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A new Market Report on the Carbon Fibre and Carbon Fibre Composites Industries Worldwide . . .

The Carbon Fibre Industry: Global Strategic Market Evaluation 2006-2010

by Tony Roberts

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- Global sales of carbon fibre reinforced plastics (CFRPs) are estimated to be \$9.9 billion in 2006, rising to \$13.6 billion by 2010. By 2025, global sales of CFRPs will be over \$25 billion a year
- The global demand for carbon fibre tow in 2006 is estimated to be 27,000 tonnes, and will rise to 34,000 tonnes by 2010
- The global end-use demand for carbon fibre (in 2006) is aerospace/defence 28%, industrial 50% (including infrastructure, wind power and oil and gas) and sports goods 22%
- Europe now accounts for 30% of the world consumption of carbon fibre tow, with North America at 35%, Japan at 15% and the rest of the world at 20%
- Carbon fibre manufacturers will invest \$820 million between 2005 and 2008 to increase carbon fibre capacity by 78%
- The two major aircraft manufacturers – Airbus and Boeing – are forecast to account for 15-20% of the worldwide small tow carbon fibre usage by 2010
- Worldwide, small tow carbon fibre capacity is forecast to increase from 29,750 tonnes in 2006 to 40,600 tonnes by 2008, a huge increase of 36%. By 2008, Japan will produce 46% of the world's small tow carbon fibre, USA will produce 28%, Europe 19% and the rest of the world 7%.
- The global capacity for large tow carbon fibre will increase from 10,300 tonnes in 2006 to 18,800 tonnes by 2010
- Pitch-based carbon fibre capacity will increase from 1,380 tonnes in 2006 to 2,480 tonnes by 2010
- The report is over 270 pages long and includes over 140 tables and over 70 figures giving statistical data, such as volume, value and market consumption, for carbon fibre and also for CFRP
- In-depth profiles of all the major carbon fibre producers worldwide, including financial details (with tables of financial results, plant volume capacities and expansion plans, carbon fibre grade properties, etc.). In-depth profiles of key CFRP manufacturers are also provided

AVAILABLE NOW – “The Carbon Fibre Industry: Global Strategic Market Evaluation 2006-2010” is an in-depth report that examines the worldwide markets for carbon fibre and carbon fibre reinforced plastics (CFRPs). Over 270 pages long and featuring over 200 tables and figures, the market report provides up-to-date and pertinent information on all aspects of the carbon fibre industry, spanning manufacture, processing, supply and end-use worldwide. Future scenarios for growth to 2010 are provided through comprehensive statistical data (in table and graph formats) and analysis of likely trends.

In-depth profiles of all the major carbon fibre and CFRP producers worldwide are included, with details such as recent financial results, plant volume capacities and expansion plans.

Since the first commercial production of carbon fibre in the late 1960s, the industry has grown to the present global production level of 27,000 tonnes (60 million lb) of carbon fibre tow, with a value \$1,300 million. The sector is a particularly dynamic one, driven in recent years by rapid growth in the civil aerospace industry and various other end-users, such as wind energy, offshore oil/gas, pressure vessels, defence and sports goods. As a result, carbon fibre reinforced plastics (CFRPs) are forecast to grow to a value of \$13.6 billion by 2010, representing an increase of 37% over 2006.

In 2006, worldwide carbon fibre consumption was geographically divided between Europe at 30%, North America at 35%, Japan at 15% and the rest of the world at 20%. Demand for carbon fibre tow will increase by 7,000 tonnes during the 2006-2010 period, representing an increase of 26%. The USA, Europe and Japan are the major consumers, but countries such as China, Taiwan, India, Bangladesh and Vietnam are also driving the demand upwards.

The report looks at these areas in detail, and also discusses the production and marketing of precursor, carbon fibre (PAN and pitch-based products), plus intermediate products such as woven fabrics, prepreg and resin matrix materials.

In order to meet increasing demand, the carbon fibre manufacturers will invest over \$800 million over the next three years, raising carbon fibre capacity by 78%. The report will analyse all the expansion plans in detail and also predict the impact they will have on the carbon fibre supply/demand situation during 2006-2010. Future capacity expansion should allow for price reductions in real terms, allowing further in-roads into less advanced applications, such as general automotive, civil engineering and infrastructure.

There are many other facts and figures are given in “The Carbon Fibre Industry: Global Strategic Market Evaluation 2006-2010”. The market report is aimed at companies manufacturing and/or supplying carbon fibre, carbon fibre intermediate products (such as prepreg), carbon fibre reinforced plastics (CFRPs) and their end users, as well as consultants and others interested in this important and dynamic market.

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Hexcel Corp

Mitsubishi Chemical Corp / Mitsubishi Chemical America Inc

Mitsubishi Rayon Co Ltd / Grafil Inc

Nippon Graphite Fiber Corp

SGL Carbon Group / SGL Technologies

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Advanced Composites Group Ltd (ACG)

Aldila Inc

Gurit Composite Technologies

Hitco Carbon Composites Inc

Nelcote Inc (FiberCote Industries)

Primco Ltd

Ten Cate Advanced Composites BV

List of abbreviations used

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ABOUT THE AUTHOR - TONY ROBERTS

Tony Roberts has over 35 years experience in the carbon fibre and advanced composites industry sectors. From the 1970s to the 1990s, he was with Courtaulds Grafil, Coventry, UK, developing the growth of applications for carbon fibres in the aerospace, industrial and sports goods sectors. In this capacity, he spent considerable time in Europe, Japan and South East Asia, developing a comprehensive understanding of global markets for carbon fibre. He subsequently moved to Mitsubishi Rayon Co Ltd, working in the USA as Sales and Marketing Director for subsidiary companies Grafil Inc and Newport Adhesives and Composites Inc. From 2005 to the present, Roberts has worked as an independent consultant, in which capacity he has carried out consultancy work into a range of advanced materials, specialising in those made with carbon fibre.

Key data on European markets for the report was researched and supplied by Ed Trewin, who is also a consultant with long experience of the carbon fibre industry, with particular emphasis on European markets. He was the author of the previous edition of the report.