

Vol. 7

# BORESTORE<sup>®</sup>

HDD TOOLING AND ACCESSORIES WAREHOUSE

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Jobs change. The unexpected occurs. You need tooling now. The Vermeer BORESTORE tooling warehouse accepts orders for overnight shipping up to 7 p.m. Central Standard Time.

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Products with this symbol are the most popular tooling options available through the BORESTORE warehouse. Look for this symbol throughout the catalog for top picks.



A full-page background image showing a worker in profile, wearing a white hard hat, safety glasses, and a high-visibility yellow vest over a dark hoodie. The worker is wearing blue jeans and purple gloves, and is focused on adjusting a component of a large, yellow industrial machine. The machine has various pipes, valves, and a black cylindrical tank. The scene is set outdoors, likely at a construction or drilling site.

# QUICK RIG GUIDE

Here's your guide for the most popular tooling for your Vermeer horizontal directional drills (HDDs). From drill rod and connection options, to housing, Vise jaws and rod wipers, we have you covered.

## Can't find what you are looking for in the Quick Rig Guide?

Browse through the rest of the Vermeer BORESTORE warehouse catalog or BORESTORE.com for a comprehensive listing of available tooling and accessories.



**D6x6 | D7x11 | D7x11A | D8x12**  
**1.32" (3.4 CM) #200 ROD**

Part No.	Product	Price USD
<b>SUB SAVER</b>		
296276507	FST 1.66" (4.2 cm) #200 Thread, 8" (20.3 cm) Long	\$118.17
<b>DRILL ROD OPTION</b>		
222394001	Firestick Drill Rod 1.32" (3.4 cm) #200 Thread, 6' (1.8 m) Long	Call Local Dealer
<b>QUICKFIRE CONNECTION SYSTEM</b>		
296364003	Starter Rod QuickFire System 300 (B) x FST #200 (B)	\$267.00
296364002	Collar QuickFire System 300 (Hardfaced)	\$137.70
296364044	Collar QuickFire System 300 (Hardfaced with Teeth)	\$154.00
296364040	Adapter QuickFire System 300 (P) x 2-4 ACME (P)	\$256.80
<b>LOW-PROFILE CONNECTIONS</b>		
276261001	Starter Rod 1.625" (4.1 cm) LPT (B) x FST #200 (B)	\$236.17
289274001	Collar 1.625" (4.1 cm) LPT (Hardfaced)	\$85.31
296343245	Collar 1.625" (4.1 cm) LPT (Hardfaced with Teeth)	\$152.94
262392001	Adapter 1.625" (4.1 cm) LPT (P) x 2-4 ACME (P)	\$158.34
<b>HOUSING OPTIONS</b>		
296343209	End Load Housing 2" (5.1 cm) OD x FST #200 (B) 8" (20.3 cm) DCI® Mini (Vermeer 5 Bolt Pattern)	\$735.88
296274010	End Load Housing 2.25" (5.7 cm) OD x FST #200 (B) 15" (38.1 cm) DCI® (Vermeer 5 Bolt Pattern)	\$1,100.26
296408265	Premium Housing 2.75" (7 cm) OD x 2-4 ACME (B) (Vermeer 6 Bolt Pattern)	\$964.25
296448877	Direct Connect Housing 2.5" (6.35 cm) OD x FST #200 (B) (Vermeer 5 Bolt Pattern)	\$1,102.50
296466246	Premium Housing Direct Connect Kit 2.75" (7 cm) OD x FST #200 (B) (Vermeer 6 Bolt Pattern)	\$1,439.07
<b>VICE JAW</b>		
296271432	Vise Jaw 1.32" (3.4 cm)	\$65.00
<b>ROD WIPER OPTIONS</b>		
235920001	Rod Wiper 1.32" (3.4 cm)	\$22.00
296385050	Rod Wiper - Split 1.32" (3.4 cm) (D8x12)	\$55.22


**D7x11 | D7x11A | D7x11A Series II | D8x12 | D9x13 Series II | D9x13 S3 | D10x15 S3**  
**1.66" (4.2 CM) #200 6' (1.8 M) LONG ROD**

Part No.	Product	Price USD
<b>DRIVE CHUCK</b>		
296255361	FST 1.66" (4.2 cm) #200 Thread, 10" (25.4 cm) Long (D7x11A)	\$308.03
<b>SUB SAVER</b>		
296255351	FST 1.66" (4.2 cm) #200 Thread, 5.83" (14.8 cm) Long (D7x11A)	\$91.69
296276507	FST 1.66" (4.2 cm) #200 Thread, 8" (20.3 cm) Long (D7x11A Series II, D8x12, D9x13 Series II, D9x13 S3, D10x15 S3)	\$118.17
<b>DRILL ROD OPTIONS</b>		
216492001	Firestick Drill Rod 1.66" (4.2 cm) #200 Thread, 6' (1.8 m) Long	Call Local Dealer
296441778	Silver Series Drill Rod 1.66" (4.2 cm) #200 Thread, 6' (1.8 m) Long	Call Local Dealer
<b>QUICKFIRE CONNECTION SYSTEM</b>		
296364003	Starter Rod QuickFire System 300 (B) x FST #200 (B)	\$267.00
296364002	Collar QuickFire System 300 (Hardfaced)	\$137.70
296364044	Collar QuickFire System 300 (Hardfaced with Teeth)	\$154.00
296364040	Adapter QuickFire System 300 (P) x 2-4 ACME (P)	\$256.80
<b>LOW-PROFILE CONNECTIONS</b>		
276261001	Starter Rod 1.625" (4.1 cm) LPT (B) x FST #200 (B)	\$236.17
289274001	Collar 1.625" (4.1 cm) LPT (Hardfaced)	\$85.31
296343245	Collar 1.625" (4.1 cm) LPT (Hardfaced with Teeth)	\$152.94
262392001	Adapter 1.625" (4.1 cm) LPT (P) x 2-4 ACME (P)	\$158.34
<b>HOUSING OPTIONS</b>		
296343209	End Load Housing 2" (5.1 cm) OD x FST #200 (B) 8" (20.3 cm) DCI® Mini (Vermeer 5 Bolt Pattern)	\$735.88
296274010	End Load Housing 2.25" (5.7 cm) OD x FST #200 (B) 15" (38.1 cm) DCI® (Vermeer 5 Bolt Pattern)	\$1,100.26
296408265	Premium Housing 2.75" (7 cm) OD x 2-4 ACME (B) (Vermeer 6 Bolt Pattern)	\$964.25
296448877	Direct Connect Housing 2.5" (6.35 cm) OD x FST #200 (B) (Vermeer 5 Bolt Pattern)	\$1,102.50
296466246	Premium Housing Direct Connect Kit 2.75" (7 cm) OD x FST #200 (B) (Vermeer 6 Bolt Pattern)	\$1,439.07
<b>WISE JAW</b>		
236076001	Vise Jaw 1.66" (4.2 cm) Stationary Side	\$56.00
236090001	Vise Jaw 1.66" (4.2 cm) Cylinder Side	\$90.78
<b>ROD WIPER OPTIONS</b>		
235921001	Rod Wiper 1.66" (4.2 cm)	\$28.56
296294590	Rod Wiper - Split 1.66" (4.2 cm)	\$58.00


















### D10x14 | D10x15 1.66" (4.2 CM) #200 10' (3 M) LONG ROD

Part No.	Product	Price USD
<b>DRIVE CHUCK</b>		
296255363	FST 1.66" (4.2 cm) #200 Thread, 11" (27.9 cm) Long	\$360.57
<b>SUB SAVER</b>		
296255351	FST 1.66" (4.2 cm) #200 Thread, 5.83" (14.8 cm) Long	\$91.69
<b>DRILL ROD OPTION</b>		
219006001	Firestick Drill Rod 1.66" (4.2 cm) #200 Thread, 10' (3.1 m) Long	Call Local Dealer
<b>QUICKFIRE CONNECTION SYSTEM</b>		
296364003	Starter Rod QuickFire System 300 (B) x FST #200 (B)	\$267.00
296364002	Collar QuickFire System 300 (Hardfaced)	\$137.70
296364044	Collar QuickFire System 300 (Hardfaced with Teeth)	\$154.00
296364040	Adapter QuickFire System 300 (P) x 2-4 ACME (P)	\$256.80
<b>LOW-PROFILE CONNECTIONS</b>		
276261001	Starter Rod 1.625" (4.1 cm) LPT (B) x FST #200 (B)	\$236.17
289274001	Collar 1.625" (4.1 cm) LPT (Hardfaced)	\$85.31
296343245	Collar 1.625" (4.1 cm) LPT (Hardfaced with Teeth)	\$152.94
262392001	Adapter 1.625" (4.1 cm) LPT (P) x 2-4 ACME (P)	\$158.34
<b>HOUSING OPTIONS</b>		
296343209	End Load Housing 2" (5.1 cm) OD x FST #200 (B) 8" (20.3 cm) DCI® Mini (Vermeer 5 Bolt Pattern)	\$735.88
296274010	End Load Housing 2.25" (5.7 cm) OD x FST #200 (B) 15" (38.1 cm) DCI® (Vermeer 5 Bolt Pattern)	\$1,100.26
296408265	Premium Housing 2.75" (7 cm) OD x 2-4 ACME (B) (Vermeer 6 Bolt Pattern)	\$964.25
296448877	Direct Connect Housing 2.5" (6.35 cm) OD x FST #200 (B) (Vermeer 5 Bolt Pattern)	\$1,102.50
296466246	Premium Housing Direct Connect Kit 2.75" (7 cm) OD x FST #200 (B) (Vermeer 6 Bolt Pattern)	\$1,439.07
<b>WISE JAW</b>		
236076001	Vise Jaw 1.66" (4.2 cm) Stationary Side	\$56.00
236090001	Vise Jaw 1.66" (4.2 cm) Cylinder Side	\$90.78
<b>ROD WIPER OPTIONS</b>		
235921001	Rod Wiper 1.66" (4.2 cm)	\$28.56
296294590	Rod Wiper - Split 1.66" (4.2 cm)	\$58.00


**D16x20 | D16x20A | D16x20 Series II | D18x22 | D20x22 | D20x22 S3  
1.9" (4.8 CM) #250 ROD**

Part No.	Product	Price USD
<b>DRIVE CHUCK</b>		
 296255364	FST 1.9" (4.8 cm) #250 Thread, 11" (27.9 cm) Long	\$344.09
<b>SUB SAVER</b>		
 296255352	FST 1.9" (4.8 cm) #250 Thread, 4" (10.2 cm) Long (D16x20, D16x20A, D18x22, D20x22)	\$91.69
 296291966	FST 1.9" (4.8 cm) #250 Thread, 10.14" (25.8 cm) Long (D16x20 Series II, D20x22 S3)	\$190.59
<b>DRILL ROD OPTIONS</b>		
230993001	Firestick Drill Rod 1.9" (4.8 cm) #250 Thread, 10' (3.1 m) Long	Call Local Dealer
296441777	Silver Series Drill Rod 1.9" (4.8 cm) #250 Thread, 10' (3.1 m) Long	Call Local Dealer
<b>QUICKFIRE CONNECT SYSTEM</b>		
 296331952	Starter Rod QuickFire System 400 (B) x FST #250 (B)	\$296.82
 296331995	Collar QuickFire System 400 (Hardfaced)	\$137.70
296364043	Collar QuickFire System 400 (Hardfaced with Teeth)	\$155.00
 296364037	Adapter QuickFire System 400 (P) x 2.375" (6 cm) API Reg (P)	\$294.35
296383294	Adapter QuickFire System 400 (P) x 8-UNC (P)	\$294.35
<b>LOW-PROFILE CONNECTIONS</b>		
234840001	Starter Rod 2.125" (5.4 cm) LPT (B) x FST #250 (B)	\$246.57
289273001	Collar 2.125" (5.4 cm) LPT (Hardfaced)	\$131.09
296343244	Collar 2.125" (5.4 cm) LPT (Hardfaced with Teeth)	\$174.42
296279067	Adapter 2.125" (5.4 cm) LPT (P) x 2.375" (6 cm) API Reg (P)	\$253.75
296472533	Adapter 2.125" (5.4 cm) LPT (P) x 8-UNC (P)	\$380.63
<b>HOUSING OPTIONS</b>		
 296408264	Premium Housing 3" (7.6 cm) OD x 2.375" (6 cm) API Reg (B) (Vermeer 6 Bolt Pattern)	\$1,065.75
 296466151	Small Armor Housing 3.25" (8.3 cm) OD x 2.325" (6 cm) API Reg (B)	\$2,360.00
296351780	Universal Housing 3" (7.6 cm) OD x 8-UNC (BxB) 23.9 GPM (90.5 L/min)	\$1,945.00
<b>WISE JAW</b>		
 236111001	Vise Jaw 1.9" (4.8 cm) Stationary Side	\$56.00
 236112001	Vise Jaw 1.9" (4.8 cm) Cylinder Side	\$85.68
 250272001	Vise Jaw 1.9" (4.8 cm) Cylinder Side with Centering Plate	\$97.92
<b>ROD WIPER OPTIONS</b>		
 235922001	Rod Wiper 1.9" (4.8 cm)	\$28.56
 296294594	Rod Wiper - Split 1.9" (4.8 cm)	\$58.00































**D18x22 | D20x22 | D20x22 Series II | D20x22 S3 | D23x30 S3  
2.06" (5.2 CM) #400 ROD**

Part No.	Product	Price USD
<b>DRIVE CHUCK</b>		
296279709	FST 2.06" (5.2 cm) #400 Thread, 11" (27.9 cm) Long (D18x22, D20x22)	\$437.84
<b>SUB SAVER</b>		
296279708	FST 2.06" (5.2 cm) #400 Thread, 6.5" (16.5 cm) Long (D18x22, D20x22)	\$128.78
296281195	FST 2.06" (5.2 cm) #400 Thread, 10.14" (25.8 cm) Long (D20x22 Series II, D20x22 S3, D23x30 S3)	\$190.59
<b>DRILL ROD OPTIONS</b>		
221628001	Firestick Drill Rod 2.06" (5.2 cm) #400 Thread, 10' (3.1 m) Long	Call Local Dealer
296441776	Silver Series Drill Rod 2.06" (5.2 cm) #400 Thread, 10' (3.1 m) Long	Call Local Dealer
<b>QUICKFIRE CONNECTION SYSTEM</b>		
296331926	Starter Rod QuickFire System 400 (B) x FST #400 (B)	\$296.82
296331995	Collar QuickFire System 400 (Hardfaced)	\$137.70
296364043	Collar QuickFire System 400 (Hardfaced with Teeth)	\$155.00
296364037	Adapter QuickFire System 400 (P) x 2.375" (6 cm) API Reg (P)	\$294.35
296383294	Adapter QuickFire System 400 (P) x 8-UNC (P)	\$294.35
<b>LOW-PROFILE CONNECTIONS</b>		
250658001	Starter Rod 2.125" (5.4 cm) LPT (B) x FST #400 (B)	\$246.57
289273001	Collar 2.125" (5.4 cm) LPT (Hardfaced)	\$131.09
296343244	Collar 2.125" (5.4 cm) LPT (Hardfaced with Teeth)	\$174.42
296279067	Adapter 2.125" (5.4 cm) LPT (P) x 2.375" (6 cm) API Reg (P)	\$253.75
296472533	Adapter 2.125" (5.4 cm) LPT (P) x 8-UNC (P)	\$380.63
<b>HOUSING OPTIONS</b>		
296408264	Premium Housing 3" (7.6 cm) OD x 2.375" (6 cm) API Reg (B) (Vermeer 6 Bolt Pattern)	\$1,065.75
296466151	Small Armor Housing 3.25" (8.3 cm) OD x 2.325" (6 cm) API Reg (B)	\$2,360.00
296351780	Universal Housing 3" (7.6 cm) OD x 8-UNC (BxB) 23.9 GPM (90.5 L/min)	\$1,945.00
<b>WISE JAW</b>		
296279701	Vise Jaw 2.06" (5.2 cm) Stationary Side	\$55.00
296279704	Vise Jaw 2.06" (5.2 cm) Cylinder Side	\$81.60
<b>ROD WIPER OPTIONS</b>		
235923001	Rod Wiper 2.06" (5.2 cm)	\$28.56
296294598	Rod Wiper - Split 2.06" (5.2 cm)	\$58.00



**D23x30 S3 | D24x40 | D24x40 Series II | D24x40A | D24x40 S3 | D40x40  
2.375" (6 CM) #600 ROD**




















Part No.	Product	Price USD
<b>DRIVE CHUCK</b>		
 230980001	FST 2.375" (6 cm) #600 Thread, 12" (30.5 cm) Long (D24x40A SN 001-382)	\$581.76
 249169001	FST 2.375" (6 cm) #600 Thread, 13.5" (34.3 cm) Long (D24x40A SN 383-Above)	\$551.16
 296273550	FST 2.375" (6 cm) #600 Thread, 16" (40.6 cm) Long (D24x40 Series II)	\$617.09
 296443778	FST 2.375" (6 cm) #600 Thread, 16.5" (41.9 cm) Long (D24x40 S3)	\$606.00
244493001	FST 2.375" (6 cm) #600 Thread, 15" (38.1 cm) Long (D40x40)	\$691.72
<b>SUB SAVER</b>		
 296436210	FST 2.375" (6 cm) #600 Thread, 10.14" (25.8 cm) Long (D23x30 S3)	\$186.85
 230945001	FST 2.375" (6 cm) #600 Thread, 5.5" (14 cm) Long (D24x40A SN 001-382)	\$149.38
 249166001	FST 2.375" (6 cm) #600 Thread, 7" (17.8 cm) Long (D24x40A SN 383-Above)	\$149.38
 276323001	FST 2.375" (6 cm) #600 Thread, 9.5" (24.1 cm) Long (D24x40 Series II)	\$173.72
 296443760	FST 2.375" (6 cm) #600 Thread, 10" (25.4 cm) Long (D24x40 S3)	\$227.25
244492001	FST 2.375" (6 cm) #600 Thread, 8.5" (21.59 cm) Long (D40x40)	\$209.12
<b>DRILL ROD OPTIONS</b>		
 222276001	Firestick Drill Rod 2.375" (6 cm) #600 Thread, 10' (3.1 m) Long (D23x30 S3-D24x40 S3)	Call Local Dealer
222455001	Firestick Drill Rod 2.375" (6 cm) #600 Thread, 15' (4.6 m) Long (D40x40)	Call Local Dealer
296441775	Silver Series Drill Rod 2.375" (6 cm) #600 Thread, 10' (3.1 m) Long (D23x30 S3-D24x40 S3)	Call Local Dealer
<b>QUICKFIRE CONNECTION SYSTEM</b>		
 296331924	Starter Rod QuickFire System 400 (B) x FST #600 (B)	\$296.82
 296364069	Starter Rod QuickFire System 460 (B) x FST #600 (B)	\$521.00
 296331995	Collar QuickFire System 400 (Hardfaced)	\$137.70
296364043	Collar QuickFire System 400 (Hardfaced with Teeth)	\$155.00
 296331990	Collar QuickFire System 460 (Hardfaced)	\$163.00
296364042	Collar QuickFire System 460 (Hardfaced with Teeth)	\$183.60
 296364037	Adapter QuickFire System 400 (P) x 2.375" (6 cm) API Reg (P)	\$294.35
 296364038	Adapter QuickFire System 400 (P) x 2.875" (7.3 cm) API Reg (P)	\$304.50
296383294	Adapter QuickFire System 400 (P) x 8-UNC (P)	\$294.35
 296364013	Adapter QuickFire System 460 (P) x 2.375" (6 cm) API Reg (P)	\$329.88
 296364014	Adapter QuickFire System 460 (P) x 2.875" (7.3 cm) API Reg (P)	\$380.63
<b>LOW-PROFILE CONNECTIONS</b>		
234826001	Starter Rod 2.125" (5.4 cm) LPT (B) x FST #600 (B)	\$251.78
289273001	Collar 2.125" (5.4 cm) LPT (Hardfaced)	\$131.09
296343244	Collar 2.125" (5.4 cm) LPT (Hardfaced with Teeth)	\$174.42
296279067	Adapter 2.125" (5.4 cm) LPT (P) x 2.375" (6 cm) API Reg (P)	\$253.75
289406001	Adapter 2.125" (5.4 cm) LPT (P) x 2.875" (7.3 cm) API Reg (P)	\$380.63
296472533	Adapter 2.125" (5.4 cm) LPT (P) x 8-UNC (P)	\$380.63
<b>HOUSING OPTIONS</b>		
 296408264	Premium Housing 3" (7.6 cm) OD x 2.375" (6 cm) API Reg (B) (Vermeer 6 Bolt Pattern)	\$1,065.75
 296406540	Premium Housing 3.25" (8.3 cm) OD x 2.375" (6 cm) API Reg (B) (Vermeer 6 Bolt Pattern)	\$1,116.50
296466243	Premium Housing Direct Connect Kit 3" (7.6 cm) OD x FST #600 (B) (Vermeer 6 Bolt Pattern)	\$1,680.51
 296466151	Small Armor Housing 3.25" (8.3 cm) OD x 2.325" (6 cm) API Reg (B)	\$2,360.00
296466152	Medium Armor Housing 3.75" (9.5 cm) OD x 2.875" (7.3 cm) API Reg (B)	\$3,438.00
296351780	Universal Housing 3" (7.6 cm) OD x 8-UNC (BxB)	\$1,945.00
296351765	Universal Housing 3.5" (8.9 cm) OD x 2.375" (6 cm) API Reg (BxB)	\$2,448.00
<b>VICE JAW</b>		
 296400226	Vise Jaw 2.375" (6 cm) D23x30 S3	\$49.10
 230831001	Vise Jaw 2.375" (6 cm) D24x40A-D24x40 S3	\$62.00
 285750001	Vise Block with Insert 2.375" (6 cm) D40x40	\$257.00
 278223001	Vise Insert for 285750001	\$18.00
<b>ROD WIPER OPTIONS</b>		
 235924001	Rod Wiper 2.375" (6 cm) D24x40-D40x40	\$28.56
 296294602	Rod Wiper - Split 2.375" (6 cm) D23x30 S3-D40x40	\$58.00







## D33x44 | D36x50 | D36x50 Series II | D40x55 S3 2.375" (6 CM) #650 ROD












Part No.	Product	Price USD
<b>DRIVE CHUCK</b>		
 296309648	FST 2.375" (6 cm) #650 Thread, 14.42" (36.6 cm) (D33x44, D36x50, D36x50 Series II)	\$645.94
 296443819	FST 2.375" (6 cm) #650 Thread, 15.42" (39.2 cm) (D40x55 S3)	\$633.27
<b>SUB SAVER</b>		
 296309650	FST 2.375" (6 cm) #650 Thread, 7.92" (20.1 cm) Long (D33x44, D36x50, D36x50 Series II)	\$215.13
 296443818	FST 2.375" (6 cm) #650 Thread, 8.92" (22.7 cm) Long (D40x55 S3)	\$237.35
<b>DRILL ROD OPTIONS</b>		
 296309599	Firestick Drill Rod 2.375" (6 cm) #650 Thread, 10' (3.1 m) Long (D33x44, D36x50, D36x50 Series II, D40x55 S3)	Call Local Dealer
 296312531	Firestick Drill Rod 2.375" (6 cm) #650 Thread, 15' (4.6 m) Long (D33x44, D36x50, D36x50 Series II)	Call Local Dealer
<b>QUICKFIRE CONNECTION SYSTEM</b>		
 296331978	Starter Rod QuickFire System 460 (B) x FST #650 (B)	\$525.00
 296415321	Starter Rod QuickFire System 460 (B) x FST #650 (B) with Check Valve	\$663.00
 296331990	Collar QuickFire System 460 (Hardfaced)	\$163.00
 296364042	Collar QuickFire System 460 (Hardfaced with Teeth)	\$183.60
 296364013	Adapter QuickFire System 460 (P) x 2.375" (6 cm) API Reg (P)	\$329.88
 296364014	Adapter QuickFire System 460 (P) x 2.875" (7.3 cm) API Reg (P)	\$380.63
<b>HOUSING OPTIONS</b>		
 296406540	Premium Housing 3.25" (8.3 cm) OD x 2.375" (6 cm) API Reg (B) (Vermeer 6 Bolt Pattern)	\$1,116.50
 296466238	Premium Housing Direct Connect Kit 3.25" (8.3 cm) OD x FST #650 (B) (Vermeer 6 Bolt Pattern)	\$1,662.53
 296466152	Medium Armor Housing 3.75" (9.5 cm) OD x 2.875" (7.3 cm) API Reg (B)	\$3,438.00
 296351765	Universal Housing 3.5" (8.9 cm) OD x 2.375" (6 cm) API Reg (BxB) 61.3 GPM (232.1 L/min)	\$2,448.00
<b>WISE JAW</b>		
 276415001	Vise Jaw 2.375" (6 cm)	\$55.00
<b>ROD WIPER OPTIONS</b>		
 235924001	Rod Wiper 2.375" (6 cm)	\$28.56
 296294602	Rod Wiper - Split 2.375" (6 cm)	\$58.00

**D40x55DR S3**

Part No.	Product	Price USD
<b>SUB SAVER</b>		
296472053	FST 2.625" (6.7 cm) #750 Thread (B)	\$304.50
<b>DRILL ROD OPTIONS</b>		
296456677	Inner Hex Rod	Call Local Dealer
296456678	Outer Rod - Firestick Drill Rod 2.625" (6.7 cm) #750 Thread, 10' (3.1 m) Long	Call Local Dealer
296487375	Inner Hex Rod Coupler	\$163.20
296456627	Inner Hex Rod Coupler Pins	\$1.13
<b>ROCK DRILL HEAD OPTIONS</b>		
296479658	RH15 Rock Head - 15" (38.1 cm) Sonde - 3.5" API (B) x FST #750 (P)	\$7,344.00
296490296	RH15 Rock Head - 19" (48.3 cm) Sonde - 3.5" API (B) x FST #750 (P)	\$7,548.00
296479732	RH15 Rebuild Tool Set	\$1,650.00
296490302	RH15 50 Hour Rebuild Kit	\$1,020.00
296490303	RH15 200 Hour Rebuild Kit - 15" (38.1 cm) Sonde	\$2,142.00
296490305	RH15 200 Hour Rebuild Kit - 19" (48.3 cm) Sonde	\$2,201.50
101562004	Polyurea Grease - Case of 10	\$66.00
PBD11500	Breakout Tongs	\$1,460.00
<b>RECOMMENDED BITS</b>		
296442949	6.25" (15.9 cm) TCI Tri-cone - Medium/Hard Rock (IADC 737)	\$7,160.00
296442948	6.25" (15.9 cm) TCI Tri-cone - Medium Rock (IADC 537)	\$7,160.00
296479461	6.25" (15.9 cm) Mill Tooth Tri-cone - Soft Rock (IADC 237)	\$4,630.00
296456704	6.25" (15.9 cm) PDC - Medium/Hard Solid Rock	\$7,100.00









Running a D36x50DR Series II? Talk to your dealer about new replacement part options.

**D36x50 | D36x50 Series II | D40x55 S3**  
**2.625" (6.7 CM) #700 Rod**

Part No.	Product	Price USD
<b>DRIVE CHUCK</b>		
 296309505	FST 2.625" (6.7 cm) #700 Thread, 15.5" (39.4 cm) Long (D36x50, D36x50 Series II)	\$711.87
 296443822	FST 2.625" (6.7 cm) #700 Thread, 14.5" (36.8 cm) Long (D40x55 S3)	\$697.91
<b>SUB SAVER</b>		
 296309507	FST 2.625" (6.7 cm) #700 Thread, 8.5" (21.6 cm) Long (D36x50, D36x50 Series II)	\$272.70
 296443821	FST 2.625" (6.7 cm) #700 Thread, 9.5" (24.1 cm) Long (D40x55 S3)	\$277.75
<b>DRILL ROD OPTIONS</b>		
296309521	Firestick Drill Rod 2.625" (6.7 cm) #700 Thread, 10' (3.1 m) Long	Call Local Dealer
296309522	Firestick Drill Rod 2.625" (6.7 cm) #700 Thread, 15' (4.6 m) Long	Call Local Dealer
<b>QUICKFIRE CONNECTION SYSTEM</b>		
 296331962	Starter Rod QuickFire System 460 (B) x FST #700 (B)	\$521.00
 296331990	Collar QuickFire System 460 (Hardfaced)	\$163.00
296364042	Collar QuickFire System 460 (Hardfaced with Teeth)	\$183.60
 296364013	Adapter QuickFire System 460 (P) x 2.375" (6 cm) API Reg (P)	\$329.88
 296364014	Adapter QuickFire System 460 (P) x 2.875" (7.3 cm) API Reg (P)	\$380.63
<b>HOUSING OPTIONS</b>		
 296406540	Premium Housing 3.25" (8.3 cm) OD x 2.375" (6 cm) API Reg (B) (Vermeer 6 Bolt Pattern)	\$1,116.50
296466239	Premium Housing Direct Connect Kit 3.25" (8.3 cm) OD x FST #700 (B) (Vermeer 6 Bolt Pattern)	\$1,662.59
296466152	Medium Armor System Housing 3.75" (9.5 cm) OD x 2.875" (7.3 cm) API Reg (B)	\$3,438.00
296351765	Universal Housing 3.5" (8.9 cm) OD x 2.375" (6 cm) API Reg (BxB) 61.3 GPM (232.1 L/min)	\$2,448.00
<b>WISE JAW</b>		
 296310768	Vise Jaw 2.625" (6.7 cm)	\$56.00
<b>ROD WIPER OPTIONS</b>		
 296294606	Rod Wiper - Split 2.625" (6.7 cm)	\$61.00





















**D50x100A | D60x90 | D60x90 S3 | D80x100  
2.875" (7.3 CM) #900 ROD**











Part No.	Product	Price USD
<b>DRIVE CHUCK</b>		
 296255366	FST 2.875" (7.3 cm) #900 Thread, 13.5" (34.3 cm) Long (D50x100A)	\$1,313.51
 296357202	FST 2.875" (7.3 cm) #900 Thread, 19.7" (50.1 cm) Long (D60x90, D60x90 S3)	\$1,313.51
296357222	FST 2.875" (7.3 cm) #900 Thread, 19.7" (50.1 cm) Long (Wireline) (D60x90, D60x90 S3)	\$1,917.99
<b>SUB SAVER</b>		
296255354	FST 2.875" (7.3 cm) #900 Thread, 5.82" (14.8 cm) (For Drive Chuck 296255366)	\$386.33
 296344115	FST 2.875" (7.3 cm) #900 Thread, 8.7" (22.09 cm) (For Drive Chucks 296357202, 296257222)	\$463.59
<b>DRILL ROD OPTION</b>		
222452001	Firestick Drill Rod 2.875" (7.3 cm) #900 Thread, 15' (4.6 m) Long	Call Local Dealer
<b>ADAPTERS</b>		
 296337363	Adapter 2.875" (7.3 cm) API Reg (P) x 2.875" (7.3 cm) FST #900 (B)	\$380.63
296341593	Adapter 2.875" (7.3 cm) API IF (P) x 2.875" (7.3 cm) FST #900 (B)	\$380.63
<b>HOUSING OPTIONS</b>		
 296408266	Premium Housing 3.5" (8.9 cm) OD x 2.875" (7.3 cm) API Reg (B) Vermeer 6 Bolt Pattern 5/8" (1.6 cm) Bolts	\$1,522.50
 296466153	Large Armor System Housing 4.25" (10.8 cm) OD x 2.875" (7.3 cm) API IF (B)	\$4,331.00
296351766	Universal Housing 3.75" (9.53 cm) OD x 2.875" (7.3 cm) API Reg (BxB) 95.7 GPM (362.3 L/min)	\$2,550.00
<b>WISE JAW</b>		
249879001	Vise Jaw 2.875" (7.3 cm) (D50x100A, D80x100)	\$106.00
222488001	Vise Insert for Part No. 249879001 (D50x100A, D80x100)	\$19.00
296443024	Vise Block Insert 2.875" (7.3 cm) Cylinder Side (D60x90, D60x90 S3)	\$199.92
296350898	Vise Block Insert 2.875" (7.3 cm) Stationary Side (D60x90, D60x90 S3)	\$137.70
<b>ROD WIPER OPTIONS</b>		
 235925001	Rod Wiper 2.875" (7.3 cm)	\$22.00
 296294610	Rod Wiper - Split 2.875" (7.3 cm)	\$61.00



**D50x100 | D50x100A | D60x90 | D60x90 S3 | D80x100 | D80x100 Series II**  
**3.5" (8.9 CM) #800 ROD**

Part No.	Product	Price USD
<b>DRIVE CHUCK</b>		
 296255475	FST 3.5" (8.9 cm) #800 Thread, 16.46" (41.8 cm) Long (D50x100, D50x100A, D60x90, D60x90 S3, D80x100 Series II)	\$1,318.05
 222431001	FST 3.5" (8.9 cm) #800 Thread, 13" (33.02 cm) Long (D80x100)	\$1,246.20
 296268953	FST 3.5" (8.9 cm) #800 Thread, 16.49" (41.89 cm) Long (Wireline) (D80x100 Series II)	\$1,920.00
<b>SUB SAVER</b>		
 296255477	FST 3.5" (8.9 cm) #800 Thread, 7.02" (17.8 cm) Long (D50x100, D50x100A, D60x90, D60x90 S3, D80x100, D80x100 Series II)	\$362.59
<b>DRILL ROD OPTION</b>		
222454001	Firestick Drill Rod 3.5" (8.9 cm) #800 Thread, 15' (4.6 m) Long	Call Local Dealer
<b>ADAPTERS</b>		
 296257929	Adapter 2.875" (7.3 cm) API Reg (P) x 3.5" (8.9 cm) FST #800 (B)	\$355.25
296312650	Adapter 2.875" (7.3 cm) API IF (P) x 2.875" (7.3 cm) FST #800 (B)	\$380.63
<b>HOUSING OPTIONS</b>		
 296408266	Premium Housing 3.5" (8.9 cm) OD x 2.875" (7.3 cm) API Reg (B) Vermeer 6 Bolt Pattern 5/8" (1.6 cm) Bolts	\$1,522.50
 296466153	Large Armor System Housing 4.25" (10.8 cm) OD x 2.875" (7.3 cm) API IF (B)	\$4,331.00
296351766	Universal Housing 3.75" (9.53 cm) OD x 2.875" (7.3 cm) API Reg (BxB) 95.7 GPM (362.3 L/min)	\$2,550.00
<b>WISE JAW</b>		
 296443140	Vise Block 3.5" (8.9 cm) Cylinder Side (D60x90, D60x90 S3)	\$219.60
 296369679	Vise Block 3.5" (8.9 cm) Stationary Side (D60x90, D60x90 S3)	\$87.12
 296285731	Vise Block 3.5" (8.9 cm) D80x100 Series II (SN 101-436)	\$125.00
 296303056	Vise Block 3.5" (8.9 cm) D80x100 Series II (SN 437)	\$197.00
 296303218	Vise Insert - Diamond Pattern 3.5" (8.9 cm) (For Part No. 296303056)	\$12.00
 249880001	Vise Jaw 3.5" (8.9 cm) (D50x100A, D80x100)	\$150.00
 285754001	Vise Block with Insert 3.5" (8.9 cm) (D50x100A, D80x100)	\$233.00
 278121001	Vise Insert 3.5" (8.9 cm) (For Part Nos. 285754001 and 296285731) (D50x100A, D80x100)	\$13.00
<b>ROD WIPER OPTIONS</b>		
 235926001	Rod Wiper 3.5" (8.9 cm)	\$28.00
 296294614	Rod Wiper - Split 3.5" (8.9 cm)	\$60.00

**D100x120 | D100x120 Series II | D100x140 | D100x140 S3**  
**3.5" (8.9 CM) #1000 ROD**

Part No.	Product	Price USD
<b>DRIVE CHUCK</b>		
 296309516	FST 3.5" (8.9 cm) #1000 Thread, 16.24" (41.3 cm) Long	\$1,363.50
 296309602	FST 3.5" (8.9 cm) #1000 Thread, 16.24" (41.3 cm) Long (Wireline)	\$1,917.99
<b>SUB SAVER</b>		
 296309515	FST 3.5" (8.9 cm) #1000 Thread, 7.02" (17.8 cm) Long	\$362.59
<b>DRILL ROD OPTIONS</b>		
296337977	Firestick Drill Rod 3.5" (8.9 cm) #1000 Thread, 15' (4.6 m) Long (D100x140, D100x140 S3)	Call Local Dealer
296309520	Firestick Drill Rod 3.5" (8.9 cm) #1000 Thread, 20' (6.1 m) Long	Call Local Dealer
<b>ADAPTERS</b>		
 296312588	Adapter 3.5" (8.9 cm) API Reg (P) x 3.5" (8.9 cm) FST #1000 (B)	\$406.00
296312616	Adapter 2.875" (7.3 cm) API IF (P) x 2.875" (7.3 cm) FST #1000 (B)	\$380.63
<b>HOUSING OPTIONS</b>		
 296408267	Premium Housing 4.5" (11.4 cm) OD x 3.5" (8.9 cm) API Reg (B) Vermeer 6 Bolt Pattern 3/4" (1.9 cm) Bolts	\$2,030.00
 296466153	Large Armor System Housing 4.25" (10.8 cm) OD x 2.875" (7.3 cm) API IF (B)	\$4,331.00
296351767	Universal Housing 4.5" (11.5 cm) OD x 3.5" (8.9 cm) API Reg (BxB) 187.6 GPM (710.1 L/min)	\$2,650.00
<b>WISE JAW</b>		
 296303056	Vise Block 3.5" (8.9 cm) (D100x120 Series II, D100x140, D100x140 S3)	\$197.00
 296303218	Vise Insert - Diamond Pattern 3.5" (8.9 cm) (For Part No. 296303056) (D100x120 Series II, D100x140, D100x140 S3)	\$12.00
<b>ROD WIPER OPTIONS</b>		
 235926001	Rod Wiper 3.5" (8.9 cm)	\$28.00
 296294614	Rod Wiper - Split 3.5" (8.9 cm)	\$60.00



# DITCH WITCH COMPATIBLE GUIDE

BORESTORE warehouse makes it easy to utilize our most popular tooling technologies on your Ditch Witch HDD.



## Connections

Running Ditch Witch drill rod? BORESTORE warehouse can cut non-proprietary thread profiles, so we can convert you to the QuickFire® connection system.



## Bits

Have some life left on your current Ditch Witch housing? We offer our high-end Ace™ and Gladiator™ bit families in Ditch Witch 5-bolt and 6-bolt configurations, offering compatibility with your current housing.

## Housings

Running SubSite electronics? Our Premium and Armor system housings are available in SubSite electronics-compatible versions.

Own some Ditch Witch pattern bits? Select Premium housings feature both Vermeer 6-bolt and Ditch Witch 6-bolt configurations on a single housing, helping you maximize usage of your bit fleet.



Let your local Vermeer dealer know the drill model you're running, and they can show you a variety of options to help meet your needs.



**HIGH**  
STANDARDS.  
**HIGH**  
EXPECTATIONS.  
**PROVEN**  
RESULTS.



When Vermeer developed Firestick drill rod, it invigorated the industry. Firestick drill rod meets the high standards of quality, durability and reliability.



**Individual numbering.** Each rod carries an individual serial number and unique born-on date for traceability.

**Coarse and tapered thread profile** for quick makeup.

# **FIRESTICK<sup>®</sup>**

## **THE SUPERIOR DRILL ROD.**

Quality steel. Reliable construction. Precise tolerances. These are the qualities that describe the industry-leading Vermeer Firestick drill rod.

The durability and performance of your drill rod is vital to your operation. See why this Vermeer original sets the industry standard.

## Firestick Drill Rod

Constructed of forged and heat-treated, high-carbon alloy steel, Vermeer Firestick drill rod has earned a reputation in the industry for strength and consistent quality. From the robust threads to double-shouldered design, Firestick drill rod stands up in high-torque applications while maintaining a large inside diameter to help maximize drilling fluid flow.

### FIRESTICK DRILL ROD

Part No.	Model Compatibility	Length	Rod Diameter	Drill Rod Thread	Bend Radius	Torque Rating
222394001	D6x6, D8x12	6' (1.8 m)	1.32" (3.4 cm)	#200	57' (17.4 m)	900 ft-lb (12,202 Nm)
216492001	D7x11 – D10x15 S3, D8x12	6' (1.8 m)	1.66" (4.2 cm) OD	#200	95' (29 m)	1500 ft-lb (2034 Nm)
219006001	D10x14, D10x15	10' (3.1 m)	1.66" (4.2 cm) OD	#200	95' (29 m)	1500 ft-lb (2034 Nm)
230993001	D16x20A, D16x20 Series II, D20x22 S3	10' (3.1 m)	1.9" (4.8 cm) OD	#250	99' (30.2 m)	2000 ft-lb (2712 Nm)
221628001	D20x22, D20x22 Series II, D20x22 S3, D23x30 S3	10' (3.1 m)	2.06" (5.2 cm) OD	#400	102' (31.1 m)	2600 ft-lb (3525 Nm)
222276001	D23x30 S3, D24x40, D24x40A, D24x40 Series II, D24x40 S3	10' (3.1 m)	2.375" (6 cm) OD	#600	108' (32.9 m)	4200 ft-lb (5423 Nm)
296309599	D33x44, D36x50, D36x50 Series II, D40x55 S3	10' (3.1 m)	2.375" (6 cm) OD	#650	108' (32.9 m)	5500 ft-lb (7455 Nm)
296312531	D33x44, D36x50, D36x50 Series II	15' (4.6 m)	2.375" (6 cm) OD	#650	108' (32.9 m)	5500 ft-lb (7455 Nm)
296309521	D36x50, D36x50 Series II, D40x55 S3	10' (3.1 m)	2.625" (6.7 cm) OD	#700	145' (44.2 m)	5500 ft-lb (7455 Nm)
296309522	D36x50, D36x50 Series II, D40x55 S3	15' (4.6 m)	2.625" (6.7 cm) OD	#700	145' (44.2 m)	5500 ft-lb (7455 Nm)
296337811	D36x50DR Series II	10' (3.1 m)	1.66" (4.2 cm) OD	#200	169' (51.5 m)	1500 ft-lb (2034 Nm)
296456677	D40x55DR S3	10' (3.1 m)	1.66" (4.2 cm) OD	HEX	169' (51.5 m)	1500 ft-lb (2034 Nm)
296456678	D36x50DR Series II, D40x55DR S3	10' (3.1 m)	2.625" (6.7 cm) OD	#750	169' (51.5 m)	6000 ft-lb (8135 Nm)
222455001	D40x40	15' (4.6 m)	2.375" (6 cm) OD	#600	108' (32.9 m)	4000 ft-lb (5423 Nm)
222452001	D50x100, D50x100A, D60x90, D60x90 S3	15' (4.6 m)	2.875" (7.3 cm) OD	#900	169' (51.5 m)	9000 ft-lb (12,202 Nm)
222454001	D60x90, D60x90 S3, D80x100 Series II	15' (4.6 m)	3.5" (8.9 cm) OD	#800	197' (60.1 m)	10,000 ft-lb (13,558 Nm)
296309520	D80x120, D100x120, D100x120 Series II, D100x140, D100x140 S3	20' (6.1 m)	3.5" (8.9 cm) OD	#1000	197' (60.1 m)	15,000 ft-lb (20,337 Nm)
296337977	D100x140, D100x140 S3	15' (4.6 m)	3.5" (8.9 cm) OD	#1000	197' (60.1 m)	15,000 ft-lb (20,337 Nm)

Call your local dealer for pricing.



On competitors' drill rod the upset tapers off quickly and irregularities appear.



Firestick drill rod provides strength and consistency through the forged upset area. That means a stronger stem and less risk of failure.

Firestick drill rod threads match up, and the internal and external shoulders simultaneously make direct contact. This contact helps with joint quality and reliability, which helps you optimize productivity.





# **SILVER SERIES<sup>®</sup> DRILL ROD**

**NOT EVERY HDD JOB IS CREATED EQUAL.**



That's why Vermeer offers an industry-leading lineup of drill rods, no matter the project at hand. For jobs where steerability is crucial and ground conditions might be challenging, there's Firestick drill rod, the industry gold standard, with unmatched quality and steering performance meant for the biggest and toughest jobs.

When straightforward, less-aggressive projects require a budget-conscious option, there's the new Silver Series drill rod. Comprised of one-piece forged, S135 grade steel, and threaded in the same U.S. state-of-the-art facility as Firestick drill rod, it is designed for moderate steering applications.

The durability and performance of your drill rod is vital to your operation. Together, Firestick drill rod and Silver Series drill rod provide a trusted option for your project.

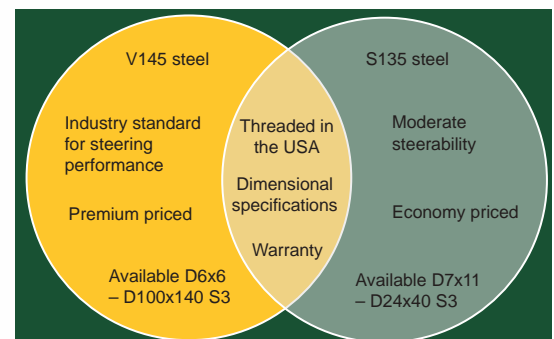
#### SILVER SERIES DRILL ROD

Part No.	Model Compatibility	Length	Rod Diameter	Drill Rod Thread	Bend Radius	Torque Rating
296441778	D7x11, D8x12, D9x13, D10x15 S3	6' (1.8 m)	1.66" (4.2 cm) OD	Firestick - #200	102.6' (31.3 m)	1500 ft-lb (2034 Nm)
296441777	D16x20 - D16x20 Series II, D20x22 S3	10' (3.1 m)	1.9" (4.8 cm) OD	Firestick - #250	106' (32.3 m)	2000 ft-lb (2712 Nm)
296441776	D20x22 - D20x22 S3, D23x30 S3	10' (3.1 m)	2.06" (5.2 cm) OD	Firestick - #400	109.4' (33.3 m)	2600 ft-lb (3625 Nm)
296441775	D23x30 S3, D24x40 - D24x40 S3	10' (3.1 m)	2.375" (6 cm) OD	Firestick - #600	116.2' (35.4 m)	4200 ft-lb (5694 Nm)

## What's the same? What's different?

Vermeer Firestick drill rod vs.  
Vermeer Silver Series drill rod

**Call your local dealer for pricing.**



# DRIVE CHUCKS/ SUB SAVERS

Preassembled to help provide proper torque and makeup, Vermeer drive chucks and sub savers are manufactured to the exacting tolerances of Vermeer horizontal directional drills.

## Drive Chucks

Like Firestick drill rod, Vermeer drive chucks are manufactured with a rigorous quality assurance process. Forged from durable Vermeer-specified alloy steel, these drive chucks carry increased strength at the flange, as opposed to billet-manufactured assemblies.



Firestick drill rod thread is grit-blasted for increased surface hardness and grease retention.

### DRIVE CHUCK

Part No.	Description	Model Compatibility	Length shoulder to shoulder	Rod Diameter	Drill Rod Thread	Price USD
296255361	Drive Chuck	D7x11A	10" (25.4 cm)	1.66" (4.2 cm)	#200	\$308.03
296255363	Drive Chuck	D10x14, D10x15	11" (27.9 cm)	1.66" (4.2 cm)	#200	\$360.57
296255364	Drive Chuck	D16x20 – D20x22	11" (27.9 cm)	1.9" (4.8 cm)	#250	\$344.09
296279709	Drive Chuck	D18x22, D20x22	11" (27.9 cm)	2.06" (5.2 cm)	#400	\$437.84
230980001	Drive Chuck	D24x40A (SN 001 – 382)	12" (30.5 cm)	2.375" (6 cm)	#600	\$581.76
249169001	Drive Chuck	D24x40A (SN 383 and above)	13.5" (34.3 cm)	2.375" (6 cm)	#600	\$551.16
296273550	Drive Chuck	D24x40 Series II	16" (40.6 cm)	2.375" (6 cm)	#600	\$617.09
296443778	Drive Chuck	D24x40 S3	16.5" (41.9 cm)	2.375" (6 cm)	#600	\$606.00
296309648	Drive Chuck	D36x50 Series II, D36x50	14.42" (36.6 cm)	2.375" (6 cm)	#650	\$645.94
296309505	Drive Chuck	D36x50 Series II, D36x50	14.5" (36.8 cm)	2.625" (6.7 cm)	#700	\$711.87
296443819	Drive Chuck	D40x55 S3	15.42" (39.2 cm)	2.375" (6 cm)	#650	\$633.27
296443822	Drive Chuck	D40x55 S3	15.5" (39.4 cm)	2.625" (6.7 cm)	#700	\$697.91
296255366	Drive Chuck	D50x100A	13.5" (34.3 cm)	2.875" (7.3 cm)	#900	\$1,313.51
296255475	Drive Chuck	D50x100A, D60x90, D60x90 S3, D80x100	16.46" (41.8 cm)	3.5" (8.9 cm)	#800	\$1,318.05
296357202	Drive Chuck	D60x90, D60x90 S3	19.74" (50.1 cm)	2.875" (7.3 cm)	#900	\$1,313.51
296357222	Drive Chuck – Wireline	D60x90, D60x90 S3	19.74" (50.1 cm)	2.875" (7.3 cm)	#900	\$1,917.99
296268953	Drive Chuck – Wireline	D50x100A, D60x90, D60x90 S3, D80x100	19.96" (50.7 cm)	3.5" (8.9 cm)	#800	\$1,920.00
296309516	Drive Chuck	D100x120 Series II, D100x140, D100x140 S3	16.24" (41.3 cm)	3.5" (8.9 cm)	#1000	\$1,363.50
296309602	Drive Chuck – Wireline	D100x120 Series II, D100x140, D100x140 S3	16.24" (41.3 cm)	3.5" (8.9 cm)	#1000	\$1,917.99


























## DID YOU KNOW?

Applying Vermeer Thread Lock epoxy will help maintain proper torque and thread engagement of your sub saver.

## Sub Savers

Vermeer sub savers are made of rugged Vermeer-specified alloy steel for unmatched durability. Like Vermeer Firestick drill rod, our sub savers each go through a 100 percent thread inspection so they're ready when you are.

### SUB SAVER

Part No.	Model Compatibility	Length shoulder to shoulder	Rod Diameter	Drill Rod Thread	Price USD
 296255351	D7x11A, D10x14, D10x15	5.83" (14.8 cm)	1.66" (4.2 cm)	#200	\$91.69
 296276507	D6x6 – D10x15 S3	8" (20.3 cm)	1.66" (4.2 cm)	#200	\$118.17
 296255352	D16x20 – D20x22	4" (10.2 cm)	1.9" (4.8 cm)	#250	\$91.69
 296279708	D18x22, D20x22	6.5" (16.5 cm)	2.06" (5.2 cm)	#400	\$128.78
 296291966	D16x20 Series II, D20x22 S3	10.14" (25.8 cm)	1.9" (4.9 cm)	#250	\$190.59
 296339860	D20x22 Series II	10.14" (25.8 cm)	2.06" (5.2 cm)	#400	\$190.59
 296281195	D20x22 Series II, D20x22 S3, D23x30 S3	10.14" (25.8 cm)	2.06" (5.2 cm)	#400	\$190.59
 296436210	D23x30 S3	10.14" (25.8 cm)	2.375" (6 cm)	#600	\$186.85
 230945001	D24x40A (SN 001 – 382)	5.5" (14 cm)	2.375" (6 cm)	#600	\$149.38
 249166001	D24x40A (SN 383 and above)	7" (17.8 cm)	2.375" (6 cm)	#600	\$149.38
 276323001	D24x40 Series II	9.5" (24.1 cm)	2.375" (6 cm)	#600	\$173.72
 296443760	D24x40 S3	10" (25.4 cm)	2.375" (6 cm)	#600	\$227.25
 296309650	D36x50 Series II	7.92" (20.1 cm)	2.375" (6 cm)	#650	\$215.13
 296309507	D36x50, D36x50 Series II	8.5" (21.6 cm)	2.625" (6.7 cm)	#700	\$272.70
 296375252	D36x50 Series II (outer rod)	12" (30.5 cm)	2.625" (6.7 cm)	#750	\$395.60
 296368693	D36x50 Series II (inner rod)	12.5" (31.8 cm)	1.66" (4.2 cm)	#200	\$200.99
 296443818	D40x55 S3	8.92" (22.7 cm)	2.375" (6 cm)	#650	\$237.35
 296443821	D40x55 S3	9.50" (24.1 cm)	2.625" (6.7 cm)	#700	\$277.75
 296255354	D50x100A – for Drive Chuck 296355366	5.82" (14.8 cm)	2.875" (7.3 cm)	#900	\$386.33
 296255477	D50x100A, D60x90, D60x90 S3, D80x100 – for Drive Chucks 296255475, 296268832	7.02" (17.8 cm)	3.5" (8.9 cm)	#800	\$362.59
 296344115	D60x90, D60x90 S3 – for Drive Chucks 296357202, 296257222	8.7" (22 cm)	2.875" (7.3 cm)	#900	\$463.59
 296309515	D100x120 Series II, D100x140, D100x140 S3 – for Drive Chucks 296309516, 296309602	7.02" (17.8 cm)	3.5" (8.9 cm)	#1000	\$362.59
 247261985	Vermeer Thread Lock				\$25.00





QuickFire connection system helps provide faster and more efficient connections, so you can spend less time on preparation and more time on productive drilling.

Precision threading process helps provide exacting tolerances.







# QUICKFIRE®



Each part includes a manufactured date and part number for convenient identification and traceability.

The QuickFire connection system is a Vermeer-original design born from the same innovation that created our industry-leading Firestick drill rod. The QuickFire connection is manufactured from high-alloy material, machined to exacting tolerances and subjected to an industry-unique heat-treatment process for durability and reliability. It is available in multiple sizes for drilling rigs rated up to 5500 ft-lb (7455 Nm) of torque. On the jobsite, you'll appreciate the coarse and tapered thread profile allowing four-turn makeup. It also features an eight-sided collar to make flat alignment easier to handle.

## QUICKFIRE CONNECTION STARTER RODS

Part No.	Description	Model Compatibility	Thread Type	Drill Rod Thread	Price USD
 296364003	QuickFire System 300 Starter Rod	D7x11A – D10x15 S3	Firestick	#200	\$267.00
296415301	QuickFire System 300 Starter Rod with Check Valve	D7x11A – D10x15 S3	Firestick	#200	\$368.00
 296331952	QuickFire System 400 Starter Rod	D16x20, D16x20 Series II, D20x22 S3	Firestick	#250	\$296.82
296415305	QuickFire System 400 Starter Rod with Check Valve	D16x20, D16x20 Series II, D20x22 S3	Firestick	#250	\$428.00
 296331926	QuickFire System 400 Starter Rod	D20x22, D20x22 Series II, D20x22 S3, D23x30 S3	Firestick	#400	\$296.82
296415314	QuickFire System 400 Starter Rod with Check Valve	D20x22, D20x22 Series II, D20x22 S3, D23x30 S3	Firestick	#400	\$459.00
 296331924	QuickFire System 400 Starter Rod	D23x30 S3, D24x40, D24x40 Series II, D24x40 S3	Firestick	#600	\$296.82
 296364069	QuickFire System 460 Starter Rod	D24x40, D24x40 Series II, D24x40 S3	Firestick	#600	\$521.00
296331925	QuickFire System 400 (B) Starter Rod	D36x50, D36x50 Series II, D40x55 S3	Firestick	#650	\$351.00
296415308	QuickFire System 400 Starter Rod with Check Valve	D23x30 S3, D24x40A, D24x40 Series II, D24x40 S3	Firestick	#600	\$443.70
 296383272	QuickFire System 460 Starter Rod	D36x50DR	Firestick	#750	\$530.00
 296364232	QuickFire System 700 Starter Rod	D36x50DR	Firestick	#750	\$1,683.00
 296331978	QuickFire System 460 Starter Rod	D36x50, D36x50 Series II, D40x55 S3	Firestick	#650	\$525.00
296415321	QuickFire System 460 Starter Rod with Check Valve	D36x50, D36x50 Series II, D40x55 S3	Firestick	#650	\$663.00
 296331962	QuickFire System 460 Starter Rod	D36x50, D36x50 Series II, D40x55 S3	Firestick	#700	\$521.00
296415324	QuickFire System 460 Starter Rod with Check Valve	D36x50, D36x50 Series II, D40x55 S3	Firestick	#700	\$663.00
296364045	QuickFire System 300 Hardware Kit Includes set of screws and O-ring	D7x11A – D10x15 S3	—	—	\$3.00
296364046	QuickFire System 400 Hardware Kit Includes set of screws and O-ring	D16x20 – D24x40 S3	—	—	\$3.00
296364047	QuickFire System 460 Hardware Kit Includes set of screws and O-ring	D36x50 – D40x55 S3	—	—	\$3.00
296392411	QuickFire System 700 Hardware Kit Includes set of screws and O-ring	D36x50DR	—	—	\$3.00

**Robust O-ring:** Helps maximize fluid delivery to the tool.

**Stress relief groove:** Patent-pending design is machined on the box and pin components to help increase fatigue life. Includes stress release grooves on both male and female end components.

**Eight-sided collar:** Developed for ease of flat alignment.

**Large dual lands:** Designed in the box-and-pin components to help transfer bending loads away from the thread profile.

**Four-turn makeup:** A coarse, tapered and robust thread profile, designed for quick makeup and flexibility.







## Low-Profile Hex Connection

The Vermeer low-profile hex connection sets the industry standard. This Vermeer-original design was created with a unique machining process that heat-treats Vermeer-specified alloy steel and machines it to Vermeer tolerances. It also undergoes a unique broaching process to create consistent flats. Each piece goes through a 100 percent thread inspection process.



A starter rod with check valve helps reduce the chance of plugging due to downhole pressure.



### LOW-PROFILE HEX STARTER ROD

Part No.	Description	Model Compatibility	Thread Type	Drill Rod Thread	Price USD
 276261001	LP Hex Starter Rod – 1.625" (4.1 cm) Hex Box	D7x11A – D10x15 S3	Firestick	#200	\$236.17
234945001	LP Hex Starter Rod – 2.125" (5.4 cm) Hex Box	D7x11A – D10x15 S3	Firestick	#200	\$279.48
240895001	LP Hex Starter Rod – 1.625" (4.1 cm) Hex Box	D16x20, D16x20 Series II, D20x22 S3	Firestick	#250	\$279.48
 234840001	LP Hex Starter Rod – 2.125" (5.4 cm) Hex Box	D16x20, D16x20 Series II, D20x22 S3	Firestick	#250	\$246.57
296409410	LP Hex Starter Rod – 2.125" (5.4 cm) Hex Box with Check Valve	D16x20, D16x20 Series II, D20x22 S3	Firestick	#250	\$358.94
 250658001	LP Hex Starter Rod – 2.125" (5.4 cm) Hex Box	D20x22, D20x22 Series II, D20x22 S3, D23x30 S3	Firestick	#400	\$246.57
 296409381	LP Hex Starter Rod – 2.125" (5.4 cm) Hex Box with Check Valve	D20x22, D20x22 Series II, D20x22 S3, D23x30 S3	Firestick	#400	\$369.24
 234826001	LP Hex Starter Rod – 2.125" (5.4 cm) Hex Box	D23x30 S3, D24x40, D24x40 Series II, D24x40 S3	Firestick	#600	\$251.78
 296409384	LP Hex Starter Rod – 2.125" (5.4 cm) Hex Box with Check Valve	D23x30 S3, D24x40A, D24x40 Series II, D24x40 S3	Firestick	#600	\$369.24

### LOW-PROFILE HEX COLLAR

Part No.	Description	Model Compatibility	Price USD
 289274001	LP Hex Collar – 2.75" (7 cm) – Hardfaced	D7x11A – D10x15 S3	\$85.31
 296343245	LP Hex Collar – 2.75" (7 cm) – Hardfaced with Teeth	D7x11A – D10x15 S3	\$152.94
 289273001	LP Hex Collar – 3.5" (8.9 cm) – Hardfaced	D16x20 – D40x40	\$131.09
 296343244	LP Hex Collar – 3.5" (8.9 cm) – Hardfaced with Teeth	D16x20 – D40x40	\$174.42



## Premium Housing

The premium transmitter housings from Vermeer integrate many of the robust and proven design characteristics of the rock-focused Armor drilling system into a versatile tool for soft to intermediate ground conditions.






Heavy-duty, heat-treated transmitter lid helps minimize signal distortion caused by flexing.

Replaceable and highly adaptable rear API connection helps realize the full wear life of the housing, improving efficiency.

Dual gun-drilled water ports help maximize drilling fluid flow/pressure and decrease incidents of plugging.



### PREMIUM

Part No.	Description	Model Compatibility	Rear Connection	Outside Diameter	Bit Bolt Pattern	Price USD
 296408265	Premium Housing	D6x6 – D10x15 S3	2-4 ACME Box	2.75" (7 cm)	6-hole – 1/2" (1.3 cm) bolt	\$964.25
 296408264	Premium Housing	D16x20A – D24x40 S3	2.375" (6 cm) API Reg Box	3" (7.6 cm)	6-hole – 1/2" (1.3 cm) bolt	\$1,065.75
 296406540	Premium Housing	D24x40 – D40x55 S3	2.375" (6 cm) API Reg Box	3.25" (8.3 cm)	6-hole – 1/2" (1.3 cm) bolt	\$1,116.50
 296408266	Premium Housing	D60x90, D60x90 S3, D80x100, D80x100 Series II	2.875" (7.3 cm) API Reg Box	3.5" (8.9 cm)	6-hole – 5/8" (1.6 cm) bolt	\$1,522.50
 296408267	Premium Housing	D100x120, D100x120 Series II, D100x140, D100x140 S3	3.5" (8.9 cm) API Reg Box	4.5" (11.4 cm)	6-hole – 3/4" (1.9 cm) bolt	\$2,030.00

# VERMEER ACE™ BITS

**PICK THE BIT THAT'S IN IT  
FOR THE LONG HAUL.**

Vermeer Ace bits provide durability and wearability. The plug-style tooth design of the Ace bit allows teeth to be positioned closer to each other.



## Standard

The standard bit features a rounded bit face to assist steering performance and offers durability, longevity and wearability for **softer ground conditions that are more abrasive, medium packed soils and light gravel.**



### STANDARD ACE DRILL BIT

Part No.	Model Compatibility	Bolt Pattern	Width	Price USD
296415439	D6x6 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4" (10.2 cm)	\$312.12
296415498	D6x6 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4.5" (11.3 cm)	\$331.50
296415445	D6x6 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	5" (12.7 cm)	\$374.34

## Pro

A step up from our standard Ace bit, it features a semi-aggressive tapered front design for penetration in harder ground conditions — offering even greater durability, longevity and wearability to tackle **loam to moderately aggressive cobble, sand and hard pan.**



### PRO ACE DRILL BIT

Part No.	Model Compatibility	Bolt Pattern	Width	Price USD
296449348	D6x6 – D10x15 S3	5-hole – 3/8" (1 cm) bolt	3" (7.6 cm)	\$290.70
296415473	D6x6 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	3.5" (8.9 cm)	\$341.70
296415374	D6x6 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4" (10.2 cm)	\$372.30
296415492	D6x6 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4.5" (11.4 cm)	\$397.80
296415394	D6x6 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	5" (12.7 cm)	\$418.20

## Premium

The premium Ace bit features an aggressive tapered bit front to help penetration rates and offers superior durability, longevity and wearability for high risk, aggressive ground conditions such as **heavy cemented cobble, hard packed soils and softer shale.**



### PREMIUM ACE DRILL BIT

Part No.	Model Compatibility	Bolt Pattern	Width	Price USD
296449347	D6x6 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4" (10.2 cm)	\$484.50
296449341	D6x6 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4.5" (11.3 cm)	\$510.00
296449344	D6x6 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	5" (12.7 cm)	\$540.60



# DRILL BITS

Vermeer drill bits are, in a word, tough. They start with Vermeer-specified high-alloy, heat-treated steel for durability and wear-resistance. Each bit is designed to meet the exacting tolerances for Vermeer HDDs to help maintain peak performance.



## Standard/Standard Hardfaced

Performance is standard with this bit. It includes a quick-shot hole and is an economical option for softer soil conditions such as **loam, black dirt and sandy loam.**

STANDARD DRILL BIT				
Part No.	Model Compatibility	Bolt Pattern	Width	Price USD
246570001	D6x6 – D10x15 S3	6-hole – 1/2" (1.3 cm) bolt	3.5" (8.9 cm)	\$83.23
246571001	D6x6 – D10x15 S3	6-hole – 1/2" (1.3 cm) bolt	4" (10.2 cm)	\$86.70
296255331	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4" (10.2 cm)	\$122.00
296255332	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4.5" (11.4 cm)	\$130.56
296255333	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	5" (12.7 cm)	\$150.00

STANDARD HARDFACED DRILL BIT				
Part No.	Model Compatibility	Bolt Pattern	Width	Price USD
272446001	D6x6	5-hole – 3/8" (1 cm) bolt	2.25" (5.7 cm)	\$108.12
296274213	D6x6	5-hole – 3/8" (1 cm) bolt	2.5" (6.4 cm)	\$87.39
296274214	D6x6	5-hole – 3/8" (1 cm) bolt	3" (7.6 cm)	\$90.51
296274215	D6x6	5-hole – 3/8" (1 cm) bolt	3.5" (8.9 cm)	\$93.64
246798001	D6x6 – D10x15 S3	6-hole – 1/2" (1.3 cm) bolt	3" (7.6 cm)	\$92.60
246799001	D6x6 – D10x15 S3	6-hole – 1/2" (1.3 cm) bolt	3.5" (8.9 cm)	\$103.00
296255334	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4" (10.2 cm)	\$141.49
296255335	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4.5" (11.4 cm)	\$151.90
296255336	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	5" (12.7 cm)	\$187.27
296255340*	D50x100 – D80x100	6-hole – 5/8" (1.6 cm) bolt	5" (12.7 cm)	\$181.56
296255341*	D50x100 – D80x100	6-hole – 5/8" (1.6 cm) bolt	6" (15.2 cm)	\$239.21

\*Does not include quick-shot hole.

## Shark

The Vermeer shark bit is one of our original designs. It's proudly built with shark teeth cutting tools that supply an aggressive cutting action to work through **hard-packed ground conditions, caliche and soft rock.**

SHARK DRILL BIT				
Part No.	Model Compatibility	Bolt Pattern	Width	Price USD
239880001	D6x6	5-hole – 3/8" (1 cm) bolt	3" (7.6 cm)	\$138.37
235175001	D6x6 – D10x15 S3	6-hole – 1/2" (1.3 cm) bolt	3.5" (8.9 cm)	\$145.66
235178001	D6x6 – D10x15 S3	6-hole – 1/2" (1.3 cm) bolt	4" (10.2 cm)	\$150.86
235181001	D6x6 – D10x15 S3	6-hole – 1/2" (1.3 cm) bolt	4.5" (11.4 cm)	\$161.16
235187001	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	3.5" (8.9 cm)	\$161.16
235190001	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4" (10.2 cm)	\$171.36
235193001	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4.5" (11.4 cm)	\$176.46
235196001	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	5" (12.7 cm)	\$192.47
235205001	D50x100 – D80x100	6-hole – 5/8" (1.6 cm) bolt	5" (12.7 cm)	\$197.68
235208001	D50x100 – D80x100	6-hole – 5/8" (1.6 cm) bolt	5.5" (14 cm)	\$204.00
235211001	D50x100 – D80x100	6-hole – 5/8" (1.6 cm) bolt	6" (15.2 cm)	\$214.20







## Gladiator Saber Bit

The Gladiator saber bit features an aggressive tapered design for penetrating hard-packed soil conditions. Includes the Gladiator standard of carbide buttons to help extend wear life, making it ready for **highly abrasive ground conditions**.



GLADIATOR SABER DRILL BIT				
Part No.	Model Compatibility	Bolt Pattern	Width	Price USD
296341835	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4" (10.2 cm)	\$270.05
296341836	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4.5" (11.4 cm)	\$292.55
296341837	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	5" (12.7 cm)	\$302.94

## Gladiator™ Spear Bit

The Gladiator spear bit is exclusively designed with oversized carbide buttons to help reduce premature wear — with a rugged, pointed design. The Gladiator spear bit lets you battle compatible ground conditions from **loam to cobble and other highly abrasive soil**.



GLADIATOR SPEAR DRILL BIT				
Part No.	Model Compatibility	Bolt Pattern	Width	Price USD
296334309	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	3.5" (8.9 cm)	\$252.82
296334328	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4" (10.2 cm)	\$263.16
296334306	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4.5" (11.4 cm)	\$283.56
296334359	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	5" (12.7 cm)	\$295.47
296419299	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	6" (15.2 cm)	\$375.06



## Gladiator Mallet Bit

Steer into the clear with the Gladiator mallet bit. It features the Gladiator-exclusive bit design with oversized carbide buttons for wear resistance as its flat face helps maximize steering control. It's ideal for **cobble and highly abrasive ground conditions**.

### GLADIATOR MALLET DRILL BIT

Part No.	Model Compatibility	Bolt Pattern	Width	Price USD
296334312	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	3.5" (8.9 cm)	\$252.82
296334324	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4" (10.2 cm)	\$263.16
296334303	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4.5" (11.4 cm)	\$283.56
296334356	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	5" (12.7 cm)	\$295.47

## Gladiator Club Bit

The Vermeer Gladiator club bit brings you the power of our exclusively designed oversized carbide buttons for wear resistance. This versatile series is ideal for **cobble and highly abrasive ground conditions**.

### GLADIATOR CLUB DRILL BIT

Part No.	Model Compatibility	Bolt Pattern	Width	Price USD
296334350	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	3.5" (8.9 cm)	\$252.82
296334326	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4" (10.2 cm)	\$263.16
296334300	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	4.5" (11.4 cm)	\$283.56
296334353	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	5" (12.7 cm)	\$295.47
296419303	D16x20 – D40x55 S3	6-hole – 1/2" (1.3 cm) bolt	6" (15.2 cm)	\$375.06

# DESIGNED WITH YOU IN MIND.

## ARMOR® DRILLING SYSTEM

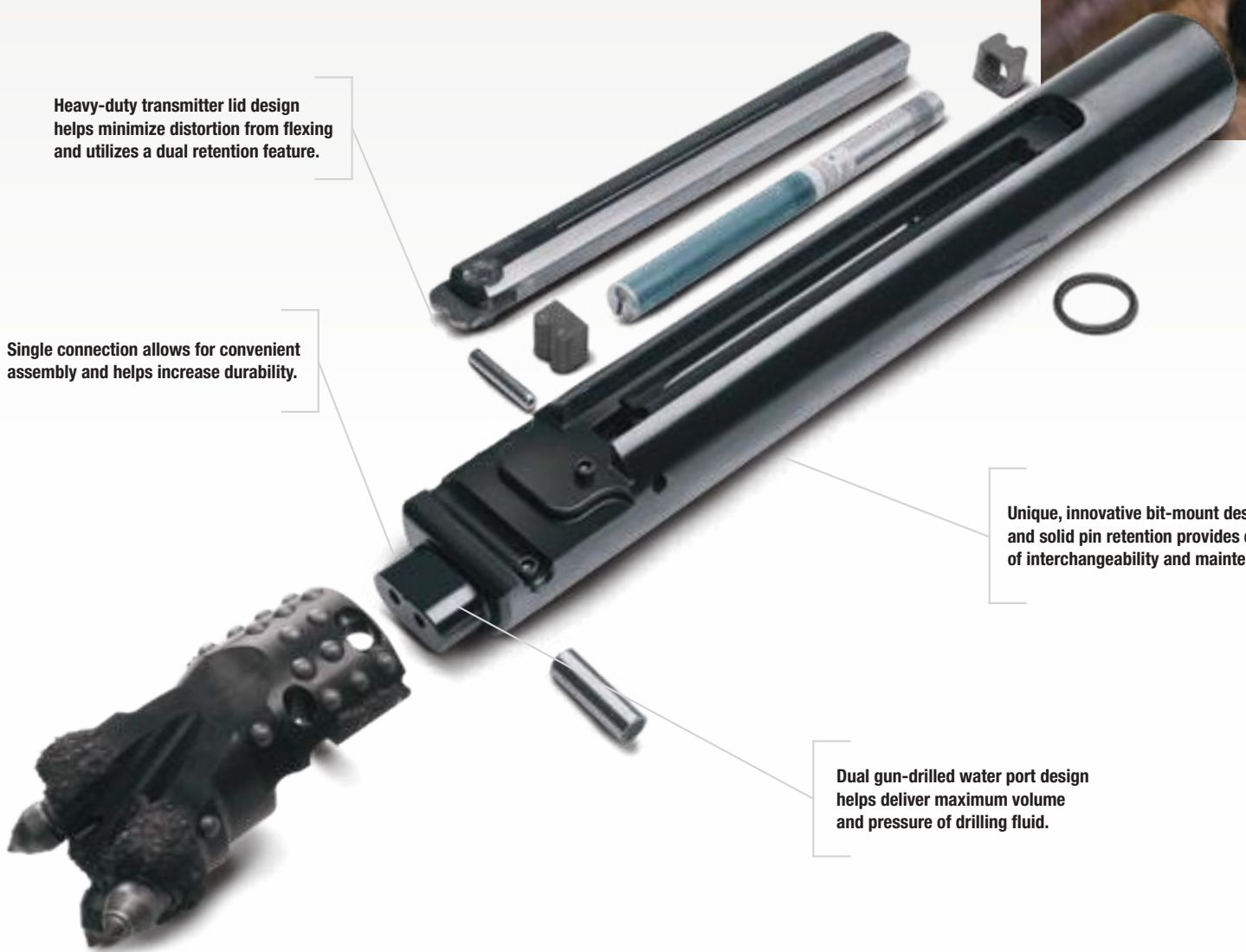
Prepare to win the tough jobs with the Armor drilling system from Vermeer. It's a single HDD tooling system with multiple drilling options designed to provide versatility and performance — one housing, multiple bits.

Heavy-duty transmitter lid design helps minimize distortion from flexing and utilizes a dual retention feature.

Single connection allows for convenient assembly and helps increase durability.

Unique, innovative bit-mount design and solid pin retention provides ease of interchangeability and maintenance.

Dual gun-drilled water port design helps deliver maximum volume and pressure of drilling fluid.





## **BRING YOUR BIT BACK TO LIFE.**

Every operator understands the value of the bits they use on the jobsite. Now, help extend the usable life of your bits with the Armor drilling system rebuild program.

Send in your worn-down bits for rebuild by the manufacturer: Vermeer. Depending on the type of wear exhibited, Armor bits can be rebuilt multiple times.

Before the rebuild process begins, every Armor bit will be reviewed by the Vermeer team of HDD tooling engineers and will undergo a comprehensive analysis by staff metallurgists.

**Contact your local Vermeer dealer for more information on the Armor drilling system rebuild program.**





# PREPARE FOR BATTLE.

The Armor drilling system bolt-on series brings together the strength of the Gauntlet™ and Lance™ bits, the versatility of premium transmitter housings and an efficient quickshot pullback tool.



## ARMOR 2.375" (6 CM) API REG

Part No.	Description	Model Compatibility	Price USD
296466151	Armor Housing System 3.25" (8.3 cm) OD, 2.375" (6 cm) API Reg Box	D16x20 – D24x40 S3	\$2,360.00
296344406	Armor Sonde Lid Kit (Lid, Roll Pins)	D16x20 – D24x40 S3	\$324.00
296428974	Armor Bit Hardware Kit (Solid Pin, O-rings, Capscrews)	D16x20 – D24x40 S3	\$18.00
296466222	Armor Gauntlet Bit – 4.25" (10.8 cm) with Pullback	D16x20 – D24x40 S3	\$2,487.00
296496183	Armor Gauntlet Small Pullback Hook	D16x20 – D24x40 S3	\$165.00
296371274	Armor Gauntlet Bit Tooth – Medium Rock	D16x20 – D24x40 S3	\$13.00
296386883	Armor Gauntlet Bit Tooth – Soft Rock	D16x20 – D24x40 S3	\$15.00
296456950	Armor Lance Pro Bit – 4.25" (10.8 cm) with Pullback	D16x20 – D24x40 S3	\$2,050.00
296493061	Lance (Pro or Original) Small Pullback Hook	D16x20 – D24x40 S3	\$107.24
296456809	Armor Lance Original Bit – 4.25" (10.8 cm) with Pullback	D16x20 – D24x40 S3	\$1,768.00
296428590	Pullback Mount Assembly	D16x20 – D24x40 S3	\$375.00
296428584	Armor Single Roller Cone Bit – 4.25" (10.8 cm)	D16x20 – D24x40 S3	\$1,870.00
296428588	Armor Bent Sub Adapter – 2.375" (6 cm) API Reg	D16x20 – D24x40 S3	\$995.00
296428587	Armor Pullback Swivel – 24,000 lb (10,866.2 kg) rated	D16x20 – D24x40 S3	\$1,246.00

## ARMOR 2.875" (7.3 CM) API REG

Part No.	Description	Model Compatibility	Price USD
296466152	Armor Side Load Housing System – 3.75" (9.5 cm) OD, 2.875" (7.3 cm) API	D24x40 – D40x55 S3	\$3,438.00
296344404	Armor Sonde Lid Kit (Lid, Roll Pins)	D24x40 – D40x55 S3	\$360.35
296428973	Armor Bit Hardware Kit	D24x40 – D40x55 S3	\$18.00
296456837	Armor Gauntlet Bit – 5.5" (14 cm) with Pullback	D24x40 – D40x55 S3	\$3,938.00
296496178	Armor Gauntlet Medium Pullback Hook	D24x40 – D40x55 S3	\$175.00
296352129	Armor Gauntlet Bit Tooth – Medium Rock	D24x40 – D40x55 S3	\$13.00
296352180	Armor Gauntlet Bit Tooth – Soft Rock	D24x40 – D40x55 S3	\$19.00
296456953	Armor Lance Pro Bit 5" (12.7 cm) with Pullback	D24x40 – D40x55 S3	\$2350.00
296493074	Armor Lance (Pro or Original) Medium Pullback Hook	D24x40 – D40x55 S3	\$147.10
296456845	Armor Lance Original Bit – 5" (12.7 cm) with Pullback	D24x40 – D40x55 S3	\$1,934.00
296428636	Pullback Mount Assembly	D24x40 – D40x55 S3	\$675.00
296428619	Armor Single Roller Cone Bit – 4.25" (10.8 cm)	D24x40 – D40x55 S3	\$2,125.00
296428612	Armor Bent Sub Adapter – 2.875" (7.3 cm) API Reg	D24x40 – D40x55 S3	\$1,095.00
296428610	Armor Swivel – 24,000 lb (10,866.2 kg) rated	D24x40 – D40x55 S3	\$1,262.00

## ARMOR 2.875" (7.3 CM) API IF

Part No.	Description	Model Compatibility	Price USD
296466153	Armor Housing System 4.25" (10.8 cm) OD, 2.875" (7.3 cm) API IF	D60x90 – D100x140 S3	\$4,331.00
296344404	Armor Sonde Lid Kit	D60x90 – D100x140 S3	\$360.35
296428972	Armor Bit Hardware Kit (Solid Pin, O-rings, Capscrews)	D60x90 – D100x140 S3	\$25.00
296488183	Armor Gauntlet Bit – 6.5" (16.5 cm)	D60x90 – D100x140 S3	\$4,750.00
296341728	Armor Gauntlet Bit Tooth – Medium Rock	D60x90 – D100x140 S3	\$29.00
296392367	Armor Gauntlet Bit Tooth – Soft Rock	D60x90 – D100x140 S3	\$31.00
296484008	Armor Lance Pro Bit – 6.25" (15.8 cm)	D60x90 – D80x100 Series II	\$2,880.00
296484086	Armor Lance Pro Bit – 7.25" (18.4 cm)	D80x120 – D100x140 S3	\$3,200.00
296341742	Armor Lance Original Bit – 6.5" (16.5 cm)	D60x90 – D80x100 Series II	\$2,400.00
296341747	Armor Lance Original Bit – 7.25" (18.4 cm)	D80x120 – D100x140 S3	\$2,600.00
296396008	Armor Single Roller Cone Bit – 6.5" (16.5 cm)	D60x90 – D100x140 S3	\$2,850.00
296396011	Armor Bent Sub Adapter – 3.5" (8.9 cm) API Reg	D60x90 – D100x140 S3	\$1,500.00

## ARMOR ACCESSORIES

Part No.	Description	Model Compatibility	Price USD
296344264	Armor Multi-Tool Small and Medium	D16x20 – D50x100A	\$273.00
296392362	Armor Multi-Tool Large	D60x90 – D100x140 S3	\$280.00
296344402	Armor Sonde Isolator and Timing Kit	D16x20 – D100x140 S3	\$28.00
296412939	Armor Timing Key – Steel	D16x20 – D100x140 S3	\$47.95

## API Bent Sub Adaptor

For use in tandem with any API pin bit, including tricone and PDC configurations.





### Gauntlet Bit

The Gauntlet bit was designed for use in **soft to medium rock, shale and caliche** ground conditions up to 10,000 psi (68.9 MPa) with exceptional steering capabilities. Carbide buttons are strategically placed on the bit for optimum cutting, and carbide hard facing helps to enhance wear and performance characteristics. A replaceable three-tooth design delivers a consistent cutting structure for steering corrections to help maximize drilling performance.



### Lance™ Original Bit

The Lance original bit is intended for use in **hard-packed soil, gravel and cobble**. The bit features a scoop design for steering capabilities and operator control to help limit wandering in challenging ground conditions. Carbide buttons and robotically applied hardfacing help improve overall bit wear in most abrasive drilling conditions.



### Lance Pro Bit

Featuring domed, plug style teeth, the Lance Pro bit offers continuous carbide coverage across the front of the bit to help extend wear life. **Carbide buttons protect the bit mount section from wear so it can be rebuilt.** With a tendency to cut on center, the Lance Pro bit helps you execute your bore as planned.

**ARMOR**  
DRILLING SYSTEM  
BY VERMEER





## Armor System Pullback Hook

Armor system Gauntlet, Lance Original and Lance Pro bits include a heavy-duty pullback hook for quick-shot applications.



## Single Roller Cone Bit

Designed to deliver versatility in cobble and broken formations, the cone rotation helps smooth out the entire drill string reducing torque spikes. The bit is used for **extreme cobbles and soft to medium rock**.



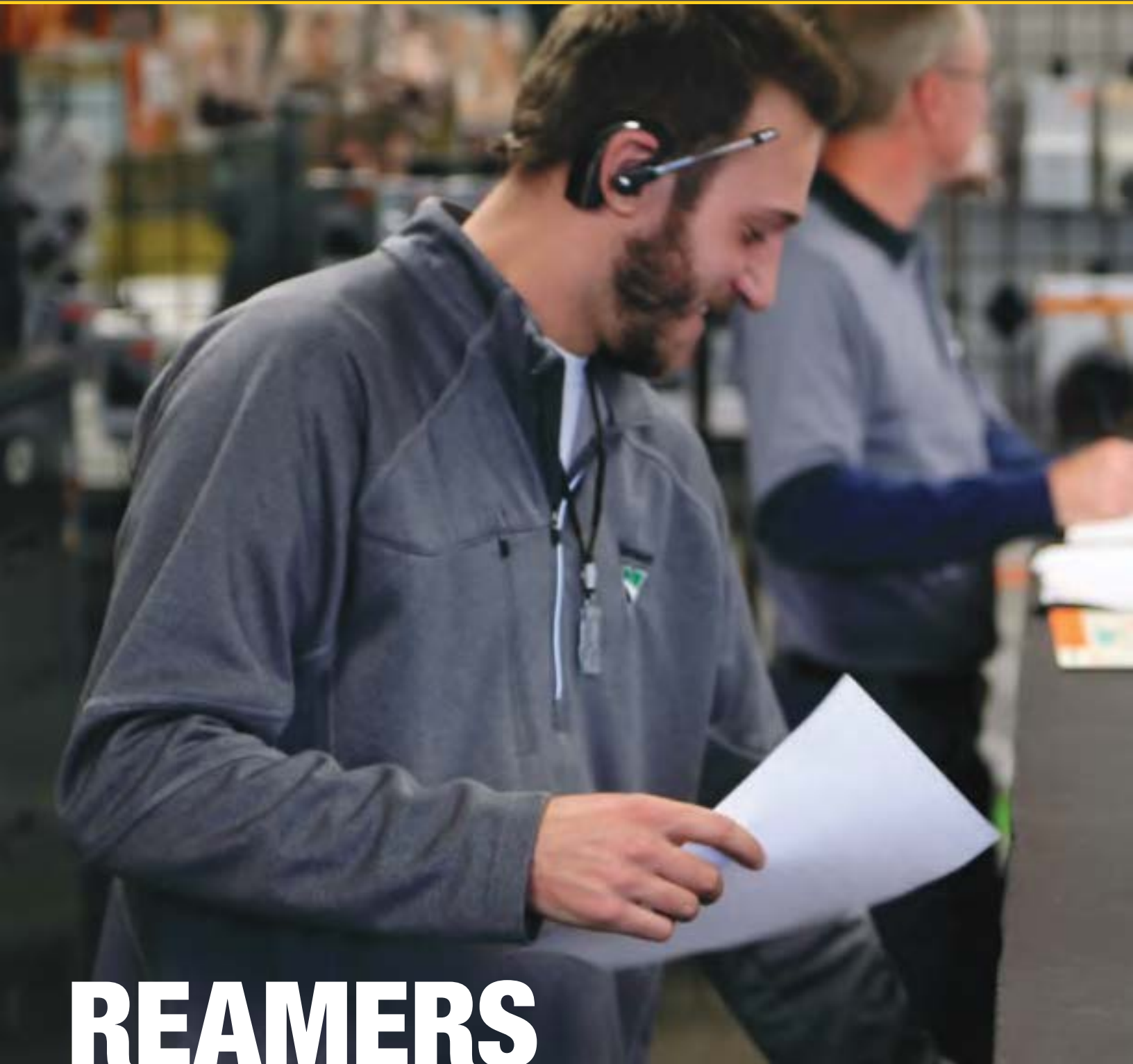
## Gauntlet Bit – Bolt-On

The bolt-on Armor System Gauntlet bit is intended for use with premium housing and was designed for use in **soft to medium rock, shale and caliche ground conditions**. For convenience, assembly includes pullback tool and conical teeth kit with three styles. Shown with included pullback hook.



## Lance Bit – Bolt-On

The bolt-on hook Armor System Lance bit is intended for use with premium housing. It is designed for use in **hard-packed soil, gravel and cobble**, and for convenience, the assembly includes pullback tool.



# REAMERS

Vermeer puts its full range of reamer solutions to work for you. From the tried and true to pioneering designs, our lineup is ready to handle a wide variety of ground conditions you run into. As always, with Vermeer you can expect a world-class product offering to help meet your needs. Plus, when you come across the unexpected, you can rely on us for customized tooling options to meet specific applications, ground conditions and, of course, your personal preferences.


## Fluted Reamer

Our fluted reamers get the job done with a robust through-shaft design and heat-treated, cast-alloy steel for durability. To help reduce the amount of resistance-causing spoil buildup, a built-in swivel minimizes the distance to the product pipe. Vermeer fluted reamers include robotically applied carbide mesh grit hardfacing for longevity. And they're available with rotary or shark teeth to create an aggressive cutting action. Ideal for rugged ground conditions ranging from **hard pan and soft rock to cobble**.


Standard threaded ports offer versatility in adjusting drilling fluid flow.



### FLUTED WITH EYE – SHARK TEETH

Part No.	Model Compatibility	Front Connection	Rear Connection	Cutting Size	Pull Eye/Pull Eye Capacity	Price USD
296341430	D6x6 – D10x15 S3	QuickFire System 300 Pin	Pull Eye	4.5" (11.4 cm)	24,000 lb (10,886.2 kg)	\$726.19
296341431	D16x20 – D24x40 S3	QuickFire System 400 Pin	Pull Eye	4.5" (11.4 cm)	24,000 lb (10,886.2 kg)	\$798.41
296341432	D6x6 – D10x15 S3	1.625" (4.13 cm) Hex Pin	Pull Eye	4.5" (11.4 cm)	24,000 lb (10,886.2 kg)	\$658.30
296341433	D16x20 – D24x40 S3	2.125" (5.4 cm) Hex Pin	Pull Eye	4.5" (11.4 cm)	24,000 lb (10,886.2 kg)	\$735.28
296341434	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	Pull Eye	6" (15.2 cm)	24,000 lb (10,886.2 kg)	\$1,063.17
296341435	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	Pull Eye	8" (20.3 cm)	24,000 lb (10,886.2 kg)	\$1,487.61
296341436	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	Pull Eye	10" (25.4 cm)	24,000 lb (10,886.2 kg)	\$1,662.46
296341437	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	Pull Eye	12" (30.5 cm)	24,000 lb (10,886.2 kg)	\$2,158.27
296341438	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	Pull Eye	14" (35.6 cm)	24,000 lb (10,886.2 kg)	\$2,541.16
296341439	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	Pull Eye	16" (40.6 cm)	24,000 lb (10,886.2 kg)	\$3,285.31
 235095001	Replacement Shark Teeth – 1.25" (3.2 cm) Weld-on					\$4.27

### FLUTED WITH EYE – ROTARY TEETH

Part No.	Model Compatibility	Front Connection	Rear Connection	Cutting Size	Pull Eye/Pull Eye Capacity	Price USD
296341440	D6x6 – D10x15 S3	QuickFire System 300 Pin	Pull Eye	4.5" (11.4 cm)	24,000 lb (10,886.2 kg)	\$726.19
296341441	D16x20 – D24x40 S3	QuickFire System 400 Pin	Pull Eye	4.5" (11.4 cm)	24,000 lb (10,886.2 kg)	\$798.41
296341442	D6x6 – D10x15 S3	1.625" (4.1 cm) Hex Pin	Pull Eye	4.5" (11.4 cm)	24,000 lb (10,886.2 kg)	\$658.30
296341443	D16x20 – D24x40 S3	2.125" (5.4 cm) Hex Pin	Pull Eye	4.5" (11.4 cm)	24,000 lb (10,886.2 kg)	\$735.28
296341444	D7x11 – D24x40 S3	2.375" (6 cm) API Box	Pull Eye	6" (15.2 cm)	24,000 lb (10,886.2 kg)	\$1,063.17
296341445	D7x11 – D24x40 S3	2.375" (6 cm) API Box	Pull Eye	8" (20.3 cm)	24,000 lb (10,886.2 kg)	\$1,487.61
296341446	D7x11 – D24x40 S3	2.375" (6 cm) API Box	Pull Eye	10" (25.4 cm)	24,000 lb (10,886.2 kg)	\$1,662.46
296341447	D7x11 – D24x40 S3	2.375" (6 cm) API Box	Pull Eye	12" (30.5 cm)	24,000 lb (10,886.2 kg)	\$2,158.27
296341448	D7x11 – D24x40 S3	2.375" (6 cm) API Box	Pull Eye	14" (35.6 cm)	24,000 lb (10,886.2 kg)	\$2,541.16
296341449	D7x11 – D24x40 S3	2.375" (6 cm) API Box	Pull Eye	16" (40.6 cm)	24,000 lb (10,886.2 kg)	\$3,285.31
 227684001	Replacement Rotary Teeth – Standard Weld-on					\$7.28



## FLUTED WITH SWIVEL – SHARK TEETH

Part No.	Model Compatibility	Front Connection	Rear Connection	Cutting Size	Swivel/Swivel Capacity	Price USD
296341426	D6x6 – D10x15 S3	QuickFire System 300 Pin	Swivel	4.5" (11.4 cm)	24,000 lb (10,886.2 kg)	\$1,035.25
296341427	D16x20 – D24x40 S3	QuickFire System 400 Pin	Swivel	4.5" (11.4 cm)	24,000 lb (10,886.2 kg)	\$1,107.47
235058001	D7x11 – D24x40 S3	1.625" (4.1 cm) Hex Pin	Swivel	4.5" (11.4 cm)	24,000 lb (10,886.2 kg)	\$1,173.40
235063001	D7x11 – D24x40 S3	2.125" (5.4 cm) Hex Pin	Swivel	4.5" (11.4 cm)	24,000 lb (10,886.2 kg)	\$1,249.37
296258154	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	Swivel	6" (15.2 cm)	24,000 lb (10,886.2 kg)	\$1,578.27
296258156	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	Swivel	8" (20.3 cm)	24,000 lb (10,886.2 kg)	\$2,002.71
296260059	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	Swivel	10" (25.4 cm)	24,000 lb (10,886.2 kg)	\$2,177.56
296260061	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	Swivel	12" (30.5 cm)	24,000 lb (10,886.2 kg)	\$2,673.37
296260063	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	Swivel	14" (35.6 cm)	24,000 lb (10,886.2 kg)	\$3,056.26
296260065	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	Swivel	16" (40.6 cm)	24,000 lb (10,886.2 kg)	\$3,800.41
235095001	Replacement Shark Teeth – 1.25" (3.2 cm) Weld-on					\$4.27

## FLUTED WITH SWIVEL – ROTARY TEETH

Part No.	Model Compatibility	Front Connection	Rear Connection	Cutting Size	Swivel/Swivel Capacity	Price USD
296341428	D6x6 – D10x15 S3	QuickFire System 300 Pin	Swivel	4.5" (11.4 cm)	24,000 lb (10,886.2 kg)	\$1,035.25
296341429	D16x20 – D24x40 S3	QuickFire System 400 Pin	Swivel	4.5" (11.4 cm)	24,000 lb (10,886.2 kg)	\$1,107.47
235013001	D6x6 – D10x15 S3	1.625" (4.1 cm) Hex Pin	Swivel	4.5" (11.4 cm)	24,000 lb (10,886.2 kg)	\$1,250.38
232555001	D7x11 – D24x40 S3	2.125" (5.4 cm) Hex Pin	Swivel	4.5" (11.4 cm)	24,000 lb (10,886.2 kg)	\$1,379.44
296258153	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	Swivel	6" (15.2 cm)	24,000 lb (10,886.2 kg)	\$1,578.27
296258155	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	Swivel	8" (20.3 cm)	24,000 lb (10,886.2 kg)	\$2,002.71
296260058	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	Swivel	10" (25.4 cm)	24,000 lb (10,886.2 kg)	\$2,177.56
296260060	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	Swivel	12" (30.5 cm)	24,000 lb (10,886.2 kg)	\$2,673.37
296260062	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	Swivel	14" (35.6 cm)	24,000 lb (10,886.2 kg)	\$3,056.26
296260064	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	Swivel	16" (40.6 cm)	24,000 lb (10,886.2 kg)	\$3,800.41
227684001	Replacement Rotary Teeth – Standard Weld-on					\$7.28

## FLUTED WITH SWIVEL – ROTARY TEETH

Part No.	Model Compatibility	Front Connection	Rear Connection	Cutting Size	Swivel/Swivel Capacity	Price USD
296341450	D36x50 – D60x90 S3	2.875" (7.3 cm) API Reg Box	Swivel	10" (25.4 cm)	50,000 lb (22,679.6 kg)	\$4,322.72
296341451	D36x50 – D60x90 S3	2.875" (7.3 cm) API Reg Box	Swivel	12" (30.5 cm)	50,000 lb (22,679.6 kg)	\$4,478.28
296341452	D36x50 – D60x90 S3	2.875" (7.3 cm) API Reg Box	Swivel	14" (35.6 cm)	50,000 lb (22,679.6 kg)	\$4,812.65
296341453	D36x50 – D60x90 S3	2.875" (7.3 cm) API Reg Box	Swivel	16" (40.6 cm)	50,000 lb (22,679.6 kg)	\$5,318.66
296341454	D36x50 – D60x90 S3	2.875" (7.3 cm) API Reg Box	Swivel	18" (45.7 cm)	50,000 lb (22,679.6 kg)	\$5,763.97
296341455	D36x50 – D60x90 S3	2.875" (7.3 cm) API Reg Box	Swivel	20" (50.8 cm)	50,000 lb (22,679.6 kg)	\$6,527.35
296341456	D36x50 – D60x90 S3	2.875" (7.3 cm) API Reg Box	Swivel	22" (55.9 cm)	50,000 lb (22,679.6 kg)	\$7,358.72
296341457	D36x50 – D60x90 S3	2.875" (7.3 cm) API Reg Box	Swivel	24" (61 cm)	50,000 lb (22,679.6 kg)	\$7,900.22
296341458	D36x50 – D60x90 S3	2.875" (7.3 cm) API Reg Box	Swivel	26" (66 cm)	50,000 lb (22,679.6 kg)	\$8,898.87
296341459	D36x50 – D60x90 S3	2.875" (7.3 cm) API Reg Box	Swivel	28" (71.1 cm)	50,000 lb (22,679.6 kg)	\$9,734.36
296341460	D36x50 – D60x90 S3	2.875" (7.3 cm) API Reg Box	Swivel	30" (76.2 cm)	50,000 lb (22,679.6 kg)	\$10,981.73
296264865	Replacement Rotary Teeth – Heavy-Duty Weld-on					\$10.16

**FLUTED WITH SWIVEL – ROTARY TEETH**

Part No.	Model Compatibility	Front Connection	Rear Connection	Cutting Size	Swivel/Swivel Capacity	Price USD
296341461	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	10" (25.4 cm)	100,000 lb (45,359.2 kg)	\$5,649.94
296341462	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	12" (30.5 cm)	100,000 lb (45,359.2 kg)	\$5,986.27
296341463	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	14" (35.6 cm)	100,000 lb (45,359.2 kg)	\$6,516.52
296341464	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	16" (40.6 cm)	100,000 lb (45,359.2 kg)	\$7,012.43
296341465	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	18" (45.7 cm)	100,000 lb (45,359.2 kg)	\$7,448.75
296341466	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	20" (50.8 cm)	100,000 lb (45,359.2 kg)	\$8,197.16
296341467	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	22" (55.9 cm)	100,000 lb (45,359.2 kg)	\$9,012.23
296341468	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	24" (61 cm)	100,000 lb (45,359.2 kg)	\$9,542.48
296341469	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	26" (66 cm)	100,000 lb (45,359.2 kg)	\$10,522.18
296341470	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	28" (71.1 cm)	100,000 lb (45,359.2 kg)	\$11,341.29
296341471	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	30" (76.2 cm)	100,000 lb (45,359.2 kg)	\$12,564.40
296341472	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	32" (81.3 cm)	100,000 lb (45,359.2 kg)	\$13,929.92
296341473	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	34" (86.4 cm)	100,000 lb (45,359.2 kg)	\$14,976.28
296341474	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	36" (91.4 cm)	100,000 lb (45,359.2 kg)	\$15,863.06
296341475	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	38" (96.5 cm)	100,000 lb (45,359.2 kg)	\$19,620.26
296341476	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	40" (101.6 cm)	100,000 lb (45,359.2 kg)	\$24,219.80
296264865	Replacement Rotary Teeth – Heavy-Duty Weld-on					\$10.16

**FLUTED BOX X PIN – ROTARY TEETH**

Part No.	Model Compatibility	Front Connection	Rear Connection	Cutting Size	Price USD
296341477	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	10" (25.4 cm)	\$2,765.38
296341478	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	12" (30.5 cm)	\$3,016.87
296341479	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	14" (35.6 cm)	\$3,577.42
296341480	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	16" (40.6 cm)	\$4,052.12
296341481	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	18" (45.7 cm)	\$5,080.30
296341482	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	20" (50.8 cm)	\$6,016.57
296341483	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	22" (55.9 cm)	\$6,735.69
296341484	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	24" (61 cm)	\$7,702.26
296341485	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	26" (66 cm)	\$9,100.10
296341486	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	28" (71.1 cm)	\$10,327.25
296341487	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	30" (76.2 cm)	\$11,751.35
296341488	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	32" (81.3 cm)	\$12,478.55
296341489	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	34" (86.4 cm)	\$12,979.51
296341490	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	36" (91.4 cm)	\$14,371.29
296341491	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	38" (96.5 cm)	\$16,360.99
296341492	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	40" (101.6 cm)	\$18,773.88
296264865	Replacement Rotary Teeth – Heavy-Duty Weld-on				\$10.16



## T-Rex™ Reamer

Take a bite out of tough conditions. Ruggedly constructed with work-hardened, high-alloy steel, this reamer incorporates a unique, steep, rear-tapered design for ease of pushback when needed. Optional built-in swivel or through-shaft designs are available. High-wear areas are made with a resilient carbide mesh grit hardfacing. Equipped with oversized shark teeth tooling for aggressive, yet smooth, cutting action, the T-Rex reamer is ready for **cobble, chunk rock and soft rock**.



Shark teeth tooling for an aggressive, yet smooth, cutting action.

High-wear areas are coated with resilient carbide mesh grit hardfacing.

### Know-How You Can Use Now.

After selecting your reamer, remember to order the appropriate adapters for your fleet. Experts are ready to help you get set up.





### T-REX WITH SWIVEL

Part No.	Model Compatibility	Front Connection	Rear Connection	Cutting Size	Swivel/Swivel Capacity	Price USD
296309260	D36x50 – D60x90 S3	2.875" (7.3 cm) API Box	Swivel	8" (20.3 cm)	50,000 lb (22,679.6 kg)	\$2,909.81
296309261	D36x50 – D60x90 S3	2.875" (7.3 cm) API Box	Swivel	10" (25.4 cm)	50,000 lb (22,679.6 kg)	\$3,248.16
296309262	D36x50 – D60x90 S3	2.875" (7.3 cm) API Box	Swivel	12" (30.5 cm)	50,000 lb (22,679.6 kg)	\$3,715.79
296309263	D36x50 – D60x90 S3	2.875" (7.3 cm) API Box	Swivel	14" (35.6 cm)	50,000 lb (22,679.6 kg)	\$4,362.19
296309264	D36x50 – D60x90 S3	2.875" (7.3 cm) API Box	Swivel	16" (40.6 cm)	50,000 lb (22,679.6 kg)	\$4,832.85
296309265	D36x50 – D60x90 S3	2.875" (7.3 cm) API Box	Swivel	18" (45.7 cm)	50,000 lb (22,679.6 kg)	\$5,549.95
296309266	D36x50 – D60x90 S3	2.875" (7.3 cm) API Box	Swivel	20" (50.8 cm)	50,000 lb (22,679.6 kg)	\$6,376.13
296309267	D36x50 – D60x90 S3	2.875" (7.3 cm) API Box	Swivel	22" (55.9 cm)	50,000 lb (22,679.6 kg)	\$7,362.90
296309268	D36x50 – D60x90 S3	2.875" (7.3 cm) API Box	Swivel	24" (61 cm)	50,000 lb (22,679.6 kg)	\$8,073.99
296320016	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	12" (30.5 cm)	100,000 lb (45,359.2 kg)	\$4,954.05
296320018	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	14" (35.6 cm)	100,000 lb (45,359.2 kg)	\$5,428.75
296309286	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	16" (40.6 cm)	100,000 lb (45,359.2 kg)	\$5,954.96
296309287	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	18" (45.7 cm)	100,000 lb (45,359.2 kg)	\$6,646.81
296309288	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	20" (50.8 cm)	100,000 lb (45,359.2 kg)	\$7,415.42
296309289	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	22" (55.9 cm)	100,000 lb (45,359.2 kg)	\$8,525.41
296309290	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	24" (61 cm)	100,000 lb (45,359.2 kg)	\$9,544.50
296309291	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	26" (66 cm)	100,000 lb (45,359.2 kg)	\$10,641.36
296309292	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	28" (71.1 cm)	100,000 lb (45,359.2 kg)	\$11,726.10
296309293	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	30" (76.2 cm)	100,000 lb (45,359.2 kg)	\$12,951.23
296309294	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	Swivel	32" (81.3 cm)	100,000 lb (45,359.2 kg)	\$14,313.72
296294440	Replacement Shark Teeth – 1.75" (4.4 cm) Weld-on					\$10.78

### T-REX BOX x PIN

Part No.	Model Compatibility	Front Connection	Rear Connection	Cutting Size	Price USD
296309251	D16x20 – D60x90 S3	2.875" (7.3 cm) API Box	2.875" (7.3 cm) API Pin	8" (20.3 cm)	\$1,510.96
296309252	D16x20 – D60x90 S3	2.875" (7.3 cm) API Box	2.875" (7.3 cm) API Pin	10" (25.4 cm)	\$1,913.95
296309253	D16x20 – D60x90 S3	2.875" (7.3 cm) API Box	2.875" (7.3 cm) API Pin	12" (30.5 cm)	\$2,490.66
296309254	D16x20 – D60x90 S3	2.875" (7.3 cm) API Box	2.875" (7.3 cm) API Pin	14" (35.6 cm)	\$3,146.15
296309255	D16x20 – D60x90 S3	2.875" (7.3 cm) API Box	2.875" (7.3 cm) API Pin	16" (40.6 cm)	\$3,722.86
296309256	D16x20 – D60x90 S3	2.875" (7.3 cm) API Box	2.875" (7.3 cm) API Pin	18" (45.7 cm)	\$4,383.40
296309257	D16x20 – D60x90 S3	2.875" (7.3 cm) API Box	2.875" (7.3 cm) API Pin	20" (50.8 cm)	\$5,092.42
296309258	D16x20 – D60x90 S3	2.875" (7.3 cm) API Box	2.875" (7.3 cm) API Pin	22" (55.9 cm)	\$6,655.90
296309259	D16x20 – D60x90 S3	2.875" (7.3 cm) API Box	2.875" (7.3 cm) API Pin	24" (61 cm)	\$6,807.40
296320012	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	12" (30.5 cm)	\$2,744.17
296320014	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	14" (35.6 cm)	\$3,283.51
296309269	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	16" (40.6 cm)	\$3,896.58
296309270	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	18" (45.7 cm)	\$4,496.52
296309271	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	20" (50.8 cm)	\$5,233.82
296309272	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	22" (55.9 cm)	\$6,101.41
296309273	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	24" (61 cm)	\$6,779.12
296309274	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	26" (66.0 cm)	\$8,181.00
296309275	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	28" (71.1 cm)	\$10,180.80
296309276	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	30" (76.2 cm)	\$10,549.45
296309277	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	32" (81.3 cm)	\$11,028.19
296294440	Replacement Shark Teeth – 1.75" (4.4 cm) Weld-on				\$10.78










## Mix Master Reamer

Like the name says, this series puts together aggressive cutting and mixed design characteristics to help reduce the amount of pullback and rotational force needed from the drill rig. Vermeer mix master reamers are intended for **sandy loam, sticky clay and other reactive ground conditions**, and are equipped with carbide shark teeth tooling for an effective shearing action.



Equipped with carbide shark teeth tooling for shearing action.

### MIX MASTER

Part No.	Model Compatibility	Front Connection	Rear Connection	Cutting Size	Price USD
 296320135	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	2.375" (6 cm) API Pin	6" (15.2 cm)	\$998.89
 296320136	D7x11 – D24x40 S3	2.375" (6 cm) API Box	2.375" (6 cm) API Pin	8" (20.3 cm)	\$1,030.20
 296320137	D7x11 – D24x40 S3	2.375" (6 cm) API Box	2.375" (6 cm) API Pin	10" (25.4 cm)	\$1,353.40
 296320138	D7x11 – D24x40 S3	2.375" (6 cm) API Box	2.375" (6 cm) API Pin	12" (30.5 cm)	\$1,415.01
296320139	D7x11 – D24x40 S3	2.375" (6 cm) API Box	2.375" (6 cm) API Pin	14" (35.6 cm)	\$1,577.24
296320140	D7x11 – D24x40 S3	2.375" (6 cm) API Box	2.375" (6 cm) API Pin	16" (40.6 cm)	\$1,839.94
296320141	D16x20 – D80x100 Series II	2.875" (7.3 cm) API Box	2.875" (7.3 cm) API Pin	8" (20.3 cm)	\$1,222.10
296320142	D16x20 – D80x100 Series II	2.875" (7.3 cm) API Box	2.875" (7.3 cm) API Pin	10" (25.4 cm)	\$1,666.50
296320143	D16x20 – D80x100 Series II	2.875" (7.3 cm) API Box	2.875" (7.3 cm) API Pin	12" (30.5 cm)	\$1,843.25
 296320144	D16x20 – D80x100 Series II	2.875" (7.3 cm) API Box	2.875" (7.3 cm) API Pin	14" (35.6 cm)	\$2,018.99
296320145	D16x20 – D80x100 Series II	2.875" (7.3 cm) API Box	2.875" (7.3 cm) API Pin	16" (40.6 cm)	\$2,171.50
 296320146	D16x20 – D80x100 Series II	2.875" (7.3 cm) API Box	2.875" (7.3 cm) API Pin	18" (45.7 cm)	\$2,479.55
296320147	D16x20 – D80x100 Series II	2.875" (7.3 cm) API Box	2.875" (7.3 cm) API Pin	20" (50.8 cm)	\$3,004.75
296320148	D16x20 – D80x100 Series II	2.875" (7.3 cm) API Box	2.875" (7.3 cm) API Pin	22" (55.9 cm)	\$3,484.50
 296320149	D16x20 – D80x100 Series II	2.875" (7.3 cm) API Box	2.875" (7.3 cm) API Pin	24" (61 cm)	\$3,731.95
296320150	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	8" (20.3 cm)	\$1,610.95
296320151	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	10" (25.4 cm)	\$1,898.80
296320152	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	12" (30.5 cm)	\$2,030.10
296320153	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	14" (35.6 cm)	\$2,216.95
296320154	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	16" (40.6 cm)	\$2,422.99
296320155	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	18" (45.7 cm)	\$3,024.95
296320156	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	20" (50.8 cm)	\$3,585.50
296320157	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	22" (55.9 cm)	\$3,863.25
296320158	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	24" (61 cm)	\$4,055.15

## Diamond Wing Cutter Reamer

Efficient and effective, the diamond wing cutter features a dual-tapered, open-bodied design to maintain mixing action which helps allow reduced pullback and rotational forces required from the drill rig.

Features front- and rear-facing shark teeth to help ease needed pushback and can handle your job coming and going.



**DIAMOND WING CUTTER REAMER**

Part No.	Model Compatibility	Front Connection	Rear Connection	Cutting Size	Price USD
296417717	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	2.375" (6 cm) API Reg Pin	10" (25.4 cm)	\$1,287.75
296417708	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	2.375" (6 cm) API Reg Pin	12" (30.5 cm)	\$1,432.18
296417699	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	2.375" (6 cm) API Reg Pin	14" (35.6 cm)	\$1,666.50
296417690	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	2.375" (6 cm) API Reg Pin	16" (40.6 cm)	\$1,849.21
296417726	D7x11 – D24x40 S3	2.375" (6 cm) API Reg Box	2.375" (6 cm) API Reg Pin	18" (45.7 cm)	\$2,029.09
296412817	D16x20 – D60x90 S3	2.875" (7.3 cm) API Reg Box	2.875" (7.3 cm) API Reg Pin	12" (30.5 cm)	\$1,575.60
296412818	D16x20 – D60x90 S3	2.875" (7.3 cm) API Reg Box	2.875" (7.3 cm) API Reg Pin	14" (35.6 cm)	\$1,767.50
296412819	D16x20 – D60x90 S3	2.875" (7.3 cm) API Reg Box	2.875" (7.3 cm) API Reg Pin	16" (40.6 cm)	\$2,014.95
296412820	D16x20 – D60x90 S3	2.875" (7.3 cm) API Reg Box	2.875" (7.3 cm) API Reg Pin	18" (45.7 cm)	\$2,131.10
296412821	D16x20 – D60x90 S3	2.875" (7.3 cm) API Reg Box	2.875" (7.3 cm) API Reg Pin	20" (50.8 cm)	\$2,398.75
296412822	D16x20 – D60x90 S3	2.875" (7.3 cm) API Reg Box	2.875" (7.3 cm) API Reg Pin	22" (55.9 cm)	\$2,575.50
296412823	D16x20 – D60x90 S3	2.875" (7.3 cm) API Reg Box	2.875" (7.3 cm) API Reg Pin	24" (61 cm)	\$2,742.15
296412826	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	14" (35.6 cm)	\$2,146.25
296412827	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	16" (40.6 cm)	\$2,400.77
296412828	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	18" (45.7 cm)	\$2,565.40
296412829	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	20" (50.8 cm)	\$2,858.30
296412830	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	22" (55.9 cm)	\$3,186.55
296412831	D36x50 – D100x140 S3	3.5" (8.9 cm) API Reg Box	3.5" (8.9 cm) API Reg Pin	24" (61 cm)	\$3,388.55





## Fly Cutter

This robust flat-face reamer is designed for higher-powered HDD rigs. You can also count on the Vermeer fly cutter in a variety of ground conditions including **sandy soil, loam and soft, medium and hard soil**, with its changeable carbide fluid nozzles that help optimize flow (including front and rear fluid nozzles to help increase spoil displacement). Also designed with C20 pockets and replaceable C21HD rotary teeth to supply you with durable cutting performance.



## Supreamer™ Reamer

Take on big jobs with the Supreamer reamer's exceptional mixing action — made possible by its open-bodied design and ruggedly large paddles.

Includes front- and rear-facing oversized carbide shark teeth tooling for aggressive cutting action and ease of pushback when needed.



## Barrel Reamer

Vermeer barrel reamers give you steady bore hole stabilization in **sandy soil loam, soft soil and medium soil**. They also include front and rear fluid nozzles to help increase spoil displacement. And they're designed with C20 pockets and replaceable C21HD rotary teeth to dish out durable cutting performance. Plus, you'll get heavy performance without hefty weight. In fact, they're designed with a unique internal baffle system that limits the amount of drilling fluid mass — decreasing overall tool weight to help protect structural integrity.



## Helical Plus Reamer

This Vermeer-original design helps you tame **sandy loam and clay**. The secret to its success is a helical bar design with shark teeth tooling and rear-facing paddles. It all adds up for more efficient cutting and mixing action.



## DON'T SEE WHAT YOU NEED HERE?

Reamers are one of the most productive and popular options for HDD contractors. That's why Vermeer provides custom reamers for the full drill and maxi rig lineups. Looking for something you don't see here? Talk to your local Vermeer dealer to learn about our custom reamer build options or get additional product information at [BORESTORE.com](http://BORESTORE.com).







# SWIVELS

Vermeer swivels give you important job flexibility that goes beyond the “nice-to-have.” Choose from a full line of options, fitting small to large rigs. Available connections include hex collar, QuickFire connection system and API for ease of compatibility with a wide range of reamers and other tooling. Plus, count on our angular contact bearing design to handle thrust and radial load.



## QuickFire Connection System



Designed for ease of use with the Vermeer QuickFire connection system.

PULLBACK SWIVEL – QUICKFIRE CONNECTION				
Part No.	Model Compatibility	Connection Type	Capacity	Price USD
 296364127	D7x11A – D10x15 S3	QuickFire System 300 Pin	10,000 lb (4535.9 kg)	\$561.00
296364110	D7x11A – D10x15 S3	QuickFire System 300 Pin	24,000 lb (10,886.2 kg)	\$1,047.54
 296364108	D16x20 – D24x40 S3	QuickFire System 400 Pin	24,000 lb (10,886.2 kg)	\$1,146.00
 296364109	D16x20 – D24x40 S3	QuickFire System 460 Pin	24,000 lb (10,886.2 kg)	\$1,163.82
 296364150	D36x50, D36x50 Series II, D40x55 S3	QuickFire System 460 Pin	40,000 lb (18,143.7 kg)	\$1,887.00



## Hex

For use with the low-profile hex connection system.

PULLBACK SWIVEL – HEX				
Part No.	Model Compatibility	Connection Type	Capacity	Price USD
 235086001	D7x11A – D10x15 S3	1.625" (4.1 cm) Hex Pin	7000 lb (3175.2 kg)	\$331.50
 235039001	D16x20 – D24x40 S3	2.125" (5.4 cm) Hex Pin	24,000 lb (10,886.2 kg)	\$860.88
280486001	D24x40 – D40x55 S3	2.125" (5.4 cm) Hex Pin	40,000 lb (18,143.7 kg)	\$1,632.00





# Double Eye

The double eye is a universal design that can be used with any reamer that doesn't include a built-in swivel.

## PULLBACK SWIVEL – DOUBLE EYE

Part No.	Model Compatibility	Connection Type	Capacity	Price USD
296448894	D7x11A – D10x15 S3	Recessed Bolt	7000 lb (3175.5 kg)	\$575.00
296448874	D16x20 – D20x22 S3	Recessed Bolt	10,000 lb (4535.9 kg)	\$625.00
296448829	D16x20 – D24x40 S3	Recessed Bolt	24,000 lb (10,886.2 kg)	\$765.00
296258123	D36x50, D36x50 Series II, D40x55 S3	Eye X Clevis	50,000 lb (22,679.6 kg)	\$1,960.00
296258124	D50x100 – D100x140 S3	Eye X Clevis	90,000 lb (40,823.3 kg)	\$2,629.56
296268977	D50x100 – D100x140 S3	Eye X Clevis	100,000 lb (45,359.2 kg)	\$3,477.00



# Plate Bit Swivel

Designed to be a quick and convenient solution — pulls on center and greases with replaceable bearing stack.

## PLATE BIT SWIVEL

Part No.	Model Compatibility	Connection Type	Capacity	Price USD
296406701	D7x11A – D10x15 S3	Cross Bolt	7000 lb (3175.2 kg)	\$425.00



# Shackles

Used to attach end product to swivel.

## CLEVIS

Part No.	Description	Capacity	Price USD
3028001	Shackle .25" (.6 cm) Pin	1000 lb (453.6 kg)	\$16.55
1452003	Shackle .31" (.8 cm) Pin	1500 lb (680.4 kg)	\$8.30
1452001	Shackle .63" (1.6 cm) Pin	4000 lb (1814.4 kg)	\$12.24
281383001	Shackle 1" (2.5 cm) Pin	13,000 lb (5896.7 kg)	\$35.70
281391001	Shackle 1.38" (2.5 cm) Pin	24,000 lb (10,886.2 kg)	\$117.00
281390001	Shackle 2" (5.1 cm) Pin	50,000 lb (22,679.6 kg)	\$197.88
280473001	Shackle 2" (5.1 cm) Pin	80,000 lb (36,287.4 kg)	\$847.62



# API

Designed for use with API thread reamers.

## PULLBACK SWIVEL – API

Part No.	Model Compatibility	Connection Type	Capacity	Price USD
296364178	D7x11A – D10x15 S3	2.375" (6 cm) API Box	7000 lb (3175.5 kg)	\$612.00
296364177	D16x20 – D24x40 S3	2.375" (6 cm) API Box	24,000 lb (10,886.2 kg)	\$1,009.80
296364234	D24x40, D24x40 S3	2.875" (7.3 cm) API Box	24,000 lb (10,886.2 kg)	\$1,045.50
296364179	D36x50, D36x50 Series II, D40x55 S3	2.875" (7.3 cm) API Box	50,000 lb (22,679.6 kg)	\$1,963.50
296260235	D50x100 – D100x140 S3	3.5" (8.9 cm) API Box	100,000 lb (45,359.2 kg)	\$3,584.00



# PULLERS

Whether you're working with HDPE, PVC or PE, you'll find a full range of puller options to help meet your product pipe type and size.



## Duct

You can get a grip on the job with our duct puller that features high thread engagement. It's durable, too, with heat-treated, high-alloy steel construction.



## Sleeved









With Vermeer sleeved pullers, a protective sleeve guards the leading edge of the installation product, reducing the possibility of contamination and helping to prevent accidental release from the puller.



## Expanded Tapered

As the leading edge of the installation product makes its way, it's guarded by a protective sleeve that reduces the possibility of contamination and helps prevent accidental release from the puller. An advanced taperlock design helps prevent accidental unscrewing of the puller during installation or removal of pipe.










**DUCT**

Part No.	Description	Size	Price USD
 231802001	Duct Puller	0.5" – 1" (1.3 cm – 2.5 cm)	\$55.00
 296255297	Duct Puller	1" (2.5 cm)	\$52.00
 289295001	Duct Puller	1" – 1.25" (2.5 cm – 3.2 cm)	\$69.00
 296255533	Duct Puller	1.25" (3.2 cm)	\$60.00
 231805001	Duct Puller	1.25" – 1.5" (3.2 cm – 3.8 cm)	\$72.00
 296255298	Duct Puller	1.5" (3.8 cm)	\$67.00
 231807001	Duct Puller	2" (5.1 cm)	\$79.00
 296448883	Duct Puller	2.5" (6.35 cm)	\$175.00

**SLEEVED**

Part No.	Description	Size	Price USD
296401388	Sleeved Puller	1" (2.5 cm)	\$189.00
296401386	Sleeved Puller	1.25" (3.2 cm)	\$245.70
296401384	Sleeved Puller	1.5" (3.8 cm)	\$259.00
296401366	Sleeved Puller	2" (5.1 cm)	\$350.70
296401367	Sleeved Puller	2.5" (6.4 cm)	\$443.10
296341810	Sleeved Puller	3" (7.6 cm)	\$495.00
296341812	Sleeved Puller	4" (10.2 cm)	\$548.00
296404503	Sleeved Puller	6" (15.2 cm)	\$926.10
296448980	Sleeved Puller	8" (20.32 cm)	\$1,525.00
296449000	Sleeved Puller	10" (25.4 cm)	\$2,500.00





**EXPANDED TAPER**

Part No.	Description	Size	Price USD
 296401387	Expanding Taper Puller	1" (2.5 cm)	\$166.95
 296401385	Expanding Taper Puller	1.25" (3.2 cm)	\$195.30
 296401383	Expanding Taper Puller	1.5" (3.8 cm)	\$247.80
 296401368	Expanding Taper Puller	2" (5.1 cm)	\$274.05
 296401369	Expanding Taper Puller	2.5" (6.4 cm)	\$337.05
 296341809	Expanding Taper Puller	3" (7.6 cm)	\$343.00
 296341811	Expanding Taper Puller	4" (10.2 cm)	\$462.00
 296404501	Expanding Taper Puller	5" (12.7 cm)	\$731.85
 296404502	Expanding Taper Puller	6" (15.2 cm)	\$775.95
296404516	Expanding Taper Puller	8" (20.3 cm)	\$1,195.95
296404517	Expanding Taper Puller	10" (25.4 cm)	\$1,814.40
296404518	Expanding Taper Puller	12" (30.5 cm)	\$2,130.45

## Pulling Grips

Help meet your job's need. Available in double- and triple-galvanized wire weave.

**PULLING GRIPS**

Part No.	Description	Size	Price USD
 204965001	Pulling Grips	0.75" – 1.25" (1.9 cm – 3.2 cm)	\$33.00
 296278316	Pulling Grips	0.75" – 1.25" (1.9 cm – 3.2 cm)	\$58.00
 204966001	Pulling Grips	1.25" – 2" (3.2 cm – 5.1 cm)	\$67.00
 204967001	Pulling Grips	2" – 2.75" (5.1 cm – 7 cm)	\$77.00
204968001	Pulling Grips	2.75" – 3.5" (7 cm – 8.9 cm)	\$112.00
204969001	Pulling Grips	3.5" – 4.25" (8.9 cm – 10.8 cm)	\$119.00
223750001	Pulling Grips	4.25" – 4.875" (10.8 cm – 12.4 cm)	\$143.00



Vermeer heavy-duty pulling grips feature a shouldered, double-weave, no-crimp design.



# VERMEER PBD11500 BREAKOUT TONGS

Whether making-up or breaking-out exit pit side tooling, the Vermeer PBD11500 breakout tongs should be something you carry with you every day to handle torqued direct connections. Unlike some competitive systems that can require a second set of hands, the PBD11500 features a tensioning design for ease of installation.

Priced at \$1,462.00, the Vermeer breakout tongs can handle tooling ranging from 1.66" (4.2 cm) to 3.50" (8.9 cm) in diameter and deliver up to 11,500 ft-lb (15,592 Nm) of torque. For crew organization, a hard plastic case is included.

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**FOR MORE INFORMATION ON THE PRODUCT  
AND HOW TO PURCHASE, CONTACT YOUR  
LOCAL VERMEER DEALER.**





# VERMEER HDD CIRCUIT TRAINING PROGRAM



**ARE YOU NEW TO UTILITY INSTALLATION OR WANT TO UP YOUR EXISTING SKILLS? NEED TO GET YOUR CREW TRAINED RIGHT TO BUILD YOUR INCOME POTENTIAL?**

**COME** to Vermeer HDD Circuit training program at Vermeer corporate offices in Pella, Iowa, for two weeks of hands-on training. **LEAVE** with personalized training from the only course of its kind in the U.S. that is certified by an accredited technical college.

Talk to your local Vermeer dealer for more information, or visit [Vermeer.com](http://Vermeer.com) to schedule your slot at the next Vermeer HDD Circuit training program.





## Thread Lube

Find thread lubes specially designed for seasonal applications and various HDD models, including the environmentally friendly Bio-Stick® grease.



Bio-Stick grease is biodegradable, nontoxic and washable, making it an environmentally friendly solution to your thread lube needs.



### THREAD LUBE

Part No.	Description	Volume	Price USD
296337339	Bio-Stick Grease	1 gal (3.8 L)	\$41.00
296337340	Bio-Stick Grease	2 gal (7.6 L)	\$77.00
296426100	Bio-Stick Grease	5 gal (18.9 L)	\$204.00
296337372	Bio-Stick Grease	30-pk cartridge	\$230.00
235983001	Vermeer Thread Lube	1 gal (3.8 L)	\$36.00
235983002	Vermeer Thread Lube – Winter	1 gal (3.8 L)	\$36.00
296408629	Vermeer Thread Lube – Winter	5 gal (18.9 L)	\$189.00
905508003	Vermeer Thread Lube – Summer	2 gal (7.6 L)	\$77.00
296426101	Vermeer Thread Lube – Summer	5 gal (18.9 L)	\$179.00

## Thread Lube Brushes

Get ready for the work ahead. A Vermeer long-handle brush makes manual thread lube application quick and convenient.

### THREAD LUBE

Part No.	Description	Price USD
296264990	Thread Lube Brush – Tapered	\$18.00
296264991	Thread Lube Brush – Beveled	\$15.00
296274856	Thread Lube Brush – Long Tapered	\$25.00





# **HDD TOOLING SCIENCE — VERMEER METALLURGY LAB TEST**

Just because one brand of tooling may look like another doesn't mean it's constructed the same. From drive chucks and drill rod, to transmitter housings, drill bits, reamers and adaptors, the quality of the metal used and how it was heat-treated can have a major impact on how it will perform and how long it can last in harsh working conditions. To make sure parts and pieces of HDD tooling produced meets high standards, Vermeer is one of the only manufacturers in the industry to invest in building its own metallurgy lab and staff it with experienced, degreed metallurgists.

Since 1992, the Vermeer Metallurgy Lab has been testing the chemical composition, tensile strength, hardness and impact toughness of Vermeer HDD tooling, parts and components. Using scientific methods, the Vermeer Metallurgy Lab examines the raw material used for manufacturing to determine quality, to help the productivity and longevity of the tooling.

**TALK TO YOUR LOCAL VERMEER DEALER TO LEARN MORE.**

# TESTING ROCKS — VERMEER ROCK LAB

The Vermeer Rock Lab takes rock collecting to a whole new level. Using state-of-the-art equipment, our experts test rock samples from all over the world in a variety of ways. Each sample is cored and undergoes unconfined compressive strength, indirect tension, abrasivity and energy index testing. The results of these tests help to characterize the rock, its hardness, abrasiveness and how it may respond when being drilled or trenched.

Consult with your local dealer to work on collecting representative rock samples from your jobsite. This will help determine the appropriate tooling to use for the ground conditions through the use of the solutions calculator that accounts for the results of rock testing, and estimates production ranges and cost of operation. With this information, you can make more informed business decisions.

As a Vermeer customer, the Vermeer Rock Lab services are available at no cost.

**TALK TO YOUR LOCAL VERMEER DEALER TO LEARN MORE.**

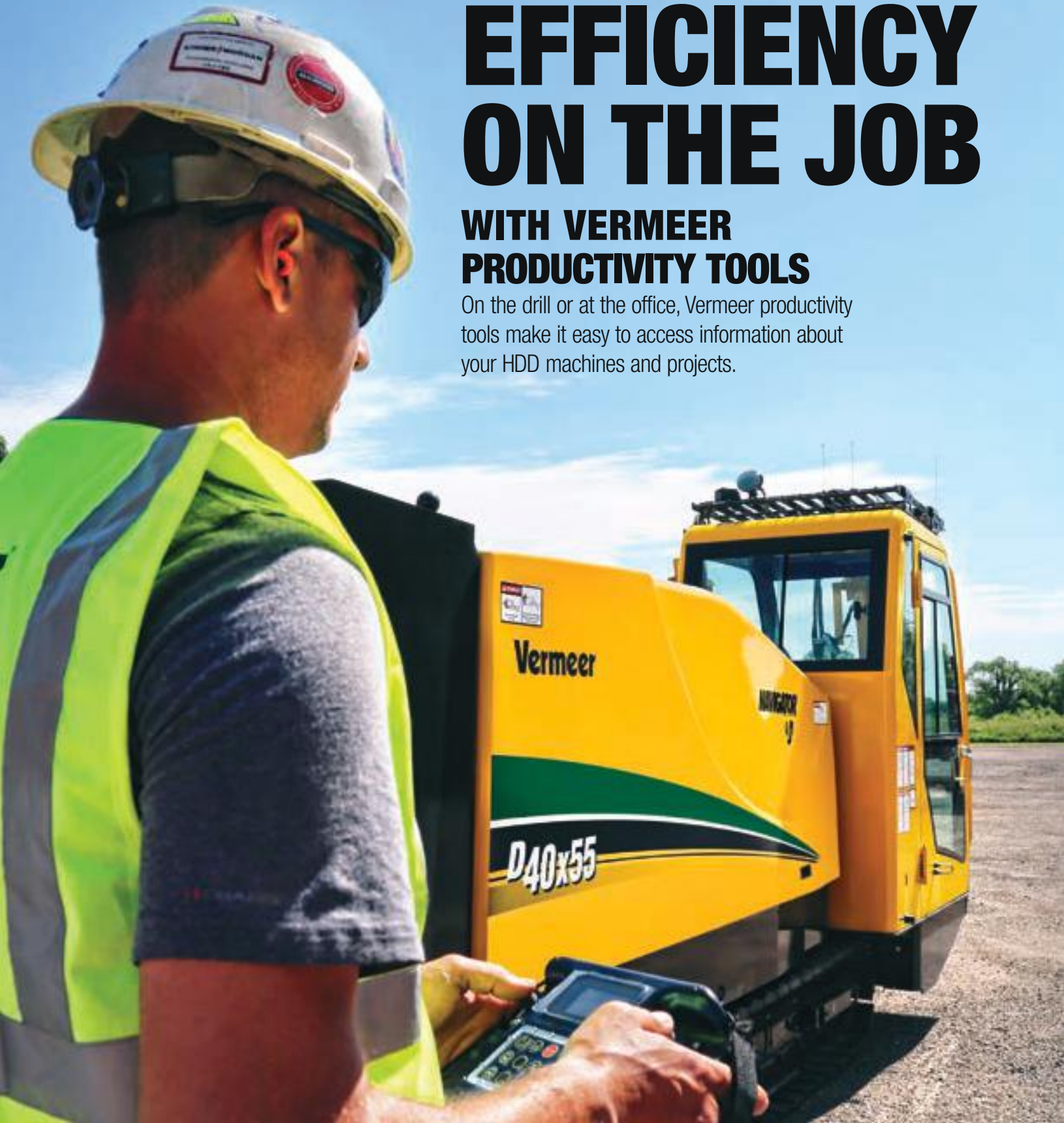




# EFFICIENCY ON THE JOB

## WITH VERMEER PRODUCTIVITY TOOLS

On the drill or at the office, Vermeer productivity tools make it easy to access information about your HDD machines and projects.





## Fleet and Fleet +Edge HDD

Vermeer Fleet provides data on equipped machines for attributes such as GPS location, identified planned maintenance schedules and completed services, idle times and fuel consumption. Vermeer Fleet +Edge HDD allows you to track near real-time machine data including mud flow, thrust and pullback force and rotation torque on a rod-by-rod basis.

## Projects

From planning and mapping to invoicing, help manage your business with the Vermeer Project Suite. Using a computer or mobile device, visually capture the jobsite, including the intended bore path and obstacles, add bore line mapping and rod-by-rod planning and compare the planned bore path to your actual as-drilled data.

## BoreAssist

Vermeer BoreAssist lets the operator load, edit and/or create a bore plan on the DCI® DigiTrak® Aurora® display. Coupled with Log-While-Drilling (LWD™), the drill rig operator can compare Log-While-Drilling data to the plan using BoreAssist and follow a rod-by-rod plan to drill the planned bore.

## BoreAid® Design Tool

The Vermeer BoreAid design tool gives you the ability to plan detailed bores from your computer. The program accounts for soil conditions, product type, machine model and other selected parameters.



# HDD TOOLS AND RESOURCES

## FOR THE FIELD AND FOR BUSINESS

With more than 25 years of innovation in the HDD market, Vermeer not only offers industry-leading equipment and unmatched dealer support — we also provide tools and resources to help contractors improve productivity to operate your business more efficiently. From a drilling community site to online equipment management tools and an online tooling warehouse, Vermeer has you covered.



### MYVERMEER.COM

A customer portal allows Vermeer equipment owners to view information online specific to the equipment they own. Owners can access manuals online — operator's, parts and maintenance — to view, print or save, and request free printed manuals, shipped directly to you.



### BORESTORE.COM

BORESTORE.com allows you to conveniently shop all HDD tooling and accessories anytime — 365 days a year. New Vermeer solutions are continually being designed, built and tested. As new products become available, you'll learn about them — and have access to them on BORESTORE.com.

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# **BORESTORE<sup>®</sup>**

HDD TOOLING AND ACCESSORIES WAREHOUSE

**Vermeer<sup>®</sup>**



**EQUIPPED TO  
DO MORE.<sup>®</sup>**