

D-Tech Rotary Steerable Tool Specifications

	RST475	RST500	RST650	RST675	RST900
Hole size, in. (mm)	6 to 6 1/8 (152.4 to 155.575)	6 1/2 to 6 3/4 (165.1 to 171.45)	7 7/8 (200.025)	8 1/2 to 8 3/4 (215.9 to 222.25)	12 1/4 to 12 1/2 (311.15 to 317.5)
Tool length, ft (m)	11.5 (3.50) w/o stabilizer	11.5 (3.50) w/o stabilizer	15.637 (4.766) w/ stabilizer sub	13 (3.96) w/ stabilizer	12.87 (3.92) w/o stabilizer
Nominal OD, in. (mm)	4.75 (120.65)	5.00 (127)	6.50 (165.10)	6.75 (171.45)	9 (228.6)
Max overpull, lb (N)	400,000 (1,800,000)	400,000 (1,800,000)	1,200,000 (5,300,000)	1,200,000 (5,300,000)	1,500,000 (6,700,000)
Max torque-at-bit, ft-lb (Nm)	8,000 (10,846)	8,500 (11,525)	16,000 (21,693)	16,000 (21,693)	55,000 (75,000)
Max weight-on-bit, lb (N)	Drill bit limited	Drill bit limited	Drill bit limited	Drill bit limited	Drill bit limited
Bit connection, in.	3 1/2 Reg	3 1/2 Reg	4 1/2 Reg	4 1/2 Reg	6 5/8 Reg
Max DLS passthrough - nonrotating, (rotating), °/30m ¹	25 (15)	25 (15)	16 (10)	16 (10)	10 (7)
Flow range, gpm (lpm) ²	170 to 400 (643 to 1,514)	170 to 400 (643 to 1,514)	300 to 670 (1,135 - 2,540)	300 to 670 (1,135 to 2,540)	410 to 1,200 (1,552 to 4,550)
Max mud density, lb/gal US (kg/L)	20 (2.39)	20 (2.39)	20 (2.39)	20 (2.39)	20 (2.39)
Chlorides, ppm ³	Material dependent	Material dependent	Material dependent	Material dependent	Material dependent
Max LCM concentration, lb/bbl (kg/L) ⁴	30 (0.13)	30 (0.13)	50 (0.19)	50 (0.19)	50 (0.19)
pH ⁵	9 to 12	9 to 12	9 to 12	9 to 12	9 to 12
Max sand content, %	1	1	1	1	1
Max pressure, PSI (MPa)	20,000 (137.9)	20,000 (137.9)	20,000 (137.9)	20,000 (137.9)	20,000 (137.9)
Max temperature, °F (°C)	302 (150)	302 (150)	302 (150)	302 (150)	302 (150)
Max operational RPM ⁶	330	330	330	330	230
Max DLS capability, °/100 ft (°/30m) ⁷	8	8	8	8	5
Up-hole/top connection, in. ⁸	3 1/2 IF (NC38) or XT39	3 1/2 IF (NC38) or XT39	4 1/2 IF (NC50)	4 1/2 IF (NC50)	6 5/8 API Reg

¹ Contact your D-Tech rep if your DLS exceeds what is provided.

² Dependent on mud density.

³ >50,000 ppm require surface flushing/external cleaning of RSS with freshwater post-run. High chloride-resistant material options available; contact D-Tech.

⁴ Subject to type of lost circulation material (LCM), medium-sized LCM. For specific materials, please contact D-Tech.

⁵ D-Tech should be contacted for silicate fluid systems.

⁶ Standard configuration is 230 RPM control unit. 330 RPM units are available upon request due to current inventory and availability.

⁷ Dependent on application, formation, bit design, run parameter, etc.

⁸ Alternative top connections are available on request.

The D-Tech rotary steerable tool consistently delivers value by reducing risk, drilling time, and cost-per-foot while providing high directional accuracy and overall reliability to total depth. To learn how we can help you on your next drilling campaign, contact your local D-Tech representative to take control of your well.