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British Standard

Lining of equipment with polymeric materials for the process industries

Part 3. Specification for lining with stoved thermosetting resins

Revêtements intérieurs à base de polymères des matériels pour les industries de procédés
Partie 3. Revêtements à base de résines thermodurcissables étuvées

Auskleidung von betriebstechnischen Anlagen in der verarbeitenden Industrie mit Polymerstoffen
Teil 3. Auskleidung mit duroplastischen Harzen

British Standards Institution

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Foreword

This Part of this British Standard has been prepared under the direction of the Pressure Vessels Standards Committee. It is one of five Parts of a new standard that will supersede Parts 1, 4, 5 and 6 of CP 3003, the change in format arising from the fresh approach adopted to conform with developments in the associated lining technology.

The Technical Committee would like to acknowledge the contributions made by the Rubber and Plastics Research Association of Great Britain which supplied the initial draft document, and the users and the manufacturers on whose submissions the draft document was based.

The stoved thermosetting resins referred to in this standard are used for a number of different duties, including protection against corrosive environments, prevention of contamination of products and provision of surfaces that do not foul easily, or that can be cleaned easily.

The thickness of this type of resin lining is 300 µm or less and it is difficult to obtain linings that are pinhole free.

Furthermore, even if linings as applied are free from imperfections, consideration has to be given to the possibility of damage in operation.

Therefore, before deciding to use this type of lining some knowledge is required of the likely corrosion rate of the substrate and the mechanism of that corrosion. If the corrosion rate is low, then the use of a thin lining is not a critical factor. If the corrosion rate is high and due to simple solution of the metal, then it is not advisable to use this type of lining because of the risk of severe corrosion through a pinhole. On the other hand, if a high corrosion rate is caused by an effect such as erosion/corrosion, then these linings can be effective barriers.

It has been assumed in the drafting of this British Standard that the execution of its provisions is entrusted to appropriately qualified and experienced people.

Compliance with a British Standard does not of itself confer immunity from legal obligations.