes Tungsten Carbide Embedded Hardfacing

“WILDCAT” Bit



“WILDCAT” (Pull Back Hole Std.) ** For Sedimentary Rock, Hardpan, Dry Clay & Compacted Soil			
Item No.	Hole Pattern	Width	Thk.
DH-06-P5-35-WC	5-Hole Ditch Witch – 12 MM	3.5"	3/4"
DH-06-P5-40-WC	5-Hole Ditch Witch – 12 MM	4.0"	3/4"
DH-06-P5-45-WC	5-Hole Ditch Witch – 12 MM	4.5"	3/4"
DH-06-P5-50-WC	5-Hole Ditch Witch – 12 MM	5.0"	3/4"
DH-06-P6-40-WC	6-Hole Ditch Witch – 16 MM	4.0"	3/4"
DH-06-P6-45-WC	6-Hole Ditch Witch – 16 MM	4.5"	3/4"
DH-06-P6-50-WC	6-Hole Ditch Witch – 16 MM	5.0"	3/4"
DH-04-P2-40-WC	5-Hole Vermeer – 3/8" x 16	4.0"	1/2"
DH-06-P7-35-WC	7-Hole Vermeer – 1/2" x 13	3.5"	3/4"
DH-06-P7-40-WC	7-Hole Vermeer – 1/2" x 13	4.0"	3/4"
DH-06-P7-45-WC	7-Hole Vermeer – 1/2" x 13	4.5"	3/4"
DH-06-P7-50-WC	7-Hole Vermeer – 1/2" x 13	5.0"	3/4"
DH-06-P7-60-WC	7-Hole Vermeer – 1/2" x 13	6.0"	3/4"

** Includes Tungsten Carbide Embedded Hardfacing

Carbide Inserts, Bolts And Hex Keys

Paddle Bit Carbide Cutting Segments

Carbide Cutting Segments	
Item No.	Description
340001010	3 - Carbide Insert Segment
340001015	4 - Carbide Insert Segment
340001020	5 - Carbide Insert Segment
340001025	6 - Carbide Insert Segment
340001030	7 - Carbide Insert Segment



Conical Carbide Cutting Segments	
Item No.	Description
340001010	3 - Carbide Insert Segment
340001015	4 - Carbide Insert Segment
340001020	5 - Carbide Insert Segment
340001025	6 - Carbide Insert Segment
340001030	7 - Carbide Insert Segment



Pilot Bit (Paddle Bit) Bolts

Pilot Bit (Paddle Bit) Bolts	
Item No.	Description
260026005	1/2" x 1" x 13 thd. - Vermeer (6 pack)
260026006	1/2" x 1" x 13 thd. - Vermeer (Nylon Locking Patch) (6 pack)
260026010	5/8" x 1" x 11 thd. - Vermeer (6 pack)
260026015	12MM x 20 X 1.75 - Ditch Witch (5 pack)
260026016	12MM x 20 X 1.75 - Ditch Witch (Nylon Locking Patch) (5 pack)
260026020	16MM x 35MM x 2.00MM - Ditch Witch (6 pack)
260026022	20MM x 40MM x 2.50MM - Ditch Witch (6 pack)



Hex L-Keys For Pilot Bits (Paddle Bits)

Hex L-Keys For Pilot Bits (Paddle Bits)	
Item No.	Description
260026001	3/8" Long Arm Hex Key fits 1/2" Bolts
260026106	1/2" Long Arm Hex Key fits 5/8" Bolts
260026011	10MM Long Arm Hex Key fits 12MM Bolts
260026116	14MM Long Arm Hex Key fits 16MM Bolts



HDD Drill Rods

Drill Pipes/HDD Drill Rods



Call for Availability and Pricing

Drill Pipes/HDD Drill Rods						
Sku Number	Pipe/Machine	Pipe Od	Wall Thickness	Drill Pipe Length	Bend Radius	Weight
DITCH WITCH/JET-TRAC COMPATIBLE						
300020100	JT 820 /920 /921	1.660"	0.240"	78.75"	98.1'	30
300020150	JT 920 L	1.660"	0.240"	118.00"	98.1'	40
300020200	JT 922	1.660"	0.240"	78.75"	98.1'	30
300020250	JT 922 Coarse Thread	1.660"	0.240"	78.75"	98.1'	40
300020300	JT 1220	1.900"	0.240"	118.00"	112.3'	60
300020350	JT 1720	2.063"	0.270"	118.00"	121.9'	79
300020400	JT 2020	2.063"	0.270"	118.00"	121.9'	65
300020450	JT 2720	2.375"	0.280"	118.00"	140.4'	75
300020500	JT 2720MI /JT3020	2.375"	0.280"	118.00"	140.4'	82
300020550	JT 4020	2.875"	0.362"	177.20"	170.0'	194
300020600	JT 4020MI	2.875"	0.362"	177.20"	170.0'	185
300020650	JT 7020/JT100/JT8020	3.50"	0.368"	177.20"	207.0'	235
VERMEER COMPATIBLE						
310030100	D7 X 11	1.660"	0.240"	72.00"	98.1'	26
310030150	D10 X 15	1.660"	0.240"	120.00"	98.1'	39
310030200	D16 X 20/D18x22	1.90"	0.240"	120.00"	112.3'	49
310030250	D24 x 26/D20x24	2.063"	0.240"	120.00"	121.9'	62
310030300	D24 X 40	2.375"	0.280"	120.00"	140.4'	80
310030350	D40 X 40	2.375"	0.280"	180.00"	140.4'	116
	D36x50 FS#700	2.65"	0.400"	120.00"	145.5'	
	D36x50 FS#700	2.625"	0.400"	180.00"	145.5'	
310030450	D50 X 100	2.875"	0.362"	180.00"	170.0'	240
310030400	D80 X 100	3.50'	0.368"	180.00"	206.9'	190
310030500	D100 X 120 W/0531	3.50"	0.368"	240.00"	206.9'	305
AMERICAN AUGER						
320040100	DD 4 -DS			120.00"		100
320040150	DD-6 (2 7/8" NC31)			180.00"		266
320040200	DD-3238			120.00"		80
CASE/TORO						
320040250	CASE 6010	2.063"	0.270"	120.00"	121.9'	66
320040300	CASE 6030	2.375"	0.280"	120.00"	140.4'	80

Backreamers

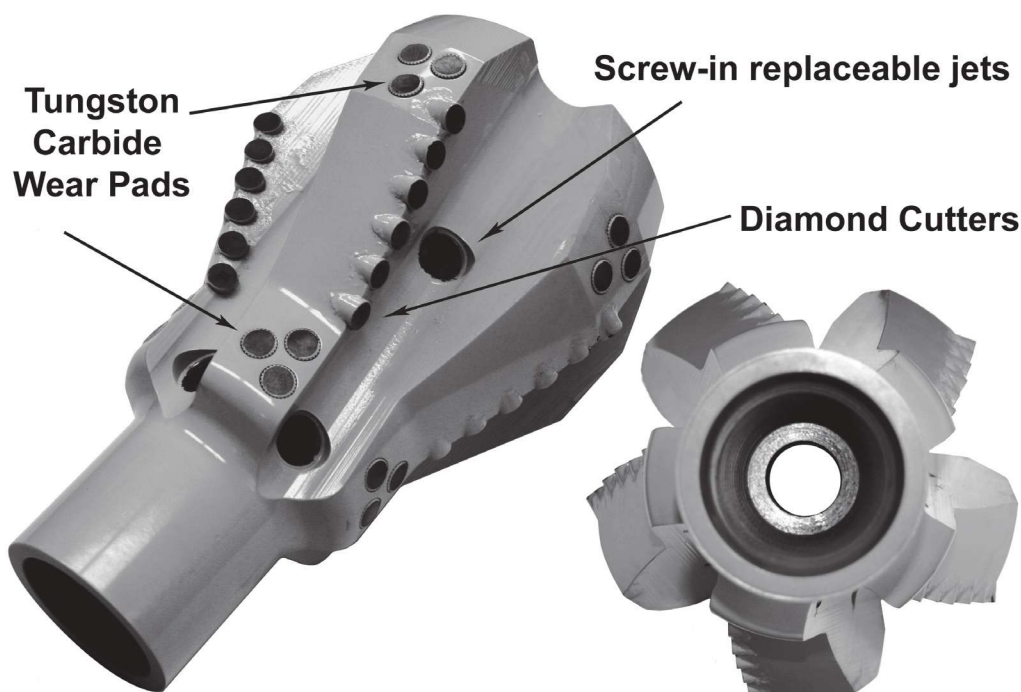
PDC Solid Body Spiral Fluted Reamers

Triple D is proud to announce the expansion of our back-reamer product line with the introduction of Triple D PDC back-reamers.

Available in standard sizes from 6" to 36", with or without pilot stabilizers and with multiple wing configurations.

The 6" to 12" PDC reamers are machined from solid heat treated bar stock for strength and durability. The larger reamers are built with a one piece center shaft, Armor Plate wings and bodies, complete with replaceable jets. All sizes are rebuildable to reduce long term costs.

All sizes are built with standard box by box configurations to allow ease of connection to any drill and utility.



PDC Solid Body Spiral Fluted Reamers "Hole Openers"			
Item No.	Nominal Cut Diameter	No. of Wings	Description
305006400	6" x 3"	4	2-3/8" REG (Box x Box) w/Screw-in Jets. No pilot.
305006000	6" x 3"	5	2-3/8" REG (Box x Box) w/Screw-in Jets. No pilot.
305007400	7" x 4"	4	2-3/8" REG (Box x Box) w/Screw-in Jets & 4" Pilot
305008400	8" x 4"	4	2-3/8" REG (Box x Box) w/Screw-in Jets & 4" Pilot
305008000	8" x 4"	5	2-3/8" REG (Box x Box) w/Screw-in Jets & 4" Pilot
305001000	10" x 4"	5	2-3/8" REG (Box x Box) w/Screw-in Jets & 4" Pilot
305001200	12" x 4"	5	2-7/8" REG (Box x Box) w/Screw-in Jets & 4" Pilot
305001400	14" x 5"	6	2-7/8" REG (Box x Box) w/Screw-in Jets & 5" Pilot

Backreamers

PDC Large Body Fluted Reamers

Available in standard sizes from 14" to 30", with or without pilot stabilizers and with multiple wing configurations.

These reamers are built with a one piece center shaft, Armor Plate wings and bodies, complete with replaceable jets. All sizes are rebuildable to reduce long term costs.

All sizes are built with standard box by box configurations to allow ease of connection for any drill.



PDC Large Body Fluted Reamers* "Hole Openers"			
Item No.	Nominal Cut Diameter	No. of Wings	Description
305001405	14" x 4"	5	2-7/8" IF (Box x Box) w/Screw-in Jets. No pilot.
305001406	14" x 4"	6	2-7/8" IF (Box x Box) w/Screw-in Jets. No pilot.
305001407	14" x 4"	7	2-7/8" IF (Box x Box) w/Screw-in Jets. No pilot.
305001605	16" x 4"	5	2-7/8" IF (Box x Box) w/Screw-in Jets. No pilot.
305001606	16" x 4"	6	2-7/8" IF (Box x Box) w/Screw-in Jets. No pilot.
305001607	16" x 4"	7	2-7/8" IF (Box x Box) w/Screw-in Jets. No pilot.
305001805	18" x 4"	5	2-7/8" IF (Box x Box) w/Screw-in Jets. No pilot.
305001806	18" x 4"	6	2-7/8" IF (Box x Box) w/Screw-in Jets. No pilot.
305001807	18" x 4"	7	2-7/8" IF (Box x Box) w/Screw-in Jets. No pilot.
305002005	20" x 5"	5	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305002006	20" x 5"	6	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305002007	20" x 5"	7	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305002008	20" x 5"	8	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305002205	22" x 5"	5	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305002206	22" x 5"	6	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305002207	22" x 5"	7	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305002208	22" x 5"	8	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305002406	24" x 5"	6	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305002407	24" x 5"	7	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305002408	24" x 5"	8	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305002606	26" x 5"	6	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305002607	26" x 5"	7	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305002608	26" x 5"	8	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305002806	28" x 5"	6	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305002807	28" x 5"	7	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305002808	28" x 5"	8	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305003006	30" x 5"	6	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305003007	30" x 5"	7	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.
305003008	30" x 5"	8	3-1/2" IF (Box x Box) w/Screw-in Jets. No pilot.

* Other configurations, shaft diameters and pilots are available upon request.

NOTE: All above Hole Openers will cut to the shaft and can be fitted with a built-in swivel or with a built-in swivel or pull back lug (refer to Reamer Coupling Selection Chart).

Backreamers

Solid Body Spiral Fluted Backreamers

Machined from a solid billit of steel for strength and durability. These reamers are available with an API Reg box by box design for several options on the back. These options include a built in 20K, 30K, 45K HDD swivel or draw bar. Now available with a pin back to allow for trailing rods or use as a centering wheel with the flow through capabilities to attach a second reamer in tandem. The API box front will accept any API pin or drill rig crossover. Made with shark teeth or conical carbide teeth.



Shown with pull tab

Solid Body Spiral Fluted Backreamers (Replaceable Fluid Jets in 6" Through 12" Models)			
Item No.	Nominal Cut Diameter	Nominal Pack Diameter	Description
250002045	4.5"	4.0"	2" IF (Box x Box) w/ Conical Teeth
250002006	6"	4.5"	2" IF (Box x Box) w/ Shark Teeth
250002106	6"	4.5"	2" IF (Box x Box) w/ Rotary Teeth
250002008	8"	6.0"	2-3/8" REG (Box x Box) w/ Shark Teeth
250002108	8"	6.0"	2-3/8" REG (Box x Box) w/ Rotary Teeth
250002010	10"	8.0"	2-3/8" REG (Box x Box) w/ Shark Teeth
250002110	10"	8.0"	2-3/8" REG (Box x Box) w/ Rotary Teeth
250002012	12"	10.0"	2-3/8" REG (Box x Box) w/ Shark Teeth
250002112	12"	10.0"	2-3/8" REG (Box x Box) w/ Rotary Teeth

Note: Choose **Front and Rear Reamer Couplings** (adapters/crossovers, drawbars, direct connect swivels) from **Reamer Coupling Charts**.

Bolt-On Replacement Swivels For Above Reamers	
Item No.	Description
200070005	10 K Bolt-On Swivel w/Lug - Totally self-contained and greasable
200070010	15K Bolt-On Swivel w/Lug - Totally self-contained and greasable
200070015	20K Bolt-On Swivel w/Lug - Totally self-contained and greasable
200070020	30K Bolt-On Swivel w/Lug - Totally self-contained and greasable
200070025	40K Bolt-On Swivel w/Lug - Totally self-contained and greasable

Solid Body Spiral Fluted Backreamers With Bolt-On Swivel (Replaceable Fluid Jets in 6" thru 12" Models)			
Item No.	Nom. Cut Dia.	Nom. Pack Dia.	Description
252003006	6"	4.5"	2" IF (Box x Swivel) w/ Shark Teeth and 10K Swivel
252003106	6"	4.5"	2" IF (Box x Swivel) w/ Rotary Teeth and 10K Swivel
252003206	6"	4.5"	2" IF (Box x Swivel) w/ Shark Teeth and 15K Swivel
252003306	6"	4.5"	2" IF (Box x Swivel) w/ Rotary Teeth and 15K Swivel
252003008	8"	6.0"	2-3/8" REG (Box x Swivel) w/ Shark Teeth and 10K Swivel
252003108	8"	6.0"	2-3/8" REG (Box x Swivel) w/ Rotary Teeth and 10K Swivel
252003208	8"	6.0"	2-3/8" REG (Box x Swivel) w/ Shark Teeth and 15K Swivel
252003308	8"	6.0"	2-3/8" REG (Box x Swivel) w/ Rotary Teeth and 15K Swivel
252003010	10"	8.0"	2-3/8" REG (Box x Swivel) w/ Shark Teeth and 20K Swivel
252003110	10"	8.0"	2-3/8" REG (Box x Swivel) w/ Rotary Teeth and 20K Swivel
252003210	10"	8.0"	2-3/8" REG (Box x Swivel) w/ Shark Teeth and 30K Swivel
252003310	10"	8.0"	2-3/8" REG (Box x Swivel) w/ Rotary Teeth and 30K Swivel
252003012	12"	10.0"	2-3/8" REG (Box x Swivel) w/ Shark Teeth and 20K Swivel
252003112	12"	10.0"	2-3/8" REG (Box x Swivel) w/ Rotary Teeth and 20K Swivel
252003212	12"	10.0"	2-3/8" REG (Box x Swivel) w/ Shark Teeth and 30K Swivel
252003312	12"	10.0"	2-3/8" REG (Box x Swivel) w/ Rotary Teeth and 30K Swivel

Backreamers

Clay Backreamer*

Fabricated for strength and durability, these Clay Reamers are available with a built-in 20K, 30K or 45K swivel or drawbar, pin or rear connection. The API REG box fronts will accept any API pin or drill rig crossover needed to attach to your drill. For aggressive cutting, mixing and pumping in sticky clay. Also, an excellent choice for shale and sandstone.



Size Range: 6” - 60” Dia.		Shaft Diameters: 2.75” - 6.75”	
Clay Reamer with Conical Teeth – API (Box x Box)			
Item No.	Nominal Cut Diameter	Shaft Diameter	Description
270001006	6"	2.75"	2" IF (Box x Box) w/ Conical Teeth
270001008	8"	2.75"	2" IF (Box x Box) w/ Conical Teeth
270001010	10"	2.75"	2" IF (Box x Box) w/ Conical Teeth
270002010	10"	3.25"	2-3/8" REG (Box x Box) w/ Conical Teeth
270001012	12"	2.75"	2" IF (Box x Box) w/ Conical Teeth
270002012	12"	3.25"	2-3/8" REG (Box x Box) w/ Conical Teeth
270001014	14"	2.75"	2" IF (Box x Box) w/ Conical Teeth
270002014	14"	3.25"	2-3/8" REG (Box x Box) w/ Conical Teeth
270001016	16"	2.75"	2" IF (Box x Box) w/ Conical Teeth
270002016	16"	3.25"	2-3/8" REG (Box x Box) w/ Conical Teeth
270001018	18"	2.75"	2" IF (Box x Box) w/ Conical Teeth
270002018	18"	3.25"	2-3/8" REG (Box x Box) w/ Conical Teeth
270002020	20"	3.25"	2-3/8" REG (Box x Box) w/ Conical Teeth
270003020	20"	4.25"	2-7/8" IF (Box x Box) w/ Conical Teeth
270002022	22"	3.25"	2-3/8" REG (Box x Box) w/ Conical Teeth
270003022	22"	4.25"	2-7/8" IF (Box x Box) w/ Conical Teeth
270002024	24"	3.25"	2-3/8" REG (Box x Box) w/ Conical Teeth
270003024	24"	4.25"	2-7/8" IF (Box x Box) w/ Conical Teeth
270002026	26"	3.25"	2-3/8" REG (Box x Box) w/ Conical Teeth
270003026	26"	4.25"	2-7/8" IF (Box x Box) w/ Conical Teeth
270002028	28"	3.25"	2-3/8" REG (Box x Box) w/ Conical Teeth
270003028	28"	4.25"	2-7/8" IF (Box x Box) w/ Conical Teeth
270002030	30"	3.25"	2-3/8" REG (Box x Box) w/ Conical Teeth
270003030	30"	4.25"	2-7/8" IF (Box x Box) w/ Conical Teeth
270003032	32"	4.25"	2-7/8" IF (Box x Box) w/ Conical Teeth
270004032	32"	4.75"	3-1/2" IF (Box x Box) w/ Conical Teeth
270003034	34"	4.25"	2-7/8" IF (Box x Box) w/ Conical Teeth
270004034	34"	4.75"	3-1/2" IF (Box x Box) w/ Conical Teeth
270003036	36"	4.25"	2-7/8" IF (Box x Box) w/ Conical Teeth
270004036	36"	4.75"	3-1/2" IF (Box x Box) w/ Conical Teeth

* Additional sizes are available upon request.

Note: Choose **Front and Rear Reamer Couplings** (adapters/crossovers, drawbars, direct connect swivels) from **Reamer Coupling Charts**.

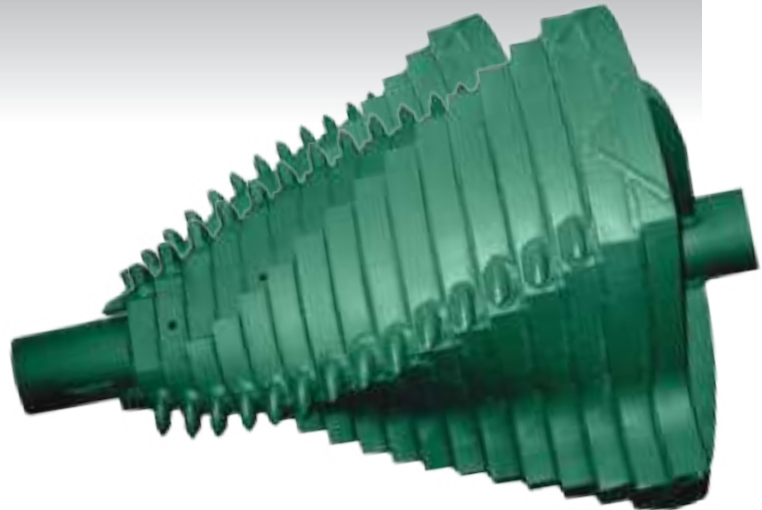
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Backreamers

Stacked Plate Spiral Fluted Backreamers*

These stacked plate backreamers feature a slow taper design and deep spiral fluting for smooth cutting and maximum mixing action. They are available with a built-in swivel, drawbar, pin or box rear connection. The API box fronts will accept any API pin or drill rig crossover.

For cobble, sandstones, shales, soft limestone, caliche and gravel.



Size Range: 10” - 54” Dia.			Shaft Diameters: 2.75” - 6.750”	
Stacked Plate Reamer with Shark Teeth-API (Box x Box)				
Item No.	Nominal Cut Diameter	Nominal Pacx Diameter	Shaft Diameter	Description
290002010	10"	8"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
290002012	12"	10"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
290003012	12"	10"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
290002014	14"	12"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
290003014	14"	12"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
290002016	16"	14"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
290003016	16"	14"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
290002018	18"	16"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
290003018	18"	16"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
290002020	20"	18"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
290003020	20"	18"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
290002022	22"	20"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
290003022	22"	20"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
290002024	24"	22"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
290003024	24"	22"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
290003026	26"	24"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
290003028	28"	26"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
290003030	30"	28"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
290004030	30"	28"	4.75"	3-1/2" IF (Box x Box) w/ Shark Teeth
290003032	32"	30"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
290004032	32"	30"	4.75"	3-1/2" IF (Box x Box) w/ Shark Teeth
290003034	34"	32"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
290004034	34"	32"	4.75"	3-1/2" IF (Box x Box) w/ Shark Teeth
290003036	36"	34"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
290004036	36"	34"	4.75"	3-1/2" IF (Box x Box) w/ Shark Teeth

* Additional sizes and configurations (extra cutting teeth, bi-directional design, etc.) are available upon request.

Note: Choose **Front and Rear Reamer Couplings** (adapters/crossovers, drawbars, direct connect swivels) from **Reamer Coupling Charts**.

Backreamers

Ground Hawk Reamers

An economical, aggressive cutting, compact reamer for use in a broad range of soil conditions - a good choice for **hardpan, shale and sandstone**.

The Ground Hawk features a dense array of conical carbide teeth (only 3/16" between carbides) brazed into our own machined alloy steel mounting blocks for durability and economical factory rebuilding when necessary. For aggressive cutting action and reduced torque requirements, the carbide teeth are set at a 20 degree positive lead angle on the 40 degree tapered blades to provide the ideal cutting geometry. For greater cutting action and durability, additional tapered cutting blades can be added as an option. Curved backup blades for easier pushbacks and quality hardfacing are standard features.

Reamers with a cutting diameter of 10" and above are equipped with a stabilizer/packing ring for strength and smoother cutting action. Standard sizes are from 6" to 24" cutting diameter. Larger sizes available upon request.



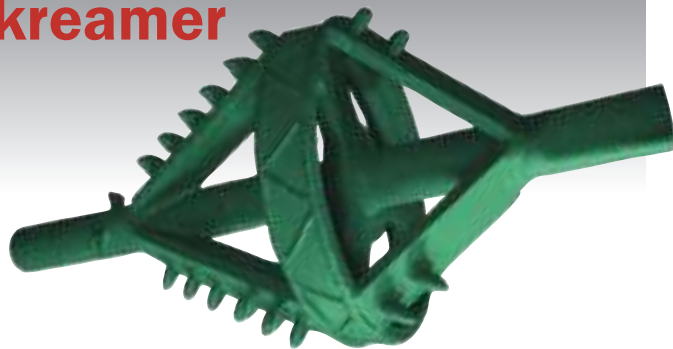
Ground Hawk Reamers				
Size Range: 6” - 30” Dia.			Shaft Diameters: 2.75” - 4.75”	
Ground Hawk Reamer – API (Box X Box)				
Item No.	Nominal Cut Diameter	Nominal Pacx Diameter	Shaft Diameter	Description
350001006	6"	N/A	2.75"	2" IF (Box X Box) w/ Conical Teeth
350001008	8"	N/A	2.75"	2" IF (Box X Box) w/ Conical Teeth
350002008	8"	N/A	3.25"	2-3/8" Reg (Box X Box) w/ Conical Teeth
350001010	10.5"	10"	2.75"	2" IF (Box X Box) w/ Conical Teeth
350002010	10.5"	10"	3.25"	2-3/8" Reg (Box X Box) w/ Conical Teeth
350001012	12.5"	12"	2.75"	2" IF (Box X Box) w/ Conical Teeth
350002012	12.5"	12"	3.25"	2-3/8" Reg (Box X Box) w/ Conical Teeth
350001014	14.5"	14"	2.75"	2" IF (Box X Box) w/ Conical Teeth
350002014	14.5"	14"	3.25"	2-3/8" Reg (Box X Box) w/ Conical Teeth
350001016	16.5"	16"	2.75"	2" IF (Box X Box) w/ Conical Teeth
350002016	16.5"	16"	3.25"	2-3/8" Reg (Box X Box) w/ Conical Teeth
350001018	18.5"	18"	2.75"	2" IF (Box X Box) w/ Conical Teeth
350002018	18.5"	18"	3.25"	2-3/8" Reg (Box X Box) w/ Conical Teeth
350002020	20.5"	20"	3.25"	2-3/8" Reg (Box X Box) w/ Conical Teeth
350003020	20.5"	20"	4.25"	2-7/8" IF (Box X Box) w/ Conical Teeth
350002024	24.5"	24"	3.25"	2-3/8" Reg (Box X Box) w/ Conical Teeth
350003024	24.5"	24"	4.25"	2-7/8" IF (Box X Box) w/ Conical Teeth
350003036	36.5"	36"	4.25"	2-7/8" IF (Box X Box) w/ Conical Teeth
350004036	36.5"	36"	4.75"	3-1/2" IF (Box X Box) w/ Conical Teeth

Note: Choose **Front and Rear Reamer Couplings** (adapters/crossovers, drawbars, direct connect swivels) from **Reamer Coupling Charts**.

Backreamers

Winged Backreamer

Cutting and mixing arms are fabricated from heat treated alloy steel for strength and durability, these Wing Reamers are available with a built-in swivel, drawbar, pin or box rear connection. The API REG box fronts will accept any API pin or drill rig crossover needed to attach to your drill.



For sand with cobbles, sandstone and hardpan.

Size Range: 8” - 72” Dia.			Shaft Diameters: 2.750” - 6.750”	
3-Winged Reamer (Fly-Cutter) -- API (Box x Box)				
Item No.	Nominal Cut Dia.	Nominal Pack Dia.	Shaft Dia.	Description
260001008	8"	N/A	2.75"	2" IF (Box x Box) w/ Shark Teeth
260001010	10"	N/A	2.75"	2" IF (Box x Box) w/ Shark Teeth
260001012	12"	N/A	2.75"	2" IF (Box x Box) w/ Shark Teeth
260002012	12"	N/A	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
260001014	14"	N/A	2.75"	2" IF (Box x Box) w/ Shark Teeth
260002014	14"	N/A	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
260001016	16"	N/A	2.75"	2" IF (Box x Box) w/ Shark Teeth
260002016	16"	N/A	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
260001018	18"	16.5"	2.75"	2" IF (Box x Box) w/ Shark Teeth
260002018	18"	16.5"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
260002020	20"	18.5"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
260003020	20"	18.5"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
260002022	22"	20.5"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
260003022	22"	20.5"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
260002024	24"	22.5"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
260003024	24"	22.5"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
260002026	26"	24.5"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
260003026	26"	24.5"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
260004026	26"	24.5"	4.75"	3-1/2" IF (Box x Box) w/ Shark Teeth
260002028	28"	26.5"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
260003028	28"	26.5"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
260004028	28"	26.5"	4.75"	3-1/2" IF (Box x Box) w/ Shark Teeth
260003030	30"	28.5"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
260004030	30"	28.5"	4.75"	3-1/2" IF (Box x Box) w/ Shark Teeth
260003032	32"	30.5"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
260004032	32"	30.5"	4.75"	3-1/2" IF (Box x Box) w/ Shark Teeth
260003034	34"	32.5"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
260004034	34"	32.5"	4.75"	3-1/2" IF (Box x Box) w/ Shark Teeth
260003036	36"	34.5"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
260004036	36"	34.5"	4.75"	3-1/2" IF (Box x Box) w/ Shark Teeth

Notes:

1. A "Spider" center support and stabilizer ring are standard on 18" and larger reamers
2. Additional sizes and configurations (extra wings, cutters, wide stabilizer rings, etc.) are available upon request.
3. Choose **Front and Rear Couplings** (adapters/Crossovers, drawbars, direct connect swivels) from **Reamer Coupling Charts**.

Backreamers

Barrel Reamers with Conical Carbide Teeth

API REG. (Box x Box)

Our Bi-Directional Barrel Reamer design features front and rear cutting blades to pack and stabilize centralize the utility.

Features include:

- 1) Front and rear carbide cutting bars
- 2) Replaceable fluid jets - front and rear
- 3) Hardfacing on critical wear areas (including the front of cutters) for long life
- 4) Clean-out plug

Used in soft formation types to stabilize larger reamers or hole openers when installing final product/utility.



Size Range: 12.8” - 48.0” Dia.			Shaft Diameters: 2.75” - 6.75”	
Barrel Reamers with Conical Teeth – API REG. (Box x Box)				
Item No.	Nominal Cut Diameter	Nominal Pack Diameter	Shaft Diameter	Description
280001012	13.5"	12.8"	2.75"	2" IF (Box x Box) w/ Conical Teeth
280002012	13.5"	12.8"	3.25"	2-3/8" REG (Box x Box) w/ Conical Teeth
280001014	14.5"	14.0"	2.75"	2" IF (Box x Box) w/ Conical Teeth
280002014	14.5"	14.0"	3.25"	2-3/8" REG (Box x Box) w/ Conical Teeth
280001016	16.5"	16.0"	2.75"	2" IF (Box x Box) w/ Conical Teeth
280002016	16.5"	16.0"	3.25"	2-3/8" REG (Box x Box) w/ Conical Teeth
280003016	16.5"	16.0"	4.25"	2-7/8" IF (Box x Box) w/ Conical Teeth
280002018	18.5"	18.0"	3.25"	2-3/8" REG (Box x Box) w/ Conical Teeth
280003018	18.5"	18.0"	4.25"	2-7/8" IF (Box x Box) w/ Conical Teeth
280002020	20.5"	20.0"	3.25"	2-3/8" REG (Box x Box) w/ Conical Teeth
280003020	20.5"	20.0"	4.25"	2-7/8" IF (Box x Box) w/ Conical Teeth
280002024	24.5"	24.0"	3.25"	2-3/8" REG (Box x Box) w/ Conical Teeth
280003024	24.5"	24.0"	4.25"	2-7/8" IF (Box x Box) w/ Conical Teeth
280002030	30.5"	30.0"	3.25"	2-3/8" REG (Box x Box) w/ Conical Teeth
280003030	30.5"	30.0"	4.25"	2-7/8" IF (Box x Box) w/ Conical Teeth
280004030	30.5"	30.0"	4.75"	3-1/2" IF (Box x Box) w/ Conical Teeth
280003036	36.5"	36.0"	4.25"	2-7/8" IF (Box x Box) w/ Conical Teeth
280004036	36.5"	36.0"	4.75"	3-1/2" IF (Box x Box) w/ Conical Teeth
280003042	42.5"	42.0"	4.25"	2-7/8" IF (Box x Box) w/ Conical Teeth
280004042	42.5"	42.0"	4.75"	3-1/2" IF (Box x Box) w/ Conical Teeth
280003048	48.5"	48.0"	4.25"	2-7/8" IF (Box x Box) w/ Conical Teeth
280004048	48.5"	48.0"	4.75"	3-1/2" IF (Box x Box) w/ Conical Teeth

Note: Choose **Front and Rear Reamer Couplings** (adapters/crossovers, drawbars, direct connect swivels) from **Reamer Coupling Charts**.

Backreamers

Tapered Barrel Backreamer

Tapered barrel reamers feature shark teeth carbide cutters in a spiral pattern, and a “packer” barrel rear for stability. Reamers have API REG box fronts and are available with built-in swivel, drawbar, pin or box rear connection. The API REG box fronts will accept any API pin crossover needed to attach to your drill.

For cobbles, shales, river rock and hardpan.



Size Range: 6” - 28” Dia.			Shaft Diameters: 2.75” - 4.25”	
Tapered Barrel Reamer with Shark Teeth -- API (Box x Box)				
Item No.	Nominal Cut Diameter	Nominal Pack Diameter	Shaft Diameter	Description
280051006	6.0"	4.5"	2.75"	2" IF (Box x Box) w/ Shark Teeth
280051008	8.0"	6.6"	2.75"	2" IF (Box x Box) w/ Shark Teeth
280051010	10.0"	8.6"	2.75"	2" IF (Box x Box) w/ Shark Teeth
280052010	10.0"	8.6"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
280051012	12.0"	10.8"	2.75"	2" IF (Box x Box) w/ Shark Teeth
280052012	12.0"	10.8"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
280051014	14.0"	12.8"	2.75"	2" IF (Box x Box) w/ Shark Teeth
280052014	14.0"	12.8"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
280051016	16.0"	14.0"	2.75"	2" IF (Box x Box) w/ Shark Teeth
280052016	16.0"	14.0"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
280051018	18.0"	16.0"	2.75"	2" IF (Box x Box) w/ Shark Teeth
280052018	18.0"	16.0"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
280053018	18.0"	16.0"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
280052020	20.0"	18.0"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
280053020	20.0"	18.0"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
280052024	24.0"	22.0"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
280053024	24.0"	22.0"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
280052028	28.0"	26.0"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
280053028	28.0"	26.0"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth
280052032	32.0"	30.0"	3.25"	2-3/8" REG (Box x Box) w/ Shark Teeth
280053032	32.0"	30.0"	4.25"	2-7/8" IF (Box x Box) w/ Shark Teeth

Note: Choose **Front and Rear Reamer Couplings** (adapters/crossovers, drawbars, direct connect swivels) from **Reamer Coupling Charts**.

Replacement Carbide Cutters	
Item No.	Description
250070100	#1 ST, Small Shark Tooth - 1.250" ht.
250070200	#2 ST, Medium Shark Tooth - 1.50" ht.
250090100	#1 C, Small Conical Tooth - 0.840" ht.
250090200	#2 C, Medium Conical Tooth - 1.26" ht.



Shark Tooth



Conical Tooth

Backreamers

“Sand Shark” Backreamer

This is the ideal reamer for sand and sandy loam. The packer blades feature carbide cutters in front and hardfacing on the edges for long life and maximum mixing and pumping action.



For Sand and Sandy Loam

Size Range: 6” - 36” Dia.			Shaft Diameters: 2.75” - 4.75”	
Reamer with a Dense Array of Conical Teeth -- API (Box x Box)				
Item No.	Nominal Cut Diameter	Nominal Pack Diameter	Shaft Diameter	Description
280071006	6.0"	4.5"	2.75"	2" IF (Box x Box) w/ Conical Carbide Blocks
280071008	8.0"	6.6"	2.75"	2" IF (Box x Box) w/ Conical Carbide Blocks
280071010	10.0"	8.6"	2.75"	2" IF (Box x Box) w/ Conical Carbide Blocks
280072010	10.0"	8.6"	3.25"	2-3/8" REG (Box x Box) w/ Conical Carbide Blocks
280071012	12.0"	10.8"	2.75"	2" IF (Box x Box) w/ Conical Carbide Blocks
280072012	12.0"	10.8"	3.25"	2-3/8" REG (Box x Box) w/ Conical Carbide Blocks
280071014	14.0"	12.8"	2.75"	2" IF (Box x Box) w/ Conical Carbide Blocks
280072014	14.0"	12.8"	3.25"	2-3/8" REG (Box x Box) w/ Conical Carbide Blocks
280071016	16.0"	14.0"	2.75"	2" IF (Box x Box) w/ Conical Carbide Blocks
280072016	16.0"	14.0"	3.25"	2-3/8" REG (Box x Box) w/ Conical Carbide Blocks
280071018	18.0"	16.0"	2.75"	2" IF (Box x Box) w/ Conical Carbide Blocks
280072018	18.0"	16.0"	3.25"	2-3/8" REG (Box x Box) w/ Conical Carbide Blocks
280073018	18.0"	16.0"	4.25"	2-7/8" IF (Box x Box) w/ Conical Carbide Blocks
280072020	20.0"	18.0"	3.25"	2-3/8" REG (Box x Box) w/ Conical Carbide Blocks
280073020	20.0"	18.0"	4.25"	2-7/8" IF (Box x Box) w/ Conical Carbide Blocks
280072024	24.0"	20.0"	3.25"	2-3/8" REG (Box x Box) w/ Conical Carbide Blocks
280073024	24.0"	20.0"	4.25"	2-7/8" IF (Box x Box) w/ Conical Carbide Blocks
280074024	24.0"	20.0"	4.75"	3-1/2" IF (Box x Box) w/ Conical Carbide Blocks
280073028	28.0"	24.0"	4.25"	2-7/8" IF (Box x Box) w/ Conical Carbide Blocks
280074028	28.0"	24.0"	4.75"	3-1/2" IF (Box x Box) w/ Conical Carbide Blocks
280073032	32.0"	28.0"	4.25"	2-7/8" IF (Box x Box) w/ Conical Carbide Blocks
280074032	32.0"	28.0"	4.75"	3-1/2" IF (Box x Box) w/ Conical Carbide Blocks
280073036	36.0"	30.0"	4.25"	2-7/8" IF (Box x Box) w/ Conical Carbide Blocks
280074036	36.0"	30.0"	4.75"	3-1/2" IF (Box x Box) w/ Conical Carbide Blocks

Note: Choose **Front and Rear Reamer Couplings** (adapters/crossovers, drawbars, direct connect swivels) from **Reamer Coupling Charts**.

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Backreamers

Spiral Fluted Cobble Reamer

Our "Spiral Fluted Cobble Reamer" is designed for handling cobble and chunk rock. Its ten degree tapered screw and body design effectively displaces cobble and chunk rock. Reamers have API box fronts and rears, and will accommodate any of our optional built-in swivels, drawbars and crossovers.

All Cobble Reamers are equipped with conical carbide teeth on the front of the torque tube and rear of the body; while the entire front and top of the spiral is hard-faced for long service life.

Additionally, our Cobble Reamers are available with conical teeth, spaced every six inches, along the full length of the spiral for extended service life - add 10% to the MSRP.



Size Range: 8" - 48"

Shaft Diameters: 3.25" - 7"

Spiral Fluted Cobble Reamer			
Item No.	Pack Diameter	Shaft Diameter	Description
295002008	8"	3.25"	2-3/8" REG (BOX X BOX)
295002010	10"	3.25"	2-3/8" REG (BOX X BOX)
295002012	12"	3.25"	2-3/8" REG (BOX X BOX)
295002014	14"	3.25"	2-3/8" REG (BOX X BOX)
295003014	14"	4.25"	2-7/8" IF (BOX X BOX)
295002016	16"	3.25"	2-3/8" REG (BOX X BOX)
295003016	16"	4.25"	2-7/8" IF (BOX X BOX)
295002018	18"	3.25"	2-3/8" REG (BOX X BOX)
295003018	18"	4.25"	2-7/8" IF (BOX X BOX)
295003020	20"	4.25"	2-7/8" IF (BOX X BOX)
295004020	20"	4.75"	3-1/2" IF (BOX XBOX)
295003022	22"	4.25"	2-7/8" IF (BOX X BOX)
295004022	22"	4.75"	3-1/2" IF (BOX XBOX)
295003024	24"	4.25"	2-7/8" IF (BOX X BOX)
295004024	24"	4.75"	3-1/2" IF (BOX XBOX)
295003026	26"	4.25"	2-7/8" IF (BOX X BOX)
295004026	26"	4.75"	3-1/2" IF (BOX XBOX)
295003030	30"	4.25"	2-7/8" IF (BOX X BOX)
295004030	30"	4.75"	3-1/2" IF (BOX XBOX)

Solid Body Backreamers

Solid Body Reamer With Drawbar For Vermeer Starter Rods

Machined from solid alloy steel bars, these high quality one-piece backreamers are designed for convenience and value. Each backreamer features a built-in LPT/Hex Pin front and drawbar rear for fast hook-up. Available with carbide shark or conical teeth.



Solid Body Reamer -- Lpt/Hex (Pin) W/ Drawbar

With Shark Teeth

Item No.	Nominal Cut Dia.	Pack Dia.	Description
250006000	6.0"	3.5"	2.125" LPT/Hex Pin W/ SHARK TEETH
250006010	6.0"	3.5"	1.625" LPT/Hex Pin W/ SHARK TEETH

Solid Body Reamer -- Lpt/Hex (Pin) W/ Drawbar

With Rotary Teeth

Item No.	Nominal Cut Dia.	Pack Dia.	Description
250006015	6.0"	3.5"	2.125" LPT/Hex Pin W/ ROTARY TEETH
250006020	6.0"	3.5"	1.625" LPT/Hex Pin W/ ROTARY TEETH

Replacement Reamer Jets (Steel)

Item No.	Description
250001500	1/8" NPT THD, X 1/8" HOLE (6 pack)
250001505	1/8" NPT THD, X 3/16" HOLE (6 pack)
250001510	1/4" NPT THD, X 3/16" HOLE (6 pack)
250001515	1/4" NPT THD, X 1/4" HOLE (6 pack)
250001520	3/8" NPT THD, X 1/4" HOLE (6 pack)
250001525	3/8" NPT THD, X 5/16" HOLE (6 pack)

Replacement Carbide Cutters

Item No.	Description
250070100	#1 ST, Small Shark Tooth - 1.250" ht.
250070200	#2 ST, Medium Shark Tooth - 1.50" ht.
250090100	#1 C, Small Conical Tooth - 0.840" ht.
250090200	#2 C, Medium Conical Tooth - 1.26" ht.

Backreamer/Housing/Crossover Selection Chart*

Select the reamer style you need. Then, using the following Coupling Selection Chart, select the front and rear couplings that fit.

Vermeer Threads				
Thread Couplings	2.75" Reamer Shaft 2" IF (Box x Box)	3.25" Reamer Shaft 2-3/8" REG (Box x Box)	4.25" Reamer Shaft 2-7/8" IF (Box x Box)	4.75" Reamer Shaft 3-1/2" IF (Box x Box)
	Part No.	Part No.	Part No.	Part No.
1.625" LP (P) x (P) for D6x6 thru D10x15	220301625	220401625	-	-
2.125" LP (P) x (P) for D16x20 thru D33x44	220302125	220402125	-	-
1.66" FST 1 #200 (B) x (P) for D6x6 thru D10x15	220300200	220400200	-	-
1.90" FST 1 #250 (B) x (P) for D16x20 thru D20x22	220300250	220400250	-	-
2.06" FST 1 #400 (B) x (P) for D18x22 thru D24x26	220300400	220400400	-	-
2.375" FST 1 #600 (B) x (P) for D24x40 thru D24x40 II	220300600	220400600	220500600	-
2.375" FST 1 #650 (B) x (P) for D33x44 thru D40x40	220300650	220400650	220500650	-
2.625" FST 1 #700 (B) x (P) for D36x50 II	220300700	220400700	220500700	-
2.875" FST 1 #900 (B) x (P) for D50x100, D50x100A	-	220400900	220500900	-
3.50" FST 1 #800 (B) x (P) for D50x100A thru D80x100 II	-	220400800	220500800	220600800
3.50" FST 1 #1000 (B) x (P) for D100x120 II	-	-	220501000	220601000
QF 400 (P)*** X (P) for 16x20 - 20x22	250050070	-	-	-
QF 400 (P)*** X (P) for 16x20 - 40x40	-	250050073	-	-
QF 460 (P)*** X (P) for 16x20 - 20x22	-	250050083	-	-
QF 460 (P)*** X (P) for 16x20 - 40x40	-	-	250050085	-

API Threads				
Thread Couplings	2.75" Reamer Shaft 2" IF (Box x Box)	3.25" Reamer Shaft 2-3/8" REG (Box x Box)	4.25" Reamer Shaft 2-7/8" IF (Box x Box)	4.75" Reamer Shaft 3-1/2" IF (Box x Box)
	Part No.	Part No.	Part No.	Part No.
2.375 API REG. Box x Pin	220340100	-	-	-
2.375 API REG. Pin x Pin	220340150	-	-	-
2.875 API REG. Box x Pin	-	220442200	-	-
2.875 API REG. Pin x Pin	-	220442250	-	-
3.500 API REG. Box x Pin	-	220442300	-	-
3.500 API REG. Pin x Pin	-	220442350	-	-
2.375 API IF Box x Pin	-	220442400	220542400	220642400
2.375 API IF Pin x Pin	-	220442450	220542450	220642450
2.875 API IF Box x Pin	-	220442500	220542500	220642500
2.875 API IF Pin x Pin	-	220442550	220542550	220642550
3.500 API IF Box x Pin	-	-	220542600	220642600
3.500 API IF Pin x Pin	-	-	220542650	220642650

* Call for other sizes

** #350 & #390 API H90S are compatible with #350 & #390 HAWKEYE connections.

*** QF #400 & #460 are compatible with Vermeer Quickfire #400 & #460 connections.

Backreamer/Housing/Crossover Selection Chart*

Ditch Witch Threads				
Thread Couplings	2.75" Reamer Shaft 2" IF (Box x Box)	3.25" Reamer Shaft 2-3/8" REG (Box x Box)	4.25" Reamer Shaft 2-7/8" IF (Box x Box)	4.75" Reamer Shaft 3-1/2" IF (Box x Box)
	Part No.	Part No.	Part No.	Part No.
JT 520, EZ 2 (B) x (P)	-	-	-	-
JT 920/920L, EZ 2 (B) x (P)	220320200	220420200	-	-
JT 1220 M1, EZ 3 (B) x (P)	220320300	220420300	-	-
JT 1720, JT 1720 M1, JT 2020 M1, JT 2720, EZ 2 (B) x (P)	220320400	220420400	220520400	-
JT 2720 M1, EZ 2 (B) x (P)	220320500	220420500	220520500	-
JT 3020 M1, EZ 3 (B) x (P)	220320600	220420600	220520600	-
JT 2720 AT, JT 3020 AT, EZ 3 (B) x (P)	-	-	-	-
JT 4020 M1, EZ 2 (B) x (P)	-	220420700	220520700	-
JT 520 DRILL PIPE THD (P) x (P)	-	-	-	-
JT 820, 920/1/2 DRILL PIPE THD (P) x (P)	220324200	-	-	-
JT 1220 M1, DRILL PIPE THD (P) x (P)	220324300	-	-	-
JT 1720, JT 1720 M1, DRILL PIPE THD (P) x (P)	220324400	220421400	-	-
JT 2720, JT 2020 M1, DRILL PIPE THD (P) x (P)	220324500	220421500	-	-
JT 2720 M1, JT 3020 M1, DRILL PIPE THD (P) x (P)	220324600	220421600	220521600	-
JT 2720 AT, JT 3020 AT, DRILL PIPE THD (P) x (P)	-	-	-	-
JT 4020, DRILL PIPE THD (P) x (P)	-	220421700	220521700	-
JT 4020 M1, DRILL PIPE THD (P) x (P)	-	220421800	220521800	-
JT 4020 AT, DRILL PIPE THD (P) x (P)	-	-	-	-
JT 7020, JT 8020 M1, DRILL PIPE THD (P) x (P)	-	-	-	-
HE #350 (P) X (P) for JT1220 - JT20	250050055	-	-	-
HE #350 (P) X (P) for JT1720 - JT30	-	250050050	-	-
HE #390 (P) X (P) for JT1720 - JT30	-	250050060	-	-
HE #390 (P) X (P) for JT4020 - JT100	-	-	250050065	-

* Call for other sizes

** #350 & #390 API H90S are compatible with #350 & #390 HAWKEYE connections.

*** QF #400 & #460 are compatible with Vermeer Quickfire #400 & #460 connections.

Backreamer/Housing/Crossover Selection Chart*

Pulling Eye Couplings - Triple D Threads				
	2.75" Reamer Shaft 2" IF (Box x Box)	3.25" Reamer Shaft 2-3/8" REG (Box x Box)	4.25" Reamer Shaft 2-7/8" IF (Box x Box)	4.75" Reamer Shaft 3-1/2" IF (Box x Box)
Description	Part No.	Part No.	Part No.	Part No.
Pulling Eye for Triple D DB1500, DB1800 - 5 Ton	220360100	220360100	-	-
Pulling Eye for Triple D DB2000, DB2250 - 8 Ton	220360200	220360200	-	-
Pulling Eye for Triple D DB2500 - 12 Ton	220360300	220360300	-	-
Pulling Eye for Triple D DB3000, DB3500 - 25 Ton	220360400	220360400	-	-
Pulling Eye for Triple D #200060000 - 30 Ton	-	-	220560500	220660500
Pulling Eye for Triple D #200090000 - 45 Ton	-	-	220560600	220660600
Pulling Eye for Triple D #200120000 - 60 Ton	-	-	220560700	220660700

Direct Connect Reamer Swivels				
	2.75" Reamer Shaft 2" IF (Box x Box)	3.25" Reamer Shaft 2-3/8" REG (Box x Box)	4.25" Reamer Shaft 2-7/8" IF (Box x Box)	4.75" Reamer Shaft 3-1/2" IF (Box x Box)
Description	Part No.	Part No.	Part No.	Part No.
12,000 lb. Swivel, Pin x Lug	200050110	-	-	-
22,000 lb. Swivel, Pin x Lug	200050130	200050140	-	-
32,000 lb. Swivel, Pin x Lug	200050155	200050160	-	-
44,000 lb. Swivel, Pin x Lug	200050165	200050170	-	-
60,000 lb. Swivel, Pin x Lug	-	-	200050185	200050190
90,000 lb. Swivel, Pin x Lug	-	-	200050195	200050200
120,000 lb. Swivel, Pin x Lug	-	-	-	200050210

* All above Direct Connect Reamer Swivels have "API Pins" that thread into Triple D Reamers.

Accessories	
Description	Part No.
Jet Lok II - Handy Pak; Thread-Locking Two-Part Epoxy Pouch	200050110

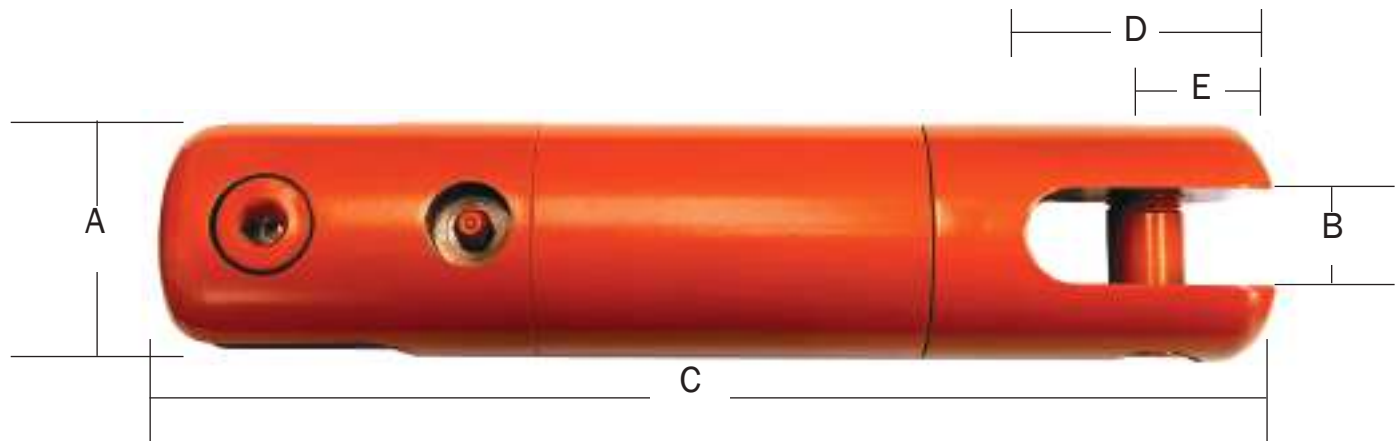
* Call for other sizes

** #350 & #390 API H90S are compatible with #350 & #390 HAWKEYE connections.

*** QF #400 & #460 are compatible with Vermeer Quickfire #400 & #460 connections.

Swivels, Duct Pullers, Shackles, Pulling Grips, Pulling Eyes, and Wire Rope Slings

Directional Drilling Swivels 2000 Series



Triple D's new 2000 Series HDD swivels are machined, in house, from heat treated SAE 4140 High Strength Alloy Steel billets (145K tensile strength) on state-of-the-art CNC machinery. Additionally, all 2000 Series swivels use multiple (stacked) angular contact bearings to handle high radial and axial loads, double lip seals to resist contamination and recessed grease fittings to protect them from breakage.

NOTE: Only use a **calcium sulfonate complex grease with EP additives**. Other lubricants will washout and severely reduce swivel service life. **Lubrication of the swivel is required BEFORE and AFTER each use to purge contaminants that may have entered the swivel while boring.**

Part No.	Working Load - lbs.		A	B	C	D	E	Pin Dia.
	Pulling	Pushing						
2000-8500	8,500	2,800	1.75"	0.63"	7.80"	1.69"	0.75"	0.5625"
2000-1000	10,000	3,300	2.00"	0.75"	8.96"	2.01"	0.88"	0.625"
2000-1500	15,000	5,000	2.50"	1.00"	11.50"	2.75"	1.25"	0.750"
2000-2000	20,000	6,600	3.00"	1.26"	12.62"	3.25"	1.50"	0.875"
2000-3000	30,000	10,000	3.375"	1.26"	13.96"	3.25"	1.50"	1.000"
2000-4500	45,000	15,000	4.00"	1.51"	15.40"	3.875"	1.75"	1.125"

Caution: For optimum service life, we recommend selecting a swivel with a workload rating that is double the pullback rating of your machine so that the swivel can better tolerate unexpected spikes.

Swivels, Duct Pullers, Shackles, Pulling Grips, Pulling Eyes, and Wire Rope Slings

Directional Drilling Swivels 5000 Series



Part no.	Description
200060010	Pullback Swivel – 60,000 Lb. Wt, Clevis X 3.5" Api If (B)
200060000	Pullback Swivel – 60,000 Lb. Wt, Clevis X Clevis
200090035	Pullback Swivel – 90,000 Lb. Wt, Clevis X 3.5" Api If (B)
200090000	Pullback Swivel – 90,000 Lb. Wt, Clevis X Clevis
200120010	Pullback Swivel – 120,000 Lb. Wt, Clevis X 4.5" Api If (B)
200120000	Pullback Swivel – 120,000 Lb. Wt, Clevis X Clevis
GR-1000	Premium Grease For Underground Pullback Swivels - 14 Oz. Cartridge

Swivels, Duct Pullers, Shackles, Pulling Grips, Pulling Eyes, and Wire Rope Slings

“Gold Series” HDD Pullback Swivels

The unique design of Triple D Swivels makes them one of the strongest on the market today. Multiple bearings and a larger shaft built with tool steel construction makes for a swivel that will not fold over like others. The smooth outside ensures a no-snag pull back. The full diameter shouldered pins and protected grease fitting completes the Triple D Swivel.



Part no.	Description
DB-1500	Pullback Swivel -- 8,500 Lb. WI
DB-1500R	Bolt-On Pullback Swivel -- 8,500 Lb. WI
DB-1800	Pullback Swivel -- 10,000 Lb. WI
DB-2000	Pullback Swivel -- 12,000 Lb. WI
DB-2250	Pullback Swivel -- 16,000 Lb. WI
DB-2500	Pullback Swivel -- 22,000 Lb. WI
DB-3000	Pullback Swivel -- 32,000 Lb. WI
DB-3500	Pullback Swivel -- 44,000 Lb. WI
200060010	Pullback Swivel -- 60,000 Lb. WI, Clevis X 3.5" Api If (B)
200060000	Pullback Swivel -- 60,000 Lb. WI, Clevis X Clevis
200090035	Pullback Swivel -- 90,000 Lb. WI, Clevis X 3.5" Api If (B)
200090000	Pullback Swivel -- 90,000 Lb. WI, Clevis X Clevis
200120010	Pullback Swivel -- 120,000 Lb. WI, Clevis X 4.5" Api If (B)
200120000	Pullback Swivel -- 120,000 Lb. WI, Clevis X Clevis
GR-1000	Premium Grease For Underground Pullback Swivels - 14 Oz. Cartridge
DB-1500P	Replacement Pin For Db-1500
DB-1800P	Replacement Pin For Db-1800
DB-2000P	Replacement Pin For Db-2000
DB-2250P	Replacement Pin For Db-2250
DB-2500P	Replacement Pin For Db-2500
DB-3000P	Replacement Pin For Db-3000
DB-3500P	Replacement Pin For Db-3500
DB-5000P	Replacement Pin For 200060000
DB-6000P	Replacement Pin For 200090000,200090035
DB-7000P	Replacement Pin For 200120000

Swivels, Duct Pullers, Shackles, Pulling Grips, Pulling Eyes, and Wire Rope Slings

Duct Pullers and Swivel Links

Duct Pullers, manufactured in house by Triple D are machined with a tapered buttress thread to grip the inside wall of polyethylene pipe and inner duct by simply screwing them into the opening. When properly installed, the gripping power of the puller is stronger than the tensile strength of the pipe or inner duct. Pullers are installed quickly and easily with a screwdriver shaft or metal rod.



Swivel-Link	
Part No.	Description
SL-9000	Complete Assembly
SL-9000A	Heat Treated Body
SL-9000B	Heat Treated Locking Pin
SL-9000C	Heat Treated Steel Bushing
SL-9000D	Heat Treated Deflector
SL-9000E	Heat Treated Bolt

Duct And Pipe Pullers - Lug Style	
Part No.	Description
DP-075L	Grip Range 0.72" - 0.93" With Rear Lug
DP-100L	Grip Range 0.94" - 1.15" With Rear Lug
DP-100AL	Grip Range 1" Irrigation Pipe - Sdr21 With Rear Lug
DP-125L	Grip Range 1.26" - 1.44" With Rear Lug
DP-150L	Grip Range 1.48" - 1.66" With Rear Lug
DP-175L	Grip Range 1.65" - 1.85" With Rear Lug
DP-200L	Grip Range 1.91" - 2.08" With Rear Lug
DP-300L	Grip Range 2.70" - 3.20" With Rear Lug

Duct And Pipe Pullers - Clevis Style	
Part No.	Description
DPC-100L	Grip Range 0.94" - 1.15" With Rear Lug
DPC-125L	Grip Range 1.26" - 1.44" With Rear Lug
DPC-150L	Grip Range 1.48" - 1.66" With Rear Lug
DPC-200L	Grip Range 1.91" - 2.08" With Rear Lug

Swivels, Duct Pullers, Shackles, Pulling Grips, Pulling Eyes, and Wire Rope Slings

PE & PVC Expanding Jaw Pulling Eyes

Both the sleeved and non-sleeved models of Expanding Pulling Eyes are designed to grip PE & PVC ducting by using hardened alloy steel jaws to grip the inside wall of the duct. The segmented alloy jaws along with the cone shaped steel expander, equally distribute gripping force and pulling load to the inside wall circumference of the duct for maximum holding.

All sleeved pulling eyes use a solid one-piece steel nose cone and sleeve design for water tightness and to prevent the ducting from over expanding and rupturing.



Hardened Alloy Steel Jaws, Cone & Rod	
Item No.	Description
60002000	2" Non-Sleeved Pulling Eye, SDR 11 thru 21, SDR 7 thru 15, SCH 40 & 80
60002100	2" Sleeved Pulling Eye, SDR 11 thru 21, SCH 40 & 80
60004000	4" Non-Sleeved Pulling Eye, SDR 11 thru 21, SDR 7 thru 15 & SCH 40 & 80
60004100	4" Sleeved Pulling Eye, SDR 11 thru 21, SCH 40 & 80

Swivel-Eye Grips

Swivel-Eye Grips	
Item No.	Description
S 75-99	Grip Range 0.75" - 0.99" (Double Weave)
S 100-124	Grip Range 1.00" - 1.24" (Double Weave)
S 125-149	Grip Range 1.25" - 1.49" (Double Weave)
S 150-199	Grip Range 1.50" - 1.99" (Double Weave)
S 200-249	Grip Range 2.00" - 2.49" (Double Weave)
S 250-299	Grip Range 2.50" - 2.99" (Double Weave)
S 300-349	Grip Range 3.00" - 3.49" (Double Weave)
S 350-399	Grip Range 3.50" - 3.99" (Double Weave)
S 400-449	GRIP RANGE 4.00" - 4.49" (DOUBLE WEAVE)

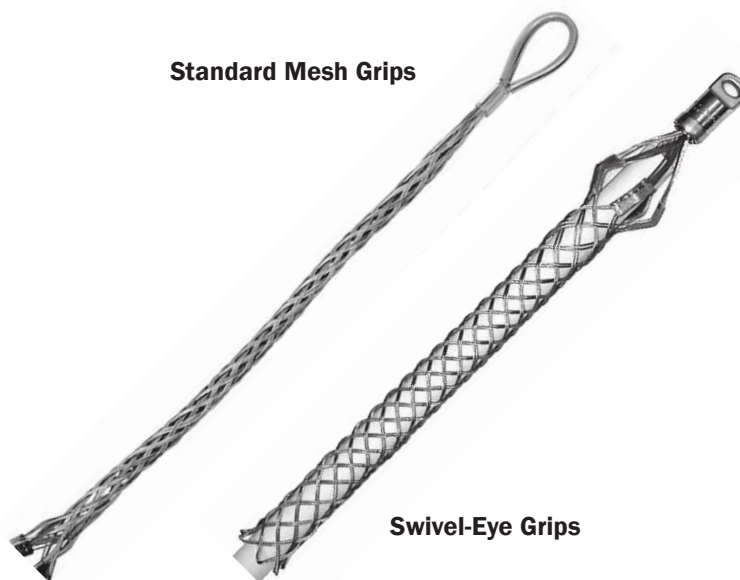
Standard Mesh Grips

Pulling grips are fabricated of Hi-Fatigue Aircraft Strand plastic coated steel cable. Continuous fabrication of grip from receiving end through entire mesh - including eye - provides a flexible stress relieving pulling eye. All strands are plastic coated, which increases the life of the grip, provides a bearing surface on underground pulls, and increases the ease and safety of installation and removal for workmen.

NOTE: When used without a "Lost Motion" device and trailing bullet, service life is significantly reduced. Nominal grip range calculated without Maxi-Grip Nose-Cone.

Standard Mesh Grips	
Item	Description
A-20SW	Grip Range 0.75" - 1.25" (Single Weave) Wkl 1,000 Lbs.
A-20	Grip Range 0.75" - 1.25" (Double Weave) Wkl 2,000 Lbs.
B-24	Grip Range 1.25" - 2.00" (Triple Weave) Wkl 2,500 Lbs.
C-26	Grip Range 2.00" - 2.75" (Triple Weave) Wkl 3,500 Lbs.
D-38	Grip Range 2.75" - 3.50" (Triple Weave) Wkl 4,500 Lbs.
E-46	Grip Range 3.50" - 4.25" (Triple Weave) Wkl 5,500 Lbs.
F-52	Grip Range 4.00" - 4.50" (Triple Weave) Wkl 6,000

Standard Mesh Grips



Swivel-Eye Grips

Swivels, Duct Pullers, Shackles, Pulling Grips, Pulling Eyes, and Wire Rope Slings

Pulling Harnesses - Standard Duty Wire Rope

Pulling Slings, manufactured in house by Triple D, allow multiple pulls of cable, pipe or duct at one time by using staggered attachment. The staggered arrangement insures that individual connections do not interfere with each other.

These high quality pulling slings are manufactured from extra flexible, 7x19, galvanized aircraft cable for strength and durability. Individual Legs are replaceable. Working Leg Loads and Total Work Loads are based on equal horizontal loads on all cables and a safety factor of 3:1. **Not For Overhead Use!**

Standard Duty Wire Rope Pulling Harnesses with Steel D-Ring Pulling Eye**						
Item No.	Cable Dia.	No. of Legs	Working Load/ Leg	Total Work	D-Ring Size	D-Ring Width
WRH-2002	1/4"	2	2300 lb.	2,200 lb.	3/8"	2-1/4"
WRH-2003	1/4"	3	2300 lb.	2,200 lb.	3/8"	2-1/4"
WRH-2004	1/4"	4	2300 lb.	2,200 lb.	3/8"	2-1/4"
WRH-2012	1/4"	2	2300 lb.	4,000 lb.	1/2"	3.0"
WRH-2013	1/4"	3	2300 lb.	4,000 lb.	1/2"	3.0"
WRH-2014	1/4"	4	2300 lb.	4,000 lb.	1/2"	3.0"
WRH-2015	1/4"	5	2300 lb.	4,000 lb.	1/2"	3.0"
WRH-2016	1/4"	6	2300 lb.	4,000 lb.	1/2"	3.0"
WRH-3002	3/8"	2	4,800 lb.	6,100 lb.	5/8"	3-1/4"
WRH-3003	3/8"	3	4,800 lb.	6,100 lb.	5/8"	3-1/4"
WRH-3004	3/8"	4	4,800 lb.	6,100 lb.	5/8"	3-1/4"
WRH-3005	3/8"	5	4,800 lb.	6,100 lb.	5/8"	3-1/4"
WRH-3006	3/8"	6	4,800 lb.	6,100 lb.	5/8"	3-1/4"
WRH-3012	3/8"	2	4,800 lb.	9,100 lb.	3/4"	3-1/2"
WRH-3013	3/8"	3	4,800 lb.	9,100 lb.	3/4"	3-1/2"
WRH-3014	3/8"	4	4,800 lb.	9,100 lb.	3/4"	3-1/2"
WRH-3015	3/8"	5	4,800 lb.	9,100 lb.	3/4"	3-1/2"
WRH-3016	3/8"	6	4,800 lb.	9,100 lb.	3/4"	3-1/2"
WRH-4002	1/2"	2	7,000 lb.	9,100 lb.	3/4"	3-1/2"
WRH-4003	1/2"	3	7,000 lb.	9,100 lb.	3/4"	3-1/2"
WRH-4004	1/2"	4	7,000 lb.	9,100 lb.	3/4"	3-1/2"
WRH-4012	1/2"	2	7,000 lb.	12,200 lb.	7/8"	4.0"
WRH-4013	1/2"	3	7,000 lb.	12,200 lb.	7/8"	4.0"
WRH-4014	1/2"	4	7,000 lb.	12,200 lb.	7/8"	4.0"
WRH-4022	1/2"	2	7,000 lb.	16,200 lb.	1.0"	4-1/2"
WRH-4023	1/2"	3	7,000 lb.	16,200 lb.	1.0"	4-1/2"
WRH-4024	1/2"	4	7,000 lb.	16,200 lb.	1.0"	4-1/2"

** Not for overhead lifting!



Swivels, Duct Pullers, Shackles, Pulling Grips, Pulling Eyes, and Wire Rope Slings

Replacement Legs

Replacement Legs for H.D. Pulling Harnesses	
Item No.	Description
RL-214	1/4" X 14" Replacement Leg
RL-224	1/4" x 24" Replacement Leg
RL-234	1/4" x 14" & 34" Replacement Legs
RL-244	1/4" x 24" & 44" Replacement Legs
RL-254	1/4" x 54" Replacement Leg
RL-264	1/4" x 54" & 64" Replacement Legs
RL-317	3/8" X 17" Replacement Leg
RL-327	3/8" x 27" Replacement Leg
RL-337	3/8" x 17" & 37" Replacement Legs
RL-347	3/8" x 27" & 47" Replacement Legs
RL-357	3/8" x 57" Replacement Leg
RL-367	3/8" x 57" & 67" Replacement Legs
RL-420	1/2" X 20" Replacement Leg
RL-430	1/2" x 30" Replacement Leg
RL-440	1/2" x 20" & 40" Replacement Legs
RL-450	1/2" x 30" & 50" Replacement Legs
RL-460	1/2" x 60" Replacement Leg
RL-470	1/2" x 60" & 70" Replacement Legs

H.D. Wire Rope with Load Rated Forged Shackle*

H.D. Wire Rope Pulling Harnesses with Load Rated Forged Shackle*	
Item No.	Description
WRS-202	1/4" DIA. CABLE, 2 LEGS, TOTAL WORK LD. 4,000 LBS.
WRS-203	1/4" DIA. CABLE, 3 LEGS, TOTAL WORK LD. 6,500 LBS.
WRS-204	1/4" DIA. CABLE, 4 LEGS, TOTAL WORK LD. 6,500 LBS.
WRS-205	1/4" DIA. CABLE, 5 LEGS, TOTAL WORK LD. 6,500 LBS.
WRS-206	1/4" DIA. CABLE, 6 LEGS, TOTAL WORK LD. 6,500 LBS.
WRS-302	3/8" DIA. CABLE, 2 LEGS, TOTAL WORK LD. 9,500 LBS.
WRS-303	3/8" DIA. CABLE, 3 LEGS, TOTAL WORK LD. 9,500 LBS.
WRS-304	3/8" DIA. CABLE, 4 LEGS, TOTAL WORK LD. 13,000 LBS.
WRS-305	3/8" DIA. CABLE, 5 LEGS, TOTAL WORK LD. 13,000 LBS.
WRS-306	3/8" DIA. CABLE, 6 LEGS, TOTAL WORK LD. 13,000 LBS.
WRS-402	1/2" DIA. CABLE, 2 LEGS, TOTAL WORK LD. 13,000 LBS.
WRS-403	1/2" DIA. CABLE, 3 LEGS, TOTAL WORK LD. 13,000 LBS.
WRS-404	1/2" DIA. CABLE, 4 LEGS, TOTAL WORK LD. 17,000 LBS.
WRS-405	1/2" DIA. CABLE, 5 LEGS, TOTAL WORK LD. 17,000 LBS.
WRS-406	1/2" DIA. CABLE, 6 LEGS, TOTAL WORK LD. 17,000 LBS.
DS-500	SLING SHACKLE - 1/2". 4,000 LB. W/L
DS-625	SLING SHACKLE - 5/8". 6,500 LB. W/L
DS-750	SLING SHACKLE - 3/4". 9,500 LB. W/L
DS-875	SLING SHACKLE - 7/8". 11,000 LB. W/L
DS-100	SLING SHACKLE - 1.0". 17,000 LB. W/L



"D" Shackles for H.D. Pulling Harnesses	
Item No.	Description
DS-500	Sling Shackle - 1/2". 4,000 Lb. W/L
DS-625	Sling Shackle - 5/8". 6,500 Lb. W/L
DS-750	Sling Shackle - 3/4". 9,500 Lb. W/L
DS-875	Sling Shackle - 7/8". 11,000 Lb. W/L
DS-100	Sling Shackle - 1.0". 17,000 Lb. W/L

Installation Accessories

Alloy Steel Soil Probes

Triple-D's insulated alloy steel soil probe is designed to provide electrical protection up to 45,000 volts - provided the user avoids bodily contact with the un-insulated portion of the probe (the shaft). Other quality features of our insulated soil probe are:

- Probe TIP is heat treated chrome-moly alloy steel for durability, and is threaded for easy replacement.
- Probe SHAFT is heat treated chrome-moly alloy steel for resistance to bending and is threaded on each end for a secure connection and ease of replacement (will not snap in half like a fiberglass shaft).
- Probe INSULATOR* is manufactured by using Advanced Ram Extrusion Technology to achieve high tensile and yield strengths. The insulator is then precision machined to finished dimensions on state-of-the-art CNC machinery. Insulator is also impervious to water absorption for constant dielectric strength.
- Probe HANDLE is 7/8" x 11" solid steel for strength and control during ground penetration.
- Probe GRIPS are durable and comfortable vinyl for impact resistance.

*Dielectric Strength Tested To ASTM D-149

The Insulated Probe is readily available in 36", 42", 48" and 54" lengths. Other lengths are available upon request.



Soil Probes (Alloy Steel)	
Item No.	Description
Insulated Type	
ISP-36	Complete unit w/ handle, insulator, 36" shaft & conical tip
ISP-42	Complete unit w/ handle, insulator, 42" shaft & conical tip
ISP-48	Complete unit w/ handle, insulator, 48" shaft & conical tip
ISP-54	Complete unit w/ handle, insulator, 54" shaft & conical tip
Non-Insulated Type	
SP-36	Complete unit w/ handle, shaft & conical tip
SP-42	Complete unit w/ handle, shaft & conical tip
SP-48	Complete unit w/ handle, shaft & conical tip
SP-54	Complete unit w/ handle, shaft & conical tip
Soil Probe Replacement Parts	
SPS-36	36" Heat Treated Chrome-Moly Steel Shaft
SPS-42	42" Heat Treated Chrome-Moly Steel Shaft
SPS-48	48" Heat Treated Chrome-Moly Steel Shaft
SPS-54	54" Heat Treated Chrome-Moly Steel Shaft
SPT-5	Tip, Heat Treated Alloy Steel - Conical - each
SPTB-5	Tip, Heat Treated Alloy Steel - Ball - each

Lightscaping & Root Cutting Spade

Lightscaping & Root Cutting Spade	
Item No.	Description
LS-4812	Alloy Steel H.d. 8"X12" Spade For Installing Wire - 15 Lbs.



Installation Accessories

Meter Keys & Operating Wrenches

Meter Keys & Operating Wrenches	
Item No.	Description
Professional METER KEYS	
MU-60	Mueller Type - Alloy Steel Head - 5/8" X 60" Shaft
MU-72	Mueller Type - Alloy Steel Head - 5/8" X 72" Shaft
MK-60	H.D. Type - 1.5" Dia. Alloy steel head - 3/4" x 60" shaft
MK-72	H.D. Type - 1.5" Dia. Alloy steel head - 3/4" x 72" shaft
Commercial Meter Keys	
CK-28	Tee Handle Curb Key - 1/2" X 28" Shaft
CK-60	Tee Handle Curb Key - 1/2" X 60" Shaft
Professional Operating Wrenes	
OW-60	2" I.d. Square Head - 1" Sq. Tube Const. - 5' Long
OW-48	2" I.d. Square Head - 1" Sq. Tube Const. - 4' Long

H.D. Steel Tampers

Constructed of solid steel, providing the weight and strength required for easier prolonged use.

H.D. Steel Tampers	
Item No.	Description
T-88-48	8" X 8" TAMP PLATE with 48" HANDLE
T-88-60	8" X 8" TAMP PLATE with 60" HANDLE
T-1010-48	10" X 10" TAMP PLATE with 48" HANDLE
T-1010-60	10" X 10" TAMP PLATE with 60" HANDLE
T-410-60	4" X 10" TAMP PLATE with 60" HANDLE (TRENCH TAMP)

Made with solid steel replaceable handle and shaft. Optional conical or round interchangeable tips make this a user favorite.



Anchor Shackles, Screw Pin



Anchor Shackles, Screw Pin	
Item No.	Description
AS-312	BODY SIZE - 5/16", WLL 1,500 LBS.
AS-375	BODY SIZE - 3/8", WLL 2,000 LBS.
AS-438	BODY SIZE - 7/16", WLL 3,000 LBS.
AS-500	BODY SIZE - 1/2", WLL 4,000 LBS.
AS-625	BODY SIZE - 5/8", WLL 6,500 LBS.
AS-750	BODY SIZE - 3/4", WLL 9,500 LBS.
AS-875	BODY SIZE - 7/8", WLL 13,000 LBS.
AS-100	BODY SIZE - 1.0", WLL 17,000 LBS.
AS-1125	BODY SIZE - 1.125", WLL 17,000 LBS.
AS-1250	BODY SIZE - 1.250", WLL 17,000 LBS.
AS-1375	BODY SIZE - 1.375", WLL 17,000 LBS.
AS-1500	BODY SIZE - 1.500", WLL 17,000 LBS.



Long Reach Pullback Shackle

Ideal for Steep Taper Paddle Bits

- Ideal For All Style Paddle Bits
- One-Piece Construction—Bodies are Manufactured From Armor Plate - 235,000 P.S.I.
- 3/4" Pins are Manufactured From Alloy Steel
- Wider and Deeper I.D. Clearances for Use in HDD—1.625" I.D. Wide x 5" Deep
- Available in Screw Pin Only
- Not Rated for Overhead Lifting

Long Reach Pullback Shackle	
Item No.	Description
260034625	1.625" I.D. x 5" Deep
260034626	3/4" x 3" Pin

Air Hammers

Triple D Hammers



Call For Pricing And Availability

High Frequency Lube Style Hard Rock Hammers.

- 4", 5", 6" and 7" High Performance Down Hole Drills and Bits.
- 4" and 5" Hammers are equipped with Extra Heavy Duty Drive Chucks and Bit Shanks to withstand heavy steering loads and provide long service life.
- 6" and 7" Hammers also feature reversible casings for greater footage from the hammers.

High-flow, High-strength, Side-load Transmitter Housings.

- Machined from a single bar of heat treated "Nickel Steel Alloy" for long life - 175,000 psi TS.
- High-flow design with multiple fluid/air ports for maximum hammer performance.
- Features a Sonde cavity that will accept 15" and 19" Digitrac and 86 Series Subsite transmitters, as well as wire-line systems.
- Simple mechanical clocking and retention mechanism that securely holds the transmitter in the housing - back-up security system. No special tools required.
- Housing doors are the thickest and most secure in the industry. They are held in place with lockable cap screws, recessed split pins and machined retention tabs.
- Transmitter batteries can be changed in minutes vs one hour with end-load housings.
- Jetted housing adapters (Tail Pieces) are available as an option.



"Hydrocyclone Separator" (Optional).

- Up to 95% efficient at removing water and particulates.
- Improves hammer performance by reducing pressure losses associated with moving air AND water into the working chambers of the hammer.
- Removes particulates in the air system, which in-turn, improves piston and cylinder life.
- Complete longer and faster drill bores due to reduced fluid interference.



Hammer Bits (Heavy Duty Shanks on 4" and 5" Bits)*.

- Slant Face Bit - for aggressive steering.
- Convex Face Bit - for easy steering with the Bent Sub only.
- Flat Face Bit - for toughness, long-life and average steering capability.

Bent 2° Top-Subs - used for primary steering.

- Bent Subs come standard with strategically placed carbide wear buttons to extend the life of the Sub and Housing.
- 1-1/2° and 3° Bent Subs are available as options.
- Contractors can change Steering Subs to accommodate various drilling conditions.

*Must be used with Heavy Duty Drive Chucks.



Air Hammers

4-1/4" Hammer Package

Part No.	Description
300104000	HDD4000 Hammer Package - Hammer, Housing, Standard Bent Sub & 2 Bits
Component Parts	
300035238	3.625" Dia. Hi-Flow, Side-Load Air Hammer Housing; 2-3/8" REG x 2-3/8" REG
300104004	TBHDD4000 Complete Hammer
300104362	Standard 2° Bent Sub
300104380	Hydrocyclone Bent Sub (Hydrocyclone Separator)
300104380X	Hydrocyclone Bent Sub (Hydrocyclone Separator) EXCHANGE w/Package
300104415	4-1/4" Bit Slant Face
300104425	4-1/4" Bit Convex Face
300105535	5-1/4" Bit Concave Face (3/4 guage)

5-1/4" Hammer Package

Part No.	Description
300105000	HDD5000 Hammer Package - Hammer, Housing, Standard Bent sub and 2 bits
Component Parts	
300042278	4.5" Dia. Hi-Flow, Side-Load Air Hammer Housing; 2-7/8" REG x 2-7/8" I.F..
300105005	TBHDD5000 Complete Hammer
300105425	Standard 2° Bent Sub
300105450	AFS Bent Sub (Axial Flow Separator)
300105450X	AFS Bent Sub (Axial Flow Separator) EXCHANGE w/Package
300105515	5-1/4" Bit Slant Face
300105525	5-1/4" Bit Flat Face
300105535	5-1/4" Bit Concave Face (3/4 guage)

6-1/4 Hammer Package

Part No.	Description
300106000	4.875" Dia. Hi-Flow, Side-Load Air Hammer Housing 3-1/2" REG x 3-1/2" IF
Component Parts	
300048350	4.88" Dia. Hi-Flow Air Hammer Housing 3-1/2" TDX x 3-1/2" IF
300106006	TBHDD6000 Complete Hammer
300106488	Standard 2° Bent Sub
300106615	6-1/4" Bit Slant Face
300106625	6-1/4" Bit Slant Face
300106635	6-1/4" Bit Concave Face (3/4 guage)

7-1/4 Hammer Package

Part No.	Description
300107000	HDD6000 Hammer Package - Hammer, Housing, Standard Bent sub and 2 bits
Component Parts	
300048350	4.875" Dia. Hi-Flow, Side-Load Air Hammer Housing 3-1/2" REG x 3-1/2" IF
300107007	TBHDD7000 Complete Hammer
300107488	Standard Bent Sub
300107715	7-1/4" Bit Slant Face
300107725	7-1/4" Bit Flat Face
300107735	7-1/4" Bit Concave Face (3/4 guage)

Hammer Support Pack

Part No.	Description
300010100	Complete Support Pack for use with all Triple D Hammers -includes all hoses, whips, couplings, lubrication injector, water pump and chasis.

Rock Drill Oil

Part No.	Description
300201000	1 Gallon Container Rock Drill Oil - #100
300201005	5 Gallon Container Rock Drill Oil - #100



Rock Drilling Tools

Terra-Mole Pneumatic Piercing Tools

Terra-Mole Pneumatic Piercing Tools are the most efficient and least expensive method for boring under streets and roads while traffic flows uninterrupted. They are designed for creating clean, compact holes for most underground installations of pipe, cable, conduit and wiring with minimal disruptions. They have exceptional power to penetrate tough soils and move quickly. Contractors who install cable, pipe, and wire underground, use Terra-Mole tools because of their performance, reliability, and low cost. With over thirty years of experience, Terra-Mole technology is responsible for producing the highest quality tools, parts and accessories.

All Terra-Mole piercing tool barrels and strikers (pistons) are CNC machined from **solid nickel chromoly steel billets**, then heat treated and precision ground for high strength and long-life. Strikers are of one-piece design (no replaceable wear rings) for durability and low user maintenance cost.

Call for Availability and Pricing



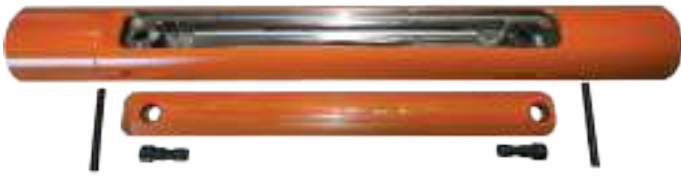
Pneumatic Piercing Tools (Piercing Tool Only)	
Part No.	Description
TM200ST	2" Dia. X 42" long, wt. 28 lbs., Screw Type Reverse, 525 bpm
TM200QT	2" Dia. X 42" long, wt. 28 lbs., 1/4 Turn Type Reverse, 525 bpm
TM300ST	3" Dia. X 53" long, wt. 78 lbs., Screw Type Reverse, 400 bpm
TM300QT	3" Dia. X 53" long, wt. 78 lbs., 1/4 Turn Type Reverse, 400 bpm
TM400ST	4" Dia. X 59" long, wt. 136 lbs., Screw Type Reverse, 400 bpm
TM400QT	4" Dia. X 59" long, wt. 136 lbs., 1/4 Turn Type Reverse, 400 bpm

Pneumatic Piercing Tools Accessories	
Part No.	Description
TM200H	Air Hose - 1/2" x 50 ft.
TM300H	Air Hose - 3/4" x 50 ft.
TM400H	Air Hose - 1" x 50 ft.
TM100LB	Lubricator Assembly (all models)
TM150QT	Lubricant, one quart
TM400QT	4" Dia. X 59" long, wt. 136 lbs., 1/4 Turn Type Reverse, 400 bpm

Pneumatic Piercing Tools Piercing Tool Package*	
Part No.	Description
TM200STP	TM200ST Tool plus Tool Package - 1/2" hose
TM200QTP	TM200QT Tool plus Tool Package - 1/2" hose
TM300STP	TM300ST Tool plus Tool Package - 3/4" hose
TM300QTP	TM300QT Tool plus Tool Package - 3/4" hose
TM400STP	TM400ST Tool plus Tool Package - 1" hose
TM400QTP	TM400QT Tool plus Tool Package - 1" hose

- * Piercing Tool Package (includes):
- Piercing Tool
 - 50 ft. air supply hose
 - Lubricator, in-line
 - 1 qt. lubricant
 - Operator & Parts Manual

What's New At Triple D



Locking Door Sounde Housings - Pgs. - 6 and 12



Cobble Boss II- Pg. 15



Bolt-On Replacement Swivels- Pg. 15



H.D. Directional Drilling Swivels - Pg. 45



Hellcat "Premium" Steep Taper Bit Pg. 27



"Wildcat" Bit - Pg. 27

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