

OPTIMAX™ SERIES SAFETY VALVES

Improving production while maintaining well integrity

The industry's most reliable subsurface safety valves

GUARD AGAINST CATASTROPHIC LOSS OF WELL CONTROL

The OptiMax series of subsurface safety valves shuts in reservoir pressures to protect crews, equipment, and the environment. Using a simple, rugged design, premium materials, and extreme performance standards, the Optimax line of safety valves provides reliable service in all applications and well conditions.

9,600
safety valves sold

>46,000 years
cumulative service life

0 failures

TUBING-RETRIEVABLE SAFETY VALVES

With no sleeves, plugs, or other mechanisms that can fail, our rod-piston, flapper-type tubing-retrievable safety valves (TRSVs) are engineered for reliability. Actuated by a single control line, hydraulic pressure opens the valve for production or injection. With any pressure loss caused by equipment failure or damage, the valve automatically reverts to its fail-safe position—firmly closed.

SAFETY VALVES FOR ANY APPLICATION

We continually expand our safety valve portfolio to meet your needs. To complement our deepwater Optimax line, we developed the Optimax Select line of safety valves for onshore wells. We've added super-slim valves and deep-set valves to our portfolio, so you can use smaller casing strings and still have space for bypass lines.

WIRELINE-RETRIEVABLE SAFETY VALVES

Faulty or damaged safety valves can cause downtime and cost millions of dollars to replace. Our wireline-retrievable safety valves (WRSVs) are an economical solution for damaged safety valves. Deployed on slickline, our WRSVs can land inside a damaged TRSV, effectively bypassing the TRSV to restore production at a fraction of the cost of replacement.

SETTING THE STANDARD

Although Weatherford safety valves are certified to API Q1 and API 14A 12th edition specifications, we subject each family of safety valves to rigorous trials that further test their durability and reliability. As a result, many of our valves have achieved the industry's highest ratings.

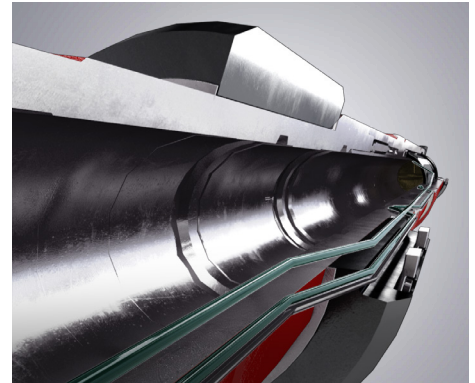
OPTIMAX™ SERIES

SAFETY VALVES

THE WEATHERFORD SAFETY VALVE ADVANTAGE

Reliability is intentional. Our safety valves are designed to eliminate points of failure.

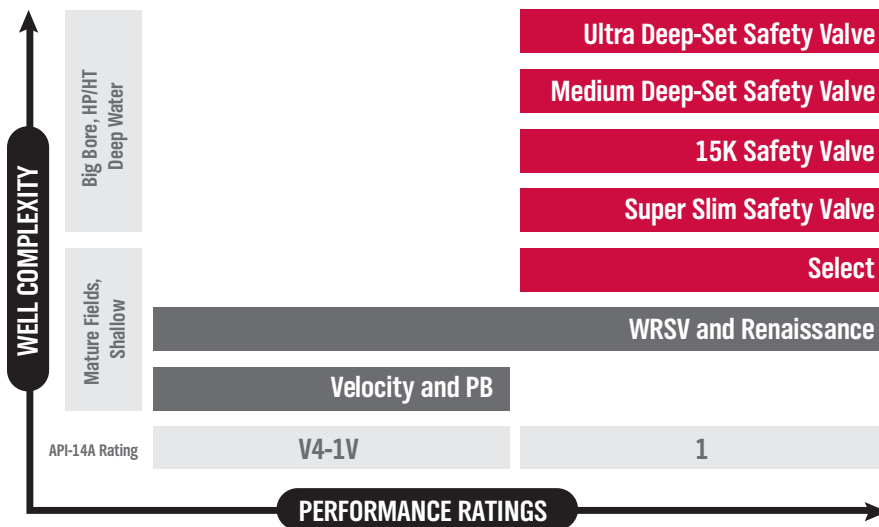
- The hydraulic system in Optimax safety valves has only two potential leak paths—the piston seals and the control-line connection. No other secondary communication path is possible.
- Our flappers maximize sealing capability, even in debris-laden environments. These flappers offer a metal-to-metal, flapper-to-seat interface with a resilient secondary soft seat.
- Spring-energized thermoplastic seals and reinforced fluoropolymer secondary seals provide exceptional closure.
- Rod piston systems are lathe-machined for precise tolerances and finish. And best-in-class piston bores facilitate accurate sealing engagement.
- Our metal-to-metal, through-the-flapper self-equalizing feature lets operators safely match pressures above and below a closed flapper.



Tubing-pressure insensitive activation reduces requirements on surface control systems.

Offshore to Onshore
**Tubing Sizes from
 2-3/8 to 7 in.**

Optimax portfolio



Reliability—Any Well, Any Place

No matter where you operate, we have a full line of modern, reliable safety valves for every application. To select the right valve for your well, contact your Weatherford representative, or visit us at weatherford.com/Optimax

weatherford.com/Optimax

OPTIMAX™ SERIES

SAFETY VALVES

Reliability has its own rewards:

Reduced Risk – Field-proven Optimax fail-safe equipment protects the safety of your crew, equipment, and the environment.

Reduced Cost – Optimax safety valves eliminate costly valve-replacement workovers. And our Optimax Select valve, for less-challenging conditions, delivers Optimax dependability in a cost-effective safety valve with absolutely NO COMPROMISE IN RELIABILITY.

Increased Production – Our Renaissance well intervention systems address well-integrity and production-impairment challenges around the world. And the Optimax safety valve lies at the heart of this technology, using advanced rigless techniques to remediate and increase production in mature wells while providing life-of-well integrity to deliver true value to our customers.



LOCATION: OFFSHORE NETHERLANDS

Surface-controlled safety valves

**ELIMINATED
\$50 MILLION
IN WORKOVER
EXPENSES**

Over a 2-year period for 27 wells with blocked or damages control lines

Weatherford insert-gas lift system

**AVERAGE 2,500
BOPD ADDED
PER WELL
DEPLOYED**

Gas lift introduction and well geometry change - rigless

weatherford.com/Optimax



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