



SURFACE TREATMENT OF TITANIUM

A DESIGNERS AND USERS HANDBOOK



TITANIUM INFORMATION GROUP

The TITANIUM INFORMATION GROUP (TIG) is an association of suppliers, design engineers, fabricators and researchers of titanium, formed with the intention of promoting the wider use of the metal and its alloys.

The aim of the Group is to influence the initial selection of materials so that titanium is given the consideration merited by its unique combination of mechanical properties, outstanding resistance to corrosion and cost effectiveness in a wide range of demanding applications.

Regular publications and literature available from the Group present detailed and up-to-date technical and commercial information to materials engineers, plant and equipment designers and buyers, and provide the answers to everyday questions about cost, availability, fabrication, installation and use of titanium and its alloys.

Members of the Group are available to give presentations about titanium on either a general or specific level to companies or at seminars. A list of member companies of TIG appears on the website. Copies of the CD 'Titanium and Its Alloys' are available for use in educational and training establishments to provide an introduction to the metal, its applications and properties. A list of Data Sheets and other TIG publications may be found on the web at www.titaniuminfogroup.co.uk.

The data and other information contained herein are derived from a variety of sources which TIG believes are reliable. Because it is not possible to anticipate specific uses and operating conditions, TIG urges you to consult with the sales or technical service personnel as appropriate of the individual companies.

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Fretting wear on titanium fanblade snubbers was increased from 100 hours to 30,000 hours by Detonation Gun™ application of a 0.25mm thick tungsten carbide-cobalt coating. Galling in the blade roots was eliminated electroplated copper-nickel-indium alloy. Courtesy Praxair Surface Technologies.

Photographs, diagrams and tables for this publication unless otherwise stated, have been provided by the members of TIG and other companies.

TITANIUM INFORMATION GROUP

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- Welding Titanium- A Designers & Users Handbook
- Titanium for Offshore and Marine Applications