Plymouth - Britain's Ocean City making waves in advanced manufacturing

Significant Advanced Manufacturing Specialisation (TTWA) Source: BRES (2011)

Specialisation	Employees	LQ
Building of ships & floating structures	4,500	40.5
Building of pleasure & sporting boats	1,900	42.9
Manufacture of bearings, gears, gearing & driving elements	500	9.2
Manufacture of fluid power equipment	300	8.4
Manufacture of tubes, pipes, hollow profiles and related fittings, of steel	300	6.3
Manufacture of medical and dental instruments and supplies	700	3.3
Manufacture of non- domestic cooling & ventilation equipment	300	2.5
Manufacture of electronic components	100	1.7
Manufacture of instruments & appliances for measuring	400	1.6

NB Location Quotient (LQ) compares share of employment in Plymouth to the GB average. Figures above 1 suggest specialisation in the local economy.

Skilled Occupations

& testing navigation

	Plymouth City		LQ
	Employees		
Science & Technology Professionals	3,000	2.1	1.2
Teaching & Research Professionals	8,600	6.2	1.2
Science & Technology Associate Professionals	2,200	1.6	0.9
Skilled Metal & Electronic Trades	6,000	4.3	1.2
TOTAL	21,200	15.2	1.0

> Plymouth Manufacturer's Group (PMG)

- **>** An informal network for like-minded business people at the most
- > The PMG is a natural repository for ideas on manufacturing in the City of Plymouth and its surrounding sub-region
- > Also has a number of sub-groups that specialise in subjects such as: health and safety; skills and training' finance & compliance and resource efficiency

Specialist Companies

BD (Becton Dickinson)	Fine Tubes
The Barden Corporation (UK) Ltd	Hellermann Tyton
Pipex px®	Invensys Climate Controls
Vi-Spring	UTC Aerospace Systems
The Wrigley Company Ltd	Kawasaki Precision Machinery (UK) Ltd
Rittal-CSM	Bombadier Transportation Signals UK Ltd
	The Barden Corporation (UK) Ltd Pipex px® Vi-Spring The Wrigley Company Ltd

The Advanced Composites Source: NOMIS (2011) Manufacturing Centre (ACMC) at Plymouth University

- > A leading composites facility based in the School of Marine Science and Engineering of Plymouth University
- > Active in a wide range of projects and aims to bridge the traditional gap between academic research and development and the needs of industry
- > Works with large and small companies in all sectors of the composites industry in implementating new technology, improving processes, testing materials and components and solving manufacturing and materials problems



Plymouth University Enterprise Solutions

- > Aimed at individuals, businesses and the community
- > A gateway to accessing Plymouth University's expertise, research, funding solutions, services and facilities
- > Entrepreneurship and business start solutions
- > Knowledge transfer and skills and training

Plymouth Electron Microscopy Centre

at Plymouth University

- > Provides expert support and access to a wide range of microscopy solutions
- > Supports a broad user group that spans manufacturing, engineering, textiles, electronics, biomedical and other sectors

South West Marine Energy Park

- > First of its kind in the UK, a private-public sector partnership backed by Government
- > Brings together exceptional physical, commercial, supply chain and R&D assets to develop and grow marine energy sector (wave, wind and tidal)
- > Mechanism to encourage commercialisation of the sector and attract inward investment

Growth Acceleration Investment Network (GAIN)

- > To accelerate growth and investment in high quality businesses and ideas to create wealth and jobs in the South West peninsula
- > Builds upon and adds value to the existing range of business services, assets and facilities by joining them all up, making them focused and
- > Providing access to new business and growth opportunities, finance and investment, and world class knowledge and research facilities and
- > Reduce risk and maximise growth by finding the best businesses and ideas and helping the businesses to become investment-ready

City College Plymouth

- **)** One of the largest FE colleges on the South Coast
- > 15,721 students, 921 apprentices and 840 employees
- > Investing £5 million in refurbishment of the college's Engineering facility and a state-of-the-art learning environment will be delivered in September 2013
- > Provides apprenticeships to foundation degrees in engineeringrelated subjects, including marine engineering, electrical engineering and renewable energy and engineering

University Technical College Plymouth

- ➤ Opening in September 2013 (14-19 year olds)
- > Sponsored by local business
- > Specialising in science, technology, engineering and mathematics
- > Focuses on marine engineering and advanced manufacturing sectors with a strong emphasis on enterprise and innovation

South West Manufacturing **Advisory Service Ltd**

- > Funded by BIS (Department for Business, Innovation and Skills)
- > Provides manufacturing business support for companies based in England, helping them to improve and grow
- > Designed to help the manufacturer streamline processes, reduce waste, become more energy efficient and generally improve and

South West Talent Retention Scheme

- > Matches talent to opportunity in order to retain skills in the financial services sector in the South West of England
- > The Rapid Match vacancy system:
- Promotes an individual's skills and experience to prospective
- Provides a pool of sector specialists for prospective employers looking to recruit locally or regionally

iNets Aerospace and Advanced Engineering

- > West of England Aerospace Forum (WEAF) runs the Aerospace and Advanced Engineering iNet, networking and training events
- > It aims to facilitate an environment where companies can improve their competitiveness and grow the industry
- > Actively encourages skills development and leads key Steering Groups within the aerospace and defence industry

Technology Strategy Board

- > The Technology Strategy Board is all about driving innovation
- > Its role is to stimulate technology-enabled innovation in the areas which offer the greatest scope for boosting UK growth and productivity
- > To promote, support and invest in technology research, development and commercialisation
- > Advising Government on how to remove barriers to innovation and accelerate the exploitation of new technologies

UK Trade and Investment (UKTI)

- > Works with UK-based businesses to ensure their success in international markets, and encourage the best overseas companies to look to the UK as their global partner of choice
- > Has a customer commitment to helping its UK and international customers by providing a range of services, to a high standard and improve customer service by listening to customer feedback
- > Has a co-ordination role across government to establish a more systematic approach to relationships with companies which are the most economically significant investors and exporters

Engineering Employers Federation

- > Dedicated to the future of manufacturing, helping manufacturing businesses evolve, innovate and compete in a fast-changing world
- > Unique combination of business services, government representation and industry intelligence

Sector Skills Council (SSCs)

- Independent, employer-led and UK-wide organisations that are designed to buld a skills system driven by employer demand
- > Cover over 90% of the UK's workforce and represent the skills and training interests of small to large businesses
- Aim to reduce skills gaps and shortages, improve productivity, business and public service performance, increase opportunities to boost the skills and productivity and improve learning supply through National Occupational Standards (NOS), Apprenticeships, and further and higher education

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National Composite Centre

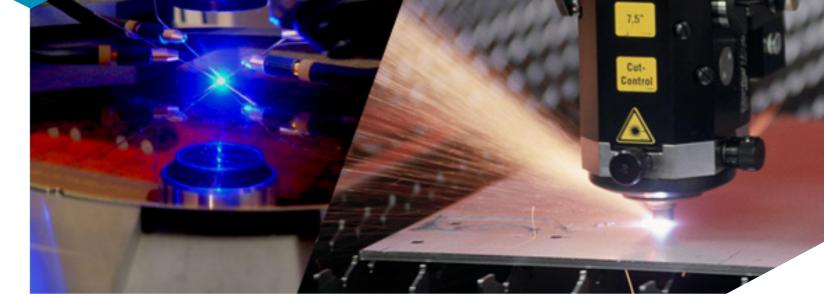
- Provide manufacturing facilities at an industrial scale and rapid manufacturing processes capable of building prototypes to validate design concepts
- > Be the hub of the UK's effort to develop and implement rapid composite manufacturing technologies and systems
- > Lead the co-ordination of a strengthened network of regional centres of composites excellence
- > Provide direction and focus for fundamental research and collaborative links with UK universities
- > Help to develop and co-ordinate training to support the skills base necessary for applying advanced and specialist composite technologies

CFMS Ltd

- > CFMS was created with one core objective: "To revolutionise the capability of simulation-based design processes"
- An independent, not-for-profit organisation, committed to accelerating the delivery of more intuitive and powerful simulation-based design processes
- > Providing a robust framework to maximise opportunities through collaborative research, knowledge sharing and influencing development in areas such as:
- Effective management and contracting mechanisms
- Engineering support and investment
- Technology development
- Process optimisation and automation
- Human barriers to effective deployment







Plymouth provides a vibrant advanced manufacturing business base with the skilled workforce, cutting edge technology and supply chain to make your business a success!

Sector Overview

A variety of high-value added enterprises involved in mechanical, precision, electrical, electronic and communications engineering, serving diverse markets.

Total employment (2011)

ightarrow 8,300 employees rising to 9,100 over the wider travel to work area

Economic contribution (2009)

> Around £400m to city's total GVA (10%)

Plymouth Overview

> Population (2011):	256,400
> Employees (2011):	102,600 (139,100 TTWA)
> Gross Value Added (2011):	£4,327m
> Businesses (2011):	5,870

Median gross weekly wage (2012)

> Plymouth	£454.4
> UK	£505.9

> Take Action

To find out more information about what Plymouth offers the advanced manufacturing sector, or to discuss how our business support service can help meet your business needs, please contact:

Economic Development Team

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