## Schlumberger

# Hydra-Jar AP

### Double-acting hydraulic drilling jar

#### **APPLICATIONS**

- Drilling or workover operations
- HPHT drilling conditions

#### **BENEFITS**

- Facilitates operational flexibility with ability to accommodate land and offshore operations, vertical and deviated drilling, and ultraHPHT environments
- Expands options for drilling, coring, cementing, testing, fishing, workover, and remedial operations
- Minimizes pressure losses and provides wireline tool compatibility
- Enables optimal placement in compression or tension for best impact and impulse
- Delivers up and down impact without requiring torqueing or tripping for adjustments

#### **FEATURES**

- Rig-floor control of jarring direction, duration, and impact intensity for remote operation
- Safety clamp that enables jar to be made up, racked, and handled like drillpipe joint, reducing trip time
- Jarring-force capability of 1,000,000 lbf [4,448,222 N]
- Seals that are rated to 20,000-psi [137.9-MPa] differential pressure
- Circulation that is rated to 10,000-psi [68.9-MPa] differential pressure
- Optional safety-lock mechanism that prevents accidental firing
- Optional 500-degF [260-degC] temperature rating
- Balanced to hydrostatic pressure through ports open to the wellbore

The Hydra-Jar AP\* double-acting hydraulic drilling jar amplifies the force applied at surface to free stuck drillstring components during drilling or workover operations. It also offers the driller an important control option: to jar up, or down, with a force ranging from a light blow to an extraheavy impact.

In most applications, the tool should be run in conjunction with the Accelerator AP\* impact tool to increase impact while protecting the drillstring and surface equipment from shock.

#### Effective and efficient for operational viability

The Hydra-Jar AP jar expands options for drilling, coring, cementing, testing, fishing, workover, and remedial operations. Its fullbore design minimizes pressure losses and provides wireline tool compatibility. The jar makes up, racks, and handles like a standard-length drillpipe, reducing trip time. It provides up, down, or up-and-down impact without requiring torqueing or tripping for adjustments.

#### Rugged durability ensures performance

Balanced to hydrostatic pressure through ports open to the wellbore, the Hydra-Jar AP jar ensures consistent hitting performance regardless of changes in downhole pressure. The jar also features a detent system that provides more consistent loading and firing of the jar over a broad range of borehole temperatures. The Hydra-Jar AP jar's unique metering process compensates for the decrease in detent cylinder oil viscosity as the jar is fired repeatedly, enabling consistent impact regardless of downhole conditions.

#### Flexibility for all drilling environments

The Hydra-Jar AP drilling jar performs effectively in every drilling environment—land or offshore, vertical or deviated wells, and ultradeep or ultrahot boreholes. The jar may be run in compression or tension, enabling optimized placement in the drillstring. Because the system works without applied torque, directional drilling tools maintain their orientation throughout the jarring operation. These features—combined with careful materials selection and field-proven engineering—deliver a uniquely rugged, reliable downhole impact system.

The Hydra-Jar AP jar can be run in compression or tension, enabling optimized placement in the drillstring.