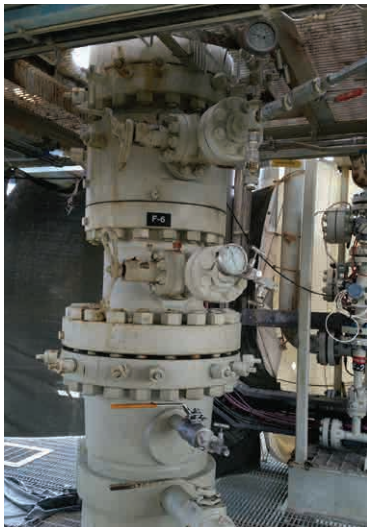
WELL HEAD TECHNOLOGY

The New Cure for Well Head Leaks

Ultra Seal® Well Bond is a new, innovative product designed to effectively seal failed well head and casing hanger elastomeric seals preventing continuous communication and pressure increases throughout the void area. The material is delivered through a proprietary delivery system keeping cleanup to a minimum.



Sometimes (due to age, chemical exposure, temperature variations or possible damage during installation) seals can be damaged, and Ultra Seal® Well Bond will seal the damaged or failed elastomers as well as leaks in pitted, de-formed and scarred metal.

ULTRA SEAL® WELL BOND

It is an innovative product designed to effectively seal failed well heads and casing hanger seals.

- The product eliminates communication and pressure fluctuations throughout the void areas.
- The material is delivered through NNW proprietary delivery system, maintaining a safe work environment for all personal involved.
- It is a complex, dry polymer blend that is mixed on site and administered through existing valves or ports on the well head.
- After injection, it is recommended to let the sealant cure for a minimum of 8 hours > 60F and 12 hour < 60F.

Ultra Seal® Well Bond does not require differential pressure to set/cure thus allowing the pressure to be bled to 0 psi, post testing.

CASE STUDY

ULTRA SEAL® WELL BOND

VR 24 CASE HISTORY INITIAL TEST 10 3/4 X 13 5/8

- Tested 10 3/4" x 13 5/8" casing void to 5,000 psi.
- The void would only pressure up to 200 psi with our test unit pumping 25 Cubic Inches Per Minute.
- Tied in test pump and flushed plastic injection, seal tite product and valve grease from void and both injection port fittings until gaining clean fluid returns.
- Began pumping Well Bond into 10 3/4 x 13 5/8" void. As pressure rose, we began taking returns on the injection port manifold positioned 90 degrees to the left of the void test fitting. The valve was closed after receiving clean Well Bond product.
- 12 Hours after injection, the 10 3/4 x 13 5/8" casing void was retested.
- Applied 5000 psi for pressure test for 30 minutes on 10 3/4 x 13 5/8" void. Test passed.