

PRODUCT OVERVIEW

S2-HD SINGLE PIECE BOW SPRING CENTRALIZER

ENGINEERING SOLUTIONS FOR CHALLENGING WELLS

The S2-HD Bow Spring Centralizer is engineered to provide exceptional strength and reliability in the most challenging well conditions. This heavy-duty version of the patented S2 centralizer is constructed from a single piece, ensuring no weak points and delivering ultra-high durability essential for high-load environments where traditional solid centralizers might be used. The S2-HD is specifically designed for casing-running situations in which heavy loads and extreme forces are at play.

Beyond its unmatched strength, the S2-HD is designed to enhance operational efficiency. It maximizes flow area, reduces torque, and enables smoother rotation and reciprocation during run-in-hole (RIH) operations, which can significantly streamline well operations and reduce risks associated with high-friction environments. The centralizer is rigorously tested to exceed API 10D standards, giving operators confidence in its performance across a wide range of challenging applications.

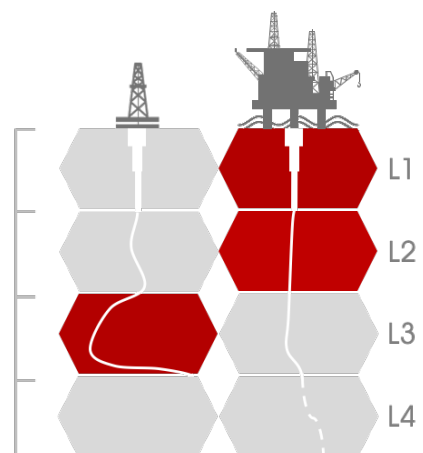
KEY PRODUCT BENEFITS

- Tested to exceed API 10D 7th Edition
- Supports cementing best practices
- Made to gauge
- Optimum standoff
- Maximum flow by area
- Reduced torque and drag
- Enhanced rotation and reciprocation

TARGET APPLICATIONS

- Tight spots
- Onshore and offshore wells
- Unconsolidated wells
- Extended reach wells
- Horizontal and highly deviated wells
- HTHP and geothermal wells
- Shale oil and gas wells
- OH completions w/packers
- Sand screen completions
- J-type and S-type

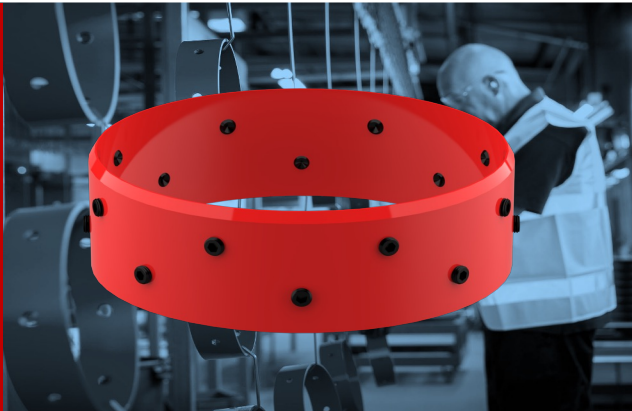
PERFORMANCE RATINGS



CORE PRODUCT SIZING

Product size	Centralizer Part Number	Recommended Stop Collar Part Number
5-1/2" ID for use in 8-1/2" Hole	0512-0812SHD	0512-HDSO
5-1/2" ID for use in 8-3/4" Hole	0512-0834SHD	0512-HDSO
7" ID for use in 8-1/2" Hole	0700-0812SHD	0700-HDSO
7" ID for use in 8-3/4" Hole	0700-0834SHD	0700-HDSO
9-5/8" ID for use in 12-1/4" Hole	0958-1214SHD	0958-HDSO
9-7/8" ID for use in 12-1/4" Hole	0978-1214SHD	0978-HDSO
13-3/8" ID for use in 16-1/2" Hole	1338-1612SHD	1338-HDSO
13-3/8" ID for use in 17-1/2" Hole	1338-1712SHD	1338-HDSO
13-5/8" ID for use in 16-1/2" Hole	1358-1612SHD	1358-HDSO
13-5/8" ID for use in 17-1/2" Hole	1358-1712SHD	1358-HDSO
14" ID for use in 17-1/2" Hole	1400-1712SHD	1400-HDSO

RECOMMENDED



HDSO SLIP ON STOP COLLAR

The HDSO Stop Collar is the heavy-duty counterpart to the S2-HD centralizer, designed for challenging wells where strength is essential. Engineered for high performance, each collar withstands intense axial forces with heat-treated, tempered steel. Features include high holding force, anti-vibration screw retention, and fitment tested up to 50 lb-ft torque.

FULL CENTRALIZER PRODUCT RANGE

MODEL	DUTY			STYLE		CONSTRUCTION			STANDOFF		UNDER-REAMED		FLEX		APPLICATION				PERFORMANCE									
	Light	Standard	Heavy	Slip-on	Hinged	Heat Treated	Single Piece	Welded Bows	Mechanical	Bow Spring	Solid Body	Standard Bows	Offset Bows	Close Tolerance	Sub	Used in tight spots	Used in restrictions	Level 1	Level 2	Level 3	Level 4	Flexibility	Runability	Strength				
OBH	■	■				■	■																		5	4	4	
OBH-W	■					■	■																			5	5	5
OSN			■	■														■										
ES		■																								6	7	6
OBS		■																								4	5	7
S2		■																								7	8	7
S2-H		■																								7	8	7
S2-HD		■		■								■														7	7	8
TUR		■										■																
TUR-CT		■										■																
TUR-SUB		■										■																
UROS		■																								8	8	7
UROS-CT		■																										
UROS-SUB		■																										