

D-Tech Rotary Steerable Tool Specifications

	RST475	RST500	RST650	RST675	RST900
Hole size, in. (mm)	6 to 6 ½ (152.4 to 165.1)	6 ¾ (171.45)	7 7/8 (200.025)	8 ½ to 8 ¾ (215.9 to 222.25)	12 ¼ to 12 ½ (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)	1,100,000 (4,900,000)	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 ½ Reg	3 ½ Reg	4 ½ Reg	4 ½ 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 to 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	230	230	230	230	230
Max DLS capability, °/100 ft (°/30m) ⁷	8	8	8	8	5
Up-hole/top connection, in. ⁸	3 ½ IF (NC38) or XT39	3 ½ IF (NC38) or XT39	4 ½ IF (NC50)	4 ½ IF (NC50)	6 5/8 API Reg

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

² Dependant on mud density.

³ >50,000 ppm requires the RST to be surface flushed/externally cleaned with freshwater post-run. High chloride-resistant material options are available; contact D-Tech.

⁴ Subject to the type of lost circulation material (LCM), medium-sized LCM. For specific materials, 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 based on 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.