

STABILIZERS

For Various BHA configurations



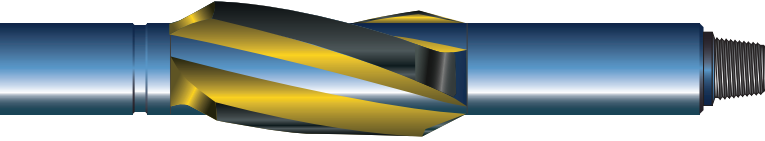
INTEGRAL BLADE STABILIZERS*

Our integral blade stabilizer sets the standard in both directional and straight hole drilling applications. The all-in-one construction makes it an industry workhorse – able to perform in the most rugged and abrasive drilling conditions. Milled directly into a steel forging, the one-piece rotating stabilizer can be run near the bit or up in the drill string in soft to medium and abrasive formations.

With our unique hardfacing capabilities, this tool can be dressed with five hardfacing materials, including HF2000 for soft formations and HF3000 for non-magnetic stabilizers. In hard or abrasive formations, HF5000, HF6000 and HF6500 hardfacing will extend this tool's lifespan by 3x–5x longer making it a very economical choice.

INTEGRAL BLADE SPIRAL STRING STABILIZER

Used primarily in rotating application

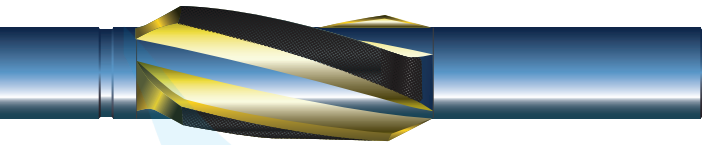


Specifications

- Three blades x 270-degree wrap
- Longer crown lengths
- Typically highest total flow area (TFA)
- Most meet API 7-1 stabilizer dimensional requirements
- Hardfacing on crown and leading edges

INTEGRAL BLADE NEAR BIT STABILIZER

Only used at the bit

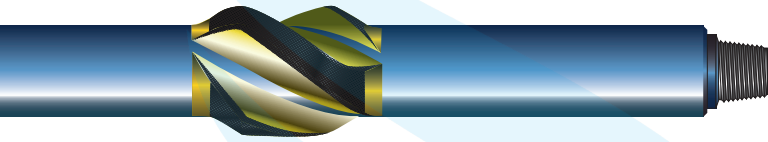


Specifications

- Like a three-blade spiral string, but with:
 - Box connections both ends
 - Bore for float on bottom end
- Typically highest total flow area (TFA)
- Most meet API 7-1 stabilizer dimensional requirements
- Hardfacing on crown and leading edges

INTEGRAL BLADE AUTOTRAC STABILIZER

Integral blade spiral stabilizer with medium crown length and shorter taper angles

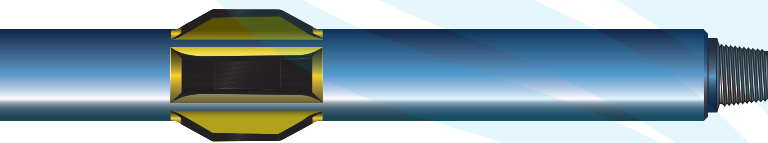


Specifications

- Three blades with 270-degree spiral
- Medium crown length
- Medium flow area (TFA)
- Hardfacing on crown and both leading and trailing taper angles
- Used in both directional and horizontal applications

INTEGRAL BLADE NORTRAC STABILIZER

Straight blade stabilizer used to maintain directional control during sliding operations

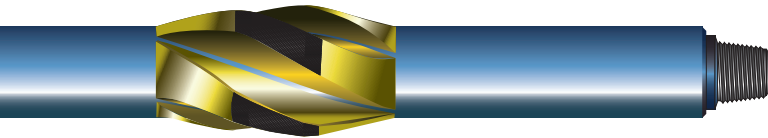


Specifications

- Three or four straight blades
- Short crown length
- Medium to high flow area (TFA)
- Hardfacing on crown and both leading and trailing taper angles
- Used in both directional and horizontal applications

INTEGRAL BLADE D-TRAC STABILIZER

Integral blade spiral stabilizer with short crown length and long smooth taper angles. Used to reduce vibration and torque leading to great reliability of downhole tool life on MWD, LWD, Mud Motor, and RSS assemblies



Specifications

- Four or five blades x tighter spiral with 300–330 degrees
- Short crown length
- Low flow area (TFA)
- Smooth transitions each end of crown
- Hardfacing on crown and both leading and trailing taper angles
- Used in rotating and sliding applications (Used in both directional and horizontal applications)

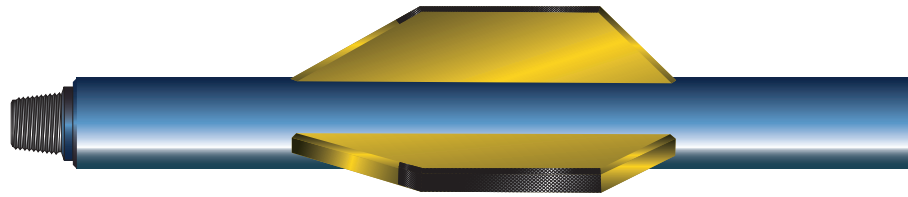
Hole Size (in)	Standard DC Size (in)	Wall Contact (in)	Blade Width (in)	Fishing Neck Length (in)	Blade Undergage (in)	Overall Length (in)		Approximate Weight (kgs)
						String	Near-bit	
6" – 6 3/4"	4 1/2" – 4 3/4"	16"	2 3/16"	28"	-1/32"	74"	70"	160
7 5/8" – 8 1/2"	6 1/2"	16"	2 3/8"	28"	-1/32"	75"	70"	340
9 5/8" – 12 1/4"	8"	18"	3 1/2"	30"	-1/32"	83"	78"	750
14 3/4" – 17 1/2"	9 1/2"	18"	4"	30"	-1/16"	92"	87"	1000
20" – 26"	9 1/2"	18"	4"	30"	-1/16"	100"	95"	1800

WELDED BLADE STRING STABILIZER

For large diameter holes

Specifications

- Three or four blades, usually straight
- Hardfacing on crown and leading edges



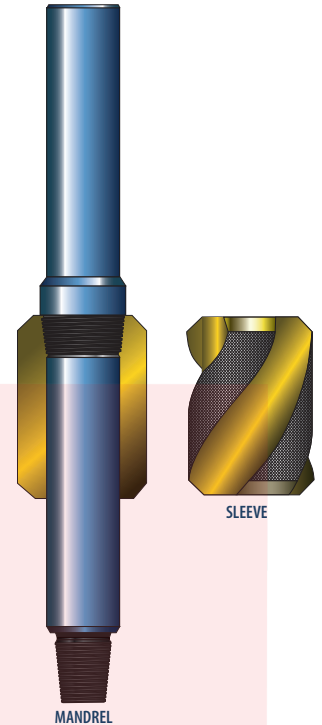
RIG REPLACEABLE SLEEVE TYPE STABILIZERS and MANDRELS

Our sleeve stabilizers are the product of simple design coupled with engineered technology. We understand the need to swiftly change out a sleeve on the rig floor which is why our sleeve and mandrel design is virtually foolproof. Our one-piece mandrel is manufactured from high strength 4145 heat treated alloy with ample tong space for connection recuts.

Easily interchanged with other brands, our sleeve and mandrel design is long-wearing and extremely economical. When they wear out, they can simply be thrown away – a must for remote areas where there is limited access to a field shop and inventory must be kept light.

Due to our hardfacing abilities, our sleeves can be stocked in the same sizes to meet different formation demands while being interchangeable to fit the same mandrel.

- Easily changed out on the rig floor
- Sleeve and mandrel design is interchangeable with similar brands
- Sleeves can be discarded when worn out



SLEEVE SPECIFICATIONS

REAMCO Sleeve Series/Size	Hole Size or Blade O.D. Range (in)	Sleeve Body Diameter (in)	Sleeve I.D. (in)	Sleeve Length (in)	Blade Width (in)	Minimum Crown Length (in)	Maximum Sleeve Weight (lbs)
475	6 1/4" – 6 3/4"	5 3/4"	4 3/4"	14"	2"	12 1/5"	43
625	8 3/8" – 9 7/8"	7 1/2"	6 1/4"	14"	2 1/2"	11 1/10"	84
775	8 7/8" – 12 1/4"	9 1/4"	7 3/4"	18"	3"	14 3/5"	162
775	10 5/8" – 17 1/2"	10"	7 3/4"	18"	3"	11 1/10"	294
963	12 1/4" – 17 1/2"	11"	9 5/8"	18"	3 1/2"	11 9/10"	253

MANDREL SPECIFICATIONS

REAMCO Mandrel Series	Maximum Fishing Neck Diameter (in)	Mandrel Upset Diameter (in)	Sleeve End Diameter (in)	Fishing Neck Length (in)	Sleeve End Length (in)	Total Overall Length (in)	Bore I.D.		Maximum Mandrel Weight (lbs)
							Near Bit	String	
47	4 3/4" – 5"	5 1/8" – 5 3/4"	4 3/4"	23"	32"	62"	1 1/2"	2 1/4"	302
62	6 1/2" – 7"	7 1/2"	6 1/4"	23"	32"	62"	2 1/4"	2 13/16"	500
77	8 1/4"	9 1/4"	7 3/4"	27"	37"	71"	2 13/16"	2 13/16"	893
96	10"	11"	9 5/8"	27"	37"	71"	2 13/16"	2 13/16"	1400

MAKE-UP TORQUE

Series	41	47	62	65	77	85	96
Make-up Torque (ft-lbs)	2000–2500	2000–2500	4500–5500	5000–6000	7000–8000	10000–12000	10000–12000

* There are other types of integral and welded stabilizers that are used less frequently