Stronghold Defender

Economical, Efficient and Effective Plug & Abandonment System

Archer's field proven Defender barrier test system enables operators to perforate and test an annular barrier. Together with the Barricade and Rampart, the Defender is part of a series of Stronghold perforating, washing, cleaning and cementing systems to deliver faster, safer and more economical solutions for operators worldwide.

Benefits

- Field proven
- Significant time and cost savings
- Efficient one-trip system with TCP
- No section milling and swarf handling
- Qualification of an effective barrier
- No surge or swab effect

Applications

- Well abandonment
- Formation integrity testing
- Annular solids integrity testing
- Circulation out of old, environmentally unfriendly, annular fluids

Features

- Primary and back-up swab cup design
- Adjustable distance between swab cups
- Flow by-pass system
- Disconnect system
- Ball or dart drop

Contact your local Archer Oiltools representative for more information on the Stronghold family of tools suitable for your well needs.

www.archerwell.com

The Defender system provides a safe, quick, economical and effective alternative to traditional plug and abandonment (P&A) techniques of casing recovery, milling and perforate, wash and cement.

Traditionally, several runs were required to test the annulus. Setting two plugs and perforating usually took up to 3 runs.

Archer's Defender system achieves this in just 1 trip by:

- Perforating the casing or liner.
- · Verifying the integrity of the annulus.
- Placing barrier material in the casing and annulus.

The **result** is a permanent verified barrier that is achieved in a single trip – a simple, cost effective solution for annular remediation, bringing absolute protection and safety.

Together with Tubing Conveyed Perforating (TCP) products and new charge development, Archer's Stronghold systems support the safe and efficient execution of operations.

In designing the Stronghold Defender system, our engineers focused on 3 key areas – **Efficiency, Flexibility** and **Reliability** to produce a service that is economical, efficient and effective.

Specifications

Casing Size, in	6 5/8 - 8 5/8	9 5/8 - 16
Min ID, in	2.2	2.3
Pressure rating, psi [bar]	5,000 [344]	5,000 [344]

Archer is a global oil services company with a heritage that stretches back over 40 years. With a strong focus on safety and delivering the highest quality products and services, Archer operates in 40 locations over 19 countries providing drilling services, well integrity & intervention, plug & abandonment and decommissioning to its upstream oil and gas clients. **We are Archer**.



Archer