

STABIL DRILL

A **SUPERIOR ENERGY SERVICES** COMPANY





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Introduction



*Sammy Joe Russo
President & Chief Executive Officer
Stabil Drill*



Sammy Joe Russo had a vision. He'd been in the stabilizer manufacturing and rental business for more than 30 years and wanted to start his own company.

He envisioned a company that would become the world leader in the stabilizer business - a company known far and wide for its superior products and service.

So in 1986, he started Stabil Drill.

Now, as a subsidiary of Superior Energy Services, Stabil Drill is even more focused on superior workmanship with a strong commitment to customer service, with more than \$100,000,000 in rental inventory and over \$10,000,000 in raw material inventory.



*Stabil Drill tools manu-
factured, inspected
and prepped for
delivery*

Capabilities



Stabil Drill's unrivaled stabilizer inventory



A Stabil Drill hallmark-precision engineering and machining



When it comes to bottomhole assemblies, there's only one rental tool name to know — Stabil Drill.

Since 1986, Stabil Drill not only has been providing tough and durable tools delivered where and when you need them, but also the wellsite experience and downhole knowledge for today's demanding drilling applications.

With an inventory of more than 25,000 rental tools, including stabilizers, non-magnetic drill collars, hole openers, reamers, mills, subs and heavyweight drill pipe, Stabil Drill can easily fit any assembly.

Stabil Drill tools are manufactured to precise specs from AISI 4145H heat-treated steel, and are hard-faced for super penetration rates and

fewer trips. Each tool is thoroughly inspected by highly skilled technicians before it leaves the plant. These inspections are so meticulous you'll never need a third-party inspection.

With six manufacturing and specialty machining facilities along the Gulf Coast, in Atlantic Canada and in the United Kingdom you always get the right tool for your job, right on time. The reason: your bottomhole assembly is our business, our only business.

And - as a subsidiary of Superior Energy Services - you get the added benefit of Superior's other drilling and production capabilities.

For your next run, drill with experience. Drill with Stabil Drill.

STABIL DRILL



API AND ISO
9001 CERTIFIED

API SPEC-7-1

LICENSE No.:
7-1-0192.1

ISO No.: 0022

Stabilizers



Precision milling
ensures quality
products.



STABIL DRILL

Stabil Drill's complete line of stabilizers includes spiral blade, straight blade, integral blade, welded blade, welded full pac, welded full wrap, sleeve-type, stainless steel non-magnetic types and its new Trico stabilizer for gumbo applications.

Designed to increase rate of penetration and to control deviation, Stabil Drill stabilizers are economical to use, reducing drilling costs per foot.

All alloy stabilizers are manufactured from AISI 4145H modified heat-treated steel for a wide variety of configurations and hole sizes. Additionally, Stabil Drill custom manufactures equipment for a wide range of drilling applications.

Stabilizers include:

Integral Spiral Blade — Used in hard formations. 360° surface contact. One-piece construction. Steel and non-magnetic available.

Non-Magnetic — Manufactured from premium stainless steel used in directional drilling applications.

Sleeve-Type — For remote areas. Interchangeable with other sleeves and mandrels.

Trico — Specially designed for use in deepwater applications where gumbo balling is prevalent.

Welded Straight Blade — For drilling soft to medium-hard formations.

Additionally, Stabil Drill offers a complete range of hardfacings for even the toughest drilling conditions:



Tungsten — Best in soft to medium-hard formations and on welded blade stabilizers. Crushed tungsten in nickel bronze matrix.



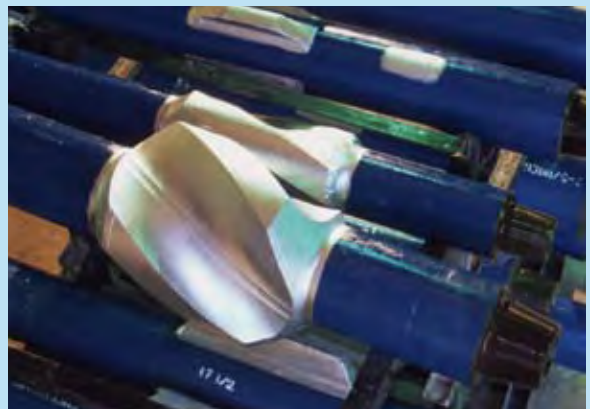
Half Rounds with Tungsten — Ideal for high deviation drilling in abrasive formations. Trapezoidal tungsten carbide inserts in a sintered carbide nickel bronze matrix.



Stabil-Tech™ — Our premium hardfacing combining Tungsten Carbide inserts surrounded with Technogenia-applied hard metal to support wear.



Quick Tip Hardfacing — The most cost-effective way to apply the maximum amount of high-grade tungsten carbide on any wear surface. Also available in multiple thicknesses. The bonding between hardfacing and base material can be verified by ultrasonic inspection.



Stabil Drill tools
manufactured,
inspected and prepped
for delivery

Welded Straight Blade Stabilizers



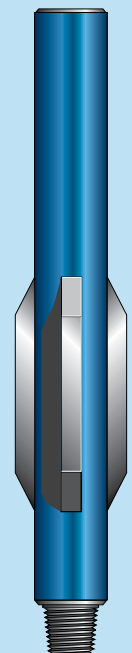
Stabil Drill's welded straight blade stabilizers are designed for drilling soft to medium-hard formations.



Dimensional Data - Welded Straight Blade Stabilizers

Hole Size (in)	Fishing Neck (Dia. in)	Bore (Dia. in)	Fishing Neck (Lgth. in)	Overall (Lgth. in)	Min. Crown (Lgth. in)	Blade Width (in)	Approx. Wt. (lbs)
4-1/8 4-1/4 4-1/2 4-5/8 4-3/4	3-1/8 - 3-1/2	1-1/2	24 - 28	65	12	1-1/2	150
5-5/8 5-7/8 6	4-1/8	1-1/2	30	78	14	2	260
6-1/8 6-1/4 6-1/2 6-5/8 6-3/4	4-3/4	2-1/4	30	78	14	2	375
7-3/8 7-5/8 7-7/8 8-3/8 8-1/2 8-5/8 8-3/4	6-1/4 - 6-3/4	2-13/16	32	85	16	2	625
9 9-1/2 9-5/8 9-7/8	7-1/4 - 7-3/4	2-13/16	28	82	16	2	850 - 915 - 985
10-5/8 11 12 12-1/4 13-1/2 14-3/4 16-1/2	8 - 10	2-13/16	30	84	16	2	1150 - 1830
17-1/2 18-1/8 20 22 24 26	8 - 10	2-13/16 - 3	33	93	16 - 18	2	1390 - 2075

STABIL DRILL



Integral Blade Stabilizers



Stabil Drill's integral blade stabilizers are designed for hard formations providing 360° surface contact.



Dimensional Data - Integral Blade Stabilizers

Hole Size (in)	Fishing Neck (Dia. in)	Bore (Dia. in)	Fishing Neck (Lgth. in)	Tong Space (Lgth. in)	Overall (Lgth. in)	Min. Crown (Lgth. in)	Blade Width (in)	Approx. Wt. (lbs)
5-5/8 5-7/8 6	4-1/8	2	28	18	60	16	2	280
6-1/8 6-1/4 6-1/2 6-5/8 6-3/4	4-3/4	2 - 2-1/4	28	17	60	16	2	370
7-3/8 7-5/8 7-7/8	6-1/4	2-1/4	28	18	72	18	2-1/2	560
8-3/8 8-1/2 8-5/8 8-3/4	6-1/4 - 6-3/4	2-1/4 - 2-1/2	34	28	84	18	2-1/2	720
9 9-1/2 9-5/8 9-7/8	6-3/4 - 7-3/4	2-1/4 - 2-1/2	32	30	87	18	2-1/2 - 2-3/4	1100
10-5/8 11 12 12-1/4	8 - 9-1/2	2-13/16 - 3	36	27	95	18	3	1400 - 2050
13-1/2 14-3/4	8 - 9-1/2	2-13/16	32	30	101	18	3-1/4	2200
16-1/2 17-1/2 18-1/8	8 - 9-1/2	3	33 - 35	31 - 32	103	18 - 20	3-1/2	2700
20 22 24 26	8 - 9-1/2	3	40	35	120	18 - 20	4	4600

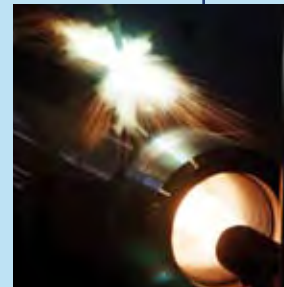




Integral Blade Stabilizers



Stabil Drill produces stabilizers for all drilling applications.



Integral Rotary Steerable



Reduced vibrations, torque reduction, increased rates of penetration and greater downhole life of LWD and MWD components

Integral Motor Steerable



Maintain directional control during "sliding" operations

Integral Three Blade Straight "Trico"



Proven in minimizing "balling" of formations between blades

Dimensional data available upon request

STABIL DRILL

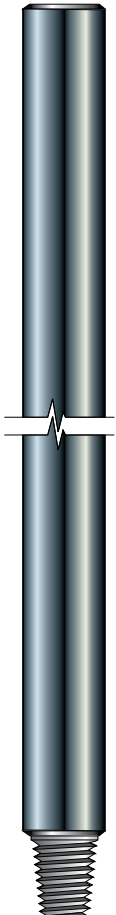
Non-Magnetic, Flex and Pony Drill Collars



Non-magnetic
drill collar
raw material
inventory



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Stabil Drill drill collars are made from AISI 4145-modified alloy steel, heat-treated to API standards with 3-1/8" to 11" ODs.

The standard drill collar length is 31'. For outside diameters larger than 4", slip or elevator recesses can be cut according to API recommended practice RP7G. Connections are cut with standard API relief features, cold rolled and kemplated.

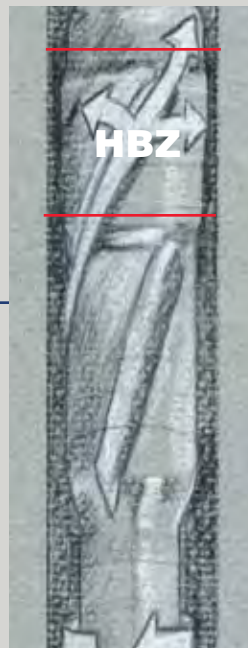
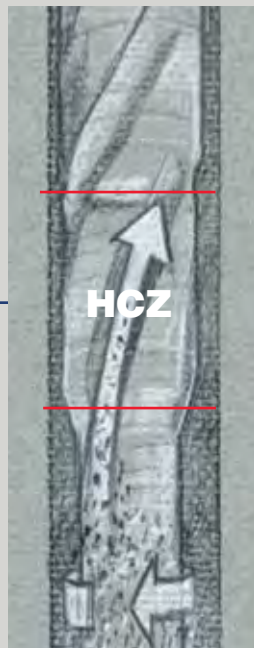
For enhanced resistance to corrosion, Stabil Drill applies a mechanical bore treatment (RSC or roller burnishing) and shot peening on outside diameters.

Stabil Drill non-magnetic drill collars are usually manufactured slick. Spiraling can be added upon request. In addition, the collars can be manufactured with a scribe line and an interface for top landing.

Stabil Drill also offers a non-magnetic flex collar to be used in conjunction with MWD collars in three nominal sizes (3-1/2", 5" and 6-1/8").

Machining of end connections is done on one of Stabil Drill's CNC machines with constant profile cutting tools. Thread profile, lead, depth, taper and stand-off are constantly inspected during and after machining.

Following API gauging, thread roots are cold-rolled to improve fatigue resistance of connections.



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Hydroclean Drill Pipe

Hydroclean drill pipe has been specially designed to run in conjunction with conventional drill pipe for use in extended reach and other non-conventional wells.

The patented design features three central upsets and a unique dual OD tool joint.

When properly placed in high angle holes or other hard-to-clean sections, it has been proven to enhance cuttings transport and improve hydraulic performance.

Hydroclean drill pipe is available in all common sizes and connections.

The hydromechanical cleaning zone (HCZ) is the zone that actually does the cleaning. It is a series of five grooves machined at a pre-determined angle to the x- axis of the drill pipe. Each groove has a negative leading edge angle that provides the primary aid to lifting the cuttings off the bore wall and holding them in suspension much longer. The positive angle, on the backside, enhances cuttings transport and helps propel cuttings up the well.

The upper section hydrodynamic bearing zone (HBZ) has a slightly larger OD and also has five grooves that are aligned with the grooves in the cleaning zone. There is no negative angle in this section. These grooves are designed to force fluid out, maintaining a constant film of mud and forming a fluid or marine bearing between the pipe and the wall for torque and drag reduction.

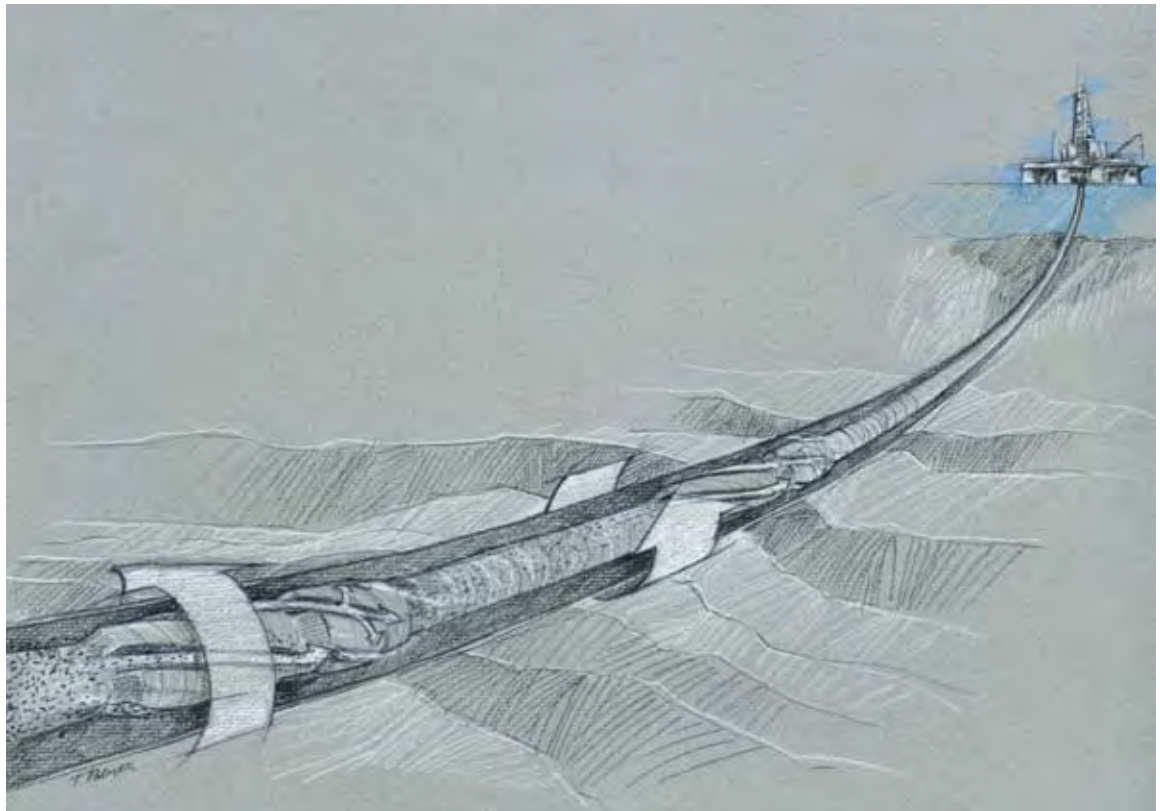
The larger OD of the bearing zone:

1. protects the HCZ from mechanical damage,
2. protects the cleaning zone from coming into contact with the wall and
3. acts as the primary bearing point, spreading the bearing load, preventing wear and maximizing tool life.

Hydroclean™



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Improved Hole Cleaning, Reduced Torque & Improved Performance

Stabil Drill's new rental product, SMFI Hydroclean™, is specifically designed to reduce or eliminate cuttings and torque problems associated with extended reach and other non-conventional wells.

The unique design of the profiles for drill pipe and heavyweight pipe provides not only hole cleaning, but also prevents differential sticking, reduces torque and improves hydraulic performance.

In extensive use on hundreds of wells all over the world, Hydroclean has reduced torque/drag and pickup weight; reduced or eliminated wiper trips and backreaming; eliminated differential sticking; and showed no discernable tool wear after more than 750 rotating hours.

Additionally, cuttings size was increased and cuttings showed up at the surface in predicted bottoms-up time.

Dimensional Data - Conventional Drill Pipe

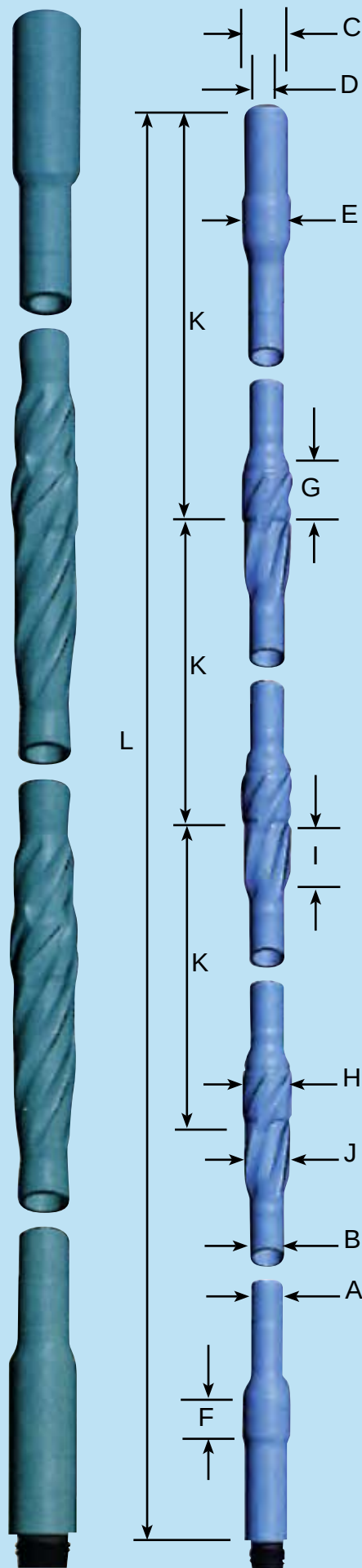
	5"	5-1/2"	5-7/8"	6-5/8"
A Body OD	5"	5-1/2"	5-7/8"	6-5/8"
B Body ID	4"	4-1/2"	4-3/4"	5-5/16"
C Tool Joint OD	6-5/8"	7"	7-1/4"	8"
D Tool Joint ID (NC 50)*	3"	3-1/2"	4-3/8"	4-1/4"
E Dual OD	7"	7-3/4"	8"	8-3/4"
F Dual OD Length	5-1/2"	5-1/2"	5-1/2"	5-1/2"
G Bearing Zone Length	8"	8"	8"	8"
H Bearing Zone OD	7"	7-3/4"	8"	8-3/4"
I Hydroclean Length	12"	12"	12"	12"
J Max. Hydroclean OD	6-1/2"	7-1/4"	7-1/2"	8-1/4"
K Central Upset Spacing	7'-6"	7'-6"	7'-6"	7'-6"
L Joint Length	31'	31'	31'	31'
D* Tool Joint ID	-	4" HT 55	4-3/8" XT-57	-
D* Tool Joint ID	-	4-1/2" FH	-	-

Heavyweight Drill Pipe

Hydroclean heavyweight drill pipe is run with conventional heavyweight pipe. The rugged design of the two extended Hydroclean sections makes it ideally suited to assist with hole cleaning in the BHA. Experience has shown that placing Hydroclean heavyweight drill pipe as near as possible to the large OD BHA components provides maximum hole cleaning performance.

Dimensional Data - Heavyweight Drill Pipe

	5"	5-1/2"
Nominal OD	5"	5-1/2"
Connection	NC50	FH
Tube ID	3"	3-3/4"
Central Upset OD	6-5/8"	7"
Tool Joint OD	6-5/8"	7"
Tool Joint ID	3"	3-3/4"
Weight (lbs/ft)	57.97	61.59
Length (ft)	31'	31'

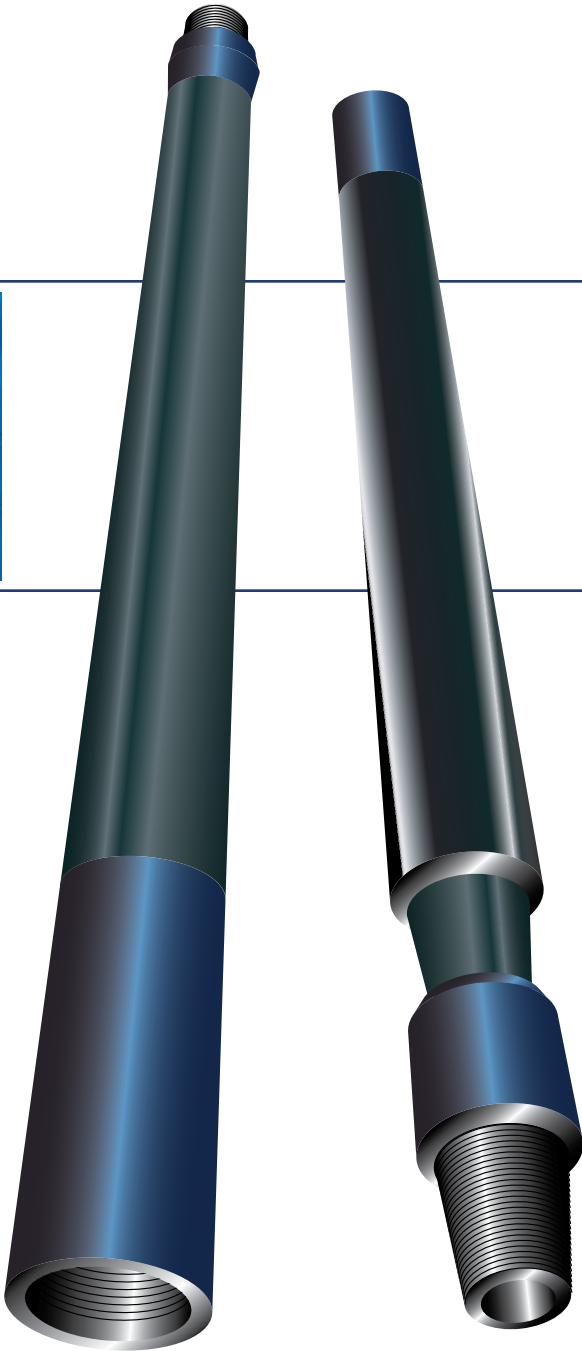


Down Hole
Shock Subs



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Quality
Control

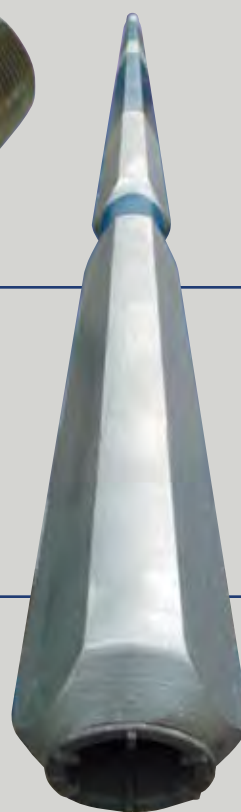
Down Hole Shock Sub

Stabil Drill Shock Subs have a heavy-duty design based on a wide range of operating experience. They can drill in any condition, whether soft, medium, or hard formations. Stabil Drill Shock Tools can be built to accommodate various downhole temperatures. The Stabil Drill Shock Sub is built with Key Belleville springs, Brass and molly guard wear rings, Teflon Backups and Nitrile seals. Viton and Geothermal seals can replace Nitrile seals in high temp conditions. Stabil Drill Shock Subs are lubricated with 90-weight gear oil, Synthetic oils can be used in high temp conditions. Multiple connection variations are available per API Spec. All Stabil Drill Shock Subs can be bored for float valves thus eliminating float subs on bit. Stabil Drill has a large inventory of Shock Subs with the capability of providing multiple tools on location thus eliminating multiple trucking invoices. Stabil Drill Shock Subs are fully inspected and redressed after every use. Stabil Drill also carries a large inventory of spare parts to keep the Stabil Drill Shock Sub fleet in optimum working condition.

Down Hole Shock Sub Specifications

Recommended Hole Size (in)	Body OD (in)	Body ID (in)	Fishing Neck Length (in)	Nominal Fishing Neck (Dia. in)	Overall Length (in)	Approximate Weight (lbs)
5-7/8 - 6-3/4	4-3/4	1-1/2	108	4-3/4	108	400
7-7/8 - 8-3/4	6-1/2	2-1/4	144	6-1/2	144	700
9-7/8 - 12-1/4	8	2-11/16	156	8	156	1300
12-1/4" - 26"	9-1/2	2-11/16	168	9-1/2	168	2200

Torque Subs & Tri-Collars



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Torque-Subs

Stabil Drill's Torque-Sub is specifically designed to deliver at-the-bit reaming performance. Its short body design is manufactured from chromium molybdenum alloy steel with chemistries formulated for downhole tools. Its durable cutting structure enables placement between the bit and mud motor in directional applications. The torque-sub also allows maximum efficiency on directional wells where doglegs necessitate a reaming run through the build section.

Premium tungsten carbide inserts are designed distinctively for continuous reaming, capable of maintaining full gauge hole in soft to medium hard rock - while providing positive indication of drill bit becoming undergauge by monitoring of rates of penetration. Expect significant reduction of vibration and enhanced bit life on upcoming wells.

Tri-Collars

Stabil Drill Tri-Collars are three-sided—uniquely designed for stabilizing the bit, especially in hard-rock formations or in applications where deviation is very critical. Manufactured to be run directly on top of the bit, these 30 foot tri-collars have a low bending strength ratio, allowing maximum stability of the drill bit. Hardfacing on 36 wear pads maintains the gauge of the tri-collar in very abrasive conditions.

Tri-collars are made from 4145 Modified Q-T to API Spec 7. They are available in 7-7/8", 8-1/2", 8-3/4" and 9-7/8" hole size.

Dimensional Data - Torque-Subs

Hole Size (in)	Fishing Neck (Dia. in)	Bore (Dia. in)	Fishing Neck (Lgth. in)	Approx. Wt. (lbs)	Overall (Lgth. in)	Blade (Lgth. in)	Insert (Dia. in)	Number of Inserts	Number of Blades	Standard Connection
6 - 6-3/4	4-3/4	1-1/2	7	105	19	8	3/4	30	6	3-1/2 API REG
7-7/8	6-1/2	2-1/4	7	165	20	8-3/4	3/4	30	6	4-1/2 API REG
8-1/2 - 8-3/4	6-1/4 thru 7	2-1/4	7	210	20	8-3/4	3/4	30	6	4-1/2 API REG
9-7/8	7-3/4	2-13/16	9	270	23	9	3/4	30	6	6-5/8 API REG
12-1/4	8 thru 10	3	10	340	24	9	3/4	30	6	6-5/8 or 7 5/8 API REG

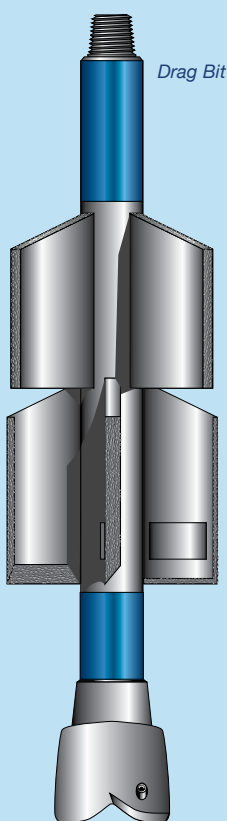
Hole Openers



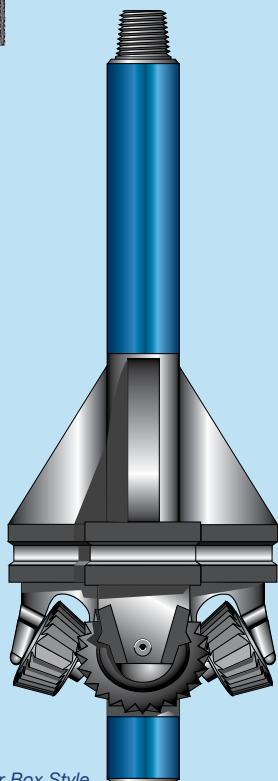
Integral Blade
Devil Drill™



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Drag Bit



Collector Box Style

Hole Openers

Stabil Drill hole openers are designed for the enlargement of pilot holes and large hole applications. They are also used for road and river crossing applications.

The hole openers are manufactured from AISI 4145H fully heat-treated alloy steel. All are available with carbide-milled teeth and insert cutters. Arms and cutters are hardfaced for protection in three different designs for varying conditions and rock formations. The design of the hole opener allows for field-changing the cutters.

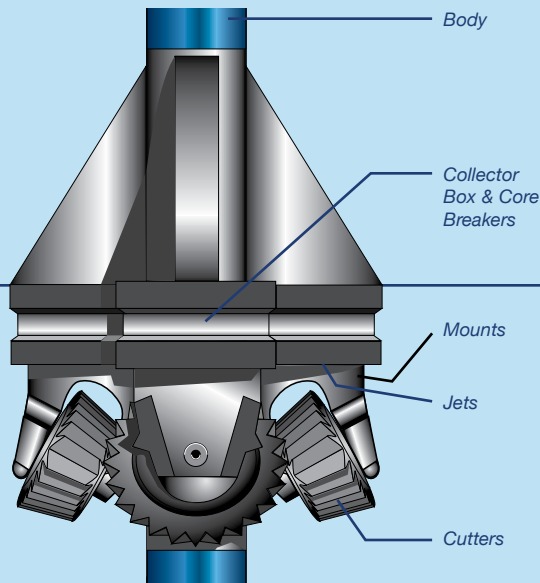
Stabil Drill's range of hole opener types include:

Integral Body Sealed Bearing Hole Opener — One piece construction offers either solid or circulating bullnoses. Cutters are available in milled tooth or tungsten carbide. Hole sizes from 5-5/8" through 60".

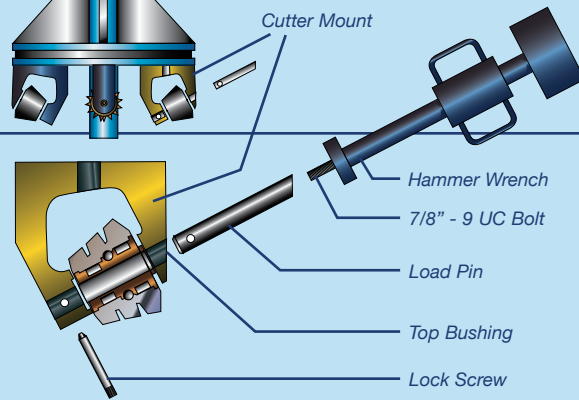
Collector Box Style — For soft, medium or hard formations. Collector box provides even fluid flow directly onto cutters, improving cleaning. Three or four sealed (or non-sealed) cutters. Size: 20" - 60" (or custom-designed).

Devil Drill™ — Excellent for soft and hard formations. Used to wipe the hole clean and ensure that casing can be installed to bottom. Tool of choice after horizontal mud motor runs. No moving parts. Blade edges dressed with tungsten carbide chips. Size: 6" - 26".

Drag Bits — For spudding holes or making wiper runs. Collector box provides even fluid flow to the blade's cutting edge. Self-stabilizing. Can be run with a rock bit in the box end or with a pilot guide. Size: 17-1/2" - 92".



Cutter Installation



Hole Openers



Hole Opener Components

Body - Stabil Drill's hole opener body is forged of 4145 Heat Treat, quenched and tempered steel, and ranges in overall length of 120" up to 132". The tool meets API Specification 7 minimum material requirements for rotary drill stem elements.

Collector Box & Core Breakers - Welded to the hole opener body, the collector box, or "cross", consists of two 2-1/2" thick plates bridged by a 1x2" piece of A-36 steel, which is used for its suitability for welding. The thickness of the steel plates makes the collector box able to withstand weight and impact while rotating.

Mounts - The mounts are cast iron and register a Brinell hardness factor of 218 up to 223 with a 3,000-kg. load, which provides strength while allowing welding. The mounts are weld-beveled and machined to accommodate cutters before being welded to the cross. A hole drilled through the mount and the first plate of the collector box accommodates jets.

Cutters - Each hole opener has a set of four cutters, which are cast to the same specifications as the mounts. The cutters are machined to fit mounts and to accommodate journals and bearings. A pair of cutters is left-hand spiraled; the other pair is right-hand spiraled.

Jets - All hole openers 30" and above are fitted with 24/32 series 95 Smith jets. Jets are fused into a jet sleeve. The 24/32 jet is field-proven as the most proficient tool for cleaning cutters.

Tool Repair & Cutter Installation

Repairing Weld Cracks and Strap Marks - Minor weld cracks can be repaired easily by grinding. If cracks are more severe, a Stabil Drill representative will promptly inspect and rectify the troubled area.

Strap marks and strapping material are also corrected by grinding them off; torch cutting is not recommended.

Special Notes

- All rotary-shouldered connections should be coated with thread compound in storage or during shipment.
- All rotary-shouldered connections should have thread protectors in storage or during shipment.
- Apply lubricant to all drill and tapped areas, load pins before loading cutters, tighten "lock screws" before screwing hammer jack into load pins.
- All gauge dimensions on all hole sizes have tolerance of +1/16", -1/4".

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Hole Openers



STABIL DRILL



IB PDC
Devil-Drill



Devil-Drill



Spiral Key
Seat Wiper



Integral
Body Sealed
Bearing Hole
Opener



Sweep

IB PDC Devil-Drill

Enables the operator to use a rotating steerable directional system while simultaneously opening the hole.

Devil-Drill

Solid construction means extra strength. Blades are dressed with tungsten carbide chips and inserts for gauge protection. For use in reaming soft to hard formations. Hole sizes from 3-1/2" through 30".

Sweep

Simultaneously allows hole enlargement while drilling. It also allows underreaming of a larger hole than the ID of the above casing or diverter.

Spiral Key Seat Wiper

The Spiral Key Seat Wiper is unique because it has no moving parts and you can run the tool while you are drilling. If you have a key seat problem on trips, you can install the tool and continue drilling without having to make a special trip to eliminate the "tight spot".

Hole Openers Specifications & Recommendations



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Hole Opener Specifications

Hole Size (in)	Body OD (in)	Body ID (in)	Length (in)	Approx. Wt (lbs)
26	9-1/2 - 10	3	110	2800
30	9-1/2 - 10	3	120	4800
36	9-1/2 - 10	3	120	5200
42	9-1/2 - 10	3	120	5600
46	9-1/2 - 10	3	120	5800

Pilot Hole Specifications

Hole Opener Size (in)	Pilot Size (in)
36	24
42	30
48	36

Set of 'Q' Cutters (4 pcs) - 95 lbs each - 380 lbs per set

Set of 441 Cutters (4 pcs) - 60 lbs each - 240 lbs per set

Weight and RPM Recommendations

Size Range (in)	Soft Shale Sand, etc		Medium Shale Sand, Lime etc		Hard Lime, Dolomite, Quartzite, etc			
	Weight (000)	RPM	Weight (000)	RPM	Milled Tooth		Insert	
					Weight (000)	RPM	Weight (000)	RPM
5-3/4 - 7-7/8	5/10	50/75	5/10	50/75	10/15	50/60	-	-
8-3/8 - 11	10/15	90/120	15/20	90/100	25/30	60/65	25/35	35/40
12 - 15-1/2	10/25	125/150	15/30	90/100	35/45	60/65	35/45	35/45
15-1/2 - 18	10/25	125/130	15/30	90/100	35/50	60/65	35/50	35/45
18-1/2 - 21	10/25	125/150	15/30	90/100	35/50	60/65	35/50	35/45
22 - 30	15/25	125/150	20/35	75/85	35/50	35/45	35/50	35/45
36	15/25	100/120	20/35	100/110	20/35	80/90	35/50	35/45

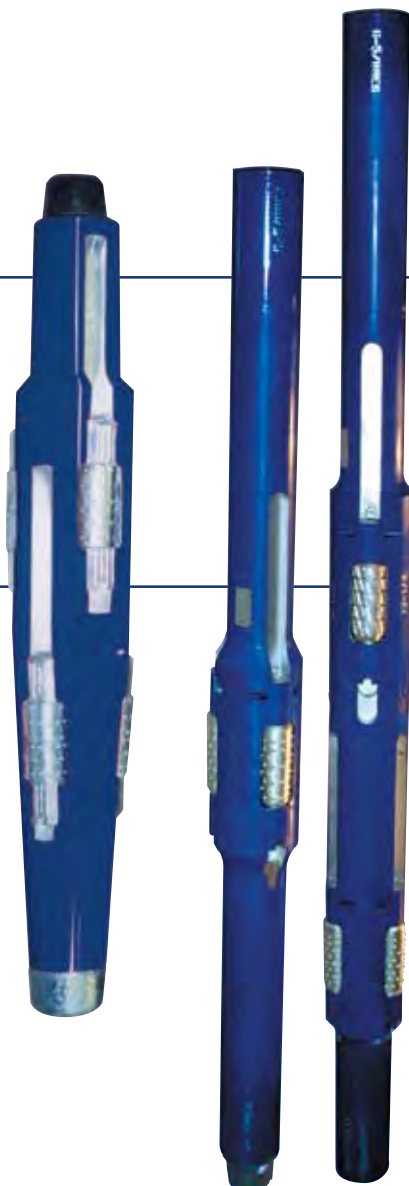
Standard Specifications - all measurements in inches

Hole Size	Minimum Pilot Hole Size	API Tool Joint	
		Pin Up	Box Down
5-3/4 - 6-1/8	3-7/8	3-1/8	2-3/8 - 2-7/8
6-1/4 - 6-1/2	4-1/4	3-1/2	2-3/8 - 2-7/8
6-5/8 - 6-7/8	4-5/8	3-1/2	7-5/8
7-5/8	5-1/8	4-1/2	3-1/2
7-7/8	5-3/8	4-1/2	3-1/2
8-1/8 - 8-1/4	5-5/8	4-1/2	3-1/2
8-3/8 - 8-3/4	5-3/4	4-1/2	3-1/2
9-1/2	6-1/4	6-5/8	3-1/2
9-5/8 - 9-7/8	6-3/8	6-5/8	3-1/2
10-5/8 - 11	7-3/8	6-5/8	4-1/2
12 - 13-3/4	8-1/8	6-5/8	4-1/2 - 6-5/8
14-3/4 - 15-1/2	9-5/8	6-5/8	6-5/8
17 - 18	11-1/2	6-5/8	6-5/8
18-1/2 - 21	11-3/4	6-5/8	6-5/8
22 - 24	13	6-5/8	6-5/8
25 - 26	15-1/4	6-5/8 - 7-5/8	6-5/8 - 7-5/8
28 - 36	17-1/2	6-5/8 - 7-5/8	6-5/8 - 7-5/8

Roller Reamers



**STABIL
DRILL**



*Stabil Drill's
modern
welding
and
fabrication
facility*



Roller Reamers

Stabil Drill Roller Reamers have a heavy-duty design based on a wide range of operating experience. They can drill in any condition, whether soft, medium, or hard formations. The reamers are built to maintain the necessary hole gauge when drilling straight or deviated holes. Its simple design allows for complete cutter replacement at rig site, without welding or the need of special tools. Stabil Drill also offers a reamer/stabilizer combo tool that gives you both reaming and stabilizing functions resulting in maximum directional control.

Standard Specifications - all measurements in inches

Hole Size (in)	Body OD (in)	Body ID (in)	Fishing Neck Length (in)	Nominal Fishing Neck Dia. (in)	Overall Length (in)	Dressed Body String or Nearbit (Approx. Wt lbs)
5-7/8	4-3/4	1-1/4	37	4-3/4	80	230
6	4-3/4	1-1/4	37	4-3/4	80	260
6-1/8	4-3/4	1-1/4 or 1-1/2	37	4-3/4	80	260
6-1/4	4-3/4	1-3/4	37	4-3/4	80	260
6-1/2	4-3/4	1-3/4	37	4-3/4	80	260
7-7/8	6-1/2	2-1/4	37	6-1/2	95	474
8-1/2	6-1/2	2-1/4	37	6-1/2	95	575
8-3/4	6-1/2	2-1/4	37	6-1/2	95	575
9-7/8	8 or 6-1/2	2-1/4	48	8 or 6-1/2	98	785
11	8	2-13/16	48	8	98	950
12-1/8	8 or 9-1/2	2-13/16	55	8 or 9-1/2	126	1088
12-1/4	8 or 9-1/2	2-13/16	55	8 or 9-1/2	126	1088
14-3/4	9-1/2	2-13/16	55	9-1/2	126	1705
16	9-1/2	2-13/16	55	9-1/2	126	1800
17-1/2	9-1/2	2-13/16	55	9-1/2	126	2400
20	9-1/2	2-13/16	55	9-1/2	126	2650
26	9-1/2	2-13/16	55	9-1/2	126	3900

- Redress kits available for 6" through 17-1/2" upon request.
- Multiple connection variations available per API spec.
- 6 point and Combo tools available in sizes 6-1/8" through 17-1/2" upon request.
- All nearbit reamers machined with standard float bores per API spec.



Z-Bits



**STABIL
DRILL**

Z-Bits

The Z-Bit's unique off set configuration is designed to combat side-tracking while reaming downhole.

The Z-bit is run under gauge below a hole opener. The rolling/cutting motion enables the Z-bit to work its way into the hole, followed by a hole opener to open the hole up to a full gauge.

The powerful flushing action through the center of the cone and through a nozzle in the shank above the cutter keeps the hole clean and the teeth clear.

If you are having trouble getting a bull nose hole opener or a drilling assembly to the bottom, the Z-Bit can ream to the bottom without side-tracking the well.

Sizes: 5-3/4", 8-1/2" and 12-1/4"



*Spiral Key
Seat Wiper*

Hole Opener

Z-Bit

Various Tools



**STABIL
DRILL**



Riser Brush Tool



BOP Wash Out Tool



E-Z Spin

Riser Brush Tool

The Riser Brush Tool is designed to run in conjunction with DWT's Wash Out Tool. This tool brushes drilling residue from the riser when going to completion fluids. The tool will also brush oil base mud residue from the riser before unlatching the riser. This tool is very effective in minimizing oil sheen.

BOP Wash Out Tool

The patented BOP Wash Out Tool is designed to ream while jetting drill cuttings from the BOP Stack and the Drilling Riser. The tool has 4-1/2" I.F. or 5-1/2" full hole box up, pin down connections. A short jetting bull nose is installed on the wash out tool to force all the fluid through the jet nozzles. Outside dimensions of the tool are 12, 17, and 17-1/2" with recessed jets below and behind the blades for protection while rotating.

E-Z Spin

The E-Z Spin is a very simple tool patented to reduce the risk of injury to personnel and to utilize rig time to the fullest while picking up the bottom hole assembly. The E-Z Spin consists of the following: A bottom stabbing pin, two plates connected with twelve 1-1/2" springs, a bearing plate and an upper 18" guide pin. The safety aspect of the E-Z Spin is that no one has to hold up the stabilizer while attempting to start the threads on the drill collar.



Motor Sleeves



Motor Sleeves

As a world leader in the rental and manufacturing of stabilization products, Stabil Drill is able to manufacture any type of integral or welded blade sleeve stabilizer. These tools are currently used by all of the major directional companies around the world on their mud motors, rotary steerable tools and also a wide array of MWD/LWD products.

Stabil Drill has the ability to manufacture from customer supplied drawings any type of sleeve stabilizer in 4145 HT steel or in any type of special non-magnetic material. Using the latest CNC milling equipment, custom and precise blade designs for specific drilling conditions are available.

Purpose made hardfacing applications are available to specifically suit each drilling application around the globe.

Stabil Drill also offers a complete line of remote location rig replaceable sleeve and mandril type stabilizers in a range of sizes from 6" thru 36" blade OD.



**STABIL
DRILL**

Mills



Threading



Mills

Stabil Drill provides the toughest mills for the toughest jobs, whether to grind, cut or sweep away stuck objects.

Stabil Drill mills are manufactured from AISI 4145H heat-treated steel and hardfaced with tungsten carbide particles for super penetration rates and fewer round trips.

Each configuration of milling tool exposes the maximum milling surface to the fish; has maximum replacement of milling edges as wear progresses; and allows maximum circulation to flush away cuttings. All mills, with the exception of the tapered and watermelon, are made with wear pads to protect the casing and maintain stability during milling operations.

Stabil Drill's experienced downhole advisor can help you choose the best mill for the job from among the following:

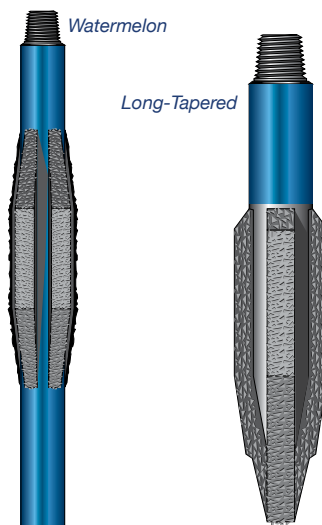
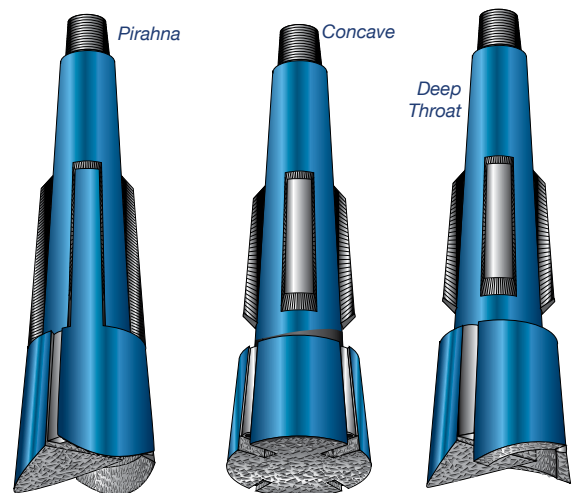
Piranha — For milling cemented pipe and excessive junk in hole. Deep "V" for maximum circulation of fluid and to hold a large amount of tungsten carbide dressing. Size: 3-1/2" - 8-3/4".

Deep Throat Cement — For milling cement where small amounts of contamination exist. Designed for maximum circulation and cutting speed. Size: 3-1/2" - 8-3/4".

Watermelon or String — For milling through collapsed casing and liners. Tapered top and bottom for reaming up and down. Connection on the bottom allows stinger to be run. Often run piggyback with long tapered mill as pilot. Sizes: 3-1/2" - 12-1/4".

Long-Tapered — For reaming out casing, liners, whipstock windows and other restrictions. Sizes: 3-1/2" - 12-1/4".

Concave Cone Buster — For milling bit cones or other objects where keeping the fish centered under the mill is imperative.



Subs & Lift Plugs



Threading



Subs & Lift Plugs

Stabil Drill subs and lift plugs are built to the same exacting standards as the larger, more technical tools in the inventory.

Stabil Drill subs include:

Kelly Saver Subs — Saves expensive wear on kelly threads and casing. Can be reworked numerous times.

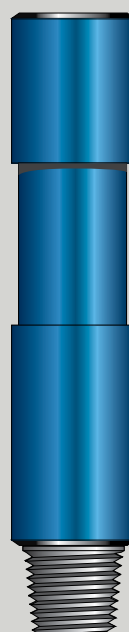
Adaptable Crossover Subs — For adapting different size connections.

Reduced Section Subs — For crossing over from one diameter to another.

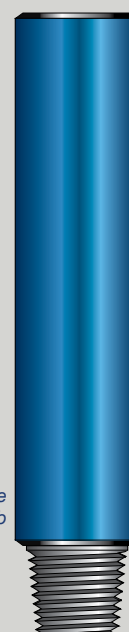
Machined-to-Fit Lift Subs — For handling ease while tripping.

Lift Plugs — Designed for heavy use. One-inch neck below the lifting plate for reworking threads.

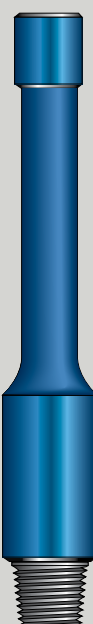
STABIL DRILL



Kelly Saver Sub



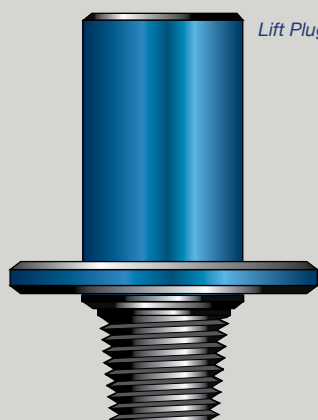
Adaptable Crossover Sub



Machined-to-Fit Lift Sub



Reduced Section Sub



Lift Plugs

Pneumatic Mud Buckets



**STABIL
DRILL**



Pneumatic Mud Buckets

Stabil Drill's pneumatic mud buckets are used for drill pipe and casing applications with sizes ranging from 2-3/8" - 6-5/8" and 7" - 16" respectively.

Seals every time protecting the environment, personnel and your costs.

Rig air is used to seal the bucket so there are no leaks and no spills.

**2-3/8" - 6-5/8" Drill Pipe Applications
7" - 16" Casing Applications**

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