



## **Contribution of the Manufacturers Group to Manufacturing in Cornwall in 2015**

The Manufacturers Group came into existence in 2012 with the addition of sme manufacturers to the Manufacturers Forum of the largest manufacturing companies in Cornwall. Many different sectors from agricultural machinery to medical equipment are covered but what unites the group is that they can be loosely classified as being in Engineering. It now consists of 38 paid company members.

### **Why is manufacturing important?**

Without writing an academic treatise it is possible to list some of the reasons why manufacturing matters to an economy and why economies without a strong manufacturing base can be weaker than those with.

In a nutshell manufacturing is a strategic industry where the economic benefits associated with it are greater than for other industries. Economists have argued that this is because –

- It is better integrated with other industries – transport, services, raw materials etc – and therefore has a high inter industry multiplier
- It is a conduit for introducing new technologies into the economy
- It creates leading edge skills which eventually spill out and benefit all industries
- It is a driver of supply chains and importantly structural change within them
- It is a driver of entrepreneurial opportunities
- It is an important source of R & D

### **Manufacturing in Cornwall**

Determining the size of the manufacturing sector in Cornwall is not as simple as one would think. The problem is that different databases and organisations have differing definitions for what is included in manufacturing, and you cannot just add the subsectors as some things are included in more than one sub sector. The following is therefore my attempt to make the best sense I can from the figures, which emanate from the Office of National Statistics, NOMIS, Regional Trends and the EEF.



## Manufacturing Units

ONS UK Business Activity, Size and Location states there were 1,110 VAT and PAYE Enterprises in Manufacturing in Cornwall in 2013 against a total of 21,195 i.e. 5.25%. However it differentiates between enterprises and units with the latter at 1,225.

Perhaps somewhat surprisingly the number of units has been stable over the recent past with 1,105 being recorded in 2010.

The table below both breaks those figures into size of unit by employees and compares with selected other sectors to attempt to put the 1,110 figure in context.

<i>Cornwall VAT and PAYE Units by Size and Sector 2013</i>					
<i>Sector</i>	<i>0 – 9</i>	<i>10 – 49</i>	<i>50 - 249</i>	<i>25+</i>	<i>Total</i>
Manufacturing	910	160	35	5	1,110
Accom & Food	1,570	505	45	5	2,125
Info & Comm	605	30	5	0	640
Ag, Food & Fish	4,145	70	5	0	4,220
Total	18,730	2,155	270	40	21,195

The figures confirm the long held view that Cornwall is a county of very small enterprises with 88% employing fewer than 10 overall and 82% in manufacturing, compared with 94% in Information & Communications and 98% in Agriculture, Fisheries and Food. Accommodation and Food Service however is well below the average with only 74% being fewer than 10.

## Employment

Employment figures differ depending on source and definition. ONS actually gives 3 different figures for enterprises and local units but also makes a distinction between Employed and Employees. NOMIS figures are broadly similar to the ONS Local Units one of 16,200.

It is hard to determine exactly what is happening as the NOMIS figures have manufacturing employment falling slightly from 16,300 in 2012 to 16,100 in 2013; while the ONS has it rising to 14,500 from 13,800 in 2012 and 13,100 in 2010.



The ONS Enterprise Employed figures show that Manufacturing accounted for 14,500 out of 167,700 i.e. 8.65% of the total. This compares with 21,335 in Accommodation and Food Service (12.7%); 1,978 in Information and Communication (1.2%) and 11,034 (6.6%) in Agriculture, Fisheries and Food.

NOMIS reports 16,100 for manufacturing against a total of 194,000 i.e. 8.3%. Information and Communication is 2,200 (1.1%) and Accommodation and Food Service is 26,900 (13.9%). Thus NOMIS puts Manufacturing slightly lower as a percentage of the total and Accommodation and Food Service slightly higher.

### **Multiplier effect**

The multiplier effect of manufacturing is greater than for most other sectors of the economy. The Southwest Regional Accounts show that Engineering in Cornwall has an employment multiplier of 1.51. (There are other types of multiplier e.g. output and two ways of measuring it but I am keeping it simple here). This is slightly lower than manufacturing multipliers from elsewhere so can be considered a robust figure.

What it means in simple terms is that for every 100 jobs in engineering in Cornwall 51 jobs are created elsewhere in the economy. The equivalent figure for Hotels & Catering is 27; and it is 38 for the economy as a whole.

### **Gross value added (GVA)**

Gross value added (GVA) is £701m or 10% of the Cornwall total of £7.0bn. (UK average 11%). This is a consistent figure over a number of platforms but notably ONS so I believe we can be confident about it. The same data gives Information and Communication at £165m (2.4%) and Agriculture, Fisheries and Food at £244m (3.5%). Unfortunately it does not separate Accommodation and Food Service but lumps it with Retail and Transportation thus making a meaningful comparison impossible. For the record that grouping accounts for £1,996m or 28.5%.

### **Wages**

Unlike at the time of our previous survey we have up to date (2013) wage figures for Cornwall; the Southwest and the UK. We do not however have consistent comparisons for the various sectors across all 3 sets of data so we have not been able to place Manufacturing in a Cornwall context. Both Median and Mean averages are given with the latter always being higher than the former.



<b>ONS ASHE 2013 Figures for Earnings</b>						
<b>Area</b>	<b>Total (£)</b>		<b>Manufacturing (£)</b>		<b>Accommodation &amp; Food service (£)</b>	
	Median	Mean	Median	Mean	Median	Mean
UK	22,044	27,271	26,593	30,900	13,970	16,396
Southwest	20,081	23,913	25,251	30,436	11,335	13,276
Cornwall	17,344	19,914				

It can be seen that Cornwall's figures are below 80% of the UK average and only 73% of the Mean average. One can draw no absolutely robust comparisons for Manufacturing or Accommodation and Food Service but it is likely that the overall UK and Southwest differentials are maintained and that Manufacturing thus pays considerably higher wages than Accommodation and Food Services. Whereas Manufacturing in both the UK and the Southwest pays above average UK wages, Accommodation and Food Services pay considerably less (plus 20 – 25% versus minus 40 – 45%).

### **Turnover**

The ONS VAT and PAYE Enterprise statistics included figures for Turnover, we believe for the first time. These show that in Cornwall the 21,195 enterprises produced a Turnover of £11,080m i.e. an average of £523,000. This masks big differences in the sectors however.

<b>Turnover by Industry Sector in Cornwall in 2013</b>			
<b>Sector</b>	<b>Turnover (£)</b>	<b>No of Enterprises</b>	<b>Average (£)</b>
Total	£11,080m	21,195	£522,770
Manufacturing	1,720m	1,110	£1.55m
Accom & Food	790.4m	2,125	£371,950
Info & Comm	133.8m	640	209,000
Ag, Fish & Food	734m	4,220	173,900



It can be seen that the average turnover per manufacturing company is a lot higher than the selected sectors but even that figure hides big differences depending on the employment size of the company. The 910 companies in manufacturing that employ fewer than 10 have an average of £183,000 while those between 10 and 49 turnover £1.5m. The figures are not provided for the larger companies but from deducting smaller ones from the total it would appear the average for 50+ is £30m.

Manufacturing thus accounts for 15.5% of Cornwall's turnover; the second largest contributor after Wholesale, Retail, Motor repair at £2,974m and a long way ahead of the third of Human Health & Social Work at £973m.

### Productivity

Cornwall's productivity as a whole is considerably less than the UK average and there is no breakdown by industry that I can find. However if we take the Turnover figures set out above and compare them to numbers employed we have a crude measure especially as we have those figures over time.

<i>Turnover per employee by Industry Sector in Cornwall in 2013</i>			
<i>Sector</i>	<i>Turnover (£)</i>	<i>No of Employees</i>	<i>Average (£)</i>
Total	£11,080m	167,746	66,053
Manufacturing	1,720m	14,501	118,808
Accom & Food	790.4m	21,353	37,047
Info & Comm	133.8m	1,978	67,622
Ag, Fish & Food	734m	11,034	66,523

<i>Turnover in Manufacturing per employee in Cornwall</i>			
<i>Year</i>	<i>Turnover (£)</i>	<i>No of Employees</i>	<i>Average (£)</i>
2013	1,720m	14,501	118,808
2012	1,422m	13,828	102,498
2011	1,296m	13,581	95,393
2010	1,274m	13,138	96,992



Thus Turnover per employee in Manufacturing is 80% higher than the industry average and three times that in Accommodation and Food and it has grown 23% since 2010.

### **Conclusion**

Manufacturing is thus a very important part of Cornwall's economy. Even though it has only 5% of the PAYE and VAT units it accounts for 10% of Cornwall's GVA and 15% of Turnover. Employment at almost 9% of the total is also significant especially given the higher wages paid in the sector. The multiplier effect is also higher than for other industries so over 24,300 people are dependent on manufacturing in Cornwall.

Productivity based on the crude numbers of Turnover per employee is 80% higher than the Cornwall average and has increased by 23% since 2010.

### **Cornwall Manufacturers Group contribution**

From our recent survey of members we can calculate the contribution that the 38 members make. In headline terms they -

- Employ 3,550
- Have Sales of £561m
- Pay wages of £99.5m
- Locally source £50m
- Pay £2m pa in Non Domestic Rates

### **Economic Contribution**

£150m is directly paid into the Cornish economy and 3,550 are directly employed. Using the 1.51 multiplier the activity supports another 1,810 jobs. Therefore 5,360 jobs in Cornwall are directly or indirectly supported by the group. There is another multiplier type which includes tertiary effects which increases the multiplier to 2.1 which increases the total to 7,455.

What this means is, if we take the above figures for those employed in manufacturing that the Group members directly account for between 22% and 25% of the total, depending on whether the ONS or NOMIS totals are used.



## **Local Sourcing**

Overall the group locally sources £50m out of total purchases of £240m (21%), up from 18% in 2013.

Interestingly the percentage of goods and services sourced locally by the smaller companies at 23% is slightly higher than that for the larger at 20.5%. Intuitively this makes sense as the bigger companies, some of whom are part of larger organisations, are more likely to have national buying policies and less local flexibility.

Nonetheless £50m a year into the local economy over and above wages is a considerable achievement.

## **GVA**

We can roughly calculate the GVA contribution using the standard definition of Turnover minus the Cost of sales (non wage costs) as we have those figures for the group, and it is £271m; i.e. 39% of the manufacturing GVA figure or about 4% of Cornwall's total GVA – a not insignificant amount.

## **Wages**

Wages of £100m are paid to 3,551 people giving a Mean average of £27,981 and a Median average of £25,000. Those employing fewer than 50 averaged £23,322, while those above averaged £28,900. The larger companies tended to pay more than the smaller ones but that was not always the case. When compared to the Cornwall averages it can be seen that the Group is well above average payers and are only marginally below the Southwest and UK averages – something that other sectors find hard to emulate.

Wages have increased since our 2013 survey where the Mean average was £26,470 and the Median £23,260. The two cohorts are not identical so some care must be taken in using these figures but an increase of 5.7% over two years in this highly competitive field does not appear unduly outlandish.

## **Turnover and Productivity**

The 38 companies have a Turnover of £561m – a Mean average of £14.8m. That however is a meaningless figure given the size disparities within the Group. The Median is £3.8m which is more reflective of the makeup of the Group. Those with fewer than 50 employees averaged £2.57m while those above averaged £30m. (We could isolate those above and below 250 employees but that would allow individual companies to be identified so we have not.) This is much higher than the Cornwall Manufacturing averages referred to above.

Turnover per employee is £158,000 which is higher than that for the sector as a whole but to be expected given the size difference. Within the Group those employing below 50



average £92,000 per person while those above average £171,000. There is a small but noticeable difference between those below and above 250 employees with the latter being higher.

The total average figure is higher than our 2013 survey where it was £146,000. While the two cohorts are not identical and therefore some care must be used in making comparisons it does show a healthy overall increase in output per person over the two years albeit skewed towards the larger companies.

### Exports

What is clear is that while the Group is in the Cornish economy it is not dependent on it. £531m of the £561m turnover is exported out of Cornwall – 95%. This is the same percentage as in 2013. The larger companies (50+ employees) export more at 97% with the smaller at 71%. Only 2 companies sold less than 20% outside of Cornwall. 11 sold 100% of their output; a further 18 were at 95%+; and a further 3 at 90%+.

Exports from the UK varied more widely with 3 companies not exporting at all and 7 exporting 5% or less. 7 companies exported 90% or more and a further 7 50% or more. 42.5% of total sales were exported with only a small difference between the larger and smaller companies in the Group at 43% and 38% respectively.

### Size

What the Group members also bring are the benefits associated with larger companies; especially important in an economy where 88% of businesses employ fewer than 10 people. The Group average is around 93 but is skewed by the fact that companies with fewer than 10 employees are only eligible in exceptional circumstances.

We can compare the Group's profile with that for Manufacturing as a whole and the bias towards the larger end is clear with the Group accounting for 45% of manufacturing companies that employ 50 or more.

<i>Cornwall and Group Units by Employee size</i>					
<i>Sector</i>	<i>0 – 9</i>	<i>10 – 49</i>	<i>50 - 249</i>	<i>250+</i>	<i>Total</i>
Cornwall	910	160	35	5	1,110
CMG	1	20	14	3	38
CMG as %	0	12.5	40	60	3.4



## **Outlook**

Competition is therefore not with other Cornish companies but is UK and worldwide – and in the case of the multinationals sometimes with other plants within the same company. The emphasis is therefore on controlling costs and finding an edge versus the competitors in national and international terms, not Cornish ones. This outlook distinguishes the Group from the vast majority of Cornish companies which rely much more heavily on the Cornish economy for their success or failure.

## **NOTES:**

When quoting these figures we should remember the provenance of some of them given different collection dates and definitions and therefore always refer to them as general estimates rather than precise figures.

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