



Corrosion, erosion and cavitation are all too often a problem in industry. Replacing heavily corroded and damaged parts is an expensive and time consuming business. Our coating range offers a solution to almost every corrosion problem in industry. Whether these corroded parts are, metal, concrete or plastic, Polyflake® has an effective and durable solution.

Developed in Europe and made from chemical resistant highly modified resins, mixed with glass flakes, Polyflake® can repair, rebuild and protect equipment to original standards at a much lower cost than replacement.

The Polyflake® system is a controlled polymerisation process through which the resin is bonded to the original bare metal. In a three-phase process, the corroded or damaged machine parts are restored to their original specifications. The formulations can be varied to produce spray, brush or trowel grades to meet the specific needs of each application, and suit the corrosive, chemical and mechanical conditions to be encountered.

The principle of using fillers of flakes is to reduce permeability, to protect against chemicle agents and to enhance fire resistance. Polyflake® uses C-glass flakes specifically developed for their chemical resistance. These glassflakes mixed with Polyflake's high performance modified resin produce the Polyflake Coatings which will substantially protect metal and non-ferrous surfaces, even in severe corrosive environments.

Polyflake® has been effectively used in immersion conditions at a temperature of 100 deg C. Customer evaluation indicates Polyflake's® ability to withstand double salinity levels at boiling point.



Key Features

- Linings and coatings containing glassflakes show superior resistance to abrasion and impact. They enhance a vacuum bond with the substrate to the extent that no undercutting will occur.
- Because the glassflakes are only 3-4 microns thick, there can be as many as 300 parallel overlapping glassflakes in a 2mm thick lining - thus a very tortuous path is offered to liquid or vapour penetration.
- Examination of underlying surfaces after removal of the Polyflake® coatings showed that no under-film oxide had been formed. This proves that the product is highly resistant to penetration of oxygen and other corrosive chemicals and agents.
- Glassflakes control the shrinkage stress normally associated with resins during their cure and reduce the co-efficient of expansion of the resin to match closely that of aluminium.
- Coupled with the already excellent adhesion properties, the glassflakes enable the bond with steel to be maintained at temperatures as high as 170°C.

