

# SWITCHBACK SCRAPER

## Versatile casing cleaning tool

### APPLICATIONS

- Openhole sand screen completions
- Preparation of packer setting depths for lower completions
- Scraping of perforations, shoe track, casing accessories, windows, and casing exits

### BENEFITS

- Saves rig time by enabling scraping of the lower completion packer setting areas immediately after drilling the final hole section without a dedicated scraper run
- Reduces risk of packoff during drilling with dormancy feature
- Enhances operational flexibility with the ability to run multiple scraper tools in the same string all activated by the same ball
- Increases drilling efficiency by dispersing accumulated cuttings beds through a combination of hydraulic and mechanical actions, particularly when used with the WELL COMMANDER\* ball-activated drilling circulating valve

### FEATURES

- Modular design with scraper rib, brush, or mill for enhanced flexibility
- Rugged high-torque design for demanding applications
- Generous flow bypass for optimized ECD control
- Ball-drop activation with advanced ball-seat technology
- Integral stabilizer to provide standoff for maximum bypass
- Innovative blade retention mechanism
- Repelling force that maintains scraper contact with casing ID while rotating workstring to clean casing as well as sidewall contact while tripping out

The SWITCHBACK SCRAPER\* versatile casing cleaning tool is used for cleaning critical casing sections on the trip out of the hole prior to running the completion, such as in sand screens. The tool can be run as a part of the BHA used to drill the final hole section, and multiple tools can be run in the same string.

Up to three SWITCHBACK SCRAPER tools can be run in the drilling assembly for openhole sand screen completions. The tool is used when only one openhole bit run remains. With the bottom tool spaced to reach the casing shoe as the bit reaches TD, a ball is dropped to activate the tool. The well is scraped clean while pulling out of the hole, enabling sand screens to be run without the need for a dedicated wellbore preparation run.

Other applications include preparing packer setting depths for lower completions, scraping perforations, scraping shoe track or casing accessories, and scraping windows and casing exits.

### How it works

The tool is run in the hole dormant with all blades recessed. When drilling operations conclude at TD in the open hole, a ball is dropped to the scraper tool or tools. Once the ball lands on the seat, pressure is applied to the recommended level, which activates the tool and allows the pads to extend.

If more than one SWITCHBACK SCRAPER tool is run in the same string, the process of pressuring up is repeated until all of the tools are activated. At that point, the ball is caught in a bypass ball catcher located below the bottom scraper tool.

Once activated, the tool is rotated at the recommended parameters for the given model while circulating to remove dislodged debris. In certain applications, such as milling a perforated or packer setting area, the string can be reciprocated while rotating to ensure a high degree of cleanliness.

