Scottish Engineering

Quarterly Review

March 2011

ENGINEERING MANUFACTURING STILL RIDING ON THE CREST OF A POSITIVE WAVE

- Order intake sustained
- Output volume remains positive
- Optimism levels are maintained
- Margins are still under pressure
- Metal manufacturing suffers

I am pleased to note that the positive noises I am hearing from member companies during the Scottish Engineering District Meetings are being confirmed by the data submitted for our Quarterly Review.

It is particularly encouraging to note that our hard-pressed electronic sector is reporting positive order intake for the third consecutive quarter. Machine shops are also doing well and are the only sub sector with no negative responses in any of the categories measured.

Metal manufacturing, however has seen a significant drop in its order volume which in turn has had a knock-on effect on plans for investment.

The government's announcement regarding a holiday for the forthcoming Royal Wedding has caused a great deal of confusion around the country. For clarification it should be noted that this is not a statutory holiday as defined within our engineering industry holiday arrangements and there is therefore no automatic requirement for companies to agree additional time off for the event.

Our observations confirm that the various political parties are already jostling for position ahead of the impending Holyrood election in May and if we could give them any advice it would be that they should help with a growing skill shortage within our industry.

It is widely accepted that the manufacturing engineering sector is playing a vital role in pulling the country out of the recession caused by the antics within the banking sector. It is unfortunate that the efforts of the many SMEs within engineering are being constrained by the lack of help from the self same banks. Despite the massive profits and bonuses continuing to emanate from the banking system there is still very little evidence of any meaningful support being made available.

Looking back at the difficulties of the last couple of years it is pleasing to note that our Scottish Engineering business improvement Lean Club continues to go from strength to strength thereby significantly improving the competitiveness of companies adopting such effective techniques.

Dr Peter Hughes, OBE FREng
Chief Executive
Scottish Engineering

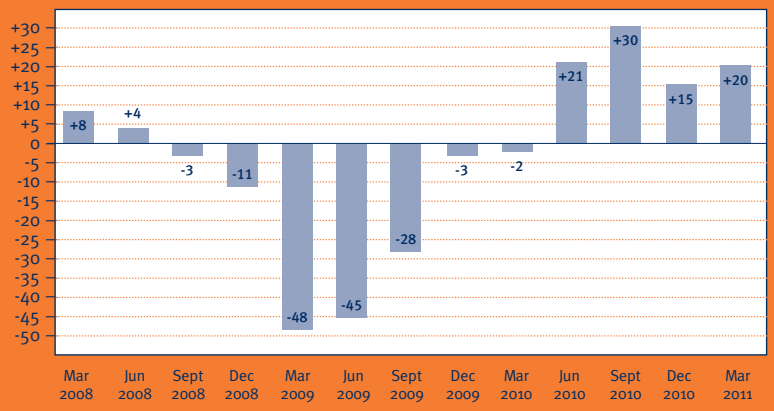
ANNUAL TRENDS

Order intake levels remain high across the industry, continuing a trend that has been seen for the last four quarters. Similarly output volumes maintain a head of steam that has been apparent for the last four quarters.

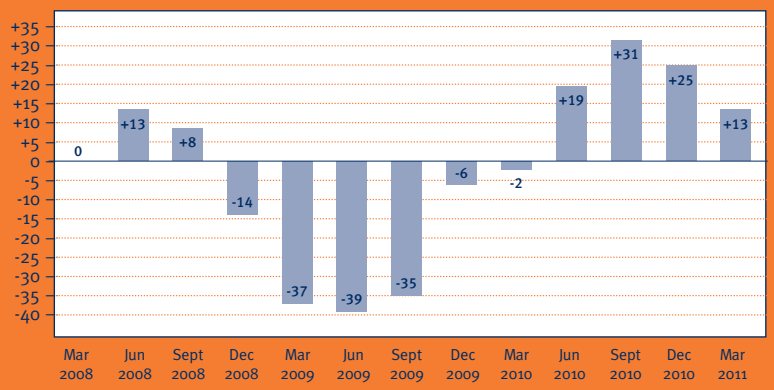
Both training and capital investment plans forge ahead; training has been positive for five consecutive quarters and capital for three.

Employment levels also remain positive for the fourth consecutive quarter and optimism has enjoyed six quarters of strong positive figures.

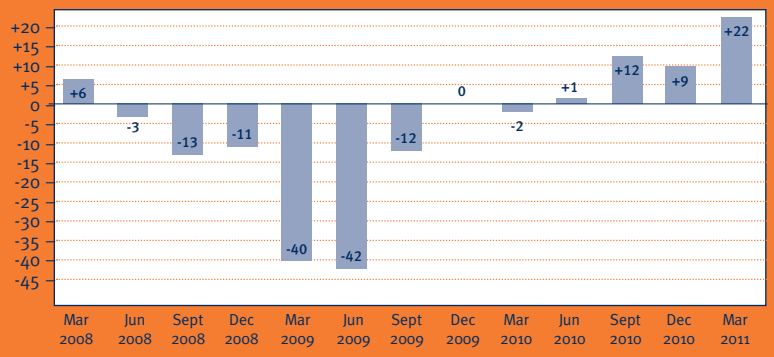
ORDER INTAKE



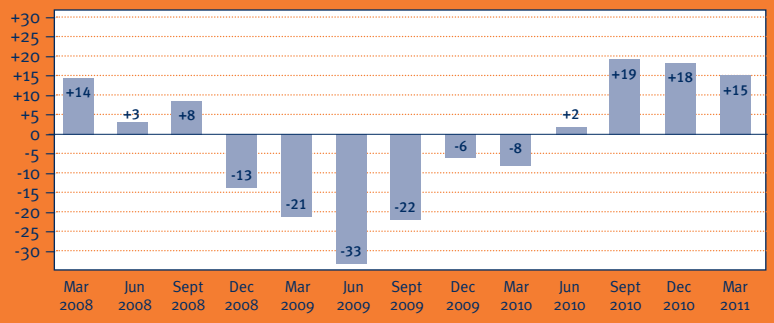
OUTPUT VOLUME



EXPORTS

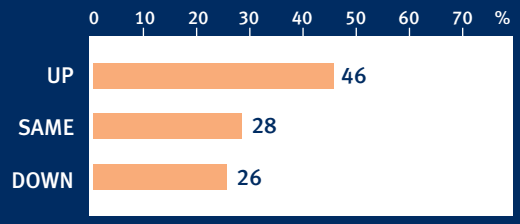


STAFFING



Balance between reports of increases and reports of decreases

ORDER INTAKE



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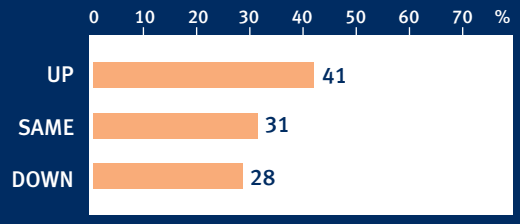

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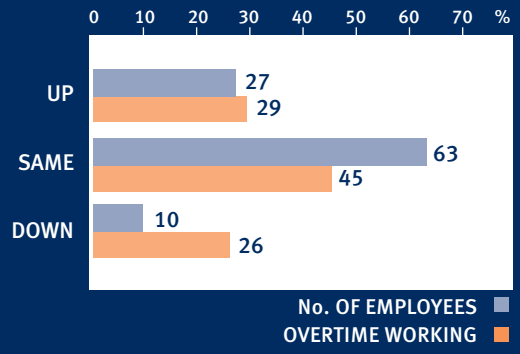
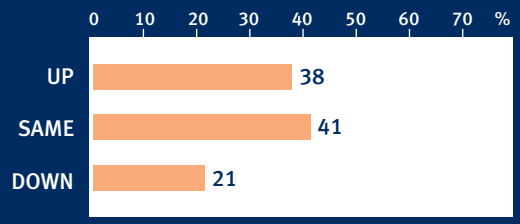
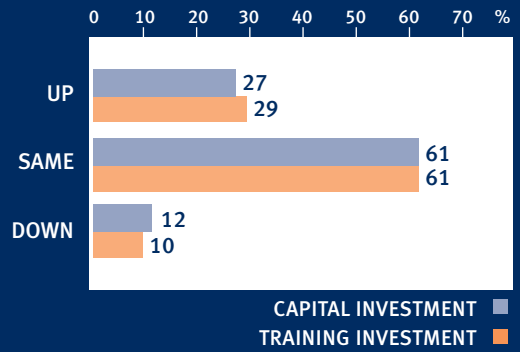


OPTIMISM



INVESTMENT



ORDER INTAKE

There has been a slight improvement in order levels over the previous quarter across all sizes of company.

OUTPUT VOLUME

All sizes of company have experienced a slight dip in the levels of output volume, but remain positive as does the electronics sector.

STAFFING

The employment levels remain positive in all sizes of company and sectors except fabricators and metal manufacturing. Overtime working has dropped slightly in small and large companies.

OPTIMISM

Apart from metal manufacturing and non-metal products the level of optimism is holding up well throughout the sectors and in all sizes of company.

INVESTMENT

Plans for capital investment continue to be positive across all sizes of company and in the sectors except for electronics and metal manufacturing. Training plans continue to be positive except for metal manufacturing.

The manufacturing engineering sector in Scotland has started 2011 as it finished 2010 – on a high note. All the major factors, order intake, output volume and staffing levels continue to be very positive.

Orders

The total order intake (46%up,28%same, 26%down) has increased from last quarter though it is still slightly below the peak of September 2010. Small (47%up, 23%same,30%down), medium (47%up, 32%same,21%down) and large companies (33%up,67%same,0%down) all report positive figures. Within the sectors, electronics (53%up,20%Same,27%down), mechanical equipment (54%up,28%same,18%down) and fabricators (50%up,19%same,31%down) have all retained their levels but metal manufacturing (25%up,31%same,44%down) is the only sector with a negative return.

UK orders in general (39%up,32%same, 29%down) have improved on last quarter. Small (43%up,24%same,33%down) and medium companies (29%up,47%same,24%down) both remain positive as do large companies (33%up,67%same,0%down).

Within the sectors, mechanical equipment (41%up,36%same,23%down), fabricators (53%up,20%same,27%down) and transport (62%up,23%Same,15%down) are all positive but electronics (33%up,27%Same,40%down) and metal manufacturing (23%up,39%same, 38%down) proved negative.

Forecasts for the next three months of UK orders in general (34%up,52%same,14%down) remain upbeat as do small (34%up,52%same,14%down), medium (32%up,49%same,19%down) and large companies (44%up,56%same,0%down).

Export orders general totals (41%up,40%same,19%down) have increased considerably over the quarter as have small (34%up,45%same,21%down), medium (49%up, 34%same,17%down) and large companies (60%up,40%same,0%down).

In the sectors electronics (45%up,37%same, 18%down), mechanical equipment (42%up, 35%same,23%down) and fabricators (33%up, 67%same,0%down) have fared well while metal manufacturing (22%up,56%same,22%down) has an equal number of companies reporting increases as reported decreases.

Predictions for export orders for the next three months in general (33%up,50%Same,17%down) remain positive which is the same story from small (31%up,54%same,15%down), medium (38%up,38%same,24%down) and large companies (20%up,80%same,0%down).

Prices

UK prices in general (28%up,62%same,10%down) have improved over the quarter as they have in all sizes of company; small (32%up, 59%same,9%down), medium (18%up, 72%same,10%down) and large companies (33%up,45%same,22%down).

Forecasts for the next quarter in general (36%up,58%same,6%down) look to be holding up well which is the same as small (40%up,56%same,4%down), medium (26%up,66%same,8%down) and large companies (40%up,40%same,20%down).

Export prices for the last three months in general (19%up,71%same,10%down) remain positive as do small companies (25%up,70%same,5%down). Medium (11%up,72%same,17%down) and large companies (0%up,80%same,20%down) however, are reporting negative results.

Predictions for the next quarter in general (22%up,73%same,5%down) continue to be positive as they are in small (24%up,74%same,2%down) and medium companies (23%up,66%same,11%down). Large companies (0%up,100%same,0%down)) are expecting the sector to remain the same as this quarter.

Optimism

In general the levels of optimism (38%up, 41%same,21%down) have improved on the previous quarter. Small (36%up, 41%same,23%down), medium (44%up, 35%same,21%down) and large companies (30%up,70%same,0%down) are all positive. In electronics (27%up,46%same,27%down) there as many companies feeling more optimistic as there are feeling less optimistic. All other sectors are positive.

Investment

Capital investment plans in general (27%up,61%same,12%down) have increased over the previous three months. Small (31%up, 54%same,15%down) and medium companies (21%up,74%same,5%down) are positive and large companies (10%up,80%same,10%down) are neutral. Within the sectors, electronics (14%up,65%same,21%down) and metal manufacturing (12%up,57%same,31%down) have returned negative results but all other sectors are positive.

Overall training plans (29%up,61%same, 10%down) continue to be positive as do small (28%up,61%same,11%down), medium (33%up,62%same,5%down) and large companies (20%up,70%same,10%down).

Staffing

Staffing levels across all sizes and sectors (29%up,57%same,14%down) are still positive. This is the same story in small (31%up,53%same,16%down), medium (28%up, 62%same,10%down) and large companies (20%up,80%same,0%down).

General predictions for the next quarter (27%up,63%same,10%down) are looking at a slight improvement. The three sizes of company, small (24%up,68%same,8%down), medium (34%up,48%same,18%down) and large (30%up,70%same,0%down) are all expecting to recruit further in the next three months.

Output volumes

Overall output volumes (41%up,31%same, 28%down) maintain a high positive level. Similarly this is the case in small (45%up,24%same,31%down), medium (32%up, 44%same,24%down) and large companies (44%up,34%same,22%down).

In the sectors all areas are positive except metal manufacturing (38%up,24%same,38%down) which has a neutral return. Non-metal products (42%up,33%same,25%down) and mechanical equipment (38%up,39%same,23%down) are examples of the positive returns.

The forecast for the next three months in general (46%up,39%same,15%down) are even more positive. Small (48%up,39%same,13%down) and medium companies (46%up,35%same,19%down) also see things improving but large companies (30%up,50%same,20%down), while still positive are virtually the same.

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% of members. Companies are described as: Small (less than 100 employees), Medium (100-500) and Large (over 500).

Scottish Engineering

The Back Page

Alan Mortimer
Head of Renewable Policy,
Scottish Power

Scotland and renewable energy go together extremely well and we are very fortunate in this country to have a government which not only supports renewables, but is also passionate about Scotland being at the forefront of the industry.

This country is already home to Europe's largest windfarm, Whitelee and continues to play an extremely important part in the development of new methods of energy generation.

Our amazing island has the opportunity to lead the development and growth of marine renewables and I'm delighted to say that we are already taking the first steps along the road to success.

In July 2010 we submitted an application to install a ten device tidal array, to be located in the Sound of Islay, a first for Scotland.

This 10 MW project marks another major milestone and with installation possibly taking place as early as 2013, we would once again be leading the world.

Imagine a fully operational tidal array producing clean, green energy within Scottish waters. This was only a pipe dream ten years ago but thanks to the drive and determination of the people involved in this industry, this is becoming a reality.

It has taken the ambition and belief of companies such as ScottishPower Renewables to invest in new technology and to support companies such as Pelamis and Hammerfest.

We have already placed an order for a Pelamis P2 wave device, which we will be installing at the European Marine Energy Centre in Orkney next year.

The Pelamis Wave Energy Converter is a semi-submerged, articulated structure composed of cylindrical sections linked by hinged joints. The wave-induced motion of these joints is resisted by hydraulic rams, which pump high-pressure fluid through hydraulic motors via smoothing accumulators. The hydraulic motors drive electrical generators to produce electricity. Power from all the joints is fed down a single umbilical cable to a junction on the seabed. Several devices can be connected together and linked to shore through a single seabed cable. Each Pelamis can generate up to 750kW.

This project will allow us to confirm the full potential of wave energy and to accelerate its deployment on a large scale, in Scotland and around the world.

Pelamis is an excellent example of the role that Scotland could play in leading the growth of marine renewables. Based in Edinburgh, they have shown that hard work and determination can produce so much.

SPR is also investing in tidal technology and is working with Norwegian company Hammerfest to develop a commercially viable device.

Our involvement with Hammerfest has facilitated the opening of a UK office in Glasgow and the creation of a development team. Their aim is to develop a 1MW commercially viable device, the HS1000, and in 2011 that machine will also be installed at the test centre in Orkney.

Hammerfest Strom has had a 300kW prototype device operating successfully in Norway since 2004 and this prototype device has formed the basis of the design for the HS1000.

The HS1000 tidal turbine is fully submerged on the seabed and will have an approximate height of 34 metres to the blade tip.

Work has already begun on the manufacture of the sub structure of the device with Scottish company, Burntisland Fabrication awarded the contract.

Having both devices developed in Scotland is true reward for all the hard work, but this could be only the start of the potential benefit to this country.

Scotland's relationship with offshore energy is decades old and that experience will be key in the manufacturing and installation of these devices.

Our Oil and Gas industry has world-leading skills in marine engineering and operations. This further enhances the prospects for Scottish businesses to benefit from the wave and tidal power industry which could be worth £6bn by 2020.

ScottishPower Renewables' own plans are fully aligned with these ambitions and will ensure that Scotland reaps the full benefits of this new sector as quickly as possible.

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