



Rotary Steerable Assist™

Rotary Steerable Assist™ (RSA) is a mud motor designed for rotary steerable applications that incorporates high thrust capacity bearings in both on-bottom and off-bottom conditions for motor-assist rotary steerable drilling applications. The revolutionary sealing technology utilizes multiple active and redundant seals to ensure continuous sealing integrity with optimum reliability. This enables 100% of the drilling fluid to pass through the motor to the rotary steerable.

Benefits

- 100% flow through resulting in no loss of flow to rotary steerable systems
- Ideal for mud operated rotary steerable applications
- Robust design to withstand rotary steerable and MWD the below motor
- High-torque drive line capable of handling higher stresses incurred from rotary steerable systems
- Designed to reduce bending stress on BHA

Performance

6100' Drilled in 24 Hours in the Southern Delaware Basin

ROTARY STEERABLE ASSIST™

6100' of 8-1/2" hole drilled in a 24-hour period with precise trajectory control throughout the entire length of the well

- **Total Drilling Hours** - <40
- **Total Lateral Footage:** 9,913'
- **Average ROP:** 269 ft/hr.



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Specifications

	Tool Sizes	
	5"	7"
Overall Length	129-1/2" (3.2766 m)	165-1/2" (4.191 m)
Hole Size	6" - 6-3/4" (152 - 171 mm)	8-1/2" - 8-3/4" (216 - 222 mm)
Lower Connection	3-1/2" PIN	4-1/2" PIN
Mandrel Connection Diameter	2.750 (70 mm)	3.750 (95 mm)
Mandrel Minor Connection Diameter	2.550 (65 mm)	3.520 (89 mm)
Mandrel Bore	1-1/4" (32 mm)	1-5/8" (25 mm)
Maximum W.O.B.	72,000 lbs (32,027 daN)	98,000 lbs (43,593 daN)
Maximum Pull While Back Reaming	58,000 lbs (25,800 daN)	81,000 lbs (36,031 daN)
Maximum Bit Overpull to Re-Run	110,000 lbs (48,930 daN)	320,000 lbs (142,343 daN)
Maximum Body Overpull to Re-Run	250,000 lbs (111,206 daN)	580,000 lbs (257,997 daN)
Absolute Overpull	375,000 lbs (166,808 daN)	905,000 lbs (402,564 daN)

