

Chemicals

The Chemicals industry is one of the largest and most diverse manufacturing industries in the UK. It is a vital trade supply chain to UK manufacturing from Aerospace to Pharmaceuticals, as well as retail manufacturing from Food & Drink to Personal Care. The Chemicals industry is comprised of commodity chemicals (e.g. industrial gases), speciality/fine chemicals (e.g. pharmaceutical intermediates, pesticides, explosives) and consumer products (detergents, fragrances, oils). The UK Chemicals sector directly employs **over 140,000 people** in high value jobs and indirectly supports around three times as many.

Headlines

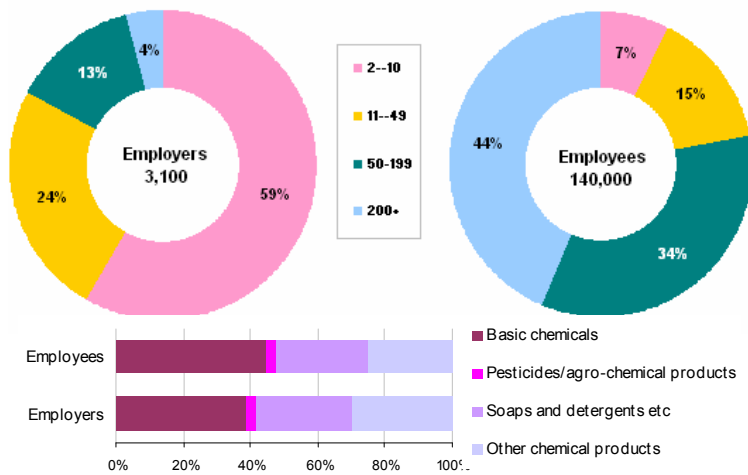
- The UK Chemical industry represents around **12% of value added in manufacturing**, equivalent to **1.5% of GDP**.
- The industry exported £24bn and contributed £1.7bn value added to the UK economy in 2009⁷, adding £30m daily to the UK balance of trade.
- The Chemicals industry in the UK invests **£628m in research and development**⁶, and around **£1bn on capital expenditure**¹ in the UK.
- Average annual growth rate for the Chemicals industry is 5.4%. The industry is forecast to reach a turnover of **£56.8bn** in 2015^{1,4}.
- **Productivity in the Chemicals Industry has increased by 69%** since 1999-2009.

Economic Picture¹

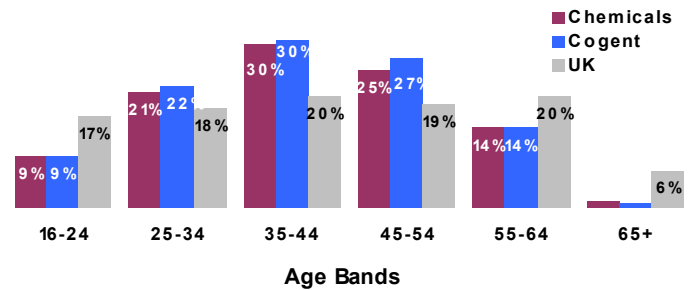
| Industry | Turnover | GVA* | GVA per Employee |
|-----------------------------------|--------------|-------------|------------------|
| | £ / bn | £ / bn | £ |
| Basic chemicals | 32.29 | 5.59 | 119,000 |
| Pesticides/agro-chemical products | 0.83 | 0.25 | 85,000 |
| Soaps and detergents etc | 4.19 | 1.41 | 48,690 |
| Other chemical products | 5.66 | 2.08 | 80,308 |
| Overall | 42.97 | 9.34 | 89,029 |

The Workforce

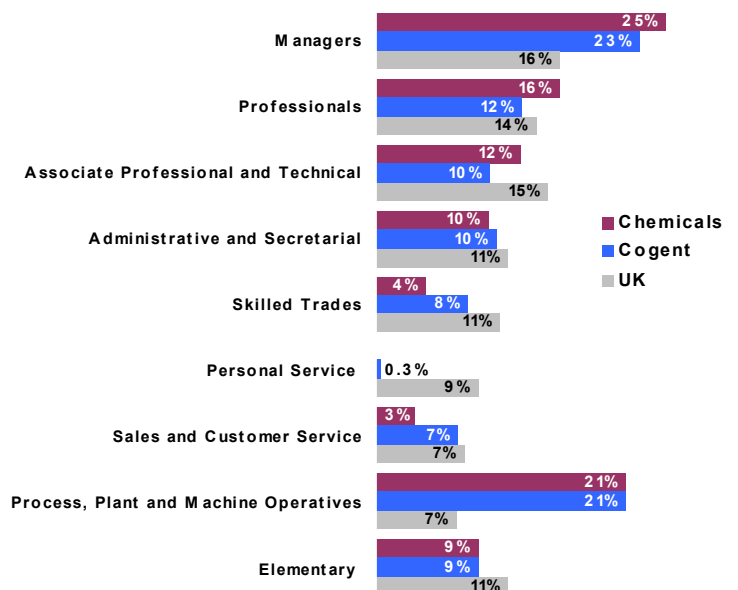
Employers and Employees by Size^{2,4}



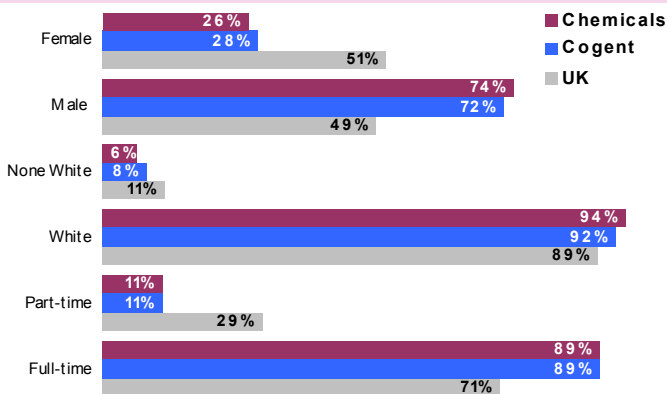
Age Profile³



Occupational Distribution³



Workforce Distribution-Gender¹, Ethnicity³ and Employment Profile³



1. Annual Business Enquiry (ABI) 2008-data released June 2010, Office of National Statistics (ONS) 2010

2. National Employers Skills Survey (NESS) 2009

3. Labour Force Survey (LFS) 2009, ESDS 2010

4. Cogent Industry Estimate- (estimated from national data, ABI, LFS, NESS, BIS..etc)

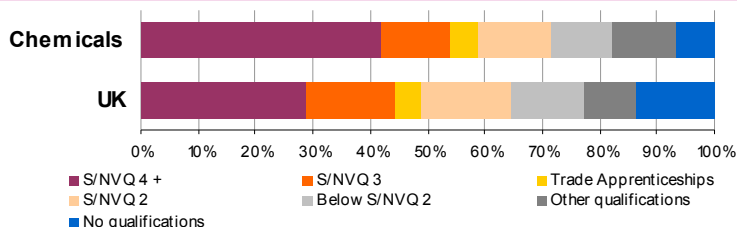
5. The Chemicals Industries Association (CIA) 2010

6. Business Enterprise R & D (BERD) 2008 – released Dec 2009, ONS 2010

* GVA - Gross value added (GVA) represents the amount that individual businesses, industries or sectors contribute to the economy.

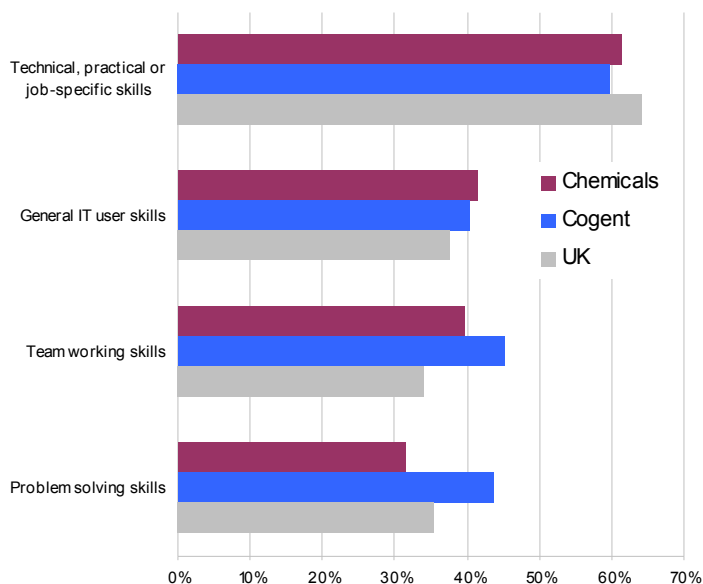
Skill level and Skills Needs

Skill Level³

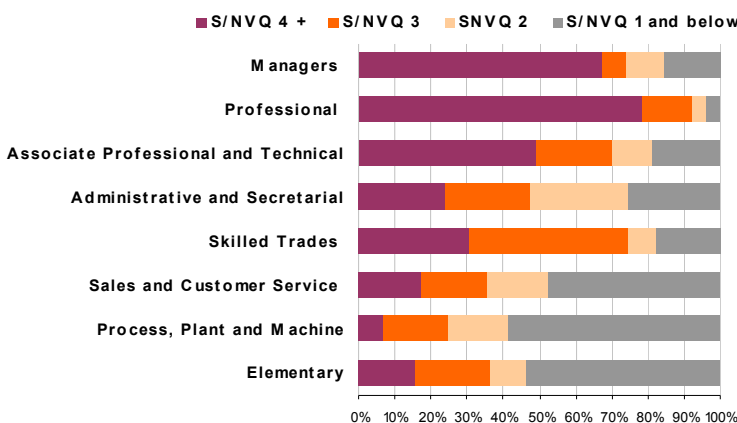


Skills Needs²

Top four skills that will need improving or updating in the next 12 months in all occupations, as reported by employers.



Skill Level by Occupation³



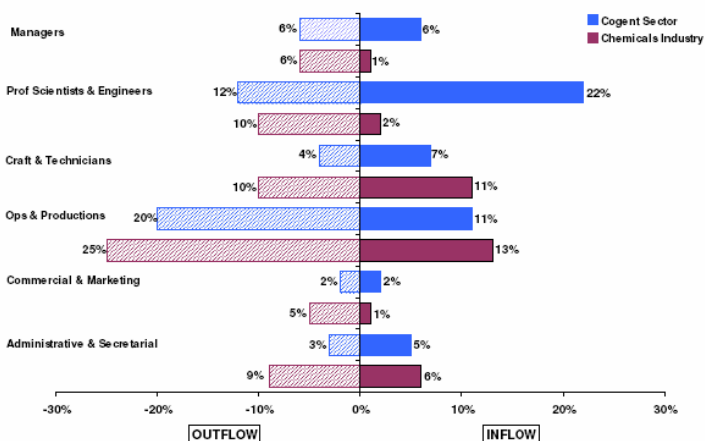
Skills Demand / Training²

- Vacancies for 'Associate Professionals' were reported by employers as the most 'hard to fill'.
- Employers expect the demand for competence based skills, leadership and management and technical level skills to increase in the next 12 months⁷.

| | Chemicals | Cogent |
|---|-----------|--------|
| Proportion of employers that expect staff will need to acquire new skills or knowledge in the next 12 months | 61% | 63% |
| Internal skills gap (proportion of employees that are not fully proficient at their jobs, as reported by employers) | 19% | 21% |
| Proportion of employers that provided training over the last 12 months | 68% | 66% |
| Number of staff trained as a proportion of employees (last 12 months) | 53% | 50% |
| Average annual training budgets per employee ⁸ (excludes cost of maintaining production while training the employee) | £680 | £930 |

Employment and Workforce Distribution

Employment Turnover by Skill Level⁸



According to the Chemicals Skills Oracle, employment turnover for 2009 was 13%.

- The main recruitment routes were: 'Mature Entrants' (45%), 'Agency' (29%), 'Apprentices' (17%) and 'Graduates' (6%). Across the sector, 75% of employers reported dependence on contractors for routine operations.
- The main departure routes were: 'other' (47%), redundancies (31%) and retirements (22%).

Employment by Region and Nation¹

| | Employees | | Employers | |
|---------------------------------|---------------|-------------|--------------|-------------|
| | n | % | n | % |
| East | 6,627 | 7% | 270 | 9% |
| East Midlands | 8,538 | 9% | 264 | 8% |
| London | 1,821 | 2% | 224 | 7% |
| North East | 7,281 | 8% | 396 | 12% |
| North West | 20,577 | 22% | 488 | 15% |
| South East | 11,538 | 12% | 396 | 12% |
| South West | 4,405 | 5% | 203 | 6% |
| West Midlands | 5,812 | 6% | 227 | 7% |
| Yorkshire and The Humber | 10,214 | 11% | 268 | 8% |
| England | 76,812 | 83% | 2,736 | 86% |
| Scotland | 7,778 | 8% | 178 | 6% |
| Wales | 6,747 | 7% | 155 | 5% |
| Northern Ireland ^{9,4} | 1,691 | 2% | 100 | 3% |
| Total* | 93,028 | 100% | 3,169 | 100% |

* Industry estimates can exceed ABI employee and employer data due to contractor workforce and SIC limitations. Cogent estimates an additional 47,000 employees for the Chemicals workforce.

7. Trade Statistics 2009, HM Revenue and Customs (HMRC) 2010

8. Skills Oracle 2010, Cogent SSC

9. Northern Ireland Annual Business Inquiry (NIABI) 2008, ONS

Standard Industrial Classification (SIC 07 code ; 24.11; 24.12; 24.13; 24.14; 24.15; 24.16; 24.20; 24.51; 24.52; 24.61; 24.62; 24.63; 24.64; 24.65; 24.66). Office of National Statistics

Cogent website: www.cogent-ssc.com

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