



SealXpert™

EXPERT IN PIPELINE PRODUCTS

PRODUCTS CATALOGUE





SealXpert™ Products

Engineered Solutions for the Pipeline Industries

SealXpert™ Products offer a range of proven maintenance and repair products that are unique in pipeline service. These products eliminate or minimize the cost of plants and equipment downtime.

Our range of maintenance and repair products are used for leak repair, corrosion protection and reinforcement, parts repair and rebuilding, corrosion and wear coating, pipeline rehabilitation, etc. Each of the products are engineered to be applied on many applications.

Our products are in used in the following industries:

- Oil and Gas
- Offshore
- Petrochemical
- Chemical
- Marine
- Power Generation
- Pulp and Paper
- Mining and Metals
- Pharmaceutical
- Semiconductor and Electronics
- Manufacturing and Processing
- Water and Waste Water
- Buildings and Facilities Maintenance



Cert No. : **N639181**

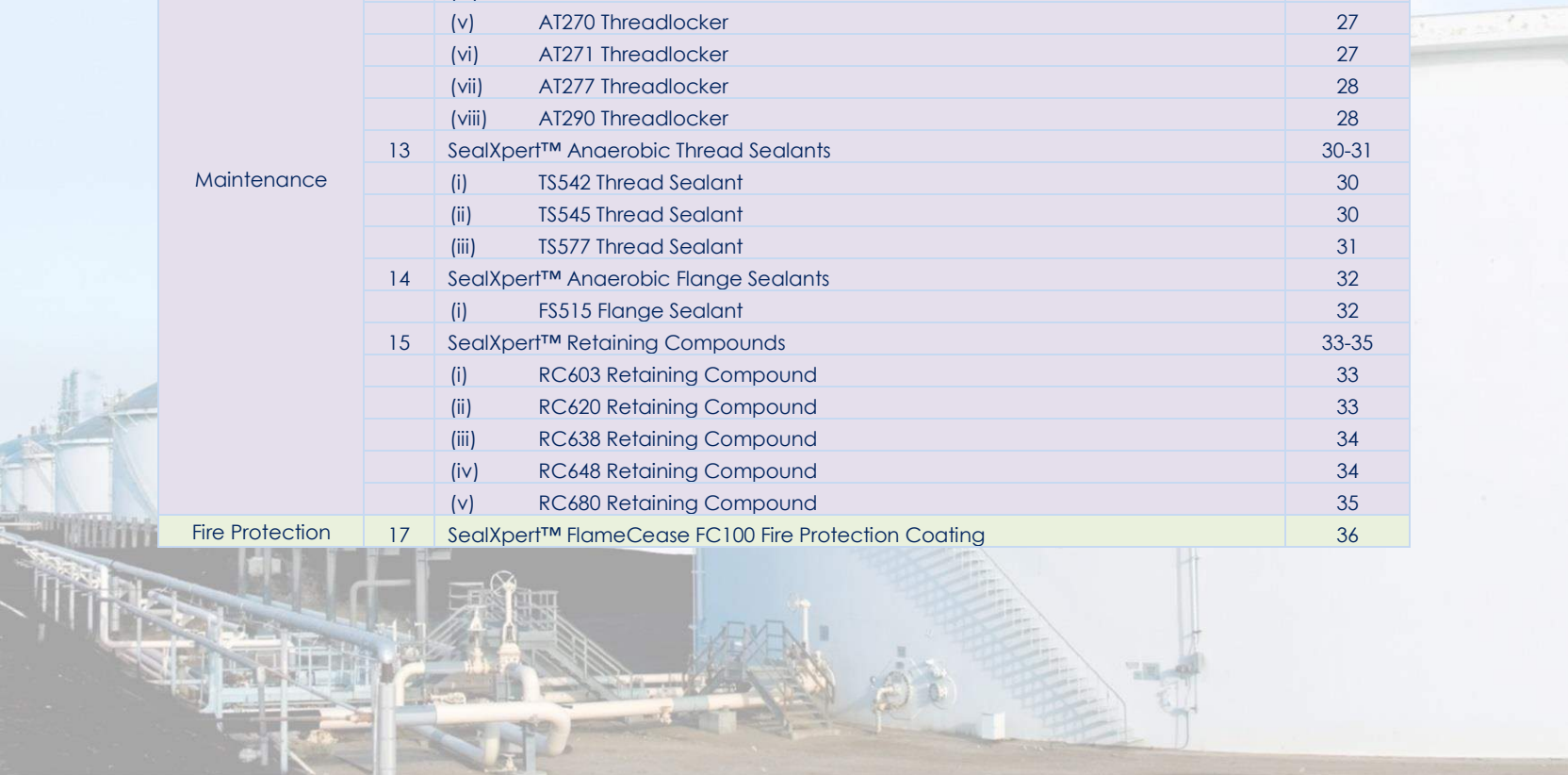


ISO 9001:2008 CERT NO.: **639177**



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Wrap Seal™ Quick Repair Kit for Pipe Leaks

Features:

- Repairs leak in 30 minutes
- Applicable to pipes up to 18" (457 mm) diameter
- Applicable on any metal or non-metal pipes
- Repairs T-joint, elbow joint, valve thread, valve body
- Withstand pressure up to 400 psi (28 kg/cm²)
- Withstand temperature up to 200 °C (392 °F)
- Safe for drinking water and resistant to most chemicals
- Reinforce and strengthen pipe after repair
- Permanent repair and extend service life of pipes

Applicable material:

- Steel
- Copper
- Aluminium
- Galvanized steel
- PVC
- CPVC
- Stainless steel
- Polyethylene
- Polypropylene
- Cast-iron
- Concrete
- FRP/GRE

Application:

- Pipe repairs:
 - ✓ offline repairs
 - ✓ sealing joints
 - ✓ hazardous material spill control
 - ✓ reinforce thinning walls
- Abrasion protection
- Structural reinforcement
- Repairs in hard to reach areas
- Underwater repairs

Applicable industries:

- | | | | |
|--------------|----------------------|----------------------------------|--------------------|
| Oil & Gas | Petrochemical | Offshore | Chemical |
| Marine | Power Generation | Building & Facilities Management | Water Distribution |
| Wastewater | Manufacturing Plants | Industrial Processing | |
| Electronics | Pharmaceutical | | |
| Pulp & Paper | Military | | |
| Irrigation | Food Processing | | |

Chemical resistance:

- Oil
- Water (drinking water, wastewater, steam)
- Solvents (acetone, toluene, MEK, ethyl alcohol)
- Mild acids (hydrochloric acid, sulfuric acid) and alkalis
- Chemical (ethylene glycol, xylenes, ammonia)
- Hydrocarbons
- Bases
- Slurries
- Fuels (petroleum, diesels, gasoline)
- Gases (LNG, LPG)
- Organic salts

Working time (Fiberglass tape):

- 1 minute at 30 °C (86 °F)

Curing time:

- 30 minutes at 30 °C (86 °F)
 - ✓ Heat may be applied to decrease curing time
 - ✓ Unopened foil pouch may be immerse in cold water prior to repair to add working and curing time

Operating temperature:

- Continuous – From -29 °C (-20 °F) up to 200 °C (392 °F)
- Intermittent – From 200 °C (392 °F) up to 320 °C (570 °F)

Operating pressure:

- Recommended for pressure up to 400 psi (28 kg/cm²)
(Results vary depending on pipe size, type of pipe, hole size, pipe content and method of application)

Package:

- 1 roll of Wrap Seal™ Fiberglass Tape
 - ✓ 2" x 5' (50 mm x 1.2 m)
 - ✓ 2" x 6' (50 mm x 1.8 m)
 - ✓ 2" x 12' (50 mm x 3.6 m)
 - ✓ 3" x 9' (75 mm x 2.7 m)
 - ✓ 4" x 12' (100 mm x 3.6 m)
- 1 unit of Seal Stic™ Quick Cure Epoxy
- 1 pair of latex gloves
- Operating instruction



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Engineered Solutions for the Pipeline Industries

Technical data:

Pressure tested	:	1/2" (15 mm) steel pipe with 1/8" (3 mm) hole when repaired with Wrap Seal™ withstands 4000 psi (281 kg/cm ²)
	:	1/2" (15 mm) steel pipe with 1/2" (13 mm) hole when repaired with Wrap Seal™ withstands 600 psi (42 kg/cm ²)
Tensile strength	:	3920 psi (276 kg/cm ²)
Bond strength	:	230 psi (16 kg/cm ²)
Tensile elongation	:	1.2 % ± 0.7 %
Compression strength	:	13750 ± 530 psi (967 ± 37 kg/cm ²)
Yield strength	:	2260 psi (159 kg/cm ²)
Cured hardness	:	82 Shore D

Product selection guide:

Pipe size	Number of rolls / size required		
	50 psi (4 kg/cm ²) 10 plys	150 psi (11 kg/cm ²) 15 plys	400 psi (28 kg/cm ²) 20 plys
1/2" (15mm)	1	1	1
3/4" (20mm)	1	1	1
1" (25mm)	1	1	2
1 1/4" (32mm)	1	2	3
1 1/2" (40mm)	2	2	1
2" (50mm)	1	1	1
2 1/2" (65mm)	1	1	2
3" (80mm)	1	2	2
4" (100mm)	1	2	3

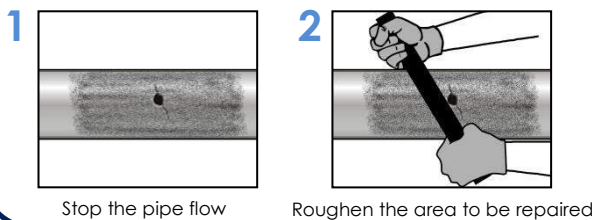
Pipe size	Number of rolls / size required		
	50 psi (4 kg/cm ²) 10 plys	150 psi (11 kg/cm ²) 15 plys	400 psi (28 kg/cm ²) 20 plys
5" (125mm)	2	2	3
6" (150mm)	2	2	4
8" (200mm)	2	3	5
10" (250mm)	3	4	6
12" (300mm)	4	5	8
14" (350mm)	4	6	8
16" (400mm)	5	7	9
18" (450mm)	5	8	9
> 18" (450mm)	Contact SealXpert™ for recommendations		

* Colour denotes roll size.

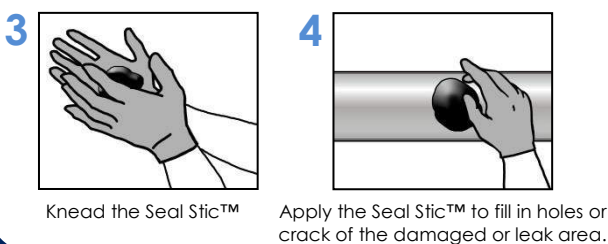
Roll size	(2" x 5') (50mm x 1.2m)	(2" x 6') (50mm x 1.8m)	(2" x 12') (50mm x 3.6m)	(3" x 9') (75mm x 2.7m)	(4" x 12') (100mm x 3.6m)
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Wrap Seal™ Offline Leak Repair Procedure

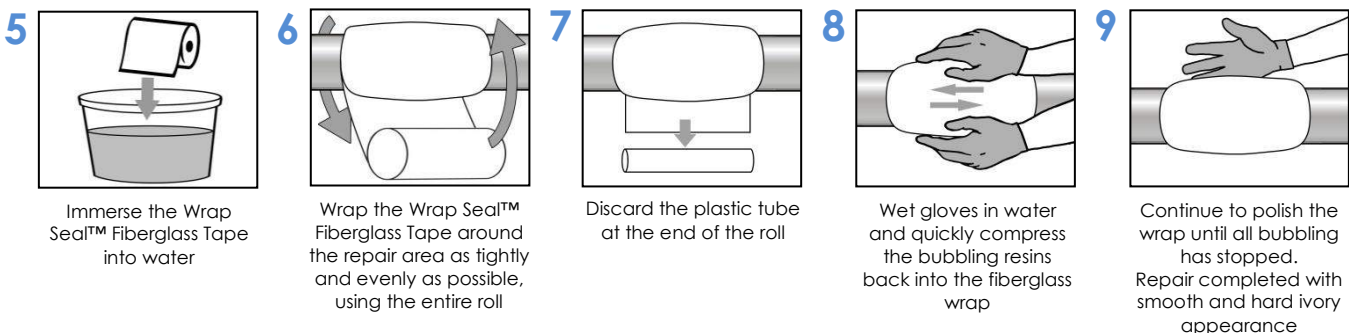
First stage: Surface preparation



Second stage: Stop the leak



Third stage: Reinforce leak area



Wrap Seal™ ULTRA Quick Repair Kit for Active Pipe Leaks

Features:

- Repairs under active leak up to 150 psi (11 kg/cm²) pressure
- No shutdown required
- Works on any metal or non-metal pipes
- Applicable to pipes up to 18" (457 mm) diameter
- Repairs leak in 15 minutes
- Withstand pressure up to 500 psi (35 kg/cm²)
- Withstand temperature up to 200 °C (392 °F)
- Safe for drinking water and resistant to most chemicals
- Ideal for pipeline reinforcement

Applicable material:

- Steel
- Copper
- Aluminium
- Galvanized steel
- PVC
- CPVC
- Stainless steel
- Polyethylene
- Polypropylene
- Cast-iron
- Concrete
- FRP/GRE

Application:

- Pipe repairs:
 - ✓ active pipe leaks
 - ✓ sealing joints
 - ✓ hazardous material spill control
 - ✓ reinforce thinning walls
- Repairs in hard to reach areas
- Underwater repairs

Applicable industries:



Oil & Gas



Petrochemical



Offshore



Chemical



Marine



Power Generation



Building & Facilities Management



Water Distribution



Wastewater



Manufacturing Plants



Industrial Processing



Electronics



Pharmaceutical



Pulp & Paper



Military



Irrigation



Food Processing

Chemical resistance:

- Oil
- Water (drinking water, wastewater, steam)
- Solvents (acetone, toluene, MEK, ethyl alcohol)
- Mild acids (hydrochloric acid, sulfuric acid) and alkalis
- Chemical (ethylene glycol, xylenes, ammonia)
- Hydrocarbons
- Bases
- Slurries
- Fuels (petroleum, diesels, gasoline)
- Gases (LNG, LPG)
- Organic salts

Working time (Fiberglass tape):

- 1 minute at 30 °C (86 °F)

Curing time:

- 30 minutes at 30 °C (86 °F)
 - ✓ Heat may be applied to decrease curing time
 - ✓ Unopened foil pouch may be immerse in cold water prior to repair to add working and curing time

Operating temperature:

- 50 °C (-58 °F) to 200 °C (392 °F)

Operating pressure:

- Recommended for pressure up to 500 psi (35 kg/cm²) (Result vary depending on pipe size, type of pipe, hole size, pipe content and method of application)

Package:

- 1 roll of Wrap Seal™ Fiberglass Tape + 1 roll of SealXpert™ Ultra Sealing Tape
 - ✓ 2" x 6' (50 mm x 1.8 m)
 - ✓ 2" x 12' (50 mm x 3.6 m)
 - ✓ 3" x 9' (75 mm x 2.7 m)
 - ✓ 4" x 12' (100 mm x 3.6 m)
 - ✓ 1" x 16' (25 mm x 5 m)
 - ✓ 1" x 16' (25 mm x 5 m)
 - ✓ 1 1/4" x 16' (32 mm x 5 m)
 - ✓ 2" x 16' (50 mm x 5 m)
- 1 unit of Seal Stic™ Quick Cure Epoxy
- 1 pair of latex gloves
- Operating instruction



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Technical data:

Tensile strength	: 3920 psi (276 kg/cm ²)
Bond strength	: 230 psi (16 kg/cm ²)
Tensile elongation	: 1.2 % ± 0.7 %
Compression strength	: 13750 ± 530 psi (967 ± 37 kg/cm ²)
Yield strength	: 2260 psi (159 kg/cm ²)
Cured hardness	: 82 Shore D
Dielectric strength	: 400 Volts/mil

Product selection guide:

Pipe size	Number of rolls / size required		
	50 psi (4 kg/cm ²) 10 plys	150 psi (11 kg/cm ²) 15 plys	400 psi (28 kg/cm ²) 20 plys
1/2" (15mm)	1	1	1
3/4" (20mm)	1	1	1
1" (25mm)	1	1	2
1 1/4" (32mm)	1	2	3
1 1/2" (40mm)	2	2	1
2" (50mm)	1	1	1
2 1/2" (65mm)	1	1	2
3" (80mm)	1	2	2
4" (100mm)	1	2	3

Pipe size	Number of rolls / size required		
	50 psi (4 kg/cm ²) 10 plys	150 psi (11 kg/cm ²) 15 plys	400 psi (28 kg/cm ²) 20 plys
5" (125mm)	2	2	3
6" (150mm)	2	2	4
8" (200mm)	2	3	5
10" (250mm)	3	4	6
12" (300mm)	4	5	8
14" (350mm)	4	6	8
16" (400mm)	5	7	9
18" (450mm)	5	8	9
> 18" (450mm)	Contact SealXpert™ for recommendations		

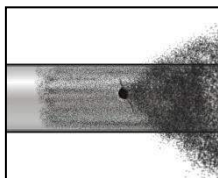
* Colour denotes roll size.

Roll size	(2" x 5') (50mm x 1.5m)	(2" x 6') (50mm x 1.8m)	(2" x 12') (50mm x 3.6m)	(3" x 9') (75mm x 2.7m)	(4" x 12') (100mm x 3.6m)
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Wrap Seal™ ULTRA Active Leak Repair Procedure

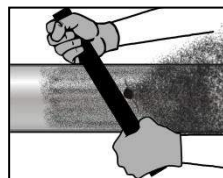
First stage: Surface preparation

1



Minimize the flow rate and reduce system pressure

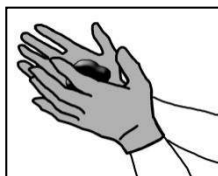
2



Roughen the area to be repaired

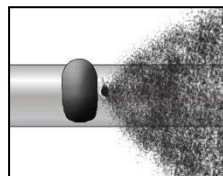
Second stage: Stop the leak

3



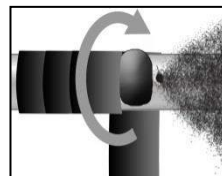
Knead the Seal Stic™

4



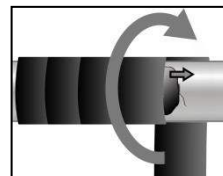
Place the Seal Stic™ away from the leak location

5



Start wrapping the SealXpert™ Ultra Sealing Tape a few distances away from the leak location

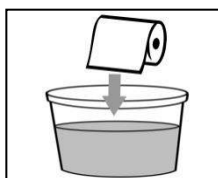
6



Continue to wrap SealXpert™ Ultra Sealing Tape onto pipe while pushing the Seal Stic™ onto leak location

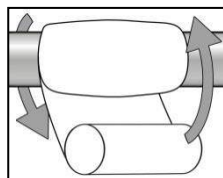
Third stage: Reinforce leak area

7



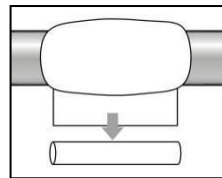
Immerse Wrap Seal™ Fiberglass Tape into water

8



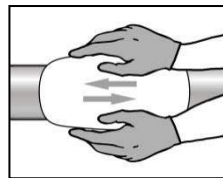
Wrap the Wrap Seal™ Fiberglass Tape above the repair tape as tightly and evenly as possible, using the entire roll

9



Discard the plastic tube at the end of the roll

10



Wet gloves in water and quickly compress the bubbling resins back into the fiberglass wrap until all bubbling has stopped. Repair completed with smooth and hard ivory appearance

SealXpert™ Ultra Sealing Tape

Features:

- Seals active pipe leaks up to 150 psi (11 kg/cm²)
- High tensile and dielectric strength
- Superior bonding properties
- Bond to itself, no adhesive required
- Excellent air and moisture control
- Seals irregular shapes
- Flame-retardant
- Resists weathering

Applicable material:

- Metal and non-metal pipes

Application:

- Permanent air-tight and water-tight seal in emergency situations
- Designed for quick plumbing repairs, sealing hoses, emergency O-ring, seals or to insulate electrical wiring
- Use for active pipe leak repairs, leaking joints and hazardous material spill control

Chemical resistance:

- Water (drinking water, wastewater, steam)
- Mild acids (hydrochloric acid, sulfuric acid) and alkalis
- Gases (LNG, LPG)
- Organic salts

Operating temperature:

- -50 °C (-58 °F) to 260 °C (500 °F)

Optimum operating temperature:

- 180 °C (356 °C)

Applicable industries:



Oil & Gas



Petrochemical



Offshore



Chemical



Marine



Power Generation



Building & Facilities Management



Water Distribution



Wastewater



Manufacturing Plants



Industrial Processing



Electronics



Pharmaceutical



Pulp & Paper



Military



Irrigation



Food Processing

Technical data:

Thickness	: 0.02" (0.5 mm)
Cold brittle point	: -50°C (-58 °F)
Tensile strength	: 700 psi (49 kg/cm ²)
Elongation, Min.	: 300%
Specific gravity	: 1.17
Volume resistivity	: 1 × 10 ¹³ Ω/cm
Water absorption	: 3% by weight
Dielectric strength	: 400 Volts/mil
Hardness	: 50 Shore A
Break strength	: 40 lbs (18 kg)

Package:

- 1" x 16' (25 mm X 5 m)
- 1" x 33' (25 mm X 10 m)
- 1 1/4" x 16' (32 mm X 5 m)
- 1 1/4" x 33' (32 mm X 10 m)
- 2" x 16' (50 mm X 5 m)
- 2" x 33' (50 mm X 10 m)



SealXpert™ Stainless Steel Pipe Clip

Features:

- Makes pipe clips from 2" (50 mm) to 382" (9700 mm)
- Easy to use
- Versatile and fast to install
- No special tool is required
- Stainless steel 304 material
- Free to cut to any diameters required

Application:

- For securing, mounting, strapping, clamping and positioning
- Can be used for all conventional clamping jobs
- Make any sizes from 2" (50 mm) diameter to 382" (9703 mm) diameter within seconds

Applicable industries:



Oil & Gas



Petrochemical



Offshore



Chemical



Marine



Power Generation



Building & Facilities Management



Water Distribution



Wastewater



Manufacturing Plants



Industrial Processing



Electronics



Pharmaceutical



Pulp & Paper



Military



Irrigation



Food Processing

Technical data:

- Material grade : All stainless steel 304
- Band length : 100' (30.5 m)
- Band width : 0.5" (12.7 mm)
- Head : 0.3" (7.9 mm) slotted hex head screw
- Closure components : 0.6" (14.2 mm) wide fastener & screw housing assembly



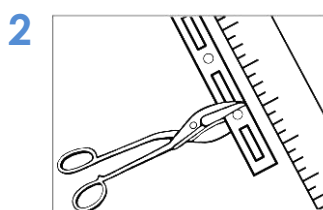
Package:

- 100' (30.5 m) continuous length of stainless steel band
- 25 adjustable fasteners (worm drive buckles)
- 10 band splices
- Weight: 3kg per set

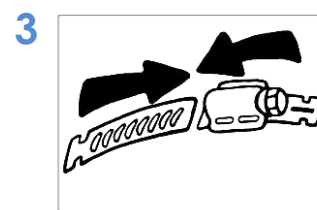
SealXpert™ Stainless Steel Pipe Clip
SealXpert™ Stainless Steel Pipe Clip Installation Procedure

- 1** Determine actual band length in one of two ways:
- (a) If diameter is known, refer to band length table below
 - (b) If diameter is not known, measure circumference with string, twine, etc. and subtract 4" (to allow for length of fastener ends) to determine actual band length.

Pipe Diameter	Length to cut on Mark	Pipe Diameter	Length to cut on Mark	Pipe Diameter	Length to cut on Mark
2" (50.8 mm)	2-1/2" (63.5 mm)	22" (558.8 mm)	65-7/8" (1673.2 mm)	60" (1524.0 mm)	184-13/16" (4694.2 mm)
3" (76.2 mm)	5-1/16" (128.6 mm)	24" (609.6 mm)	72-1/8" (1832.0 mm)	62" (1574.8 mm)	191-1/8" (4854.6 mm)
4" (101.6 mm)	8-7/8" (225.4 mm)	26" (660.4 mm)	77-1/4" (1962.2 mm)	64" (1625.6 mm)	197-7/16" (5014.9 mm)
5" (127.0 mm)	11-7/16" (290.5 mm)	28" (711.2 mm)	83-5/8" (2124.1 mm)	66" (1676.4 mm)	203-5/8" (5172.1 mm)
6" (152.4 mm)	15-3/16" (385.8 mm)	30" (762.0 mm)	89-7/8" (2282.8 mm)	68" (1727.2 mm)	209-15/16" (5332.4 mm)
7" (177.8 mm)	17-3/4" (450.9 mm)	32" (812.8 mm)	96-3/8" (2447.9 mm)	70" (1778.0 mm)	216-1/4" (5492.8 mm)
8" (203.2 mm)	21-1/2" (546.1 mm)	34" (863.6 mm)	102-5/8" (2606.7 mm)	72" (1828.8 mm)	222-9/16" (5653.1 mm)
9" (228.6 mm)	24-1/8" (612.8 mm)	36" (914.4 mm)	108-7/8" (2765.4 mm)	74" (1879.6 mm)	228-7/8" (5813.4 mm)
10" (254.0 mm)	27-7/8" (708.0 mm)	38" (965.2 mm)	115-1/4" (2927.4 mm)	76" (1930.4 mm)	235-13/16" (5989.6 mm)
11" (279.4 mm)	30-3/8" (771.5 mm)	40" (1016.0 mm)	121-9/16" (3087.7 mm)	78" (1981.2 mm)	241-1/2" (6134.1 mm)
12" (304.8 mm)	34-3/16" (868.4 mm)	42" (1066.8 mm)	128" (3251.2 mm)	80" (2032.0 mm)	247-13/16" (6294.4 mm)
13" (330.2 mm)	36-3/4" (933.5 mm)	44" (1117.6 mm)	134-5/16" (3411.5 mm)	82" (2082.8 mm)	254-1/8" (6454.8 mm)
14" (355.6 mm)	40-1/2" (1028.7 mm)	46" (1168.4 mm)	140-5/8" (3571.9 mm)	84" (2133.6 mm)	260-7/16" (6615.1 mm)
15" (381.0 mm)	43-1/16" (1093.8 mm)	48" (1219.2 mm)	146-15/16" (3732.2 mm)	86" (2184.4 mm)	266-5/8" (6772.3 mm)
16" (406.4 mm)	46-7/8" (1190.6 mm)	50" (1270.0 mm)	153-1/4" (3892.6 mm)	88" (2235.2 mm)	272-15/16" (6932.6 mm)
17" (431.8 mm)	49-7/16" (1255.7 mm)	52" (1320.8 mm)	159-9/16" (4052.9 mm)	90" (2286.0 mm)	279-1/4" (7093.0 mm)
18" (457.2 mm)	53-1/8" (1349.4 mm)	54" (1371.6 mm)	165-7/8" (4213.2 mm)	92" (2336.8 mm)	285-9/16" (7253.3 mm)
19" (482.6 mm)	55-3/4" (1416.1 mm)	56" (1422.4 mm)	172-3/16" (4373.6 mm)	94" (2387.6 mm)	291-7/8" (7413.6 mm)
20" (508.0 mm)	59-1/2" (1511.3 mm)	58" (1473.2 mm)	178-1/2" (4533.9 mm)	96" (2438.4 mm)	298-3/16" (7574.0 mm)



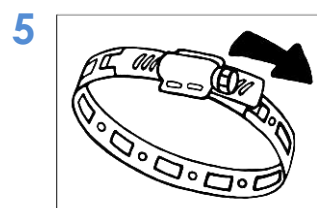
Measure band to proper length and cut through center of nearest round hole with shears, snips, hacksaw, etc.



Engage one screw housing end to one perforated end by turning screw three or four times



Complete the clamp by diagonally inserting the ends of the engaged fastener assembly to the band through the tops of the square holes at each end of the band



Tighten finished clamp

Wrap Clamp™ Leak Repair Clamps

Wrap Clamp™ WC1 Leak Repair Clamps

Features:

- Single side locking clamp
- Easy to handle, quick and simple to install
- No special tools or expertise required
- Stainless steel 304 / 316 material

Application:

- Applicable for pipeline pressure up to 363 psi (26 kg/cm²)
- Suitable for all pipe materials
- Acts as compensator for thermal expansion and dampens vibration

Chemical resistance:

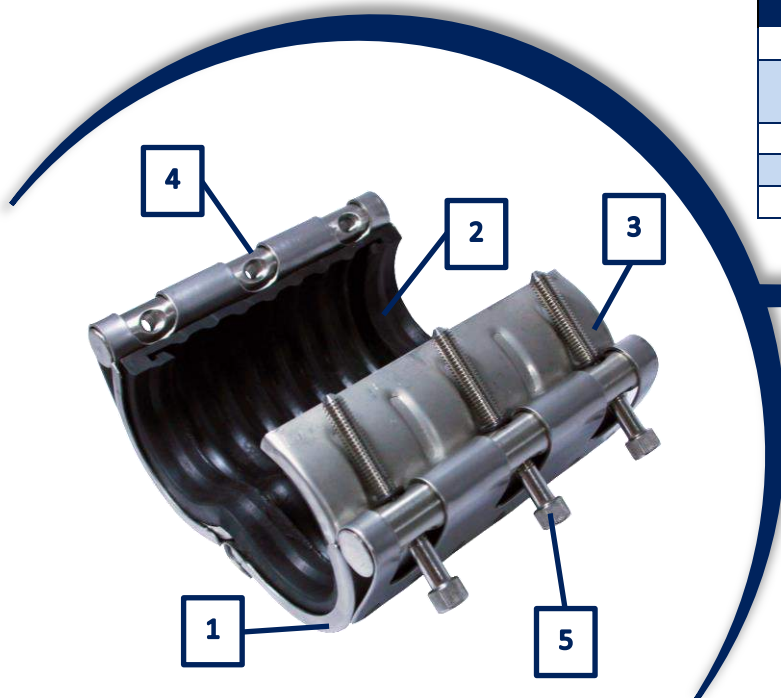
- NBR:
 - ✓ Water (drinking water, wastewater), gas, oil, gasoline and hydrocarbons, bases, slurries, fuels (petroleum, diesels, gasoline)
- Viton:
 - ✓ Oil, water (drinking water, wastewater, steam), solvents (Acetone, toluene, MEK, ethyl alcohol), acids (hydrochloric acid, sulfuric acid), chemical (ethylene glycol, xylenes, ammonia), hydrocarbon, bases, slurries, fuels (petroleum, diesels, gasoline), gases (LNG, LPG), organic salts

Operating temperature:

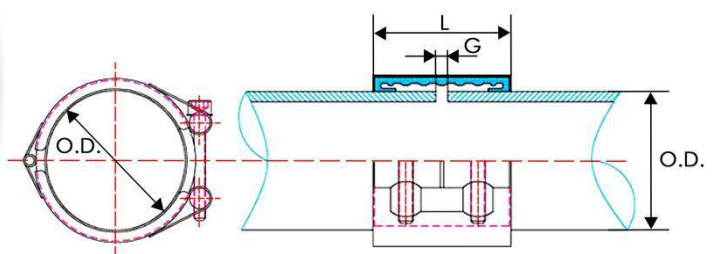
- NBR: -20 °C (-4 °F) to 100 °C (212 °F)
- Viton: -95 °C (-139 °F) to 300 °C (572 °F)

Sizes and technical data:

Model	O.D.		O.D. Range mm	Length, L mm	Max Expansion Distance mm	MAX Pipe Distance (for Connection), G mm	Pressure Psi (kg/cm ²)	Weight Kg
	Inch	mm						
WC1-25A60	1	34	33-35	57	30	15 ± 10	363 (26)	0.2
WC1-32A60	1 ¼	42	42-44	57	30	15 ± 10	363 (26)	0.35
WC1-40A60	1 ½	48.6	47-49	60	30	15 ± 10	363 (26)	0.35
WC1-50A80	2	60.5	59-61	80	40	20 ± 15	363 (26)	0.8
WC1-65A140	2 ½	76.3	75-78	140	100	20 ± 15	363 (26)	1.5
WC1-80A200	3	89.1	88-91	203	150	25 ± 20	232 (16)	3.1
WC1-100A200	4	114	106-117	203	150	25 ± 20	232 (16)	3.4
WC1-125A200	5	140	138-142	204	150	30 ± 25	232 (16)	4.7
WC1-150A200	6	168	158-170	204	150	30 ± 25	232 (16)	5.9
WC1-200A255	8	219	216-222	255	150	30 ± 25	174 (12)	12.2
WC1-250A255	10	273	272-276	255	150	30 ± 25	174 (12)	13.5
WC1-300A255	12	325	324-328	255	150	30 ± 25	145 (10)	16.3



No	Components	Materials
1	Casing	SUS 304/316
2	Rubber Sleeve	NBR
		VITON
3	Slade Plate	SUS 304/316
4	Threaded Rod	SUS 304
5	Bolts	SUS 304



Wrap Clamp™ Leak Repair Clamps

Wrap Clamp™ WC2 Leak Repair Clamps

Features:

- Two side locking clamp
- Easy to handle, quick and simple to install
- No special tools or expertise required
- Stainless steel 304 / 316 material

Application:

- Applicable for pipeline pressure up to 174 psi (12 kg/cm²)
- Suitable for all pipe materials
- Acts as compensator for thermal expansion and dampens vibration

Chemical resistance:

- NBR:
 - ✓ Water (drinking water, wastewater), gas, oil, gasoline and hydrocarbons, bases, slurries, fuels (petroleum, diesels, gasoline)
- Viton:
 - ✓ Oil, water (drinking water, wastewater, steam), solvents (Acetone, toluene, MEK, ethyl alcohol), acids (hydrochloric acid, sulfuric acid), chemical (ethylene glycol, xylenes, ammonia), hydrocarbon, bases, slurries, fuels (petroleum, diesels, gasoline), gases (LNG, LPG), organic salts

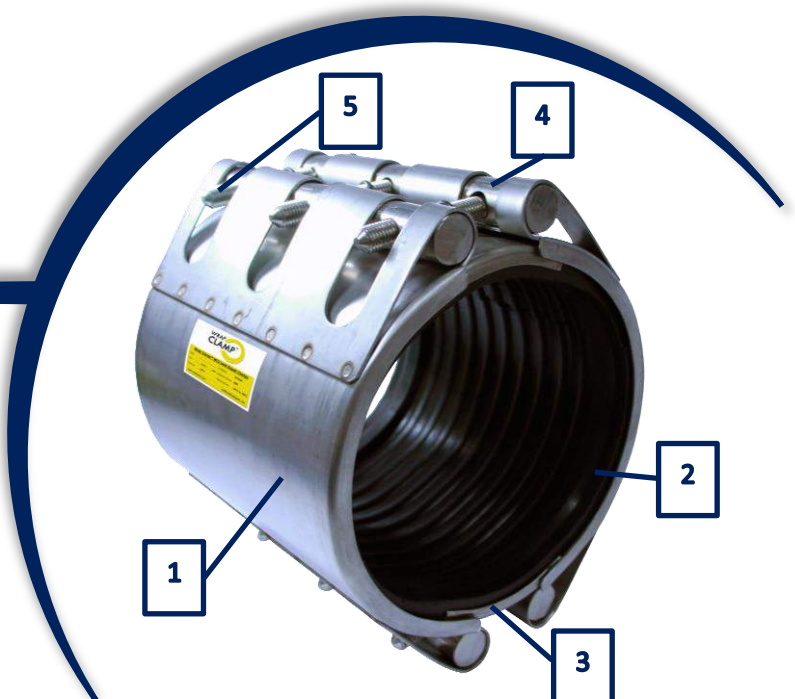
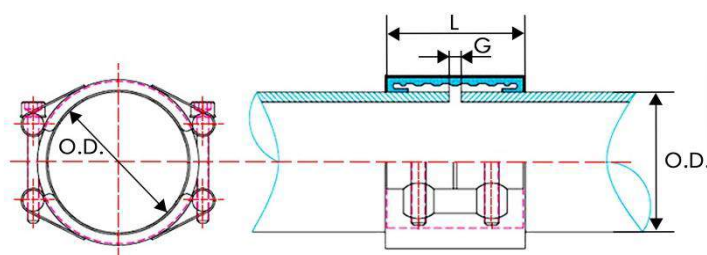
Operating temperature:

- NBR: -20 °C (-4 °F) to 100 °C (212 °F)
- Viton: -95 °C (-139 °F) to 300 °C (572 °F)

Sizes and technical data:

Model	O.D.		O.D. Range mm	Length, L mm	Max Expansion Distance mm	Max Pipe Distance (for Connection), G mm	Pressure Psi (kg/cm ²)	Weight Kg
	Inch	mm						
WC2-300A255	12	325	324-328	255	150	60 ± 55	174 (12)	19.2
WC2-350A255	14	377	375-379	255	150	60 ± 55	174 (12)	22.0
WC2-400A255	16	426	425-429	255	180	60 ± 55	174 (12)	24.0

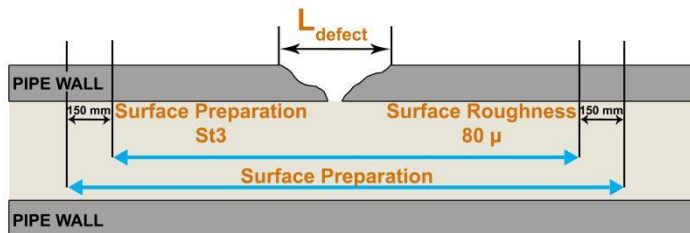
No	Components	Materials
1	Casing	SUS 304/316
2	Rubber Sleeve	NBR
		VITON
3	Slade Plate	SUS 304/316
4	Threaded Rod	SUS 304
5	Bolts	SUS 304



Composite Repair for Pipe and Tank Leaks:

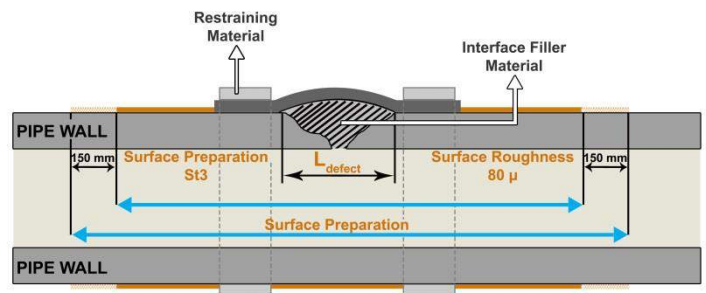
- Customized solution for through wall defects for pipes and tank walls
- Compliant installed by trained and certified applicators
- Engineering Calculation Report and Method of Statement for each repair
- ISO24817 and ASME PCC2 standards
- Provide excellent strength, bonding and chemical resistance
- Warranty for 20 years

First stage: Surface preparation



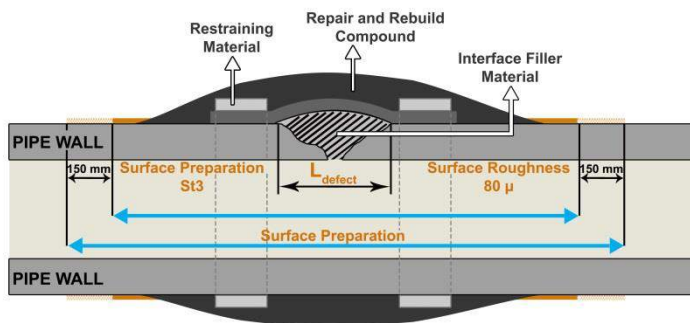
- Clean affected pipe / tank wall surface to St3 standard.
- Prepare surface roughness to approximately 60 to 80 microns

Second stage: Select suitable Interface Filler Material and Restraining Material



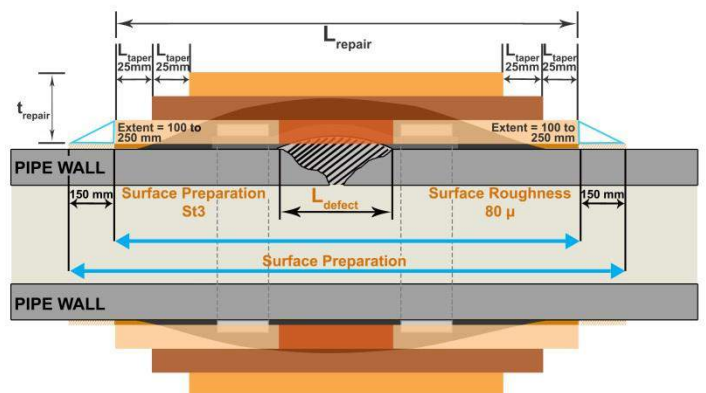
- Select suitable interface filler material (e.g. SS106) to cover leak area
- Select suitable restraining material (e.g. SealXpert™ Stainless Steel Pipe Clip with stainless steel sheet metal) to arrest leak

Third stage: Select Suitable Repair and Rebuild Compound



- Select suitable repair and rebuild compound (e.g. PS102) to coat affected pipe / tank wall surface

Fourth stage: Select Suitable Reinforcement Wrapping Material



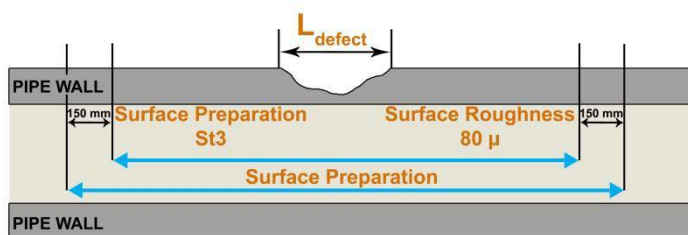
- Select suitable reinforcement wrapping material (e.g. Wrap Seal PLUS™ Fiberglass Repair Tape)
- Installed wrapping thickness is calculated based on ISO24817 and ASME PCC2 Standards

Composite Repair

Composite Repair for Pipeline Reinforcement:

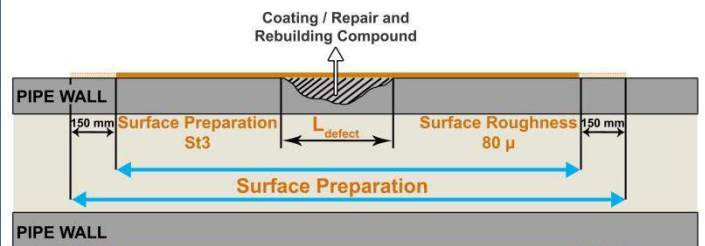
- Customized solution for thin wall defects for pipes and tank walls
- Compliant installed by trained and certified applicators
- Suitable for wall loss up to 80%
- Engineering Calculation Report and Method of Statement for each repair
- ISO24817 and ASME PCC2 standards
- Provide excellent strength, corrosion and chemical resistance
- Warranty for 20 years

First stage: Surface preparation



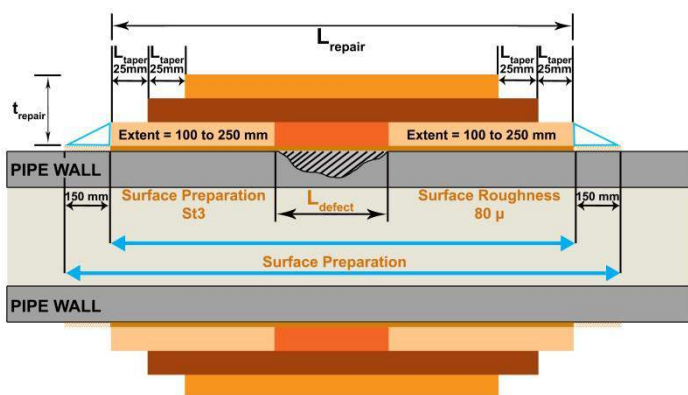
- Clean affected pipe / tank wall surface to St3 standard.
- Prepare surface roughness to approximately 60 to 80 microns

Second stage: Select suitable Coating / Repair and Rebuilding Compound



- Select suitable coating / repair and rebuilding compound (e.g. Wrap Seal PLUS™ Resin and Activator) to coat on affected area

Third stage: Select Suitable Reinforcement Wrapping Material



- Select suitable reinforcement wrapping material (e.g. Wrap Seal PLUS™ Fiberglass Repair Tape)
- Installed wrapping thickness is calculated based on ISO24817 and ASME PCC2 Standards

Wrap Seal PLUS™ Corrosion Repair Products

Wrap Seal PLUS™ Resin and Activator

Features:

- Corrosion barrier and isolator
- High adhesion strength
- Excellent alkali and acid resistance
- Ease of application by using paint rollers and paint brush
- Applicable for pipes, tanks, and large surfaces

Applicable material:

- Galvanized steel
- Copper
- Stainless steel
- Carbon steel
- Concrete
- Polyethylene
- FRP/GRE

Application:

- Applied as corrosion coating on pipes, storage tanks, vessels, exhaust lines, bulkheads, machineries, joints, and large surfaces.
- Applied with Wrap Seal PLUS™ Uncoated Fiberglass Tape, Chopped Strand Mat or Surface Tissue for reinforcement, bonding and lamination

Applicable industries:

Oil & Gas	Petrochemical	Offshore	Chemical
Marine	Power Generation	Building & Facilities Management	Water Distribution
Wastewater	Manufacturing Plants	Industrial Processing	Electronics
Pharmaceutical	Pulp & Paper	Military	Irrigation
Food Processing			

Chemical resistance:

- MEK
- Diesel
- Ethylene glycol
- Ammonia
- Acetone
- Crude oil
- Toluene
- Ethyl alcohol
- Gasoline
- Sodium hydroxide

Working time:

- 10 minutes at 30 °C (86 °F)

Curing time:

- 2 hours at 30 °C (86 °F)

Technical data:

Colour - Resin	:	Natural
- Activator	:	Straw colour
Viscosity	:	20000 - 40000 cps at 21 °C (70 °F)
Specific gravity	:	1.85
Compressive strength	:	24500 psi (1723 kg/cm ²)
Tensile strength	:	35000 psi (2461 kg/cm ²)
Bond strength	:	500 psi (35 kg/cm ²)
Flexural strength	:	42000 psi (2953 kg/cm ²)
Flexural modulus	:	1.6x10 ⁶ psi (112491 kg/cm ²)
Barcol hardness	:	40 - 50 Shore D
Coverage area (per set)	:	0.15 m ² at 3 mm thickness



Package:

- 1 can of Wrap Seal PLUS™ Resin
- 1 bottle of Wrap Seal PLUS™ Activator
- Gross weight: 500 gm (1.1 lb)

Wrap Seal PLUS™ Corrosion Repair Products

Wrap Seal PLUS™ Fiberglass Repair Tape

Features:

- Remediate, repairs and reinforces
- Durable, strong and permanent
- Restore pipes to original strength

Application:

- Applied onto thinning pipe walls for pipeline reinforcement
- Improve hoop strength of pipeline after repair
- Suitable for pipe diameter up to 60" (1524 mm)
- Applicable for pipeline temperature up to 280 °C (536 °F)

Technical data:

Tensile modulus	:	3.8 x 10 ⁶ psi (267166 kg/cm ²)
Tensile strength	:	65000 psi (4570 kg/cm ²)
Flexural modulus	:	3.6 x 10 ⁶ psi (253105 kg/cm ²)
Flexural strength	:	53100 psi (3733 kg/cm ²)
Compressive strength	:	28500 psi (2004 kg/cm ²)
Dielectric strength	:	20000 Volts
Hardness	:	85 Shore D



Package:

- 4" x 20' (100 mm x 6 m)
- 4" x 30' (100 mm x 9 m)
- 6" x 20' (150 mm x 6 m)
- 6" x 30' (150 mm x 9 m)

Wrap Seal PLUS™ Corrosion Repair Products

Wrap Seal PLUS™ Chopped Strand Mat

Features:

- Excellent conformability and handling
- Excellent weight uniformity
- Good mechanical properties
- Good laminate smoothness
- Non-hazardous

Application:

- Applied with Wrap Seal PLUS™ Resin and Activator to provide high tensile strength, impact, abrasion and corrosion resistance for large surfaces with low curvatures (storage tanks, vassals, etc.)
- Designed as surface rebuilding over large surfaces

Technical data:

Appearance and odour	:	White / Off-white colored solid with odour
Density	:	450 g/m ²



Package:

- 39" x 210' (1000 mm x 64 m)
- Weight: 30 kg

Wrap Seal PLUS™ Corrosion Repair Products

Wrap Seal PLUS™ Surface Tissue



Features:

- Excellent fiber distribution
- Good tear strength
- Good tensile strength
- Excellent weather-proofing
- Imposed seepage resistance
- Longer service life
- Non-hazardous

Application:

- Applied with Wrap Seal PLUS™ Resin and Activator to provide high tensile strength, impact, abrasion, and corrosion resistance for large surfaces (storage tanks, vassals, etc.)
- Designed to be used as a surfacing tissue to provide a gel-coat/resin reinforcement and a smooth resin-rich surface to the composite

Technical data:

Appearance and odour	:	White / Off-white colored solid with odour
Glass type	:	C
Fiber diameter	:	12.5µ ± 1
Binder type	:	Styrene-acrylic
Thickness	:	0.01" (0.25 mm)

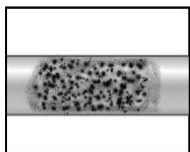
Package:

- 39" x 820' (1000 mm x 250 m)
- Weight: 9.5 kg

Wrap Seal PLUS™ Corrosion Repair Procedure

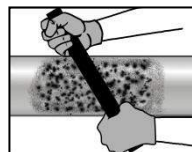
First stage: Surface preparation

1



Corroded pipe surface

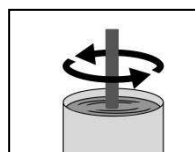
2



Roughen the area to be repaired

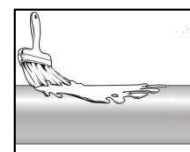
Second stage: Surface coating

3



Mix and stir Wrap Seal PLUS™ Resin and Activator for at least 1 minute until well mixed

4

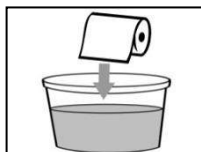


Apply two coats of activated resin evenly over the area to be repaired and allow to cure

Third stage: Reinforcement

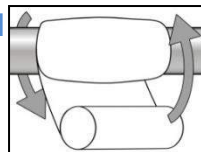
PIPE

5a



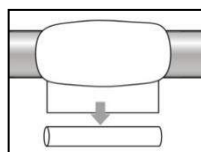
Immerse Wrap Seal PLUS™ Fiberglass Repair Tape into water

6a



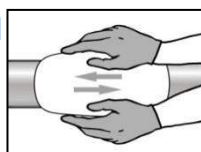
Wrap the fiberglass repair tape as tightly and evenly as possible, with at least 50% overlap over affected pipe length

7a



Discard the plastic tube at the end of the roll

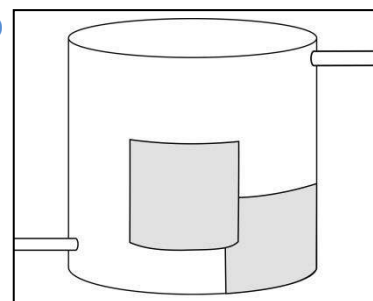
8a



Wet gloves in water and quickly compress the bubbling resins back into the fiberglass wrap until all bubbling has stopped. Repair completed with smooth and hard ivory appearance

FLAT SURFACE/TANK

5b



Apply several layers of Wrap Seal PLUS™ Surface Tissue or Wrap Seal PLUS™ Chopped Strand Mat onto the affected area

Seal Stic™ Quick Cure Epoxy Sticks

SS102 Steel Epoxy Stick

Features:

- Pre-mixed steel-based formulation
- Bonds to dry surfaces
- Bonds to metals, concrete and plastics
- Cures at room temperature
- Can be drilled, tapped, machined or painted
- Non-toxic and solvent-free

Technical data:

Colour	:	Dark grey
Compressive strength	:	12000 psi (844 kg/cm ²)
Tensile strength	:	6000 psi (422 kg/cm ²)
Shear strength	:	900 psi (63 kg/cm ²)
Hardness	:	80 Shore D
Temperature range	:	-50 °C to 120 °C (-58 °F to 248 °F)
Pot life (100g mixture)	:	10 min
Min. curing time before function	:	20 min

Package:

- 114 gram/tube



Seal Stic™ Quick Cure Epoxy Sticks

SS103 Aluminium Epoxy Stick

Features:

- Pre-mixed aluminium-based formulation
- Repairs to non-rusting aluminium castings, machinery and equipment
- Fills porosity in aluminium castings
- Can be drilled, tapped, machined or painted
- Non-toxic and solvent-free

Technical data:

Colour	:	Aluminium
Compressive strength	:	12000 psi (844 kg/cm ²)
Tensile strength	:	6000 psi (422 kg/cm ²)
Shear strength	:	900 psi (63 kg/cm ²)
Hardness	:	80 Shore D
Temperature range	:	-50 °C to 120 °C (-58 °F to 248 °F)
Pot life (100g mixture)	:	10 min
Min. curing time before function	:	20 min

Package:

- 114 gram/tube



Seal Stic™ Quick Cure Epoxy Sticks

SS104 Bronze Epoxy Stick

Features:

- Pre-mixed bronze-based formulation
- Bonds securely to bronze, brass & copper alloys
- Can be drilled, tapped, machined or painted
- Non-toxic and solvent-free

Technical data:

Colour	:	Bronze
Compressive strength	:	12000 psi (844 kg/cm ²)
Tensile strength	:	6000 psi (422 kg/cm ²)
Shear strength	:	900 psi (63 kg/cm ²)
Hardness	:	80 Shore D
Temperature range	:	-50 °C to 120 °C (-58 °F to 248 °F)
Pot life (100g mixture)	:	10 min
Min. curing time before function	:	20 min

Package:

- 114 gram/tube



Seal Stic™ Quick Cure Epoxy Sticks

SS106 Underwater Epoxy Stick

Features:

- Pre-mixed ceramic-based formulation
- Suitable for moist and wet conditions
- Excellent resistance to oil and chemicals
- Bonds to metallic and non-metallic surfaces
- Can be drilled, tapped, machined or painted
- Non-toxic and solvent-free

Technical data:

Colour	:	Light yellow
Compressive strength	:	12000 psi (844 kg/cm ²)
Tensile strength	:	6000 psi (422 kg/cm ²)
Shear strength	:	900 psi (63 kg/cm ²)
Hardness	:	80 Shore D
Temperature range	:	-50 °C to 120 °C (-58 °F to 248 °F)
Pot life (100g mixture)	:	10 min
Min. curing time before function	:	20 min

Package:

- 114 gram/tube



SealXpert™ Expanded PTFE Tape

Features:

- Gasket tape made from pure, expanded, virgin PTFE
- Supplied with adhesive backing
- Quick and simple to install
- Reduced down time

Application:

- Used in a wide variety of static application in nearly all kind of industries
- The exceptional malleability of expanded PTFE can compensate for out-of-parallel and/or damaged sealing surfaces and allows use with stress sensitive connections and applications where only a limited flange load is available
- Sealing of flanges, pump housings, compressors, hand-holes and manholes, air ducts, compensators, heat exchangers and etc.

Chemical resistance:

- Most chemicals from pH 0-14
- Main exceptions are molten alkali metals and elemental fluorine at high temperature and pressure

Operating temperature:

- Continuous – from -240 °C (-400 °F) up to 260 °C (500 °F)
- Intermittent – up to 310 °C (590 °F)

Operating pressure:

- Vacuum up to 2901 psi (204 kg/cm²)

Technical data:

Colour	:	White
Thickness	:	0.2" (5 mm)
Density	:	0.65 g/cm ³ , ±0.1 g/cm ³ (for rectangular cross sections only)
Others	:	Physiologically harmless. It has no smell or taste. It is neither contaminating nor toxic

Package:

- 2" x 10' (50 mm x 3 m)



SealXpert™ Metal Repair Compounds

PS102 Steel Repair Putty (A)

Features:

- Metal-filled two-component epoxy putty
- Bonds to metals, concrete and plastics
- Cures at room temperature
- Can be drilled, tapped, machined or painted
- Excellent resistance to oil, gasoline, water and chemicals
- Ideal for patching and repairing areas where welding or brazing is undesirable

Application:

- Suitable for repairing defects and rebuilding of steel and iron casting parts
- Recommended for repairing and rebuilding of worn components such as bearing and fan housing

Package:

- 454 gram/set



SealXpert™ Metal Repair Compounds

PS103 Aluminium Repair Putty

Features:

- Aluminium-filled two-component epoxy putty
- Repairs to non-rusting aluminium castings, machinery and equipment
- Excellent resistance to chlorofluorocarbons
- Bonds to aluminium and other metals
- Fills porosity in aluminium castings
- Can be drilled, tapped, machined or painted

Application:

- Used for rebuilding of various aluminium casting parts
- Used for repairing aluminium casting air holes and sand holes, shrinkage and cracks
- Used for filling oversize, scratch or damaged repairing
- Applicable to general machines, automobiles, airplanes, watercraft etc.

Package:

- 454 gram/set



SealXpert™ Metal Repair Compounds

PS104 Bronze Repair Putty

Features:

- Bronze-filled two-component epoxy putty.
- Repairs to bronze and brass bushings, shafts, castings and parts
- Repairs and rebuilds area where brazing is undesirable or impossible
- Bonds securely to bronze alloys, brass, copper and ferrous metals
- Can be drilled, tapped, machined or painted

Application:

- Used for rebuilding and repairing of various bronze casting parts
- Used for repairing bronze casting air holes and sand holes, shrinkage and cracks
- Used for filling oversize, scratch or damaged repairing
- Applicable to watercrafts, machines, automobiles, mining machineries etc.

Package:

- 227 gram/set



SealXpert™ Metal Repair Compounds

PS105 Stainless Steel Repair Putty

Features:

- Stainless steel-filled two-component epoxy putty
- Patch, repair and rebuild stainless steel parts and equipment
- Bonds to ferrous and non-ferrous metals
- Non-rusting

Application:

- Used for repairing stainless steel and steel parts defect repairing and worn part rebuilding
- Applicable to watercrafts, machines, automobiles, mining machineries etc.

Package:

- 454 gram/set



SealXpert™ Metal Repair Compounds

PS106 Underwater Repair Putty

Features:

- Ceramic-based two-component epoxy putty.
- Suitable for moist and wet conditions
- Excellent resistance to oil and chemicals
- Bonds to metallic and non-metallic surfaces
- Fills porosity and cracks on valves and pump bodies
- Can be drilled, tapped, machined or painted

Application:

- Used for repairing pipeline, valve, pump shell, tank body and concrete under emergency
- Used for leakage stopping for water machineries, watercrafts repairing, mines and buildings etc.
- Used in splash zone repair in combination of SealXpert™ Fiberglass Repair Tapes

Package:

- 454 gram/set



SealXpert™ Metal Repair Compounds

PS107 5 Min (SF) Repair Putty

Features:

- Fast-curing
- Stainless steel-filled two-component epoxy putty
- Suitable for quick and emergency repairs
- Cures in less than one hour
- Can be drilled, tapped, machined or painted

Application:

- Used for emergency and quick repairing of steel, iron, stainless steel etc. metal damaged parts, worn parts and leakage
- Applicable to watercrafts, machines, automobiles, mining machineries etc.

Package:

- 454 gram/set



SealXpert™ Metal Repair Compounds

PS108 Hi-Temp Repair Putty

Features:

- Withstands high temperature up to 230 °C (446 °F) (continuous) and 280 °C (536 °F) (intermittent)
- Nickel alloy-filled two-component epoxy putty
- Suitable for engine parts repairs
- Can be drilled, tapped, machined or painted

Application:

- Used for repairing abrasion, scratch, and crack etc. on equipment operating at high temperature
- Applicable to watercrafts, automobiles, machineries in petrochemical, power plant etc.

Package:

- 454 gram/set



SealXpert™ Metal Repair Compounds

PS109 Supermetal Epoxy Putty

Features:

- Alloy and ceramic filled two-component epoxy putty
- Excellent hardness
- Cold welding repairing material
- Versatile durable repair composite
- Outstanding adhesion to all metals
- Excellent corrosion resistance
- Superior chemical resistance
- Can be drilled, tapped, machined or painted

Application:

- Suitable for repairing worn rotating shafts
- Applicable for making repairs that can be precision machined

Package:

- 454 gram/set



SealXpert™ Metal Repair Compounds

PS110 Titanium Repair Putty

Features:

- Titanium filled two-component epoxy putty
- High performance
- Excellent chemical resistance
- Withstands heavy loads in harsh chemical environments
- Can be drilled, tapped, machined or painted

Application:

- Suitable for repairing and rebuilding on load bearing components
- Applicable for repairs to machineries and equipment that can be precision machined



Package:

- 454 gram/set

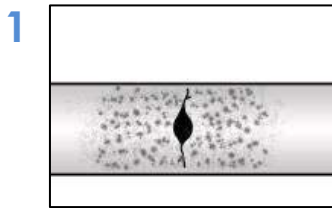
SealXpert™ Metal Repair Compounds

Technical Data

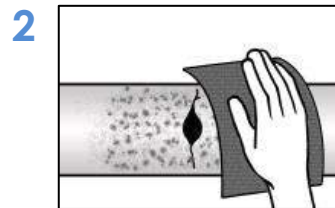
Product No.	Colour	Compressive Strength psi (kg/cm ²)	Tensile Strength psi (kg/cm ²)	Shear Strength psi (kg/cm ²)	Hardness Shore D	Temperature Range °C(°F)	Mixture (A:B)		Pot Life min	Curing Time		Coverage Area (per set) cm ² at 0.2" (6 mm) thickness
							Weight	Volume		50% load hour	100% load hour	
PS 102	Grey	18130 (1275)	4931 (347)	2901 (204)	80	-50 to 160 (-58 to 320)	9:1	5:1	40	8	24	450
PS 103	Aluminium	14214 (999)	4351 (306)	2611 (184)	80	-50 to 160 (-58 to 320)	6:1	3.5:1	50	12	24	503
PS 104	Bronze	13779 (969)	4351 (306)	2611 (184)	80	-50 to 170 (-58 to 338)	9:1	3:1	40	12	24	165
PS 105	Dark Grey	15229 (1071)	4931 (347)	2901 (204)	80	-50 to 160 (-58 to 320)	11:1	3.75:1	50	12	24	465
PS 106	Brown	13053 (918)	4496 (316)	2611 (184)	80	-50 to 150 (-58 to 302)	5:1	3.5:1	20	6	12	472
PS 107	Dark Grey	13053 (918)	3626 (255)	2611 (184)	80	-50 to 120 (-58 to 248)	1.7:1	1:1	5	1/6	1	450
PS 108	Dark Grey	12908 (908)	4351 (306)	2611 (184)	80	-50 to 280 (-58 to 536)	5:1	4:1	60	6	12	432
PS 109	Dark Grey	24656 (1733)	7977 (561)	3046 (214)	90	-50 to 160 (-58 to 320)	2:1	2:1	50	12	24	450
PS 110	Dark Grey	18855 (1326)	4061 (286)	2031 (143)	87	-50 to 160 (-58 to 320)	11:1	3.75:1	21	8	16	450

SealXpert™ Repair Putties Application Procedure

First stage: Surface preparation

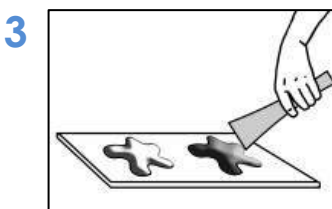


Clean surface thoroughly with solvent

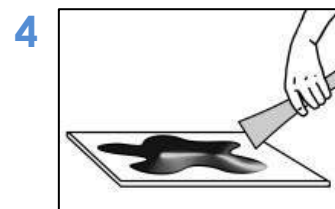


Grit blast surface area with a coarse file / sandpaper / coarse wheel / abrasive disc pad
Clean the surface again with solvent

Second stage: Mixture

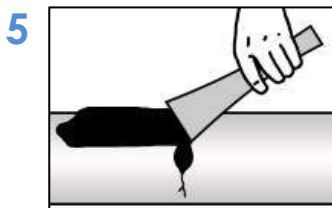


Mix component A (Resin) and component B (Hardener) in accordance to the specified ratio

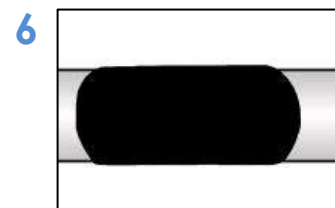


Continuously scrape material from the sides and bottom of container until uniform, streak-free consistency is obtained

Third stage: Application



Dispense the mixture to prepared surface with trowel



Allow curing in accordance to the minimum curing time at room temperature before operation



SealXpert™ Wear & Corrosion Resistant Coating

WR204 Wear Resistant Coating

Features:

- Ceramic microsphere and silicon alloy filled two-component epoxy coating.
- Suitable for application on vertical surfaces.
- Coating has strong adhesion and excellent properties of wear and impact resistance.

Application:

- Designed to rebuild and pre-protect the machine worn by whirlpool, corrosion and cavitation erosion, water pump impellers, shell, induced-draft fan impeller etc.

Technical data:

Colour	:	Dark grey
Compressive strength	:	15954 psi (1122 kg/cm ²)
Tensile strength	:	4351 psi(306 kg/cm ²)
Shear strength	:	2176 psi(153 kg/cm ²)
Hardness	:	90 Shore D
Temperature range	:	-50 °C (-58 °F) to 121 °C (250 °F)
Mixture (A:B)	:	Weight – 4:1 / Volume – 4:1
Pot life	:	40 min
Min. curing time before function	:	50% load – 10 hours 100% load – 24 hours
Coverage area (per set)	:	378 cm ² at 6 mm thickness

Package:

- 500 gram / set



SealXpert™ Wear & Corrosion Resistant Coating

WR211 Corrosion Resistant Coating

Features:

- Composed of modified epoxy, wear resistant ceramic and crystal mineral powder
- Thixotropic viscosity, suitable for application on vertical surface
- Excellent resistance to strong alkali and acid

Application:

- Used for rebuilding and protecting metal material and concrete facilities against corrosion of acid/alkali solution
- Rebuilding and protective coating of various corroded pipeline, pump, valve, exchanger, etc.

Technical data:

Colour	:	Dark Grey
Compressive Strength	:	13053 psi (918 kg/cm ²)
Tensile Strength	:	4351 psi (306 kg/cm ²)
Shear Strength	:	1450 psi (102 kg/cm ²)
Hardness	:	73 Shore D
Temperature Range	:	-50 °C (-58 °F) to 121 °C (250 °F)
Mixture (A:B)	:	Weight – 5:1 / Volume – 4:1
Pot Life	:	60 min
Coverage area (per set)	:	378 cm ² at 6 mm thickness

Package:

- 500 gram / set



SealXpert™ Anaerobic Threadlockers

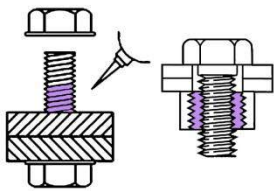
AT222 Threadlocker

Features:

- Thixotropic viscosity, low strength
- Easy removal, parts can be separated with hand tools

Application:

- Prevent threaded fasteners from vibration and leakage
- Used for locking and sealing M2 - M8 (ideal for under M6) threaded fasteners, prevent thread from rust
- Especially suitable for situation where easy disassembly is available, adjust locating screw, small diameter or long threaded fasteners



Package:

- 50 ml / bottle



SealXpert™ Anaerobic Threadlockers

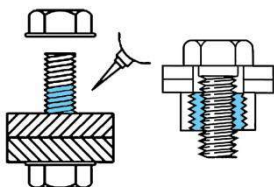
AT242 Threadlocker

Features:

- Medium strength, thixotropic viscosity
- Controlled lubricity for accurate clamp loads
- Easy removal, parts can be separated with hand tools

Application:

- Used for locking and sealing M8 - M16 (Ideal below M8) threaded fasteners, prevent loosening, and leakage from shock and vibration



Package:

- 50 ml / bottle



SealXpert™ Anaerobic Threadlockers

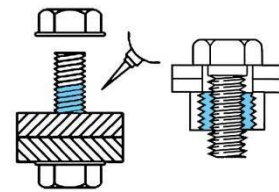
AT243 Threadlocker

Features:

- Medium strength, thixotropic
- Good oil resistance, can be used on the surface with slight oil contamination
- Controlled lubricity for accurate clamp loads
- Easy removal, parts can be separated with hand tools

Application:

- Prevent threaded fasteners from loosening and leakage
- used for locking and sealing M8 – M20 (Ideal for under M18) threaded fasteners
- Typically suitable for inert surface, such as stainless steel and electroplated surface



Package:

- 50 ml / bottle



SealXpert™ Anaerobic Threadlockers

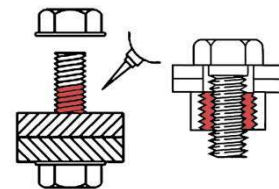
AT262 Threadlocker

Features:

- Medium to high strength, thixotropic viscosity
- Excellent chemical resistance
- Good lubricity
- Easy removal, parts can be separated with hand tools

Application:

- Prevent loosening and leakage from shock and vibration
- Used for permanent locking and sealing M10 – M26 (Ideal for under M20) threaded fasteners
- Prevent rusty threads
- Thread locking, sealing and engine plug sealing



Package:

- 50 ml / bottle



SealXpert™ Anaerobic Threadlockers

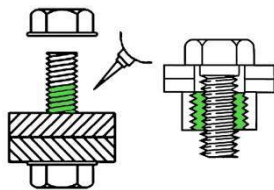
AT270 Threadlocker

Features:

- Low viscosity, high strength
- Excellent chemical resistance
- Good lubricity
- Heat and hand tools are required for disassembly

Application:

- Prevent loosening and leakage from shock and vibration
- Used for locking and sealing threaded fasteners of M25 and larger
- Prevent rusty threads



Package:

- 50 ml / bottle

SealXpert™ Anaerobic Threadlockers

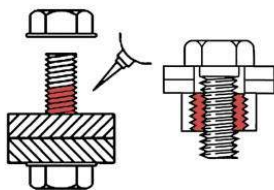
AT271 Threadlocker

Features:

- High strength, medium to low viscosity
- Excellent chemical resistance
- Good lubricity
- Heat and hand tools are required for disassembly

Application:

- Prevent loosening and leakage from shock and vibration
- Used for permanent locking and sealing M16 - M26 (Ideal for under M22) threaded fasteners, prevent thread from rust
- Typically used for stud end locking (such as cylinder head stud)



Package:

- 50 ml / bottle

SealXpert™ Anaerobic Threadlockers

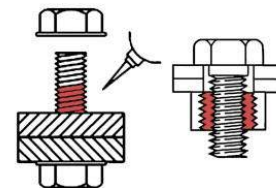
AT277 Threadlocker

Features:

- High strength, high viscosity
- Excellent chemical resistance
- Good lubricity
- Heat and hand tools are required for disassembly

Application:

- Prevent loosening and leakage from shock and vibration
- Used for permanent locking and sealing M24 - M36 threaded fasteners, prevent thread from rust
- Typically used for large diameter thread locking and sealing



Package:

- 50 ml / bottle

SealXpert™ Anaerobic Threadlockers

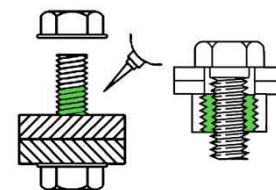
AT290 Threadlocker

Features:

- Low viscosity, medium strength, high penetrability
- wicking grade
- Excellent chemical resistance
- Seals 0.1mm gap welding seam, crack, dispersed shrinkage and casting microspores

Application:

- Prevent loosening and leakage from shock and vibration
- Used for locking and sealing pre-assembled threaded fasteners under M12
- Penetrate threads by capillary action
- Prevent rusty threads



Package:

- 50 ml / bottle

SealXpert™ Anaerobic Threadlockers
Technical Data

Product No.	Typical Use	Max Gap Fill mm	Uncured			Cured			Curing Speed	
			Colour	Viscosity mPa.s	Specific Gravity g/cm ³	Breakaway Torque Nm	Prevail Torque Nm	Temperature Range °C (°F)	Fixture min	Full Cure hour
AT222	M2 – M8, removable	0.13	Purple	1,200 Thixotropic	1.05	6	4	-50 to 150 (-58 to 302)	10 - 20	24
AT242	M8-M16, removable	0.13	Blue	1,700 Thixotropic	1.05	12	5	-50 to 150 (-58 to 302)	10 - 20	24
AT243	M8-M20, slight oil contamination	0.13	Blue	2,250 Thixotropic	1.05	20	7	-50 to 150 (-58 to 302)	10 - 20	24
AT262	M10-M26, permanent locking and sealing	0.13	Red	1,800 Thixotropic	1.10	22	30	-50 to 150 (-58 to 302)	10 - 20	24
AT270	M25, permanent locking and sealing	0.13	Green	500	1.10	26	36	-50 to 150 (-58 to 302)	10 - 20	24
AT271	M16-M26, permanent locking and sealing	0.13	Red	500	1.12	27	30	-50 to 150 (-58 to 302)	10 - 20	24
AT277	M24-M36, permanent locking and sealing	0.25	Red	7000	1.12	30	30	-50 to 150 (-58 to 302)	23 - 30	24
AT290	Under M12, wicking grade	0.10	Green	12	1.08	10	26	-50 to 150 (-58 to 302)	5 - 15	24



SealXpert™ Anaerobic Thread Sealants

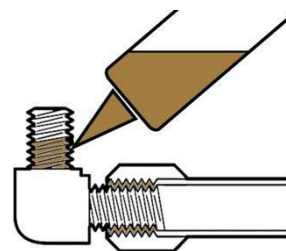
TS542 Thread Sealant

Features:

- Thixotropic, low viscosity, medium strength
- Contains no fillers and will not foul pipeline system

Application:

- Used for sealing fine threads in pneumatic and hydraulic systems
- Typically used for sealing fine pipe thread under M36



Package:

- 50 ml / bottle

SealXpert™ Anaerobic Thread Sealants

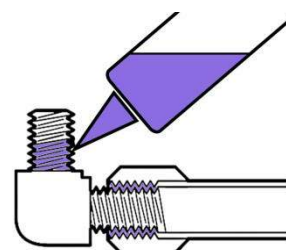
TS545 Thread Sealant

Features:

- Thixotropic, low viscosity, low strength
- Good oil tolerance, can be used on surfaces with slight oil contamination
- Contains no fillers and will no foul pipeline system

Application:

- Typically used for sealing and locking high hydraulic pressure power system, ideal for under M36 tapered thread.
- Will not foul or jam hydraulic and pneumatic fittings on surface, can be used with slight oil contamination.



Package:

- 50 ml / bottle

SealXpert™ Anaerobic Thread Sealants

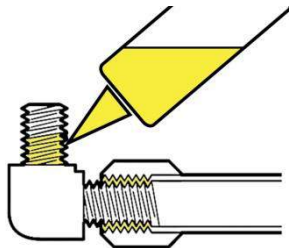
TS577 Thread Sealant

Features:

- High viscosity, thixotropic, high strength
- Contains no fillers and will not foul pipeline system
- Suitable for large gap sealing and fast curing

Application:

- Used for pipe thread sealing at rigorous operating condition or of large gap
- Typically used for sealing stainless steel pipe thread or pressure sealing of taper/straight pipe thread below M80



Package:

- 50 ml / bottle



SealXpert™ Anaerobic Thread Sealants

Technical Data

Product No.	Typical Use	Max Diameter of Thread mm	Uncured			Cured	
			Colour	Viscosity mPa.s	Specific Gravity g/cm ³	Max. Sealing pressure psi (kg/cm ²)	Temperature Range °C (°F)
TS542	Fine threads	M36	Brown	1,850 thixotropic	1.06	10153 (714)	-50 to 150 (-58 to 302)
TS545	For hydraulic and pneumatic pipeline thread sealing	M36, tapered	Purple	14,000 thixotropic	1.05	10080 (709)	-50 to 150 (-58 to 302)
TS577	Coarse thread sealing	M80, tapered/ straight	Yellow	100,000 thixotropic	1.10	9427 (663)	-50 to 150 (-58 to 302)



SealXpert™ Anaerobic Flange Sealants

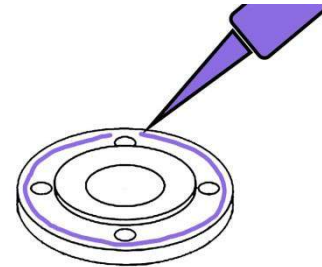
FS515 Flange Sealant

Features:

- Thixotropic viscosity
- General purpose
- Excellent solvent and chemical resistance

Application:

- Flexible gasket after cured, withstands slight flange movement caused by vibration
- Used for rigid machined parts flange sealing
- Applicable to motive power machines such as automobile, engineering machine, internal combustion engine, mining equipment, etc. for heavy loading



Package:

- 50 ml / tube

SealXpert™ Anaerobic Flange Sealants

Technical Data

Product No.	Typical Use	Max Gap Fill mm	Uncured			Cured		Curing Speed
			Colour	Viscosity mPa.s	Specific Gravity g/cm ³	Max. Seal Pressure Psi (kg/cm ²)	Temperature Range °C (°F)	Full Cure Hour
FS515	General purpose	0.25	Purple	1,200,000 Thixotropic	1.10	4351 (306)	-50 to 150 (-58 to 302)	24

SealXpert™ Retaining Compounds

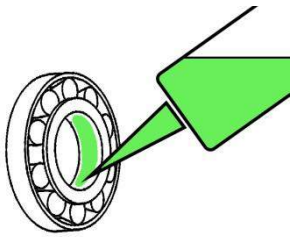
RC603 Retaining Compound

Features:

- High strength, low viscosity
- Good oil tolerance, can be used on surfaces with slight oil contamination

Application:

- Seals and secures cylindrical assemblies under 0.005" (0.13 mm) diametrical clearance
- Designed for transition and interference fit
- Used for slightly oily surface and inert surface



Package:

- 50 ml / bottle

SealXpert™ Retaining Compounds

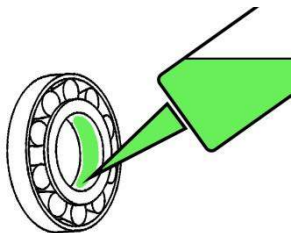
RC620 Retaining Compound

Features:

- Thixotropic viscosity
- Self-curing high temperature resistant

Application:

- Designed to retain cylindrical fittings which can endure high temperatures 232 °C (450 °F)
- Generally applicable for parts whose working temperature is 150 °C (302 °F) to 230°C (446 °F) (intermittent and continuous)
- Used to bond and retain automobile air valve sleeve, injection molding machine core sleeve, valve bushing, cylinder liner, plunger pin in steam hammer; seal or lock thread



Package:

- 50 ml / bottle

SealXpert™ Retaining Compounds

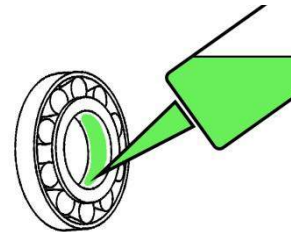
RC638 Retaining Compound

Features:

- Maximum high strength, high viscosity
- Fixture in 5 minutes

Application:

- Used for retaining cylindrical assembly where fit clearance can approach 0.01" (0.26 mm) and where maximum strength at room temperature is required
- Lock bushings and sleeves into housings and on shafts
- Designed for transition and interference fit



Package:

- 50 ml / bottle

SealXpert™ Retaining Compounds

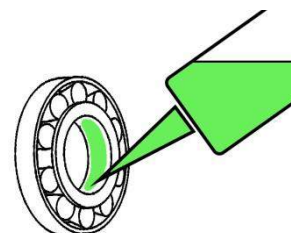
RC648 Retaining Compound

Features:

- High strength, medium to low viscosity
- Withstand high temperature to 175 °C (347 °F)
- Fixture in 5 minutes

Application:

- Used for dynamic loading or periodic loading working conditions
- High temperature resistant, cures fast, retaining cylindrical assembly where fit clearance is less than 0.006" (0.15 mm)
- Designed for transition and interference fit



Package:

- 50 ml / bottle

SealXpert™ Retaining Compounds

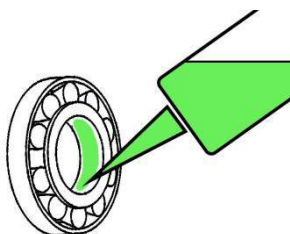
RC680 Retaining Compound

Features:

- High strength, medium viscosity
- Enhances bonding strength

Application:

- Used for diametral clearance of less than 0.01" (0.25 mm) clearance fit or transition fit with the best fit clearance between 0.002" (0.05 mm) to 0.004" (0.10 mm)
- Replace press fit and prevent rust
- Used for slight rotating (worn) bearing, shaft sleeve etc. fittings, retain belt pulley, bushing, gear wheel, rotor, rebuild hole-shaft fitting parts and out-of-tolerance parts
- Designed for transition and interference fit.



Package:

- 50 ml / bottle

SealXpert™ Retaining Compounds

Technical Data

Product No.	Typical Use	Max Gap Fill mm	Uncured			Cured		Curing Speed	
			Colour	Viscosity mPa.s	Specific Gravity g/cm ³	Shear Strength Psi (kg/cm ²)	Temperature Range °C (°F)	Fixture min	Full Cure hour
RC603	Slightly oil contaminated surface	0.13	Green	200	1.10	> 2901 (> 204)	-50 to 150 (-58 to 302)	5 - 10	24
RC620	high temperatures 232 °C (450 °F)	0.30	Green	8,500	1.15	> 2901 (> 204)	-50 to 230 (-58 to 446)	30 - 100	24
RC638	Maximum strength	0.26	Green	2,500	1.09	> 4496 (> 316)	-50 to 150 (-58 to 302)	5 - 10	24
RC648	Withstands continuous working high temperature up to 175 °C (347 °F)	0.15	Green	500	1.25	> 2611 (> 184)	-50 to 175 (-58 to 347)	5 - 15	24
RC680	For clearance and transition fit	0.25	Green	1,250	1.12	> 2756 (> 194)	-50 to 150 (-58 to 302)	10 - 15	24



SealXpert™ FlameCease FC100 Fire Protection Coating

Features:

- Low installation cost
- High Durability Fire Tested under British Standard 476 Part 6, 7 & 20
- Contains no halogenated flame retardant
- Excellent lap shear, tensile and compressive strengths
- More specific to address complex issues with different resin types

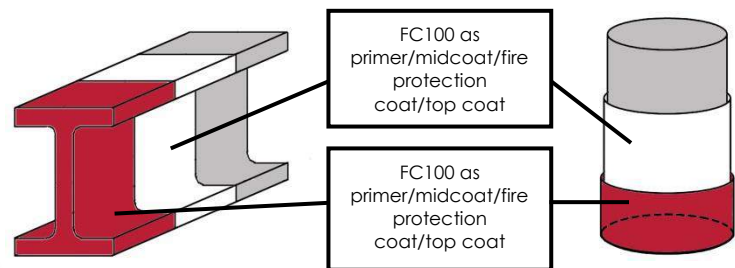
Application:

- Ideal for use in:
 - ✓ Petrochemical plants
 - ✓ Chemical processing plants
 - ✓ Gas processing facilities
 - ✓ Refinery facilities
 - ✓ Pipe rack beams and columns
 - ✓ Vessel skirts and supports
 - ✓ Tank saddles
 - ✓ Silo top
 - ✓ Automotive/aircraft parts
- Suitable for both interior and exterior applications
- Suitable for onsite and offsite application
- Apply by using brush or paint roller
- Can be used as primer, fire protection coat and top coat, 3-in-1
- May apply any epoxy base paint coating after FC100 base on personal preferences for aesthetic purpose

Technical data:

Gel time	: 15 min
Gel to peak exotherm	: 18 min
Total time to peak exotherm	: 28 min
Peak exotherm temperature	: 174 °C (345 °F)
Barcol hardness	: 49
Tensile strength	: 6672 psi (469 kg/cm ²)
Tensile modulus	: 73 x 10 ⁹ pa
Heat distortion temperature	: 117 °C (243 °F)@ 264 psi (19 kg/cm ²)
Adhesive strength	: 1958 psi (138 kg/cm ²)
Tensile elongation	: 2.8%
Flexural strength	: 23931 psi (1683 kg/cm ²)
Flexural modulus	: 6.8 x 10 ⁹ pa

Fire Resistance	Recommended Coating Thickness (I-Beam)	Product Usage Per Coating
1 hour fire protection	1.0 mm thk / 2 coatings	800 grams / m ²
2 hours fire protection	1.5 mm thk / 3 coatings	800 grams / m ²
3 hours fire protection	3.5 mm thk / 7 coatings	800 grams / m ²



Package:

- FC100 Resin (20kg)
- FC100 Hardener (1kg)

Seal
xpert
SealXpert™ Products



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