Advanced Materials for Water Handling: Composites and Thermoplastics

1st Edition

Derick Scott

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Preface

The word 'plastic' has tended to be used in a general and sometimes derogatory manner for many years. The author apologises for using this word frequently, but has found no alternative to describe both thermoplastic and thermosetting composite materials in one word.

Thermosetting and composite materials are considered as identical in this book, unless specific reference is made to a thermosetting resin, and in this case all information concerns the resin itself, rather than a composite material. FRP (fibre reinforced plastic) or GRP (glass fibre reinforced plastic) may also be used instead of composite, especially when used in relation to industrial manufacturers and some standards.

The author has more than 30 years of experience in the fields of composite and thermoplastic materials, and has been actively involved in the design, manufacture, sales and installation of a large range of equipment for the water, oil and chemical markets in Europe, the Middle East and North America. He has considerable experience with ISO 9000 quality systems in relationship to pipe systems and vessels manufactured from thermoplastic and composite materials, as well as ASME Section X for the design, manufacture and testing of composite high pressure vessels. He has previously published with Elsevier Advanced Technology a review of the European FRP Tank and Vessel market, and has worked as a consultant in the field of manufacture and sales of composite materials for the last five years.

Comments, requests for further clarification and/or further contributions from suppliers of raw material, finished or semi-finished products, end users or organisations concerned with the specification, design or working of plastic materials in contact with water are more than welcome and will be considered for inclusion in the first revision of this handbook.

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