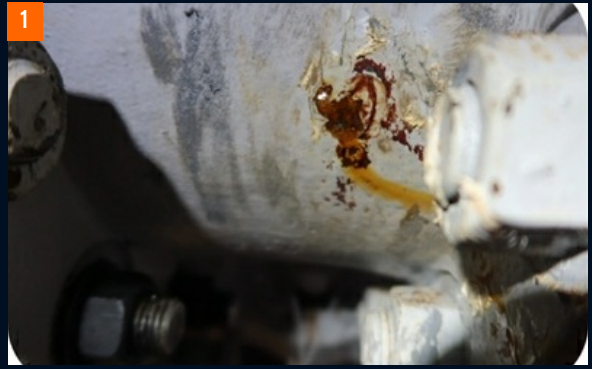


BELZONA SUPERWRAP II REINFORCED LEAK SEALING ON 10-INCH VALVE

ID: 10280



PROBLEM

Leakage was identified on the external surface of the pipe, caused by long-term corrosion and pipe aging. The degradation compromised the structural integrity and leak-tightness of the pipe, creating a potential risk to safe and reliable plant operation. Immediate repair and restoration activities are required to eliminate the leakage, prevent further deterioration, and ensure the piping system continues to meet nuclear power plant safety, quality, and operational requirements.

APPLICATION SITUATION

Leakage was identified on the external surface of the piping system as a result of corrosion and pipe wall degradation caused by aging. To immediately stop the leakage, Belzona 1212 and Belzona 1221 (Super E-Metal) were used to seal the affected area. These materials are suitable for high-speed emergency repair. Belzona 1111 (Super Metal) was then applied over the entire valve geometry to restore the damaged surface.

To further ensure the integrity and reliability of the piping system, Belzona SuperWrap II was subsequently installed over the repaired section to provide additional mechanical reinforcement and long-term protection against further deterioration or future damage.

APPLICATION METHOD

1. Hand tools were used to remove rust and prepare the surface for application of paste-grade materials to seal the leak.
2. Belzona 1221 (Super E-Metal) and 1212 were applied to the leakage area as they are suitable for emergency repair.
3. Belzona 1111 (Super Metal) was then used for rebuilding the valve geometry and left to cure.
4. Belzona SuperWrap II was applied on top of the Belzona 1111 (Super Metal) to reinforce the protective protocol for the valve

BELZONA FACTS

The selected repair method provides an effective temporary fix for the leakage problem by using materials for emergency repair. In addition, a long-term protection that included the Belzona SuperWrap II system was added to support continued safe and reliable operation of the nuclear power plant piping system.

INDUSTRY

Power

LOCATION

Yeonggwang, South Korea

APPLICATION DATE

February 2026

PRODUCTS

Belzona 1111 (Super Metal)
Belzona 1212
Belzona 1221 (Super E-Metal)
Belzona SuperWrap II

SUBSTRATE

Carbon steel

PHOTOS

1. Damage on valve caused by corrosion and pipe aging
2. Belzona paste-grade materials, suitable for emergency repair, seal the leak on the valve
3. Belzona 1111 (Super Metal) applied on top of the emergency leak repair
4. Belzona SuperWrap II was applied to reinforce the leak repair on the valve

For more examples of Belzona Know-How in Action, please visit khia.belzona.com

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