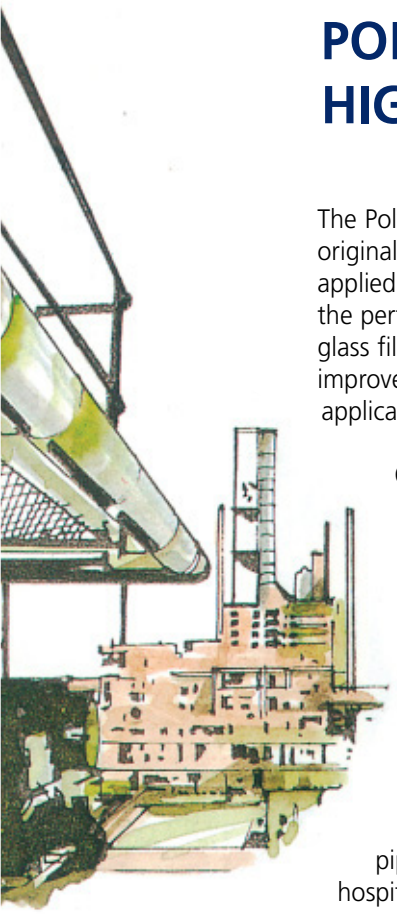
CORROCOAT

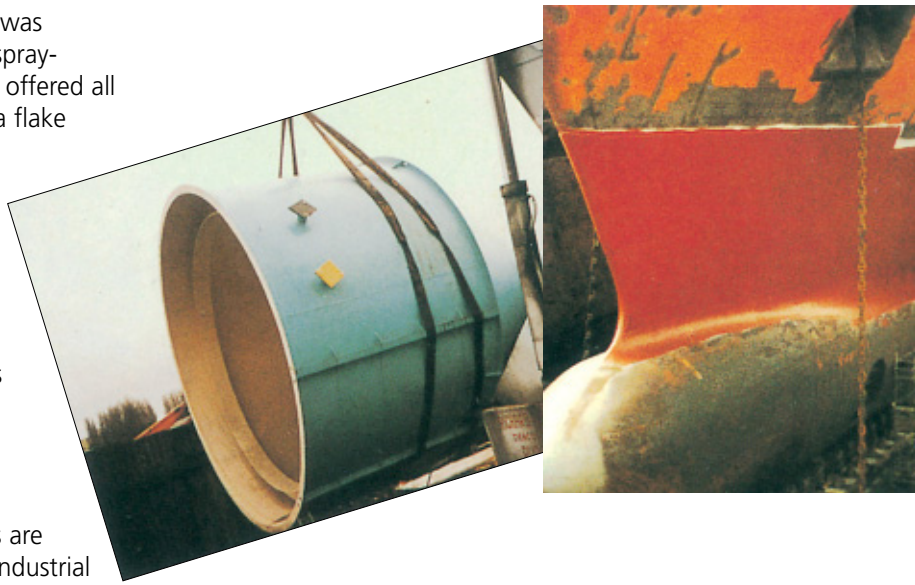
POLYGLASS

high performance coating systems

POLYGLASS –
HIGH PERFORMANCE COATING SYSTEMS



The Polyglass range of materials was originally developed to create a spray-applied protective coating which offered all the performance advantages of a flake glass filled system, together with improved ease and speed of application.



Over the years, the Polyglass range has expanded to include different formulations developed to meet specific application requirements.

Today, these products are used throughout the industrial world, to protect components as diverse as offshore process vessels, pipelines, structural steel and even hospital hot water tanks. Polyglass has proven highly effective in extremely corrosive environments.

Specially formulated to give optimum ease of application and short cure cycles, Polyglass offers a remarkably low permeation rate, combined with excellent resistance to abrasion and cathodic disbondment. The inherent durability and undercutting resistance of this high performance coating enables it to remain intact, even when damaged through to the metal substrate, with negligible under-film creep.

POLYGLASS – UNIVERSAL APPLICATION POTENTIAL

Polyglass requires no primer although a primer can be provided where logistics demand. It is easy to apply, cures quickly and can be applied in single coat applications.

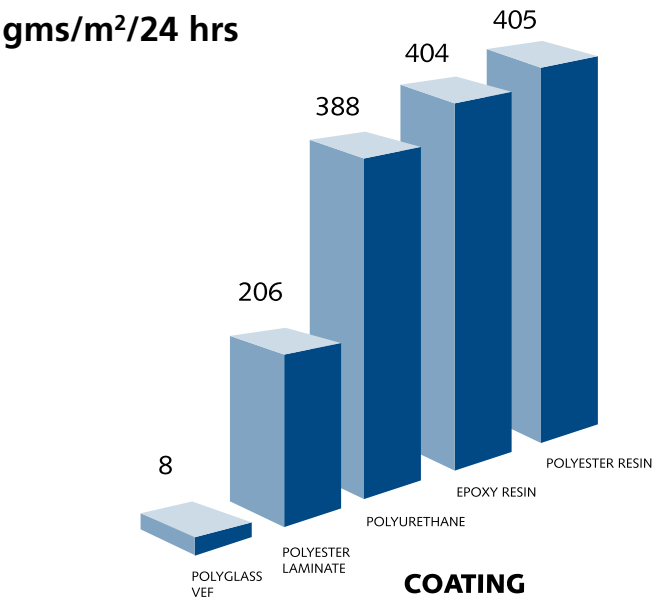
It provides an extremely tough, long life, highly corrosion and chemical resistant lining.

Quick cure times mean that Polyglass can be walked on three hours after application.

Polyglass can be used on a wide variety of substrates including Steel and Concrete, and has been used for protection in the Offshore, Oil and Petrochemical, Power Generation, Marine, Water/Sewerage and Process industries.

Polyglass materials can be used with standard airless spray set-ups, plural component systems and for small areas with conventional gun and pressure pot. Polyglass materials cure at low temperatures and can be used at ambient temperatures as high as 40°C. Single coat applications, quick cure times and simple application can reduce down time significantly and total life cycle costs, compared with conventional paint and coating systems, can be reduced by up to 60%.

WATER VAPOUR TRANSMISSION



Polyglass is produced with a specially manufactured micro flake using ECR (extra corrosion resistant) glass.

ECR glass flake imparts better qualities to Polyglass than standard glass flakes and in conjunction with highly modified resin systems provides a very low permeation, mechanically strong, tough and abrasion resistant coating with outstanding long-term performance.

THE RANGE OF POLYGLASS AND ASSOCIATED MATERIALS

Polyglass VE/VEF

A modified epoxy vinyl ester filled with flake glass.
Application: Airless Spray/Brush
Temperature limitation:
Maximum 110°C immersed.
160°C gaseous

Polyglass VE is used where resistance to chemicals is of particular importance, or where aggressive chemical attack at elevated temperatures is prevalent.

Polyglass 100

Isophthalic polyester/acrylic co-polymer filled with flake glass.
Application: Airless Spray.
Temperature limitation:
Maximum 60°C immersed.

Polyglass 100 is a low cost version of the standard Polyglass system, offering an ideal solution for aggressive atmospheric environments and immersed conditions. Typical applications include coastal steel work, splash zones and other aqueous conditions. Also used as a heavy duty flooring compound.

Polyglass PPA & PPV

Two-pack, air dried reactivation flake glass primer/sealer based on unsaturated polyester/vinyl ester resins.

Used as a holding primer for ferrous substrates prior to the application of Polyglass VE. Also performs well as a concrete primer.

Polyglass VEF Material Test Data

Test	Test Method/std.	Result
Compressive Strength	BS 6319: Part 2: 1983	827 kg cm^2
Flexural Properties (three point method)	BS 2782: Part 10: Method 1005: 1977	118° @ 1 kg
Tensile Strength	BS 6319: Part 7: 1985	26.7 N/mm^2 (3874 psi)
% Elongation to break	BS 6319: Part 7: 1985	0.6%
Adhesive Strength on to steel	ASTM D1002	441 kg/cm^2 cohesive failure
Shear Strength	BS 6319: Part 4: 1984	388 kg/cm^2
Hardness	BS 2782: Part 10: Method :1001: 1977	51 Barber Colman
Impact Strength	BS 3900: Part E3: 1973	6.5 Joules Forward 2.5 Joules Reverse
Abrasion Resistance	ASTM D4060-90	218 mg
Water Vapour Permeability	ASTM D1653	2.6 x 10^{-5} perm inch
Heat Distortion Temperature	Different Scanning Calorimetry (DSC)	140°C
VOC level	COR101	6.5%
Shrinkage Ratio	COR102	7%
Resistance to Cathodic Disbondment	* BS 3900 Part F11	Excellent

* When tested for 28 days at -1.6V vs SCE shows no disbonding. After 112 days cathodic disbonding varies between 1 to 3mm

This test data has been obtained under laboratory conditions at 20°C on a standard cured sample.
Results may vary with state of cure and environment.

Polyglass HA & HA VE

Two-pack, cold cured polyester or vinyl ester/acrylic co-polymer flake glass.
Application: Brush or short-haired roller. For use as a stripe coating to spray grades of Polyglass.

Ecoflake

A styrene-free polyester with very low VOC emissions, low shrinkage and for uses similar to standard Polyglass.
Application: Airless Spray.
Temperature limitation:
Maximum 90°C immersed.

Please note: All temperature limitations given are intended as guidelines only and will vary significantly according to service type and conditions. To ascertain the suitability of product for specific applications, full environmental data should be supplied to Corrocoat to allow detailed evaluation of the proposed duty.

All information is given in good faith without guarantee or liability.

Corrocoat branches throughout the world. For your nearest Corrocoat branch contact Corrocoat UK.
Technical data sheets, product application data and chemical resistance lists are available from :–

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