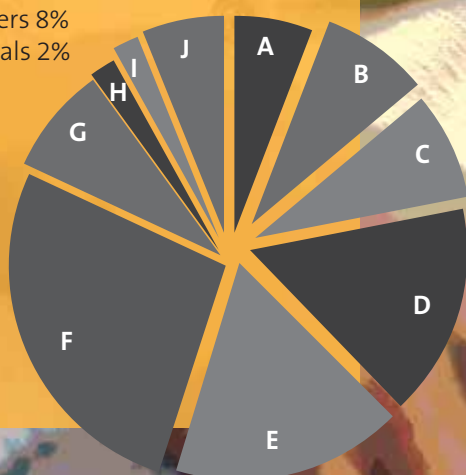


# Manufacturing and Product Design

Manufacturing is one of the largest employment sectors in the UK. It employs around 3.4 million people. Manufacturing includes food and drink, textiles and clothing, processing industries, printing, chemical engineering and pharmaceutical engineering. In fact, the manufacturing sector produces everything we use!

## WHO DOES WHAT?

- A Admin/Clerical 6%
- B Craftspersons 8%
- C Fitters 8%
- D Managers 16%
- E Operators/Assemblers 17%
- F Other Occupations 27%
- G Professional Engineers 8%
- H Software Professionals 2%
- I Stores 2%
- J Technicians 6%



Source: Labour Force Survey 2007  
© Crown Copyright.  
Figures are for England.

## WHAT'S HAPPENING?

- > Locally, 32,800 are employed in manufacturing.
- > Employees in all science, engineering and technology occupations require a high level of numeracy due to the technical and mathematical basis of the jobs in the sector.
- > Employment in lower skilled manufacturing has declined in recent years because of the low cost of labour in other countries, particularly those in South East Asia and Eastern Europe.
- > Apprenticeships can be a good route into a skilled trade. They can offer a more vocational route into work and gaining qualifications. There are more Apprenticeships in engineering and manufacturing than any other sector.
- > Female employees are under represented in this sector.

## WHAT WE THINK WILL HAPPEN

- > There will be an increasing need for higher level skills. Computer aided design (CAD) and other technical and IT skills are particularly in demand.
- > New qualifications, called Diplomas, are being introduced. These will help people prepare for university, college or work. There will be a Diploma in Manufacturing and Product Design. Look out to see whether it's on offer in your area.

## NUMBERS EMPLOYED LOCALLY

> B&NES	3,578
> Bristol	8,086
> North Somerset	5,090
> South Gloucestershire	16,047

Source: Annual Business Inquiry Employee Analysis. ONS Crown Copyright. (From Nomis 2009)

## SOME JOB SUGGESTIONS

- > Chartered/Incorporated Engineer
- > Chemical Engineer
- > Engineering Craftsperson
- > Engineering Operator
- > Fabricator
- > Fitter
- > Packaging Operative
- > Quality Control Inspector
- > Sheet Metal Worker
- > Technician

## IS THIS YOU?

- > *Good at communicating ideas and theories*
- > *Always pay attention to detail*
- > *Interested in craft, design and technology*
- > *Interested in maths*

## HOW MUCH COULD I EARN? Average annual salary (£s)\*

> Assembler/Routine Operator	£19,822
> Biochemist	£35,551
> Food Preparation Trades	£15,671
> Furniture Maker	£18,625
> Mechanical Engineer	£38,426
> Plant and Machine Operator	£23,900
> Production Manager	£46,561

## WHAT 16 YEAR OLDS DID IN 2008

In 2008 83.7% of 16 year olds in the West of England continued in full-time education, while a further 10.2% entered full-time employment or work-based training.

A total of 1,182 Year 11 school leavers from local schools entered full-time employment or work-based training. Of this number, 103 went into engineering and manufacturing related work.

Source: Connexions West of England 2009.

## WANT TO KNOW MORE?

If you're serious about a career in manufacturing and product design – FIND OUT MORE!

- > Use Careerscape, JED, Kudos and the manufacturing section of your Connexions resource area for more information including:
  - > Qualifications
  - > Local training, further and higher education opportunities
  - > Skills and personal characteristics
  - > Rates of pay and working conditions
  - > Local, national and international employers.

## WEBSITES

- > Apprenticeships: [www.apprenticeships.org.uk](http://www.apprenticeships.org.uk) or call the helpline on 08000 150 600
- > Engineering Construction Industry Training Board: [www.ecitb.org.uk](http://www.ecitb.org.uk)
- > Enginuity: [www.enginuity.org.uk](http://www.enginuity.org.uk)
- > Manufacturing and Product Design Diploma: [www.manufacturingdiploma.co.uk](http://www.manufacturingdiploma.co.uk)
- > SCENTA - Science, Engineering and Technology: [www.scenta.co.uk](http://www.scenta.co.uk)
- > SEMTA - Sector Skills Council for Science, Engineering and Manufacturing Technologies: [www.semta.org.uk](http://www.semta.org.uk)
- > Society of Women Engineers: [www.swe.org.uk](http://www.swe.org.uk)

\*Salary rates have been calculated using the average gross pay rates for full-time workers. Figures are for the United Kingdom. Averages can hide higher earnings. With training and career development, higher salaries can be achieved. Source: Annual Survey of Hours and Earnings 2008, O.N.S., © Crown Copyright.



# Notes

A large rectangular area with a light beige background, overlaid with horizontal dotted lines for writing notes. The background image of the couple is visible through the semi-transparent area.

Connexions centres in the West of England:

**Bath and North East Somerset:** 28 Southgate, Bath BA1 1TP. T: 01225 461 501

**Bristol:** 4 Colston Avenue, Bristol BS1 4ST. T: 0117 987 3700. Minicom: 0117 907 4514

**North Somerset:** 45 Boulevard, Weston-super-Mare BS23 1PG. T: 01934 644 443

**South Gloucestershire:** 21-23 High Street, Kingswood, South Gloucestershire BS15 4AA. T: 0117 961 2760  
or 28 Gloucester Road North, Filton, South Gloucestershire BS7 0SJ. T: 0117 969 8101

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