



TETRA AdvanceClean® Magnitude Tool

ADVANCECLEAN® TOOLS

Overview

The TETRA AdvanceClean Magnitude is an extremely effective down-hole tool for use during drilling, fishing, milling, and completion operations for the removal of ferrous debris. The TETRA AdvanceClean Magnitude removes debris, perforation burrs and other foreign material from the wellbore.

Each tool has a minimum of 10 magnet segments specially aligned on the body to provide the maximum surface area for magnetic coverage using magnetic technology. The TETRA AdvanceClean Magnitude will extract ferrous metal contaminants from well fluids from the moment it enters the rotary table until it is removed from the well.

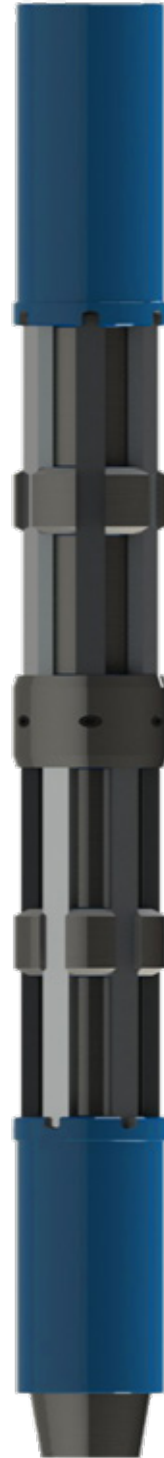
The TETRA AdvanceClean Magnitude can either be run individually or in conjunction with multiple TETRA AdvanceClean Magnets or other AdvanceClean tools, depending on the tool requirements and variable applications. A full range of sizes are available from 4½" up to 13¾".

Features and Benefits

- High reliability with proven record, maximum capacity up to 86 lb.
- High strength magnet strips used providing high carrying capacity and temperature resistance.
- No internal connections and easily field re-dressed.
- No flow restriction through tool annulus, allowing full access to magnets.
- Applicable to all casing and liner sizes.

Design Specifications

Description	String Magnet
Current Model Numbers	TM-500, TM-700, TM-900, TM-13000
Sizes Available	See table
Material	4145
Temperature rating	350°F
Maximum rotational speed	90 RPM
Maximum RIH/POOH speed	150 ft/min
Thread connections	See table





Magnitude Specification Information

	4½ Magnitude	5" Magnitude	7" Magnitude	9½" Magnitude	13¾" Magnitude
Magnet Sleeve OD	3.125"	3.750"	5.250"	6.500"	10,000"
Body Minimum ID	1.000"	1.250"	2.000"	3.000"	3.000"
Fishing Neck Length	12.000"	12.000"	19.500"	19.500"	19.500"
Fishing Neck OD	3.125"	3.125"	5.000"	6.250"	6.250"
Number of Bar Magnets	10	10	12	16	20
Tool Overall Length (ft)	80.0"/6.7 ft	80.6"/6.8 ft	90.0"/7.5 ft	90.0"/7.5 ft	92.5"/7.7 ft
Rig Connection Type	2¾" REG	2¾" REG	3½" IF	4½" IF	4½" IF
Torsional Yield Strength (ft/lb)	5,810	5,810	26,500	44,200	44,200
Make-up Torque (ft/lb)	3,700	3,700	11,000	27,000	27,000
*Tensile Strength (lb)	362,660	362,660	842,400	1,416,200	1,416,200