

Quarterly Review

JUNE 2011

- ENGINEERING** • Order intake grows further
- MANUFACTURING** • Output volume remains strong
- CONTINUES TO** • Optimism continues
- MAINTAIN ITS** • Metal manufacturing bounces back
- SURGE FORWARD** • Employee numbers sustained

Last month a record number of participants enjoyed the Scottish Engineering Awards Dinner for 2011 and celebrated the continuing success of the sector.

Seven companies were given special congratulations with Burntisland Fabrications Ltd, Clyde Bergemann Ltd, Controlled Therapeutics (Scotland) Ltd, Hyspec Engineering Ltd, McDonald Engineers Ltd, Mitsubishi Electric Air Conditioning Systems Europe Ltd, receiving President's Awards.

The top accolade went to Aggreko plc who have enjoyed another stunningly successful year and continue to be the world's leading supplier of equipment which provides power at local and international levels. Young engineer Gavin Miller from Clyde Union Pumps received the Scottish Engineering/Incorporation of Hammermen of Glasgow Award for the outstanding contribution to his company's work with the world's largest solar power station in California.

Guest of honour Archie Bethel CBE presented a strident case for the navy's nuclear defence capability and described how it safeguarded the nation at a cost significantly less than your average household insurance. Once again this was a most successful networking event.

One of the main concerns being discussed within our industry, before, during and after dinner and subsequently confirmed by the Bank of England was the ongoing failure of the UK banking system to assist SMEs at an appropriate level.

A further concern was the need for a balanced, sustainable, affordable and secure energy supply and the failure of the Scottish Government to have a frank and open debate based on the facts as opposed to political spin. We would welcome the provision of accurate current data supplied by an independent body such as the Royal Academy of Engineering to assist in the overall energy debate.

I continue to believe that the SNP manifesto claim to provide 100% of our electricity demand from renewables by 2020 is cloud cuckoo land.

DR PETER HUGHES, OBE FRENG
Chief Executive
Scottish Engineering



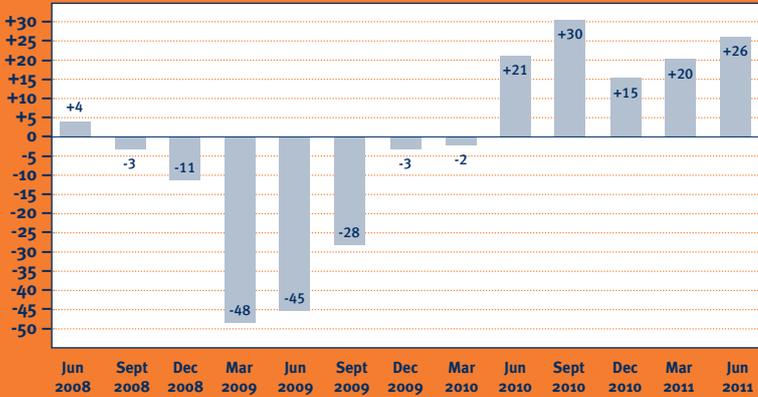
ANNUAL TRENDS

For five consecutive quarters, order intake has been remarkably positive. In the same vein, output volume has seen five quarters of strong figures.

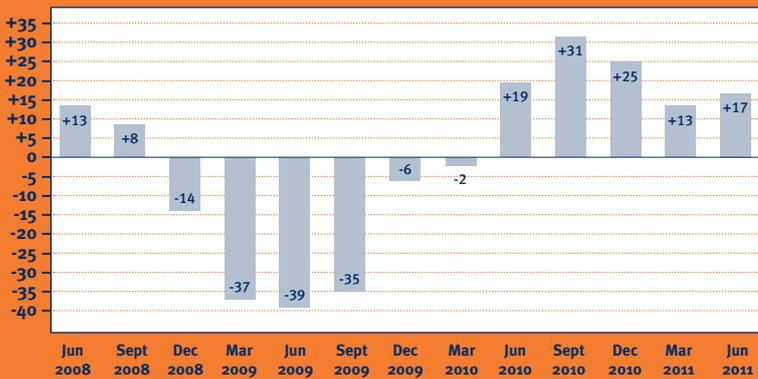
Training investment is now into its seventh positive quarter and capital investment levels have reported four very positive quarters.

Employment levels remain at a very high level where they have been for the last four quarters.

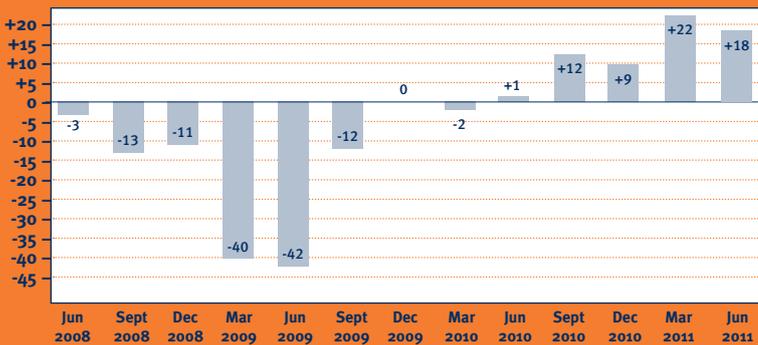
ORDER INTAKE



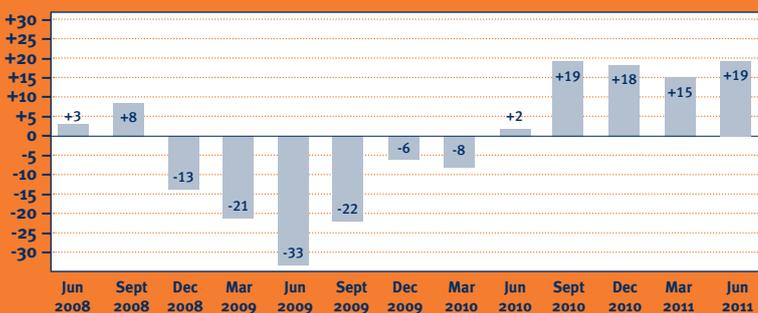
OUTPUT VOLUME



EXPORTS

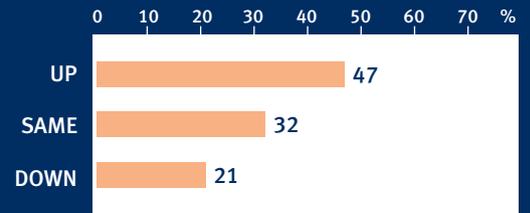


STAFFING

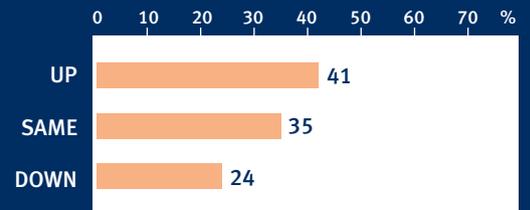


Balance between reports of increases and reports of decreases

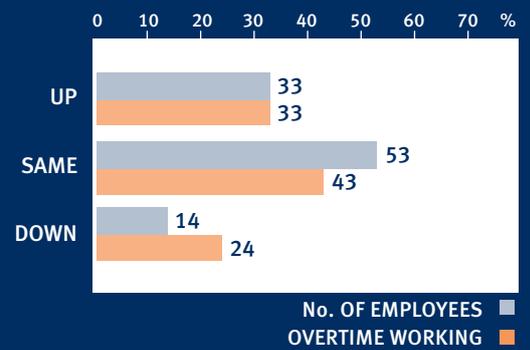
ORDER INTAKE



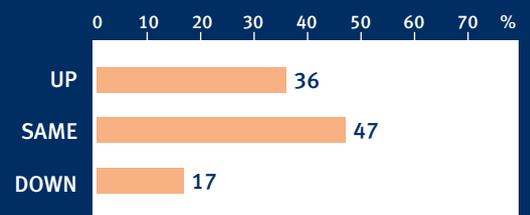
OUTPUT VOLUME



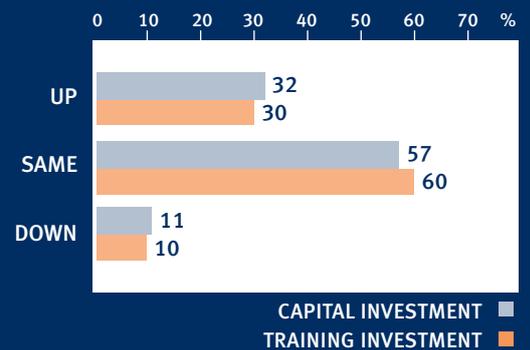
STAFFING



OPTIMISM



INVESTMENT



ORDER INTAKE

We have witnessed the strongest grouping of positive results since we began our survey.

OUTPUT VOLUME

Over all disciplines we have seen good figures with only one negative feature being medium sized companies.

STAFFING

The levels have been improving over the last four quarters.

OPTIMISM

Throughout the engineering industry optimism remains strong for the seventh consecutive quarter.

INVESTMENT

Both training and capital investment have been positive for the last four quarters.

The survey figures for the first quarter of 2011 seemed to be marking time but now that the second quarter data has been processed we see the Scottish manufacturing engineering sector surging ahead again. Improvements in orders and prices are heartening and the engineering sector appears to be flourishing despite concerns over investment input levels.

Orders

The total order intake (47%up,32%same,21%down) has further improved over the previous two quarters, creeping ever closer to the peak that was achieved in September 2010. Small (51%up,28%same,21%down), medium (44%up,31%same,25%down) and large companies (12%up,88%same,0%down) all report positive figures. Within the sectors, mechanical equipment (41%up,42%same,17%down), fabricators (44%up,50%same,6%down) and machine shops (69%up,8%same,23%down) have all maintained a positive situation.

UK orders in general (40%up,39%same,21%down) have improved on the previous two quarters. Small (45%up,34%same,21%down) medium (33%up,42%same,25%down) and large companies (12%up,88%same,0%down) all remain positive.

Within the sectors, electronics (36%up,43%same,21%down), oil and gas (33%up,50%same,17%down) and fabricators (38%up,56%same,6%down) have all performed well as have transport (73%up,18%same,9%down) and fabricators (38%up,56%same,6%down).

Forecasts for the next three months of UK orders in general (29%up,55%same,16%down) remain healthy as do small (29%up,54%same,17%down) medium (25%up,58%same,17%down) and large companies (43%up,57%same,0%down).

Export orders general totals (37%up,44%same,19%down) had maintained their positive position as have small (41%up,39%same,20%down) and medium companies (30%up,55%same,15%down) while large companies (0%up,75%same,25%down) reveal a negative balance.

In the sectors, mechanical equipment (42%up,36%same,22%down), machine shops (38%up,62%same,0%down), and metal manufacturing (33%up,45%same,22%down) have produced positive figures where fabricators (14%up,72%same,14%down) had a balance of companies reporting increases as reported decreases.

Predictions for export orders for the next three quarters in general (25%up,60%same,15%down) remain positive which is how small companies (29%up,60%same,11%down), believe they will fare. Medium (18%up,58%same,24%down) and large companies (0%up,75%same,25%down) see the future as being negative.

Prices

UK prices in general (30%up,66%same,4%down) continue to be positive and improve as they do in small (34%up,61%same,5%down), medium (17%up,80%same,3%down) and large companies (38%up,62%same,0%down).

Forecasts for the next three months in general (30%up,64%same,6%down) remain upbeat and that is the same as in small (30%up,65%same,5%down), medium (28%up,64%same,8%down) and large companies (33%up,56%same,11%down).

Export prices for the last three months in general (22%up,73%same,5%down) are still positive and in small (28%up,68%same,4%down) and medium companies (12%up,82%same,6%down) but all of the large companies (0%up,100%same,0%down) who took part in the survey saw prices remain the same.

Predictions for the next quarter in general (24%up,69%same,7%down) are positive yet again as they are for small (25%up,71%same,4%down) and medium companies (25%up,66%same,9%down)

while large companies (0%up,75%same,25%down) are looking to see a negative future.

Optimism

In general terms optimism (36%up,47%same,17%down) continues on an upward journey. Small (37%up,48%same,15%down), medium (33%up,48%same,19%down) and large companies (33%up,45%same,22%down) remain positive. In the sectors, oil and gas (17%up,66%same,17%down) has a balance of companies being more optimistic against those being less optimistic. Mechanical equipment (33%up,45%same,22%down), machine shops (62%up,38%same,0%down) and fabricators (44%up,44%same,12%down) are all optimistic.

Investment

Capital investment plans in general (32%up,57%same,11%down) continue to improve quarter on quarter. Small (35%up,52%same,13%down), medium (29%up,62%same,9%down) and large companies (22%up,78%same,0%down) are all positive. Within the sectors, electronics (23%up,62%same,15%down), non-metal products (19%up,69%same,12%down) and fabricators (38%up,50%same,12%down) continue to provide positive returns.

Overall training plans (30%up,60%same,10%down) keep on the positive track as do small (31%up,57%same,12%down), medium (26%up,68%same,6%down) and large companies (33%up,67%same,0%down).

Staffing

Staffing levels in general (33%up,53%same,14%down) are even more positive. This is the same story in small (35%up,53%same,12%down) and medium companies (33%up,48%same,19%down) while large companies (12%up,76%same,12%down) have an equal number of companies losing staff as are gaining staff.

General predictions for the next quarter (30%up,60%same,10%down) are looking at a slight improvement. The three sizes of company, small (28%up,61%same,11%down), medium (39%up,53%same,8%down) and large (22%up,67%same,11%down) are all expecting to recruit further in the next three months.

Overtime levels overall (33%up,43%same,24%down) remain positive as they are on small (38%up,42%same,20%down) and large companies (33%up,45%same,22%down) while medium companies (19%up,45%same,36%down) have turned negative.

Output volumes

Overall output volumes (41%up,35%same,24%down) maintain a very positive situation. This is reflected in small (45%up,34%same,21%down) and large companies (25%up,63%same,12%down) but medium companies (33%up,31%same,36%down) report a negative quarter.

In the sectors, oil and gas (17%up,50%same,33%down) are negative while mechanical equipment (41%up,37%same,22%down), machine shops (54%up,15%same,31%down) and fabricators (38%up,56%same,6%down) have returned positive figures.

The forecast for the next three months in general (40%up,45%same,15%down) sees a continuation of the positive drive. Small (37%up,48%same,15%down) medium (50%up,33%same,17%down) and large companies (38%up,50%same,12%down) also all see things improving.

The facts in this Review were acquired by a survey of Scottish Engineering's members and certain other electronic companies and foundries. The membership covers all sectors of the industry. The response rate was 41.5% of members. Companies are described as:
Small (less than 100 employees),
Medium (100-500) and Large (over 500).

The Back Page



PROFESSOR JIM McDONALD
FREng
Principal and Vice Chancellor
University of Strathclyde

Scotland has a proud heritage of world-class engineering, manufacturing, design and innovation. Over the past few centuries, Scottish engineering “know-how” and products have proved to be drivers not only of the UK economy, but also for international progress and growth – technological excellence with impact for the benefit of society and wealth creation. In the 21st Century this will encompass a wide range of areas from renewable technologies to high value manufacturing – Scotland is well positioned to play a leading role in this renewed focus on wealth creating industries.

We are hearing increasing governmental references to national and global requirements for resetting the economy with a welcome acknowledgement that science, engineering and technology will “kick start” our recovery. In Scotland, our engineering and manufacturing strengths provide us with the competitive edge to support the success of our indigenous companies and to attract increasing levels of inward investment. This will both protect and create significant numbers of jobs in a number of engineering related sectors – energy, manufacturing, aerospace, marine and defence - ranging from modern apprenticeships through to PhD level graduates.

What is sure, however, is that we will only maximise our ability to exploit these “once in a generation” opportunities by creating high quality, strategically focussed, partnerships that encompass government and public sectors, industry and business as well as our Universities and Colleges. This approach, sometimes referred to as the “Triple Helix” of innovation and economic value, is one through which Scotland is already being recognised as offering international exemplars - attracting major investment and high quality industry partners.

The quality and value in Scottish Universities are producing connections between research, development, demonstration and deployment (RDD&D). This “innovation pipeline” supports industry to build competitive advantage, harnessing intellectual property in our research and accessing high quality, industry ready graduates and post-graduates – the real basis for Scottish technological excellence and leadership.

With reference to Technology Readiness Levels (TRLs) - Universities will typically operate at the TRL 1-4 stages (research specification to proof of concept), whereas industry drives technological innovation from TRL 7-9 (demonstration at scale through to product and service provision). It is essential that we “bridge the gap” between TRL 4-7 to accelerate academic and industrial R&D exploitation, partner to take a whole-life approach to TRL 1-9 developments in key sectors and collaborate on the creation and use of resources and facilities to create a distinct Scottish “RDD&D machine” for engineering innovation. If we are to create lasting industries and economic value, we need to build sectoral innovation clusters including large scale companies, SMEs essential to create high value supply chains and academic partners undertaking R&D and providing access to independent challenge and thinking.

Two major examples of such an approach, where the University of Strathclyde has been playing a central role, are the creation of the Advanced Forming Research Centre (AFRC) and the launch of the University’s Technology and Innovation Centre (TIC).

The Advance Forming Research Centre
(<http://www.strath.ac.uk/afrc/>)

This world-class research Centre pioneers forming and forging techniques to support manufacturing for the aerospace, energy, marine and automobile industries, and is expected to set new standards in manufacturing design. It is a collaborative venture between the University, Scottish Enterprise, the Scottish Government and internationally renowned engineering firms including Rolls-Royce, Boeing, Mettis Aerospace, TIMET, Aubert & Duval and Barnes Aerospace. The thematic focus includes:

- Rapid ‘technology pipeline’ from concept - demonstration - exploitation.
- Setting new standards for the design and forming of high integrity, high value add products.
- Exceptional business performance and growth delivered to partners.
- Dedicated high quality, purpose-built, facility that reflects the state of the art in forming and forging.

The Technology and Innovation Centre
(<http://www.strath.ac.uk/tic/>)

This ambitious research and technology Centre will transform the way universities, business and industry collaborate to bring global competitive advantage to Scotland. TIC brings together 850 academics, researchers and project managers from the University and its leading industrial partners to work side-by-side in a state of the art building in the heart of Glasgow.

Together, they will find solutions to challenges in sectors central to economic regeneration in Scotland and internationally, including power and energy, photonics and sensors, advanced engineering, pharmaceutical manufacturing and bio-nano systems.

Developed with industry-for industry, the TIC is already attracting interest from major international companies, and its first partners include SSE, Scottish Power and the Weir Group. At £89 million, the project is the University’s single-biggest investment in research capacity attracting financial backing from Scottish Enterprise and the Scottish Funding Council.

TIC will be based at the heart of the city – on the City Science site - and will become the cornerstone of Scottish Enterprise’s new International Technology and Renewable Energy Zone (ITREZ) – a global economic hub to bring innovative businesses to Glasgow to sit alongside the University.

In conclusion, Scotland is poised to capture again a leading international position for engineering excellence, manufacturing and innovation – a real Scottish Engineering Renaissance, one based on partnership, capability and ambition and rooted in our history that is recognised around the world.

M&C ENERGY GROUP

Headquartered in Dunfermline, M&C Energy Group has 35 years’ experience in energy procurement and price risk management, legislation compliance services and water consultancy – helping our clients save money and improve energy efficiency.

With 20 offices across 13 countries, M&C serves more than 3,500 clients with a combined energy spend under management of over £6.25bn. Our award winning approach to controlling commodity price risk ensures our clients stay within budget and benefit from market falls.

The world of energy charges is complex and all suppliers make mistakes. The surprise is just how big those mistakes can be. M&C Energy Group is a proven market leader in recovering historical overpayments and correcting on-going charging arrangements, which in some cases can equate to more than 100% of the annual energy budget.

If you would like to speak with us, please telephone 01383 745 165 or visit our website www.mcenergygroup.co.uk