

SPITFire HD[®] Release Tool

Provides heavy-duty (HD) strength, efficiency, and reliably releases stuck tools

Applications

- E-line perforating
- Pumpdown perforating

Features and Benefits

- Capable of withstanding 400+ runs between maintenance cycles
- Integrated plug-and-play switch carrier for easy removal and replacement of the detonator within minutes. with no external wiring required
- Compatible with
 - Jars
 - Warrior Well Logging System and commercial perforating switches
 - Addressable and EB switches

Tool Description

The Weatherford SPITFire HD release tool is designed to reliably release the downhole tools if a toolstring becomes stuck in the wellbore. This avoids wire breaks and facilitates the efficient and clean retrieval of the toolstring using a conventional fishing overshot.

For oilfield operators and service providers running wireline and perforating technologies in horizontal or highly deviated wells, where there is a high risk the toolstring could get stuck and wire could break, the SPITFire HD release tool is a wireline ballistic release technology that provides an option for detaching from the stuck toolstring on command using a frangible joint. The SPITFire HD tool combines the field-proven SPITFire technologies with greater strength, a shorter tool length, fewer components, more efficient field operation, and enhanced electrical continuity.

The SPITFire HD tool is an industry leading innovation allowing four or more times the runs before maintenance as a heavy-duty version of the original SPITFire tool.



SPITFire HD[®] Release Tool

Unlike other wireline release technologies which are less reliable due to weaker, pressure-activated release mechanisms that routinely result in unintended releases, the SPITFire HD tool incorporates a high-strength frangible joint that requires booster detonation and will release on loss of pressure containment of the toolstring.

The high tensile strength of the SPITFire HD release tool makes it suitable for use in high-impact perforating environments and allows it to be placed anywhere in the toolstring, even below perforating guns and in conjunction with jars.

The SPITFire HD release tool ensures that the cable is retrieved out of the hole each time, mitigating the risk of stuck tools and expensive fishing operations, and can withstand over 400 consecutive runs before maintenance cycles.

Specifications

Mechanical

Outside diameter	2.75 in. (69.85 mm)
Makeup length	29.2 in. (742 mm)
Weight	41 lb (19 kg)
Upper and lower connections	1-5/8 in. 6 Acme (GO B)
Fishing method	2 3/4 in. Overshot

Operational

Pressure rating	25,000 psi (172.4 MPa)
Temperature rating	350°F (175°C) (explosives limited ¹)
Tensile strength	100,000 lb (45,359 kg)
Shock rating	20,000 g 3 Axis Minimum
Maximum moment force	7,000 ² lb.ft

¹ Refer to explosives datasheet. Be careful to not exceed 300°F (148°C) with RDX. HMX boosters are available.

² Measured at center of tool. May vary due to field connections.

Electrical

Pass through voltage	600 V
Pass through current	3 A

