

# MAGNOSTAR (MSTAR)

## Specialized Tools: Debris Recovery Tools

The MAGNOSTAR\* (MSTAR) magnet was designed specifically for large-volume cleanup applications in high torque strings. The MAGNOSTAR magnet provides superior magnetic surface area for high volume ferrous debris extraction when circulation alone is insufficient.

### Applications

The MAGNOSTAR tool is well-suited for a variety of applications, including displacements, post-perforating, pre-fracturing, multi-zone completions, milling, burning, fishing and smart completions. The tool should be run whenever the potential exists for significant ferrous debris in the wellbore.

### Features

- Single Piece Mandrel, no internal connections
- Optional Dedicated Flow Path to prevent flow path restrictions when packed full of debris
- Fixed Stabilizer Sleeve on box end to provide standoff when POOH
- Casing compatible facing material to minimize casing wear
- Unique, patent pending mechanical method of retaining magnets
- Available in common casing/liner sizes and weights (13 $\frac{3}{8}$  in. to 7 in.)

### How it works

The MAGNOSTAR magnet is run in the well on the workstring in combination with other wellbore clean-up tools. The magnet can be rotated and reciprocated without fear of damage to the casing or the tool itself. The blades on the housing provide generous flow area for fluid bypass around the tool. The fixed stabilizer sleeve on the box end provides stand-off and a secure area away from the casing wall to collect debris while pulling out of the hole. It is available in common casing/liner sizes and weights.

### Advantages

- Potential capacity for up to 200 lb (91 kgs) of ferrous material retrieval
- High strength, rare earth magnets rated to 350°F (177°C)
- Removable magnets for body inspection
- Designed with premium high torque connections
- No flow restriction below the tool permitting large debris-free access to magnets
- Recovered debris easily removed on location



# MAGNOSTAR Heavy Duty (MSTAR-HD)

## Specialized Tools: Debris Recovery Tools

The MAGNOSTAR\* HD (MSTAR-HD) magnet was designed specifically for large-volume cleanup applications in high torque strings. The MAGNOSTAR magnet provides superior magnetic surface area for high volume ferrous debris extraction when circulation alone is insufficient. The MAGNOSTAR HD tool version is fitted with mill rings on the box and pin connections for more aggressive applications.

### Applications

The MAGNOSTAR HD tool is well-suited for a variety of applications, including displacements, post-perforating, pre-fracturing, multi-zone completions, milling, burning, fishing and smart completions. The tool should be run whenever the potential exists for significant ferrous debris in the wellbore.

### Features

- Single Piece Mandrel, no internal connections
- Optional Dedicated Flow Path to prevent flow path restrictions when packed full of debris
- Fixed Stabilizer Sleeve on box end to provide standoff when POOH
- Casing compatible facing material to minimize casing wear
- Unique mechanical method of retaining magnets
- Upper and lower mill rings
- Available in common casing/liner sizes and weights (13<sup>3</sup>/<sub>8</sub> in. to 7 in.)

### How it works

The MAGNOSTAR HD magnet is run in the well on the workstring in combination with other wellbore clean-up tools. The magnet can be rotated and reciprocated without fear of damage to the casing or the tool itself. The blades on the housing provide generous flow area for fluid bypass around the tool. The fixed stabilizer sleeve on the box end provides stand-off and a secure area away from the casing wall to collect debris while pulling out of the hole. The mill rings allow the tool to grind down larger pieces of debris either below or above the magnet. It is available in common casing/liner sizes and weights.

### Advantages

- Potential capacity for up to 200 lb (91 kg) of ferrous material retrieval
- High strength, rare earth magnets rated to 350°F (177°C)
- Removable magnets for body inspection
- Designed with premium high torque connections
- No flow restriction below the tool permitting large debris-free access to magnets
- Recovered debris easily removed on location
- Larger pieces of debris can be ground down with the mill rings

