

STABILDRILL

TORSIONAL MITIGATION TOOL
STORM TOOL™

PATENTED
TORSIONAL
SHOCK &
VIBRATION
MITIGATION
FOR RSS

MITIGATES
FULL RANGE OF
DYSFUNCTION
FROM STALLS
TO HFTO

ENABLES FASTER
SECTIONS BY
PROTECTING THE
DRILL BIT WITH
FEWER TRIPS FOR
BHA FAILURES

MITIGATE DRILLING DYSFUNCTION IN RSS APPLICATIONS

REDUCTION IN SHOCK & VIBRATION

STORM TOOL

Stabil Drill's Stick-Slip & Torsional Oscillation Reduction and Mitigation Tool aka the STORM TOOL™ is designed to mitigate drilling dysfunction in rotary steerable system (RSS) applications and across the section:

- Tool placed below motor in RSS BHA.
- Torque oscillations converted into axial movement of WOB independent internal dampening mechanism to absorb mechanical energy.
- Reduce amount of shock & vibration on BHA and limits severity of events when they occurred.
- Maintains consistent depth-of-cut to protect bit enabling fast & longer intervals.
- Reduce trips for RSS/MWD failures and bits in RSS applications.

DIMENSIONS

STORM TOOL SPECIFICATIONS AND OPERATING PARAMETERS					
Model	4.75	5.12 / 5.25	6.62	7.12	9
Overall Length	11.9' (3.6 m)	13' (3.9 m)	13.5' (4.1 m)	17.2' (5.2 m)	23' (7 m)
Body OD	4.75" (120.7 mm)	5.125 – 5.25" (130.2 – 133.3 mm)	6.63" (168 mm)	7.125" (181 mm)	9" (228.6 mm)
Mandrel Pin OD	4.75 or 5" (120.7 or 127 mm)	5.125 or 5.25" (130.2 or 133.4 mm)	6.63" (168 mm)	6.75" (171.5 mm)	9" (228.6 mm)
Pass Through ID	1.13" (28.7 mm)	1.19" (30.2 mm)	1.63" (41 mm)	1.63" (41.4 mm)	2.75" (69.9 mm)
Weight	605 lbs (275 kg)	730 lbs (330 kg)	1,325 lbs (601 kg)	1,960 lbs (890 kg)	4,000 lbs (1,810 kg)
Recommended Hole Sizes	5-5/8 - 6-3/4" (143 - 171 mm)	6 - 6-3/4" (152 - 171 mm)	7-7/8 – 8-3/4" (200-222 mm)	8-1/4 - 9-7/8" (210 - 251 mm)	10 5/8 – 26" (270 - 660 mm)
Rig Ends	3-1/2 IF XT(F)-39 w/ 5" Rig Ends	3-1/2 IF XT(F)-39 & 40 NC40 / D540	4-1/2 IF D550	4-1/2 IF D550	6-5/8 REG 7-5/8 REG

RECOMMENDED OPERATING LIMITS

Max Overpull, POOH	324,000 lbs (144,100 daN)	400,000 lbs (177,900 daN)	802,000 lbs (356,700 daN)	816,000 lbs (363,000 daN)	900,000 lbs (400,300 daN)
Max WOB	50,000 lbs (22,200 daN)	54,000 lbs (24,000 daN)	112,000 lbs (49,800 daN)	109,000 lbs (48,500 daN)	195,000 lbs (86,700 daN)
Max Temperature	400°F (200°C)	400°F (200°C)	400°F (200°C)	400°F (200°C)	400°F (200°C)

PERFORMANCE DETAILS

Diff Pressure (@ 8.3 ppf)	150 Psi @ 300 gpm (1,050 kPa @1,100 L/min)	125 Psi @ 350 gpm (850 kPa @1,300 L/min)	160 Psi @ 700 gpm (1,100 kPa @2,650 L/min)	195 Psi @ 700 gpm (1,350 kPa @2,650 L/min)	47 Psi @ 1,200 gpm (320 kPa @4,550 L/min)
Operating Torque	250 - 10,250 ft-lbs (350 - 13,900 N-m)	250 - 9,500 ft-lbs (350 - 13,000 N-m)	500 – 18,500 ft-lbs (675 – 25,079 N-m)	1,000 - 20,000 ft-lbs (1,300 - 27,000 N-m)	1,500 - 45,000 ft-lbs (2,000 - 61,000 N-m)
Maximum Torque	13,500 ft-lbs (18,500 N-m)	13,000 ft-lbs (17,500 N-m)	35,000 ft-lbs (47,457 N-m)	32,000 ft-lbs (43,500 N-m)	45,000 ft-lbs (61,000 N-m)
Flow Range	100 - 350 gpm (400 - 1,300 L/min)	100 - 400 gpm (400 - 1,500 L/min)	300 - 750 gpm (1,135 – 2,840 L/min)	300 - 750 gpm (1,100 - 2,800 L/min)	600 - 1,300 gpm (2,300 - 4,900 L/min)