

[total care specific solution]



 **Polyken**[®]

Pipeline Tape Technology

An aerial photograph of a lush green landscape, likely a wetland or marsh, with a winding river or stream. The image is overlaid with a large, circular lens flare effect in the lower half, creating a soft, ethereal glow. The sky is a clear, light blue.

Polyken® is part of Seal For Life Industries, which is the name of a closely associated group of companies engaged in preventing and combating corrosion in the broadest possible sense. Seal For Life is the statement through which we demonstrate our thinking about the concept of ‘people, planet, profit’ – as well as about the quality and therefore the lifespan of our solutions. It shows what we think about markets, complete solutions, cost of ownership, the often sensitive infrastructures within which we work, and about our sustainable cost-effective solutions.

Welcome to Seal For Life Industries.

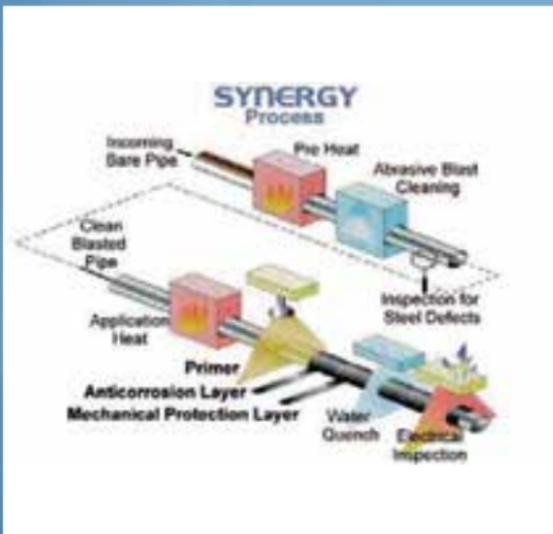
Why use Polyken® tape coating systems?

Polyken® pipeline tape coating systems provide pipeline protection with cold-applied and fused tape coating products for various climates and environments. With a full range of multi-layered coating systems and a host of coating accessories, Polyken® is ready to respond to customers anywhere around the globe.





The Synergy[®] System



Fused Multi-Layer System

Polyken[®] plant coating systems

The Synergy System

The SYNERGY system is a fused multi-layer. During application the two or three layers are fused, resulting in strong mechanical and chemical bonds that maximize performance. Thermal fusion generates mechanical toughness and superior anticorrosion properties that ensure long-term pipeline protection.

The Primer Layer

The Primer Layer is a solvent-based thermoplastic primer that provides a uniform surface for optimal adhesion. The primer is formulated with stress-corrosion cracking inhibitors.

The Anti Corrosion Layer

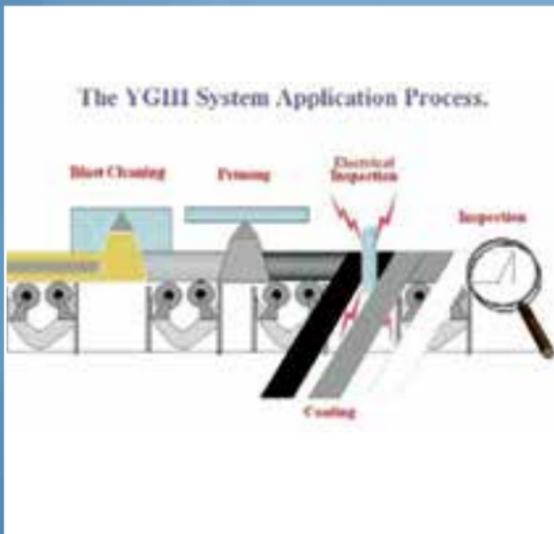
The Anti Corrosion Layer chemically bonds to the primer layer and fuses to the outer polyethylene layer to anchor it completely to the pipe.

The Mechanical Layer

The Mechanical Layer fuses with the elastomer layer and to itself to provide protection from the elements, as well as mechanical protection.



The Polyken[®] YGIII[®] System



Cold Applied Multi-Layer System

Polyken[®] plant coating systems

The Polyken[®] YGIII System

The Polyken[®] YGIII[®] system is a cold-applied, multi-layer coating system used primarily for the protection of steel and ductile iron water pipelines.

Low and Zero-VOC, Solvent-Based Primers

Low and Zero-VOC, Solvent-Based Primers comply with all air quality standards and regulations. Designed for machine application and formulated with stress-corrosion cracking inhibitors.

The Anti-Corrosion Layer

The Anti-Corrosion Layer is engineered for maximum adhesion to the primed surface with excellent conformability.

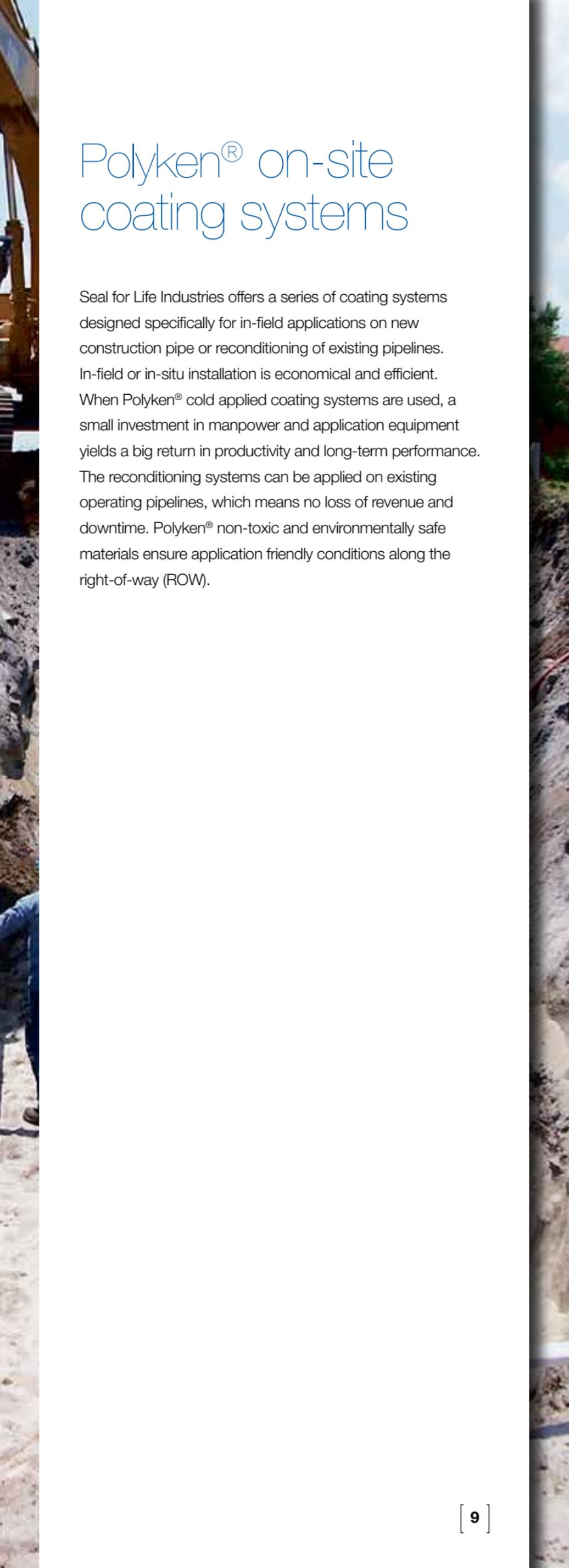
The Middle and Outer Mechanical Protection Layers

The Middle and Outer Mechanical Protection Layers provide exceptional handling and in-service protection of the coating system.

Weld Stripping Layer

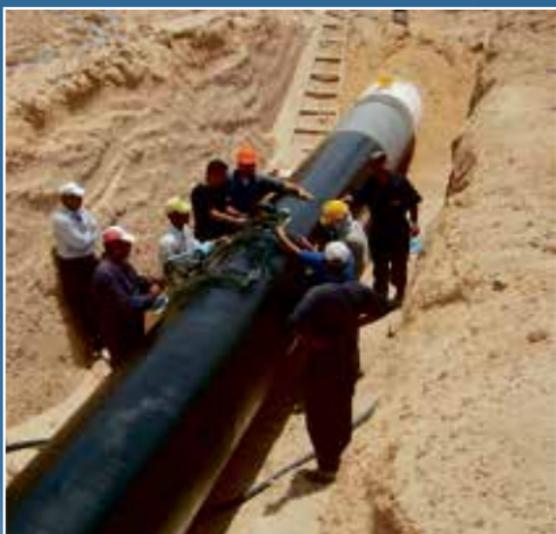
Weld Stripping Layer is used in the corrosion protection of spiral and longitudinal weld areas.





Polyken® on-site coating systems

Seal for Life Industries offers a series of coating systems designed specifically for in-field applications on new construction pipe or reconditioning of existing pipelines. In-field or in-situ installation is economical and efficient. When Polyken® cold applied coating systems are used, a small investment in manpower and application equipment yields a big return in productivity and long-term performance. The reconditioning systems can be applied on existing operating pipelines, which means no loss of revenue and downtime. Polyken® non-toxic and environmentally safe materials ensure application friendly conditions along the right-of-way (ROW).



Product range

Polyken® carries a full line of products to complement the main line coating systems and meet the challenges of modern pipeline activities.

- **Utility work:** hand-applied tape products for gas utility, oil field, and plumbing applications on small diameter pipe.
- **Coating repair:** cold-applied tape products for plant and field repair of main line coating systems.
- **Specialty fittings and fabrication work:** a variety of tape systems and mastics that conform to irregularly-shaped pipe.
- **Field joints:** single-sided and double-sided tape systems that conform to bell and spigot, welded and mechanically-coupled field joints.
- **ROW construction:** Rockshield system, tie-in, and above-ground tape systems for use at the job site by the pipeline contractor.
- **Offshore Tapes:** Whether replacing PVC on welded joints or protecting Pier Pilings, Polyken® has the tape coating for the job.

Polyken® product range

New construction / Reconditioning Systems		
Product	Uses and general characteristics	Total thickness
		Metric
1019	Solvent-based primer designed for machine application on abrasive-cleaned or wire brushed pipe surfaces. Contains stress-corrosion cracking inhibitors.	N/A
1027	Solvent-based primer designed for brush, roller or spray application to mechanically-cleaned reconditioned pipe surfaces. Contains stress-corrosion cracking inhibitors.	N/A
980 980-20 980-25 980-30	Anti-corrosion layer designed for machine application under various climactic conditions. Excellent conformability to the primed pipe surface with proven long-term in-ground performance.	0.51 mm 0.63 mm 0.76 mm
955	Mechanical protection coating layer designed for machine application. Protects Polyken® 980 from backfill and in-ground construction damage.	0.76 mm 0.63 mm

* For pipe diameters up to 36" or DN900

High Shear System		
Product	Uses and general characteristics	Total thickness
		Metric
2019	High shear primer designed for machine application on mechanically-cleaned pipe surfaces. Formulated with stress-corrosion cracking inhibitors and materials that remain stable at elevated temperatures.	N/A
2000	Anti-corrosion layer formulated with a high shear adhesive to work in conjunction with the Polyken® 2019 primer. The polymeric backing is designed to remain pliable at elevated temperatures for long-term corrosion protection.	0.64 mm
2055	Mechanical protection layer designed for machine application to protect the Polyken® 2000 layer from backfill and construction damage. The polymeric backing is designed for long-term stability at elevated temperatures.	0.64 mm
2036	Hand-applied version of the Polyken® 2000 system for application to field joints, fittings and specialty piping. Also used as an in-field repair coating system.	0.64 mm

* For pipe where soil stress conditions exist

High Temperature Polypropylene System		
Product	Uses and general characteristics	Total thickness
		Metric
1619	Thermally activated solvent-based primer for spray, roller or brush application to mechanically-cleaned new or reconditioned pipe. Formulated for stability at elevated temperatures and contains stress-corrosion cracking inhibitors.	N/A
1600HT	Cross linked polyethylene based coating system with a cross-linked adhesive capable of maintaining long-term protection at high temperatures. The system is applied in multiple layers using commercially available reconditioning equipment.	0.64 mm, 0.76 mm

* for application on high temperature pipelines operating at maximum temperatures up to 121°C (250°F)

Thickness	ASTM D1000 Adhesion to primed steel pipe		Maximum temperature		
	US Imperial	Metric	US Imperial	Metric	US Imperial
N/A	N/A	N/A	100°C	212°F	
N/A	N/A	N/A	100°C	212°F	
20 mil 25 mil 30 mil	33 N/10 mm	33 N/10 mm	85°C *	185°F *	
30 mil 25 mil	33 N/10 mm	33 oz/in	85°C	185°F	

Thickness	ASTM D1000 Adhesion to primed steel pipe		Maximum temperature		
	US Imperial	Metric	US Imperial	Metric	US Imperial
N/A	N/A	N/A	100°C	212°F	
25 mil	28 N/10 mm	250 oz/in	93°C	200°F	
25 mil	33 N/10 mm	300 oz/in	93°C	200°F	
25 mil	28 N/10 mm	250 oz/in	93°C	200°F	

Thickness	ASTM D1000 Adhesion to primed steel pipe		Maximum temperature		
	US Imperial	Metric	US Imperial	Metric	US Imperial
N/A	N/A	N/A	121°C	250°F	
25, 30 mil	33 N/10 mm	300 oz/in	121°C	250°F	

(250°F)

Polyken® product range

Pipe Wrap, Joint Coatings and Accessory Products		
Product	Uses and general characteristics	Total thickness
		Metric
1027	Solvent-based primer designed for brush, roller or spray application to mechanically-cleaned pipe surfaces. Contains stress-corrosion cracking inhibitors.	N/A
908	General utility tape for hand application on small diameter pipe, joints and fittings.	0.20 mm
911	General utility tape for hand application on small diameter pipe, joints and fittings.	0.23 mm
910	All purpose tape system for field application in the oil patch.	0.25 mm
900	General utility tape for hand application on small diameter pipe, joints and fittings.	0.3 mm
920	Utility tape system with increased mechanical integrity for hand or machine application on small diameter pipe.	0.51 mm
905 (-30) 905 (-40)	Cold-applied tape system used for tie-in sections during pipeline construction.	0.75 mm 1.02 mm
930 (-35) 930 (-50)	Heavy duty joint wrap tape for hand wrapping in applications where higher shear properties are required. Designed without release liner for less waste and ease of use. EN/DIN B30 Qualified.	0.89 mm 1.27 mm
931	Self-adhering, 100% butyl rubber filler used to fill voids and crevices around joints, fittings and specialty piping. Must be over-wrapped with any of the Polyken® joint wrap systems.	0.97 mm
932 (-35) 932 (-50)	Cold-applied tape system with an elevated high-tack adhesive. Provides excellent conformability when hand applied to field joints, fittings and specialty piping. EN/DIN B30 Qualified.	0.89 mm 1.27 mm

Thickness	ASTM D1000 Adhesion to primed steel pipe		Maximum temperature	
	US Imperial	Metric	US Imperial	Metric
N/A	N/A	N/A	100°C	212°F
8 mil	N/A	N/A	66°C	150°F
9 mil	11 N/10 mm	100 oz/10 mm	66°C	150°F
10 mil	11 N/10 mm	100 oz/in	66°C	150°F
12 mil	11 N/10 mm	100 oz/in	66°C	150°F
20 mil	11 N/10 mm	100 oz/in	66°C	150°F
30 mil 40 mil	38 N/10 mm	350 oz/in	85°C	185°F
35 mil 50 mil	27 N/10 mm 33 N/10 mm	250 oz/in 300 oz/in	85°C	185°F
38 mil	27 N/10 mm	250 oz/in	121°C	250°C
35 mil 50 mil	16 N/10 mm 18 N/10 mm	150 oz/in 160 oz/in	50°C 50°C	122°F 122°F

Polyken® product range

Pipe Wrap, Joint Coatings and Accessory Products (cont.)		
Product	Uses and general characteristics	Total thickness
		Metric
933 (-25)	Specifically designed to provide additional protection of the weld steam of a spiral or longitudinally welded pipe.	0.64 mm
934(-35) 934(-50)	Cold-applied tape system with a high tack adhesive Used as a patch/repair system and as the primary corrosion protection system on field joints, fittings and specialty piping.	0.89 mm 1.27 mm
936(-30) 936(-50)	Cold-applied, high tack tape system specifically for above-ground protection on cleaned pipe surfaces. The system is formulated to resist degradation caused by exposure to UV rays and various outdoor conditions. Long-Term UV Resistance.	0.762 mm 1.27 mm
937	Brush-applied mastic coating to protect irregularly-shaped underground metal surfaces.	N/A
938	Brush-applied mastic coating to protect irregularly-shaped underground metal surfaces.	N/A
939	100% solids mastic designed as a self-adhering filler material prior to overcoating with Polyken® joint coating tape systems.	**
942	Cold-applied, double-faced tape systems for in-field or plant application on mechanically-cleaned and primed pipe. The Polyken® 942 complies with the DIN 30672 standard when used in conjunction with a mechanical protection layer. EN/DIN C50 Qualified.	0.76 mm
955 EN	Mechanical protection layer for use with Polyken® 942 coating product. Easy hand or machine application.	0.76 mm
954	Mechanical protection layer for use with all of the Polyken® joint wrap coating products. Easy hand or machine application.	0.38 mm
4000(-35)	Cold-applied coating system designed for the corrosion protection of field joints, fittings, and specialty piping. This system does not require a primer or liquid adhesive. EN/DIN B30 Qualified.	0.89 mm
5000	Rockshield system - polyethylene diamond mesh screen helps protect against backfill and handling damage during construction.	4.0 mm
5200	Rockshield system - polyethylene mesh laminated to polypropylene fabric padding for the ultimate supplemental coating protection.	6.6 mm

** See data sheet

Offshore tapes		
Product	Uses and general characteristics	Total thickness
		Metric
980-SSJ	Polyken® 980-SSJ Joint Coating has been specifically designed and ideally suited for the corrosion protection of welded joints of Lay-barge installed pipelines.	65 mil
670	Specifically designed and ideally suited for the corrosion protection of "in-situ" pilings installed in fresh or sea water	1.54 mm
671	Mechanical protection layer for use with Polyken® 670 coating product.	1.54 mm

Thickness		ASTM D1000 Adhesion to primed steel pipe		Maximum temperature	
US Imperial	Metric	US Imperial	Metric	US Imperial	
25 mil	2.2 Kg/cm	200 oz/in	85°C	185°F	
35 mil 50 mil	27 N/10 mm 35 N/10 mm	250 oz/in 320 oz/in	66°C 66°C	150°F 150°F	
30 mil 50 mil	22 N/10 mm 22 N/10 mm	200 oz/in 225 oz/in	66°C 66°C	150°F 150°F	
N/A	N/A	N/A	66°C	150°F	
N/A	N/A	N/A	66°C	150°F	
**	33 N/10 mm	300 oz/in	93°C	200°F	
30 mil	33 N/10 mm	300 oz/in	50°C	122°F	
30 mil	N/A (outerwrap)	N/A (outerwrap)	66°C	150°F	
15 mil	N/A (outerwrap)	N/A (outerwrap)	85°C	185°F	
35 mil	17 N/cm 12 N/cm	160 oz/in 110 oz/in	50°C -34°C	122°F -30°F	
160 mil	Rockshield	Rockshield	66°C	150°F	
260 mil	Rockshield	Rockshield	66°C	150°F	

Thickness		ASTM D1000 Adhesion to primed steel pipe		Maximum temperature	
US Imperial	Metric	US Imperial	Metric	US Imperial	
1.66 mil	> 4 N/cm (unprimed)	> 20 lbs/in. (unprimed)	85°C	185°F	
60 mil			66°C	150°F	
60 mil	N/A (outerwrap)		66°C	150°F	

STOPAQ[®]
Self Healing Corrosion Prevention
& Sealant Technology

+

Polyken[®]
Pipeline Tape Technology

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Visco-elastic Tape Solutions

The synergy of Seal For Life Industries

Everyday brings us new opportunities to put the combined synergistic and innovative strengths of our companies into practice wherever required, throughout the world. It's a world that we face with an unequivocal mission which we consider so important that we've named our collective business after it: Seal For Life.

Above or under water, from salty swamps to complex polar operations, Seal For Life offers a number of specialist and proven products. The best approach for many projects is to combine these products, thus delivering a tailor made and optimized solution for each individual project.

Flexible 1 + 1 = 3 principle

We call this the 1 + 1 = 3 principle, which is made possible by the direct and open contacts between our products specialists. It means that Seal For Life can respond rapidly and effectively to any project, no matter what combination of products and specialisms is applied.

1+1 = 3 principle is made a reality by Seal For Life Industries. Seal For Life is the constant factor!

For more information regarding specifications, track records and other commercial/technical information, please consult us at:

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Manufacturing sites:

Kentucky - USA, Tijuana - Mexico, Westerlo - Belgium,
Baroda - India, Stadskanaal - the Netherlands,
Dammam - Saudi Arabia



 **SEALFORLIFE**
Industries

 **Polyken**[®]
Pipeline Tape Technology