# **AgitatorHE System**

### Technical Summary

## Higher Efficiency. Higher Energy.

As lateral sections extend relentlessly in length and difficulty, friction reduction systems must become more energetic to alleviate ever-increasing levels of downhole friction. NOV's new Agitator™HE System supplies even more friction-breaking energy to the drillstring, yielding higher ROP and reach than ever before – all at no extra cost in pressure drop.

#### Features and Benefits

- Higher energy output than the standard Agitator system, achieved with the same pressure drop
- Higher efficiency increases effectiveness in low-pressure applications
- Higher energy output is effective in extended-reach situations, further extending the pay zone
- Offers the same metronomic reliability as the standard Agitator system, which has achieved more than 70,000 successful runs
- Offers the same operational functionality as the standard Agitator system: Frequency - requires no new MWD compatibility considerations
  - Placement requires no special considerations compared to the standard Agitator system

### Technical specifications

Tool size (OD)	5" 5" (HIGHFLOW)	6 ½" 6 ½" (HIGHFLOW)	6 <sup>3</sup> ⁄4" 6 <sup>3</sup> ⁄4" (HIGHFLOW)
Overall length	11 ½ ft 12 ft	15 ½ ft 13 ½ ft	13 ½ ft 12.7 ft
Weight	498 lbs	900 lbs	1,000 lbs
Recommended flow range	150-270 gpm 250-330 gpm	375-475 gpm 400-600 gpm	400-600 gpm 600-900 gpm
Temperature range	320°F (160°C)	320°F (160°C)	320°F (160°C)
Operating frequency	18-19 Hz @ 250 gpm 16-17 Hz @ 250 gpm	15 Hz @ 400 gpm 16-17 Hz @ 500 gpm	16-17 Hz @ 500 gpm 13-19 Hz @ 600-900 gpm
Optimal pressure drop generated	500-600 psi	500-600 psi	500-600 psi
Max pull	500,000 lbs	570,000 lbs 690,000 lbs	570,000 lbs 566,000 lbs
Connections	Grant Prideco <sup>™</sup> XT39 pin/box	4 ½" XH 4" IF pin/box NC46 pin/box	4 ½" IF pin/box



