

HEAVY-DUTY RAZOR BACK advanced casing cleaning tool

Handles complex wellbore cleanups

How it improves wells

The HEAVY-DUTY RAZOR BACK* advanced casing cleaning tool from M-I SWACO consists of a high-strength, one-piece mandrel and is designed to meet the demands of complex wellbore cleanups. By allowing a higher rpm and weight-on-bit rating than the standard RAZOR BACK* casing cleaning tool, the HEAVY-DUTY RAZOR BACK tool is well suited for drilling up cement accessories commonly found inside the liner or casing.

How it works

The HEAVY-DUTY RAZOR BACK tool is run with a maximum running-in-hole and pulling-out-of-hole speed of 150 ft/min [46 m/min] and should be positioned at least 30 ft [9 m] above the drill bit or mill. The string should be picked up off bottom and circulated regularly to clear any accumulation of debris.

Where possible, the bit or mill OD should be greater than the stabilizer sleeve OD of the tool. If this is not possible, it is recommended that a full-gauge mill be run below the first HEAVY-DUTY RAZOR BACK tool in the bottomhole assembly.

Additional information

The HEAVY-DUTY RAZOR BACK tool has all the unique features of the standard RAZOR BACK tool, plus a carbide-compound coated fixed upper and lower mill ring and an increased-strength, one-piece mandrel. This ensures the tool can cope with the demands of drilling up cement accessories commonly found inside the liner or casing. When a drill bit or mill is used, cuttings generated are not always small enough to easily pass inside or around wellbore-cleanup tools. The lower mill ring of the tool ensures that larger cuttings and debris are ground down to a size that makes it easier for them to circulate past any other tools in the string.

The one-piece, main mandrel is complete with nonrotating, right-hand spiral stabilizer sleeves and a metal-bladed lantern covering 360°. The self-centralizing lantern inside the casing ensures an equal cleaning force for all hole inclinations. The main tool body rotates through the stabilizer sleeves and lantern, avoiding wear or damage to the casing during pipe rotation. The metal-bladed lantern is strong, flexible, and self-centralizing, providing the force to contact and scrape the pipe ID equally and effectively.

The tool is available in all common casing and liner sizes. Premium threads are also available.



HEAVY-DUTY RAZOR BACK tool.

HEAVY-DUTY RAZOR BACK Tool Operating Parameters

Tool and Casing Size, in	Maximum Rotating Speed in Tension, rpm	Maximum Rotating Speed in Compression, rpm	Maximum Compression at Tool When Rotating, lbs
3½	60	60	3,000
4½–5½	90	90	5,000
6¾–8¾	120	120	10,000
9¾–13¾	120	120	15,000
16–20	100	100	50,000

These are general guidelines only and are subject to review, if required, for individual circumstances.