

Load Anchor

Metal-to-metal anchor for the COLOSSUS M2M system



Rated up to 13,400 psi [94 MPa]



Rated to 150 degC [302 degF]

APPLICATIONS

- HPHT applications
- Anchor tiebacks and hangers to enable higher bidirectional-load capability
- Anchor hangers in polished bore receptacles (PBR)

BENEFITS

- Reduces thermal expansion loads while anchoring extended-reach drilling completion strings
- Enables use of conventional liner hanger equipment that would otherwise be unable to support heavy axial loads
- Anchors completion strings immediately while waiting for other completion operations
- Prevents movement of tieback casing during thermal expansion
- Removes the load transfer onto the liner hanger and tieback system
- Eliminates requirement for pipe movement to set anchor in previous casing string

FEATURES

- Cost-effective, nonsealing, robust metal-to-metal load anchor system
- Bidirectional, extreme high-load capabilities
- NACE compliant
- Effective for the life of the well

As a part of the COLOSSUS M2M* metal-to-metal expandable liner hanger system portfolio, the load anchor system provides full metal-to-metal anchoring of tieback casing, effectively removing the transferred compression load to the liner tieback and liner hanger.

The unique Metalmorphology* metal-to-metal sealing and anchoring technology shapes metal downhole to create metal-to-metal solutions that conform perfectly to the shape of the upper casing string.

The result is a gas-tight, axial-load-bearing, metal-to-metal interface that meets well integrity legislation and retains its effectiveness for the life of the well.

Applications

The load anchor is set against the previous casing above or below the hanger to remove excessive compression and tensile loading from the hanger and tieback seal. Additionally, the load anchor can be used to prevent movement of the tieback casing to help maintain the integrity of traditional seal stacks and PBR systems.

In some casing designs, high thermally-generated axial loads can occur in tieback casings. This may cause problems for the liner hanger system, the casing, or even the casing threads, particularly when the casing design requires semiflush connection profiles, which have reduced axial load capabilities. The load anchor system is run as part of the tieback casing and will anchor the tieback to the outer casing to remove any axial load transfer onto the liner hanger system.

Load Anchor Specifications

Size, in [cm]	OD, in [cm]	Standard ID, in [cm]	Internal Pressure, psi [MPa]	External Pressure, psi [MPa]	Axial Rating, lbf [N]
7.875 × 11.875 [20.003 × 30.163]	5.750 [14.605]	6.375 [16.193]	11,000 [75.8]	13,400 [92.4]	1,300,000 [5,782,688]
14 × 16 [35.560 × 40.640]	14.500 [36.830]	12.360 [31.394]	10,000 [68.9]	9,000 [62.1]	2,900,000 [12,899,842]
16 × 20 [40.640 × 50.800]	14.500 [36.830]	14.688 [37.308]	5,000 [34.4]	5,000 [34.4]	2,500,000 [11,120,554]



Load anchor.

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