FIXOKiT®

HOLE SEALING SYSTEM WITH OR WITHOUT RESIDUAL FLOW

TECHNICAL DATA SHEET

ONSHORE / OFFSHORE

FIXOKiT® DESCRIPTION

FIXOKiT® is a hole and crack sealing system with or without residual flow. This unique and revolutionary concept, makes possible to plug through-wall defects. The installation can be carried out with the presence of residual flow.

FIXOKiT® technology adapts to different geometries (tee, elbow, straight line, oval pipe) and environments (Onshore/Offshore). This product can be used for various liquid fluids (oil, water, etc.) and gases.

FIXOKIT® is effective for most hole configurations, up to 50mm diameter.

The system can be installed on irregularities such as welds or corrosion cankers, making it the best system for repairing through-wall defects before composite wrapping designed as per ISO 24.817 and ASME PCC-2.

FIXOKiT® applicators must be trained by 3X trainer. 3X company or its representatives shall be contracted to perform any no standard repairs.

FIXOKiT® FEATURES

USES

- Suitable on welds, tee, elbows, ovalized pipes
- Compatible with most common liquid fluids (oil, water, etc…) and gases
- Stop the leak with residual flow
- Hole diameter up to 50mm
- Pipe diameter from 4 to 56 inch
- Fills corrosion voids
- Rebuilds metallic surfaces to its original shapes
- Pipeline and piping repairs
- Tank repair
- Severe abrasion and erosion
- Through-wall defect
- Used with all R4D repair systems

BENEFITS

- Very good sealing
- Easy to use product
- Able to be reinforced with R4D
- Long-term leak repair
- No additional load on line
- Flow pressure shut off/ adaptable to any geometry
- Easy to store product
- No heating or post-curing required for typical applications
- Excellent chemical resistance with a wide range of chemicals
- Tough putty structure resists thermal-mechanical shock
- Outstanding adhesion insures reliable performance with no undercutting or under film corrosion
- Excellent abrasive and erosive resistance
- Excellent wear characteristic, extends equipment operating life
- No VOCs

FIXOKiT® CONCEPT

FIXOKiT® includes the tools allowing to plug a leak with residual flow and secure it (step 1 & 2) or to seal a leak without flow (only step 2).

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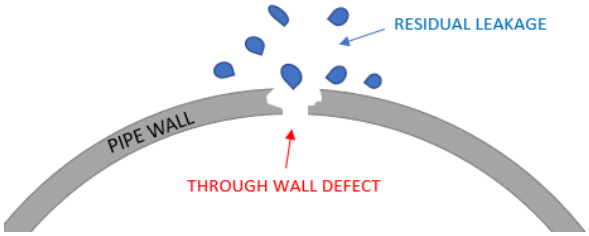
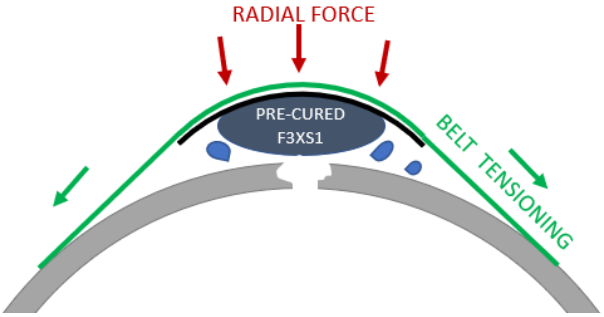
1rst step (optional, only if there is a residual flow): plug a leak with residual flow

This system is a specific implementation and is based on the injection of a pre-polymerized epoxy filler into the through-wall defect.

When mixed, this filler begins its polymerization reaction. During this reaction, it reaches an optimal hardening phase for leakage sealing. It is then injected into the defect. The pressure flow in compensated by a counter pressure using ratchet belts. The filler can penetrate the defect despite the pressure flow and seal the leak. When the fluid is stopped, the total polymerisation of the filler must be reached before removing ratchet belt system.





2nd step: reinforcement of the defect zone

When the flow is stopped (after step 1 or if the line is shutdown), the surface preparation can be made according to HSE procedure and 3X implementation, in order to apply F3XS1 + 3mm metallic plate to reinforce the defect zone.

The pipe is now ready to be reinforced with REINFORCEKiT® 4D (R4D), according to the standards.

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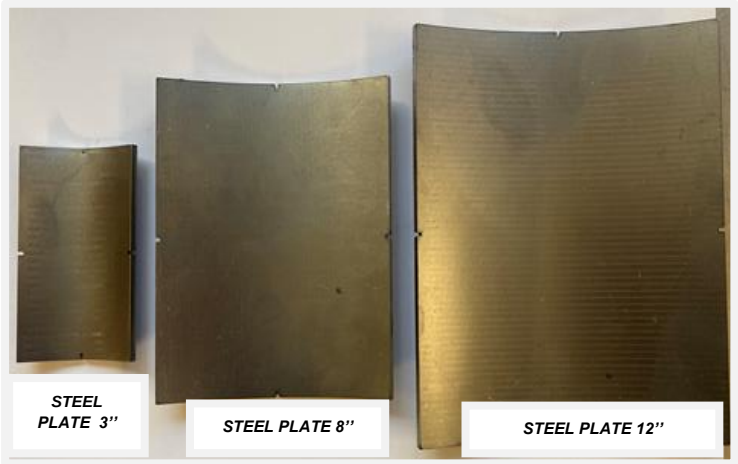
FIXOKiT® COMPOSITION

FIXOKiT® is made of:

- 1 galvanized steel plate 50mm x 50mm, thickness 0.5mm
- 1 galvanized steel plate 80mm x 80mm, thickness 0.5mm
- 1 steel plate 64mm x 47mm, thickness 3mm, curvature 3''
- 1 steel plate 95mm x 95 mm, thickness 3mm, curvature 8''
- 1 steel plate 123mm x 123mm, thickness 3mm, curvature 12''
- 2 black ratchet belts 25mm x 5m
- Part A of F3XS1 (0.5kg)
- Part B of F3XS1 (0.025kg)
- Part C of F3XS1 (10 mL)
- 1 bottle + 1 pipette
- 1 F3XS1 metallic spatula (red)
- 1 spatula + 1 squeegee + 2 mixing plates
- 1 set of spoon ratio
- 1 durometer SHORE A
- 1 plastic sleeve (1m)
- 1 pair of nitrile gloves (blue)

The choice of the steel plate curvature depends on the diameter of the pipe to be repaired. Do not change the composition of the FIXOKiT® for quality reasons. Do not attempt to fit FIXOKiT® on a pipe diameter other than ones specified on the package.



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FIXOKiT® TECHNICAL SPECIFICATIONS

DENOMINATION	FIXOKiT® (LEAK SEALING TECHNIQUE)
USE	ONSHORE/OFFSHORE ENVIRONMENT
PIPE DIAMETER	4 to 56 inch
MIN. TEMPERATURE	+10°C / +50°F
MAX. TEMPERATURE	+70°C / +158°F
DEFECT DIAMETER	50mm max
MAXIMUM PRESSURE	Residual flow. Contact 3X for further details. The leak sealing ability will reduce with increase of pressure and defect size

F3XS1 TECHNICAL SPECIFICATIONS

F3XS1 is an advanced ceramic-reinforced epoxy filler. F3XS1 offers a very high quality for mechanical repairs of damaged pipe and piping caused by crack, corrosion, abrasion, impact or chemical stress.

DENOMINATION	F3XS1
APPLICATION CONSITENCY	Pasty
COMPRESSIVE STRENGTH	14 500 psi
FLEXURAL STRENGTH	8 700 psi
SHORE D DUROMETER HARDNESS	85

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APPLICATION NOTES

INSTRUCTION	FIXOKIT® must be used only by trained and certified applicators. Contact us for training certificate.
USE	FIXOKIT® is made for single use only and is sold as ready to use kit.
SHELF-LIFE	2 years after manufacturing date mentioned on packaging (# XX – dd/mm/yy).
STORAGE	FIXOKiT® is a product with specific storage conditions. Good storage temperature must be around 25°C.
SAFETY	Each applicator should read and understand the Installation Procedure before to use 3X products. Before intervention, hazards and measures must be assessed accurately to ensure the safety of installation and applicators (pipe temperature, fluid or gas exposure, environment contamination...). Make sure the applicators wear appropriate PPE before leak sealing in accordance with risk assessment (chemical protective apparel, face shield, chemical or heat resistant gloves).
WARRANTY DISCLAIMER	Every reasonable effort is made to ensure the technical information and recommendations of this data sheet are true and accurate to the best of our knowledge at the date of issuance. However, improvements being continuously implemented to 3X products, this information is subject to change without notice. Please contact your 3X Distributor for the last updated product specifications. This 3X technical datasheet warrants the quality of this product when used according to directions. User shall determine suitability of the product for use and assumes all risk.