OVERVIEW
HF-Series packers are single-string, retrievable, cased-hole packers that feature a facility for bypass of multiple electrical and/or hydraulic control lines. Available for use as both the top production packer or as one of many lower packers that isolate adjacent zones, these packers include a specialized slip configuration and additional body lock ring. This allows operation under higher loads and greater pressures than standard production packers.

SETTING MECHANISMS
HF-Series packers have two setting and three release mechanisms.
» Setting mechanisms
  - Tubing-pressure set
  - Control-line set
» Release mechanisms
  - Punch and pressure release
  - Shift and pressure release
  - Mechanical shift release

The release mechanism is recessed and selective, allowing for passage of other toolstrings. Axial loads are supported in both directions so tool cannot be released by tubing forces.

FEATURES
» Hydraulically activated interlock mechanism prevents premature setting
» No body movement during setting
» Premium thread connections
» NBR, HNBR and Aflas element options with anti-extrusion system
» Tailpipe can be left in tension or compression

BENEFITS
» Less damage to casing using a multi-cone, full-coverage slip system
» Fully retrievable after installation
» Can be deployed with SmartWell® systems
» Can be used as both top production packer and lower isolation packer
» Avoid damage to control line during setting
PENETRATIONS
Provision is made for the passage of multiple hydraulic and/or electrical control lines. All connections are sealed using Halliburton proprietary FMJ connectors.

CONNECTIONS
The packer is made up directly to the tubing string via integral premium thread connections. The internal mandrel also uses premium thread connections for continuity.

» Anti-preset mechanisms: Incorporate a hydraulically activated interlock system and can be adjusted before run in hole. This system allows packer to be run in highly deviated or horizontal wells, thus eliminating presetting risks caused by casing drag.

» Tandem setting: Designed for tandem setting with tailpipe in tension, compression, or neutral. Setting mechanism is independent of tubing movement or pressure-induced tubing forces. Setting action will not impart loads on or damage any penetrations or lines.

INTEGRAL ELEMENT ANTI-EXTRUSION SYSTEM
The packing element is multi-piece with NBR and HNBR sealing elements. It incorporates an anti-extrusion system that provides high resistance to swab off, which permits increased running speeds and high annular circulation rates (up to 8 bbl/min) before setting. The system was qualified through multiple thermal cycles using both water and nitrogen as test media.

LOAD AND FUNCTIONAL PERFORMANCE
Check with Halliburton representative for performance rating based on casing weight.

For more information, contact your local Halliburton representative or visit us on the web at www.halliburton.com