

# Octolock™ Diffuser Stage-to-Stage Locking Mechanism

## FOR IMPROVED PUMP RELIABILITY AND FAILURE PREVENTION

### OVERVIEW

Traditional centrifugal pump diffusers rely on compression forces from the assembly process in order to remain static during normal pump operation. When high-pressure/high-temperature (HPHT) events occur, however, there can be a reduction in compressive loads - leading to diffuser rotation, diminished pump reliability, and, potentially, total failure.

### TESTED AND PROVEN DESIGN

Summit ESP® has a unique Octolock diffuser design featuring a stage-to-stage locking mechanism to eliminate pump failures as the result of a spun diffuser. Its proprietary anti-rotation component enables pumps to maintain their high performance during intermittent HPHT events. No diffuser spin was seen as a result of experimental pump testing with .001-inch total stack compression.

### PUMP CAPABILITIES

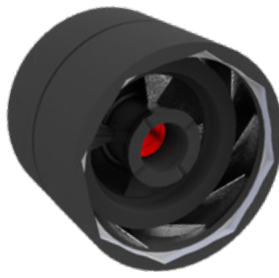
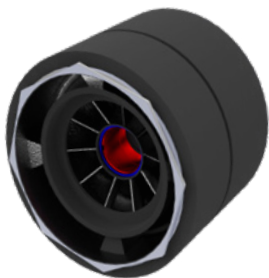
The Octolock design prevents diffuser rotation, thus extending pump run life and reducing non-productive time (NPT). This Octolock diffuser stage-to-stage locking mechanism – which is available with Halliburton Summit ESP pump series 675, 875, and 950 – can handle flow rates of 2,000 to 94,000 barrels of oil per day.

### FEATURES

- » Anti-rotation design
- » Compression tested
- » Concentric fit-up
- » Cast feature

### BENEFITS

- » Increased reliability (less downtime)
- » HPHT mitigation
- » Extended pump run life



*Unique design features stage-to-stage locking mechanism to eliminate pump failures.*

For more information, contact your local Halliburton representative  
or visit us on the web at [www.halliburton.com/summitesp](http://www.halliburton.com/summitesp)

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