DATA SHEET

HALLIBURTON

Well Intervention

Wellhead severance system

Delivers fast, reliable casing severance in offshore wells

FEATURES

- Colliding shock wave charge design for complete casing severance
- RF-safe electrical initiation system using steel-armored mono-conductor
- Compact system with minimal surface equipment requirements
- Pressure-compensated design rated for deployment to 4,000 ft
- Capable of severing multiple casing strings up to 36 in. diameter
- Advanced computational modeling to simulate explosive events and optimize charge weight

BENEFITS

- Reduces vessel time and operational costs through fast, efficient severance
- Minimizes crew requirements and eliminates bulky rig-up equipment
- Delivers reliable performance in complex or unforeseen well conditions
- Supports rapid turnaround and deployment in global offshore environments
- Generates minimal waste, reducing environmental impact and cleanup time
- Allows deepwater severance beyond the reach of abrasive systems

Overview

Efficient wellhead abandonment is essential to reducing offshore operational time and cost. The Halliburton wellhead severance service provides a proven solution to safely and economically sever multiple casing strings in a single operation. Specialists deploy the system from a dive support vessel, drillship, or semi-submersible using standard operating methods to ensure accurate in-hole positioning.

The system uses a steel-armored mono-conductor for deployment and electrical initiation of a radio-frequency-safe detonating system. Based on the Colliding Shock Wave theory, the charge initiates simultaneously at both ends, sending shock waves through the explosive column. When the waves collide, the energy radiates outward, severing casing diameters up to 36 in.

Engineers designed the system with three core components: an initiation system, pressure compensation, and explosive type. This configuration enables deployment to depths of 4,000 ft and extends severance operations beyond the limits of abrasive and mechanical systems. Advanced computational modeling improves reliability by simulating explosive events, optimizing charge weight, and predicting severance performance.

The wellhead severance service supports global abandonment operations with a compact footprint, minimal crew requirements, and fast turnaround. The solution delivers safe, efficient, and cost-effective results in complex well conditions.

Wellhead severance system

Applications

- Abandonment operations that require severance of multiple wellhead casings
- Offshore wells in deepwater environments where abrasive systems are limited
- Emergency response scenarios that require fast mobilization and minimal crew
- Deployment from dive support vessels, drill ships, or semi-submersibles
- Operations that require RF-safe initiation and compact system footprint

Wellhead severance system specifications

PARAMETER	VALUE
Max severed casing diameter (simultaneous)	Up to 36-in. (application dependent)
Deployment rating	4,000 ft (1,220 m)
Conveyance / initiation	Steel armored mono-conductor; RF safe detonating system
ROV interface	1 main lift point (grabber compatible)
Deployment platforms	DSV, drillship, or semi submersible

Note: Performance varies based on wellhead geometry, casing sizes, materials, and operating conditions. An engineering review is required to confirm the final configuration and charge selection.

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