

# MANUFACTURING AND ADVANCED ENGINEERING



Manchester is at the heart of the UK's largest regional centre for manufacturing employment; the North West of England. Whether you are looking for a lab for R&D or large scale manufacturing, Manchester offers the right environment to support commercialisation.



Europe's largest  
centre for advanced  
materials research



114,000  
employed in manufacturing  
and engineering



50,000  
employed in  
advanced manufacturing



8,340  
manufacturing  
companies

£500m  
invested in advanced materials  
in centres of excellence



14,000  
students studying subjects  
relevant to manufacturing  
and advanced engineering



27% of the UK's  
materials science students  
are Manchester-based



£7.7bn  
value of Manchester's  
manufacturing industry

The region's supply chain, talent and access to market are why it is home to some of the world's biggest names including BAE Systems, Cargill, Ferranti, Hitachi, MBDA, Millken, NXP, P&G, Sherwin Williams, Siemens, Thales and Unilever.

## Skills And Access To Labour

The region provides companies with access to some of the best talent in manufacturing and engineering. Over 114,000 people are employed in the sector working in areas as diverse as aerospace, chemicals, defence, electronics systems, precision medical instrument manufacturing, software engineering and transport. The region's workforce is highly skilled with 50,000 employed in advanced manufacturing, and the level of productivity surpasses the national average.

Our talent pipeline is further complemented by over 14,000 students studying engineering and other STEM subjects. This means your business can access 65% of the new talent available across the North West of England.

The region has a large cluster of world-leading engineering consultants. This provides a range of technical expertise in areas such as civil construction and architectural services to major national and international projects. These include Arup, AECOM, Balfour Beatty, Bouygues Energies & Services, Jacobs Engineering, Mott MacDonald and WSP Parsons Brinckerhoff.

## Manufacturing Efficiencies

The region's cluster of manufacturing and engineering businesses offers an established supply chain, many of whom are adept at implementing technology to drive efficiencies. In addition to this, operational costs within Greater Manchester are significantly lower than the south east. The region's strengths in advanced materials and Internet of Things also creates further collaborative opportunities between businesses and expert researchers at the University of Salford, who are driving the UK's strategic national developments.

## Access to Market

Manchester is the gateway to national and international markets. Manchester Airport serves over 200 destinations worldwide via the UK's largest regional airport. The region's comprehensive motorway infrastructure is perfect for meeting distribution needs across the UK and further afield. This is further complemented by Port Salford, the region's inland port which provides multimodal connectivity combining road, rail and sea transport.



National Graphene Institute



Kellogg's

## Investors in Manchester

ARUP



Cargill

HEINEKEN



Kellogg's

NXP



## Research and Development

Manchester's four world-class universities have a track record of working with industry to deliver innovation across major industrial sectors, including aerospace, automotive, technical textiles and the nuclear industries.

They are home to some of the world's leading research institutes including Europe's largest materials science research center, BP's International Centre for Advanced Materials, the National Graphene Institute, Dalton Research Institute, National Composites Certification and Evaluation Centre, Aerospace Research Institute, Institute for Materials Research and Innovation, North West Composite Centre, and the Centre for Autonomous Systems and Robotics. With investments of nearly £500m including the development of the Sir Henry Royce Institute for Materials Research and Innovation, the region is a center of excellence. These assets help to place Manchester at the heart of future growth in the UK's manufacturing sector.

## Technology & Innovation

Manchester has world-leading strengths in new technologies such as graphene and 2D materials. Researchers within the city are working with industry to commercialise applications in areas such as composites, nanotechnologies, 3D printing, sensor technologies, and robotics. In addition to this, companies located here are well-placed to benefit from a growing talent pool of digital skills. With 54,400 employees, the largest cluster outside London, there are numerous collaborative opportunities to deliver the latest tech innovations and drive efficiencies.

## Sector Strengths

- **Food and drink:** Home to the largest concentration of food and drink manufacturing employment in the region. Major companies include McVities, Heineken, Kellogg's and Heinz.
- **Logistics:** Manchester is home to the UK's only airport city. Manchester Airport City Enterprise Zone offers bespoke design and build opportunities for manufacturers and logistics companies.
- **Aerospace and Automotive:** Manchester is at the heart of the largest aerospace cluster in Europe and leads in research and development, with increased interest in advanced materials from automotive manufacturers.
- **Technical textiles:** Manchester has one of the UK's largest technical textiles clusters for both manufacturing and research. Specialisms include medical and healthcare material applications, sport and performance materials, and carbon fibre production.

## How MIDAS can Help

David Hilton, Head of Business Development - Manufacturing and Advanced Engineering to find out how Manchester can help you innovate:

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