



MechLOK™ Drill Pipe Swivel

RIGHT OR LEFT HAND LOCKING.

MECHANICALLY LOCKABLE. FOR COMPLEX TUBULAR INSTALLATIONS.

The MechLOK™ Drill Pipe Swivel can be run on any string where potential problems exist in reaching Target Depth due to frictional issues, typically in long, horizontal extended reach drilling (ERD) wells.

A drill-string deployed swivel tool, our MechLOK™ Swivel facilitates the rotation of the drill pipe above the liner in an ERD well, reducing drag, redistributing friction and mitigating helical buckling of the work-string. It also increases the available weight to push completions and liners to Target Depth in ERD wells.

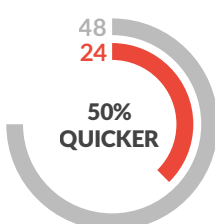
Our MechLOK™ Swivel has the choice of either left or right locking, enabling the tool to effectively cater to many well operation scenarios. Locking of the MechLOK™ immediately prevents swivelling by a simple, mechanical manipulation of the drill-string. Once locked, the tool can be rotated to the right or left, in compression or tension. Using this unique, patented single tool mitigates the HSE risk involved in handling multiple roller bearing subs or alternative drag reducing tools.

THE BENEFITS

- Reduces the need for heavy-weight drill pipe or collars
- Protects items from potentially harmful torque
- Immediate locking enables mechanical release of setting tools when required
- No drop ball, no hydraulic concerns
- Ensures completions or liners get to TD
- Maximises ROI

IN NUMBERS

■ Conventional Technology ■ MechLOK™ Drill Pipe Swivel



24 HOURS SAVED
Using the MechLOK™ Swivel guarantees getting to Target Depth safely on the first attempt.



**\$1,000,000
\$550,000**
\$450,000 SAVED
By running a completion or liner in an ERD well in half the time.



**REDUCED HSE
EXPOSURE**
Personnel injury risk drops dramatically due to the minimal manpower requirement.

MechLOK™ Drill Pipe Swivel Data Sheet

Tool Specifications	MechLOK™ 3½" Tool Parameters		MechLOK™ 5½" Tool Parameters	
	Imperial Data Figures	Metric Data Figures	Imperial Data Figures	Metric Data Figures
Drill Pipe Size	3.500" - 4.500"	88.90mm to 114.30mm	5.000" - 5.875"	127.00mm to 149.23mm
Tool O.D.	5.625"	142.30mm	8.250"	209.60mm
Tool I.D.	1.830"	46.50mm	2.60"	66.00mm
Tool Length Extended	144" / 12.00ft	3.65m	151" / 12.61ft	3.85m
Tool Length Compressed	134" / 11.15ft	3.40m	139" / 11.58ft	3.55m
Tool End Connections	To match drill-pipe connections		To match drill-pipe connections	
Max. Operating Temperature	350°F	175°C	350°F	175°C
Approximate Tool Weight	784lbs	356kg	1,686lbs	765kg
Internal Yield Pressure	13,500 psi	930 bar	12,500psi	860bar
External Collapse Pressure	11,000psi	760 bar	10,000psi	690bar
Tensile Yield of Tool	300,000lbs	135 metric tons	900,000lbs	410 metric tons
Compressive Yield of Tool	300,000lbs	135 metric tons	900,000lbs	410 metric tons
Max. Dog Leg of Tool	10° /100ft (6.125 hole)	10° /30m (155.60 hole)	10° /100ft	10° /30m
Operating Differential Pressure Rating	7,500psi	517bar	7,500psi	517bar
Recommended Rotary Speed	30 – 50rpm			
Max. Intermittent Rotary Speed	85rpm			
Method to Lock Swivel	100% Mechanical Right or Left Rotation			
Locking Method (RH: Clockwise / LH: Anticlockwise)	40 Rotations in Tension		25 Rotations in Tension	
Max. Operating Torque Locked (RH or LH)	15,000ft-lbs	20,337Nm	40,000ft-lbs	52,235Nm
Max. Static Load on Bearings	125,000lbs	57 metric tons	325,000lbs	147 metric tons
Max. Rotating Load on Bearings	95,000lbs	43 metric tons	180,000lbs	81 metric tons
Standard Casing Size to Deploy Tool	7.000" 29.0#	177.80mm 42.3kg/m	9.625" 53.3# & 9.875" 9.875" 62.8#	244.50mm 78.1kg/m 250.83mm 91.6kg/m

Deep Casing Tools

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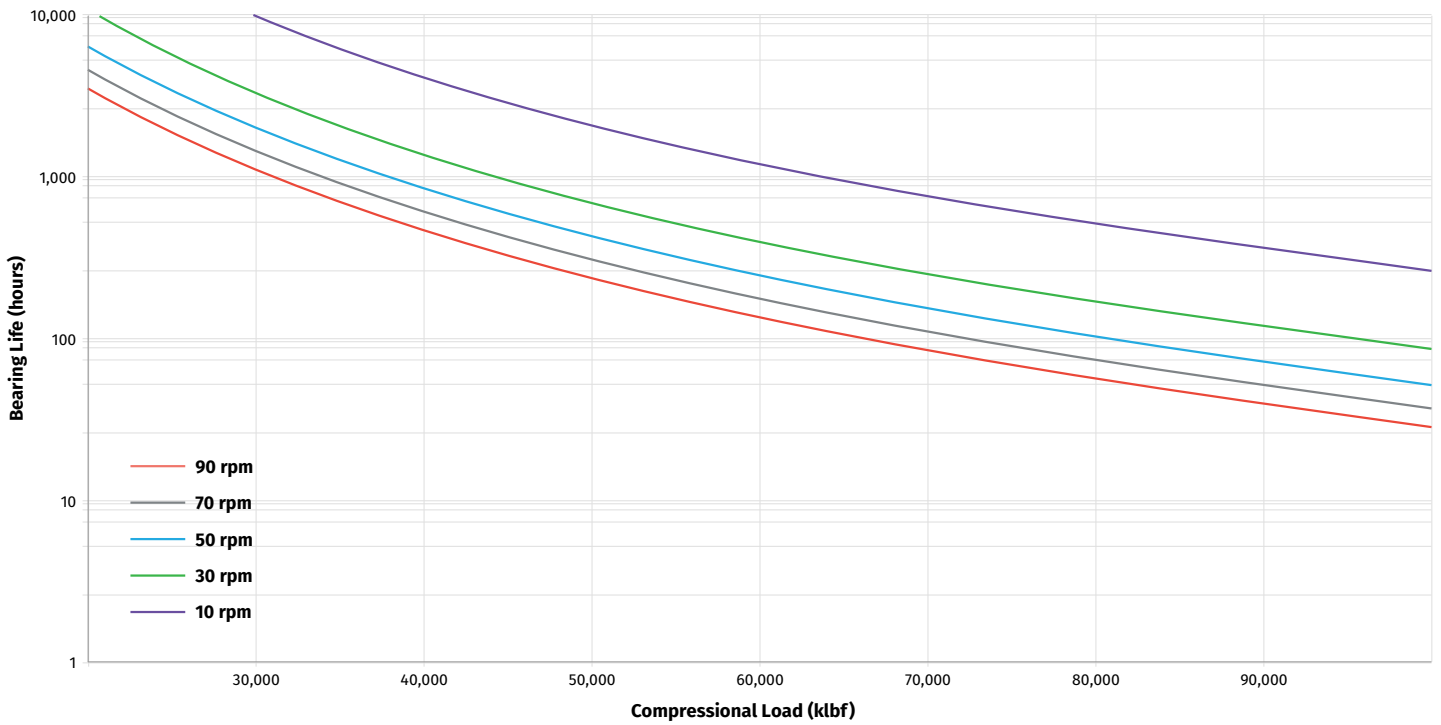
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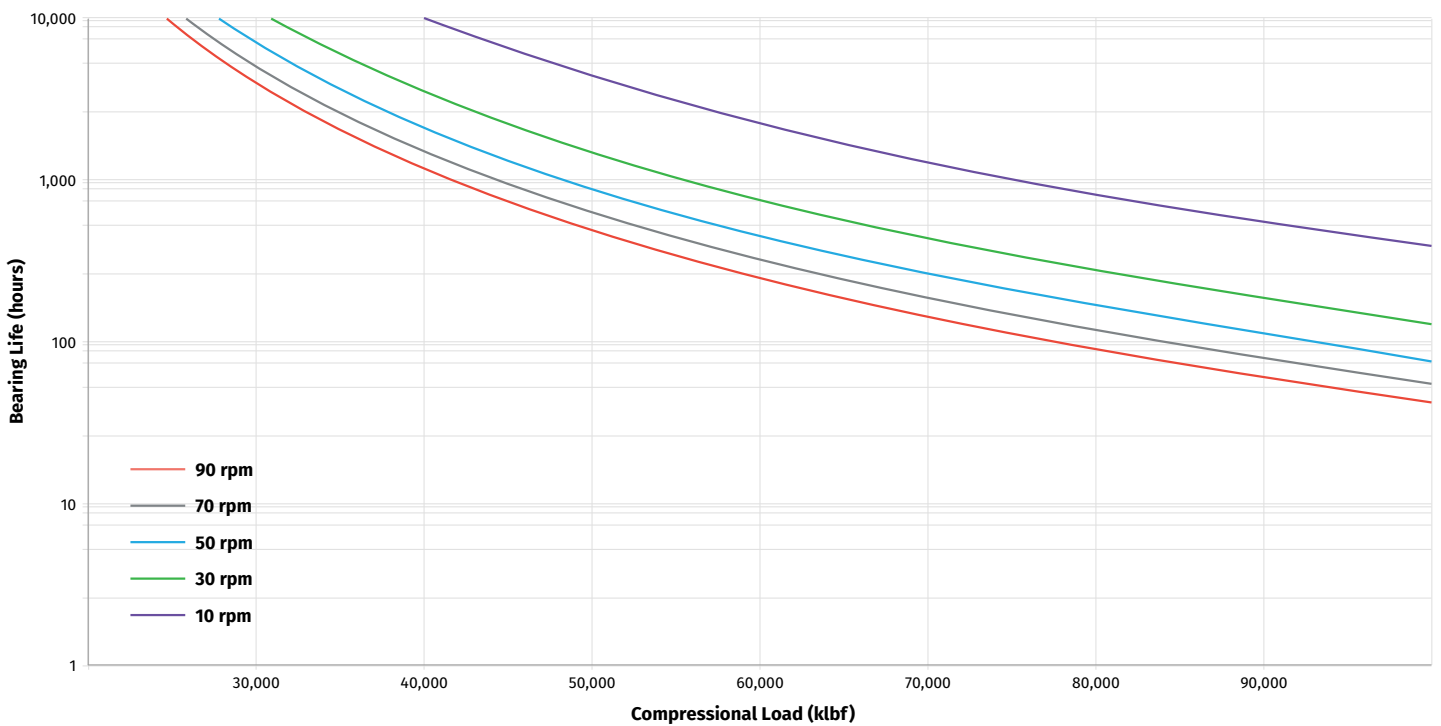


MechLOK™ Drill Pipe Swivel Data Sheet

Bearing Life Curve 3½" MechLOK™



Bearing Life Curve 5½" MechLOK™



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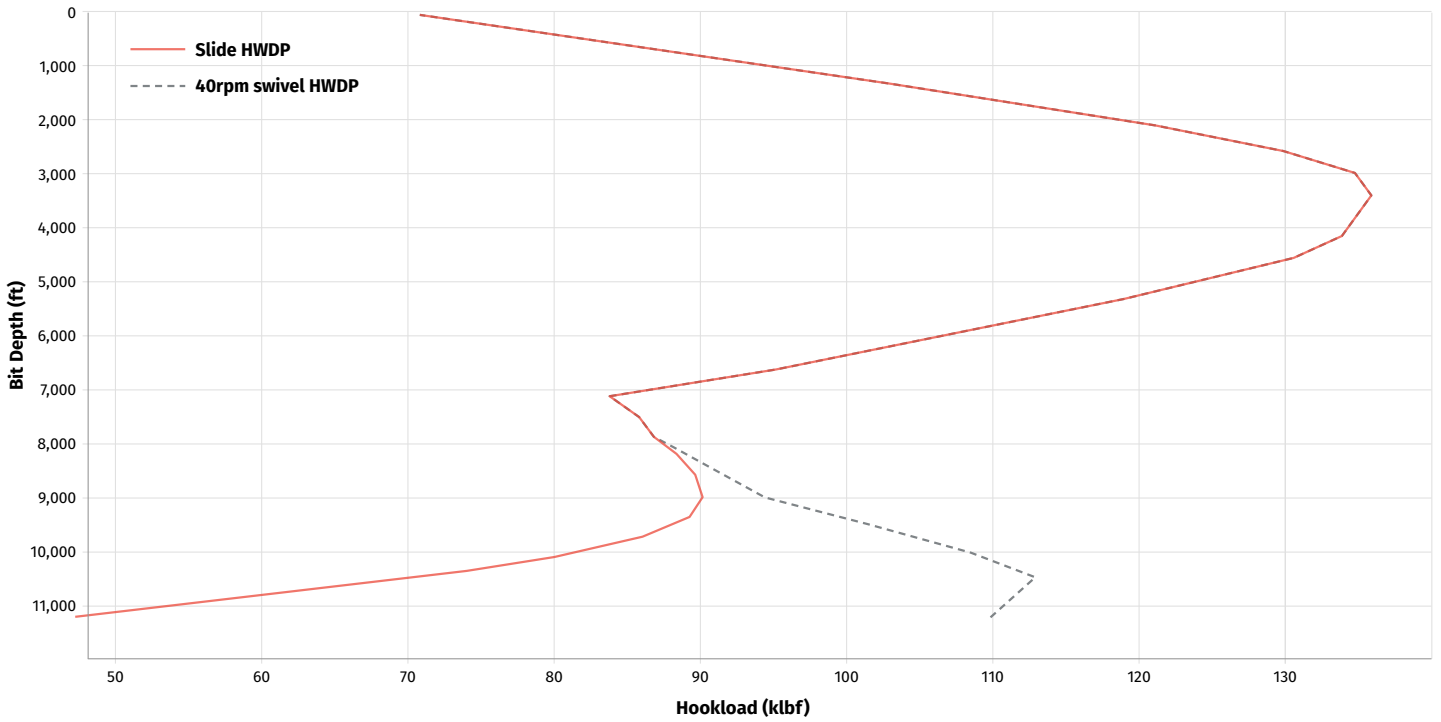
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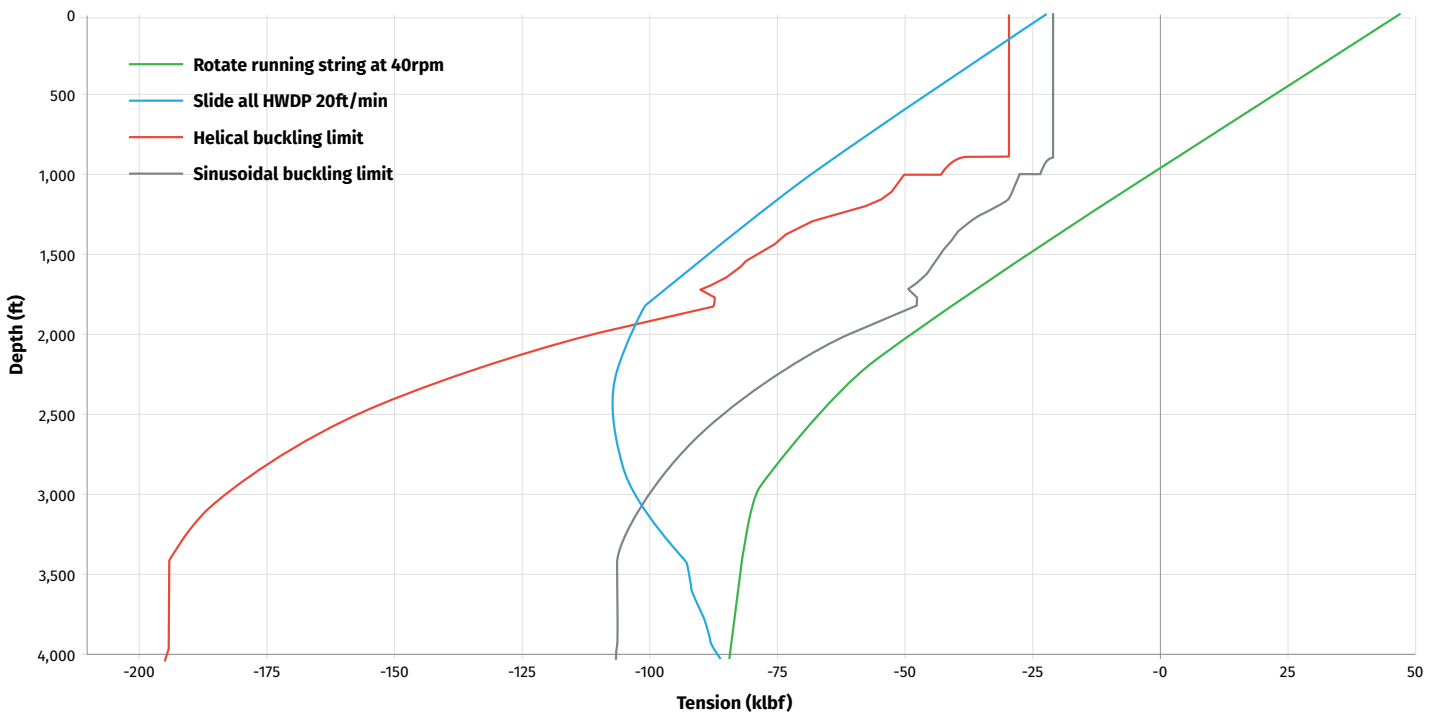
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Torque and drag modelling available hookload



Torque and drag modelling buckling comparison



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