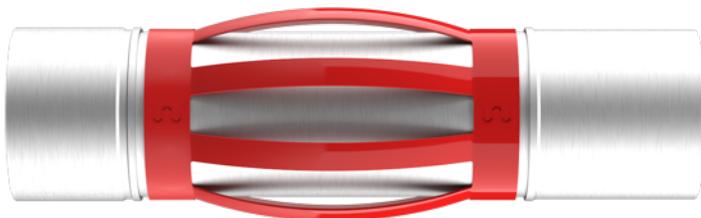


TUR-SUB CENTRALIZER

ENGINEERING SOLUTIONS FOR ULTRA-NARROW ANNULUS APPLICATIONS

The TUR-SUB is designed to be run in the challenging, close tolerance, under-ream applications found in some of the world's most challenging offshore fields.



In tight annulus applications and deep-water operations, centralizers must compress virtually flat to allow travel through narrow under-reamed well sections.

Precise manufacturing and the TUR SUB's single piece constructions eliminates the risk of failure associated with welded bow spring centralizers. This integrity and strength allow the sub body to rotate within the TUR centralizer at minimal torque values.

During operations, the TUR centralizer will recess entirely into the sub body enabling it to pass through the tightest of restrictions. The sub body is manufactured to API 5CT requirements and will meet or exceed burst, collapse and tensile ratings and will be threaded to fit the casing string.

Centek has the capability to supply sub bodies tailored to meet customer specifications.

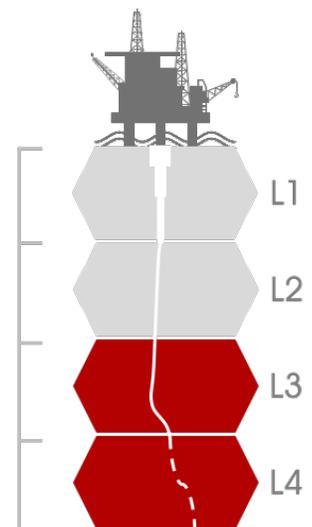
KEY PRODUCT BENEFITS

- Designed specifically for ultra-tight tolerance applications
- Low equivalent circulating density (ECD) signature to lower surge effect during run-in-hole (RIH)
- Allows for rotation when fully compressed
- Fewer bows for more efficient RIH
- Will meet or exceed host casing burst and collapse specifications
- Interlocked band design gives the strength of a single piece centralizer

TARGETED APPLICATIONS

- Deepwater
- Ultra-narrow annulus
- Alternative to standard subs that will have higher initial insertion forces due to bow design

PERFORMANCE RATINGS



CORE PRODUCT SIZING*

Product size	PART NUMBER
	Centralizer Sub
9-5/8" ID for use in 12-1/4" Hole	0958-1214 TUR-SUB
11-3/4" ID for use in 14" Hole	1134-1400 TUR-SUB
11-3/4" ID for use in 14-3/4" Hole	1134-1434 TUR-SUB
14" ID for use in 17-1/2" Hole	1400-1712 TUR-SUB
16" ID for use in 20" Hole	1600-2000 TUR-SUB
17-7/8" ID for use in 22" Hole	1778-2200 TUR-SUB

*custom sizes are available. Speak to your sales representative for more information.

FULL STRING SOLUTION

WELL TYPE	ONSHORE						ONSHORE + OFFSHORE			UNDER-REAM / OFFSHORE	
WELL LEVEL	L1				L2	L2 & L3	L3 + (L1+L2)			(L3+L4)	
	OSN	OBH	OBH-W	OBW	OBS-2	OBS	S2-HD	S2	S2 Hinged	TUR (Includes variants)	UROS (Includes variants)
PRODUCT NAME & TYPE	SOLID BODY						BOW SPRING				
	Pressed bows	Non-welded with hinge	Welded with hinge	Welded	Single piece	Single piece	Heavy duty, single piece	Single piece	Hinged	Single piece	Single piece
FLEXIBILITY (0-8)											
RUNABILITY (0-8)											
STRENGTH (0-8)											

For more information talk to our Global Sales team today or use our Product Selector Tool to find the right product for your application – sales@centekgroup.com

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