

## Overseas Market Information



### Market Survey Report on the Metal Industry of some of the major European Countries

(Continued from previous issue)

#### Italy

Similar to Finland, Italy has a leading role in automation and the use of robots. In 2003, Italy produced robots to a value of 350 million Euro. The Italian automation technology is concentrated in the Emilia Romagna region, especially around Piacenza. Currently, production shows a tendency towards flexible packaging machines and fully automated monitoring.

The automation technology in Emilia Romagna also shows a few subcontractors which specialised in packaging machines. 80 per cent of the Italian manufacturers of packaging machines are situated in this region, and partly in the Lombardy.

Apart from manufacturing packaging machines, mechanical engineering in Italy is characterised by the manufacturing of machine tooling and textile machines. With 767,000 employees in 2002 (Source : International Labour Organisation), mechanical engineering is the strongest sector of the Italian metal industry in terms of employment. Most companies are small and medium-sized enterprises : 73.5 per cent of the enterprises in the machine tooling, automation and robot sector earn less than 12.5 million Euro annual turnover and employ a staff of less than 100 people. Italy is the second largest exporter of packaging and textile machines worldwide.

In general, a relatively large share of very skilled staff is employed in the Italian mechanical engineering sector. The members of staff visited university and now work in planning and quality assurance, testing and customer analysing.

In 2003, almost 16,000 people worked in the manufacturing of packaging machines – a growth when compared to the last years. The growth in the production of packaging machines is caused by the positive situation in the cosmetics and food industry. Machine tooling manufacturing is concentrated in Piedmont, Lombardy, Emilia Romagna and Triveneto employing almost 33,000 people.

In 2003, virtually all Italian steel companies could improve turnover and revenues in manufacturing metal products and alloys. The production of crude steel rose by 1.7 per cent to 26.7 million tons crude steel. Italy ranks tenth place of the world's steel producers. The 154,000 employees in this sector earned an hourly wage of 19.70 Euro on average.

Vehicles, sports boats and large yachts are the most important products of the Italian transportation industry which employs a total of 265,000 people. For the building of large yachts, Italy could strengthen its position and gained 37 per cent of the world market during the past two years. The sports boat industry earned a turnover of 2 billion Euro in the year 2003. Genua proves to be the centre of shipbuilding in the Mediterranean region.

In 2002, the production of vehicles and automotive parts earned 38 billion Euro. In the European automotive market, Italy takes third place. Turin, in particular, is the centre of this industry – also with respect to subcontracting. In the year 2002, Italy produced about 1.4 million vehicles. The automotive subcontractors alone employed 30,000 people in 2002. In 2000, the labour costs (not wage!) amounted to 19.87 Euro.

In South Tyrol, Italy's most northerly province, the "Metal Working" and "Mechanical Engineering and Automotive" sectors also play an important role. Roughly 750 companies employ approx. 11,000 people, which is almost 5 per cent of the region's total workforce. These two sectors belong to the economic areas in South Tyrol with above-average productivity, all the more so because they have to assert themselves in the international markets. The metal working businesses sell around a quarter of their products in the rest of Italy and 63 per cent abroad, while the companies in the "Mechanical Engineering and Automotive" industry are also strongly focused on export : approx. 35 per cent of sales are to the other Italian provinces and 57 per cent are to foreign countries, mainly Germany.

#### Latvia

Metal finishing and mechanical engineering were the leading sectors of the Latvian industry even in earlier times when the country was the high-tech manufacturing centre for the Soviet military and aerospace industry. This is the reason why Latvia strongly suffered from the decline of the Russian market. At present, the industry mainly concentrates on export-oriented remittance work.

The annual output of the metal finishing industry amounts to 580 million Euro. The industry is characterised by the geographically distributed small and medium-sized enterprises. In 2002, 24,900 people were employed earning an average hourly wage of 1.10 Euro, one of the lowest in the whole of Europe.

The advantages of the site of Latvia for the metal finishing industry are easy access to the European market, attractive labour costs and well trained staff where the main training, research and development centres are located in Riga. Another advantage is the availability of well-priced steel from Russia in an adequate quality.

The key sub-sectors of the metal finishing industry are the manufacturing of machined metal products (26 per cent), means of transportation such as ships and trailers (26 per cent), electrical and electro-mechanical devices and equipment (23 per cent), and machines and machine tooling (21 per cent). At present, the previously well-developed electronics and communications equipment sector covers only 4 per cent. During the past three years, however, it showed satisfactory figures of growth due to the expansion of several enterprises.

In the long run, remittance work in electronics, cars and ship-building as well as tools manufacturing (casting moulds and model forms) are very promising sectors. The Latvian tools industry shows an exemplary success. It has consistently strengthened its competitive lead to receive remittance work from multinational companies, such as ABB, Audi, Ford, GM, Philips or Volvo.

## Lithuania

The Lithuanian metal industry is very much export-oriented since the domestic market of Lithuania is small. The metal products, machinery and products of the Lithuanian equipment industry are mainly geared towards the demand of foreign - particularly western - markets. In 2003, the Lithuanian metal sector exported goods amounting to a value of 925.5 million Euro.

Simple metal products accounted for 23 per cent of the entire export volume, or 58 per cent of the entire Lithuanian production in this sector. Machinery and equipment made of metal earned 77 per cent of the metal industry exports, i.e. 61 per cent of the entire Lithuanian production of equipment and machinery. The competitive advantages of Lithuania are low wages, high quality standards and a good infrastructure for import and export.

In 2003, the metal finishing industry of Lithuania had 920 enterprises with a total annual turnover of 466.3 million Euro. 78 per cent of the metal finishing enterprises had less than 50 employees, which is typical for the entire Lithuanian metal sector.

The mechatronics industry is an important area of the Lithuanian metal finishing industry. Frequently, the small enterprises of the Lithuanian metal finishing industry are equipped for customised, high quality manufactures. Employment figures deviate strongly : There are 19,200 employees in the metal finishing industry, 41,000 in the manufacturing of automotive parts. The wage level ranks in penultimate position in the EU, growth rates, however, are to be expected. Particularly promising industries are the non-ferrous metal waste & scrap (56 million Euro turnover in 2003), heating and cooling devices as well as sheet metal and other metal products.

26 Lithuanian enterprises produce metals and alloys with a total turnover of 18.5 million Euro in 2003. Here again, the bulk of enterprises employs less than 50 people. In 2002, the average monthly wage was at 292.80 Euro. The key buyers of the Lithuanian products of this sector are Germany, Latvia and the US. The most important import partners are Kazakhstan, Germany and Russia. Compared to 2003, the share of foreign direct investment in this sector rose by 12 per cent.

The mechanical engineering industry of Lithuania earned an annual turnover of 202.8 million Euro in 2003, which represents an increase by two per cent. In the year before, the turnover of the export-dependent Lithuanian mechanical engineering sector grew by 25 per cent. Turkey, Russia and Germany are the key export partners of Lithuania in this sector. In the year 2003, 10,100 people were employed by 302 mechanical engineering enterprises with an average monthly wage of 339 Euro. 61 per cent of these enterprises employed less than 50 people.

The Lithuanian automotive industry is strongly export-oriented with 95 per cent of the products being exported. This industry is characterised by small and medium-sized enterprises, too. The growth rates of the turnovers are positive : the year 2001 saw an increase in turnover by 11.5 per cent and the year 2002 saw a growth by 15 per cent to 88.7 million Euro.

The Lithuanian automotive industry concentrates on the manufacture of cables and wires for vehicles and for the electronic wiring, automotive electronics, fuel pumps, air compressors, diesel engines, oil and air filters, braking systems, trailer couplings, deco parts and cargo containers. Wires and cable components earn 79 per cent of the turnover. In addition, Lithuanian enterprises are experienced in equipping and assembling special vehicles such as, for example, double-deck engine-driven vehicles. In 2002, employees of the Lithuanian automotive industry earned 405.60 Euro per month on average.

The Grand Duchy of Luxembourg entered the age of industrialisation during the second half of the 19th century. The discovery of iron ore as well as new production technologies, skilfully carried out by clear-sited iron-masters, promoted the expansion of a powerful steel industry, which is efficient on a worldwide scale.

Though other sectors, such as ceramics, breweries and the textile industry were equally prosperous, the steel industry became the pillar of Luxembourg's industry, as is reflected in its predominant part in the national production and by the number of people employed in this sector.

For almost a century, the steel industry was the motor of the whole economy and allowed the Grand Duchy to join the leading industrialised countries and to achieve a high living standard.

The impact of the crisis, which unsettled the steel industry, was particularly felt in the Grand Duchy, due to the monolithic structure of the industrial network and the absence of a sound inner market. Therefore, at the very beginning of the crisis, it became essential to develop a strategy that was able to guarantee a perennial competitive steel industry.

Simultaneously to an intense internal restructuring process, Luxembourg's steel industry concluded strategic agreements with important steel groups. Thanks to the realisation of the most ambitious investment plan since World War II, including the replacement of classical steel making by electric steel making, the Luxembourg steel industry continued its efforts to improve its competitiveness for future openings. A continuous research policy supports the high standard of its present technology.



Besides the steel sector, which today employs approximately 7,700 persons, other sectors also reflect the diversity of the Grand Duchy's industrial structure.

The metal transformation sector is one of the most important sectors after the steel industry and includes sectors as foundries, wire mills, galvanisation, manufacturing of electrodeposited copper foils as well as a very diversified line for the construction of equipments and products ranging from blast furnaces to prefabricated factories, precision mechanics and steel and wool. Some of the most significant productions are metal buildings, handling and hoisting machinery, track material, thermostats, refrigerators, brass foundries and carbide parts.

New products like injection moulding machines, aluminium sheets, metal coating and hydraulic systems are becoming more important. This sector mainly aims at export. Its products are sold in Europe as well as on other continents.

One of today's most dynamic sectors of industry is the automotive industry. The Grand Duchy of Luxembourg has become a strategic location for suppliers to the automotive industry. The sector employs about 8,000 persons at 25 production sites. All car manufacturers in France, Germany and the United Kingdom as well as Belgian and Dutch assembly lines can be provided within 24 hours.

The Luxembourg companies active in Luxembourg's automotive industry offer a diversified range of products from steel, insulation products and interior coverings to batteries, thermostats, refrigerators, tyres and windscreens.

## The Netherlands

Like in many other countries, the national metal industry suffered from the recession of the past years. For the year 2004, the German Office for Foreign Trade (BfAI) expects a slight export growth for the Netherlands. Therefore, the export-oriented Dutch metal and electrical industry should also benefit from this recovery in 2004.

At present, mechanical engineering has to face low investments of companies. In 2002, production dropped by 4.6 per cent compared to the previous year. At the same time, turnovers increased by 5 per cent since a few large projects from 2001 were transferred and booked in the subsequent year. The association of metal, plastics, electronics and electrotechnical industry (FME) in the Netherlands expects a drop in domestic sales by 1.5 per cent in the year 2003. International sales is the only sector where a growth of .5 per cent is anticipated.

The Dutch mechanical engineering industry is very export-oriented. According to a survey of the FME association carried out among its members, one out of ten enterprises has a subsidiary production plant abroad. Investments in rationalisation measures shall now help the Dutch mechanical engineering to overcome the recession where the hopes of the industry are geared to the year 2004.

Investments to increase efficiency, in particular, shall rise the demand in machinery by the end of 2003. The FME expects a domestic sales growth of 2.5 per cent and 3.5 per cent for abroad in 2004. Besides, Dutch mechanical engineering also shows signs of stronger specialisation and concentration to research and development.

The production of metals and alloys makes for a third of the production of Dutch industry representing the strongest branch of the metal industry. Typically, intermediate products for finishing are manufactured. Metal production is concentrated on the large enterprises. Simple metal products are manufactured typically by small and medium-sized enterprises. The general decline in demand also affected this industry : In 2003, the production of metal products dropped by 2.3 per cent.

The Dutch automotive industry is characterised primarily by the manufacturing of automotive parts. The Netcar company is the only enterprise to assemble passenger cars. For the year 2003, the Dutch automotive industry estimated its sales growth to 3.5 per cent, for the year 2004, an even stronger growth of 6 per cent is expected. For a large part, this growth is due to the strong orientation towards export.

## Poland

Poland is the largest automotive market of the countries of the former Eastern Bloc. Between 1990 and 2002, the automotive market grew by 70 per cent. So far, only 50 per cent of all Polish households own a car. Therefore, the automotive industry reckons with a high expansion potential in the domestic market.

Within the Polish economy, the automotive industry attracts most investment. 72 per cent of the means were invested in machinery and technical installations, 9.8 per cent in tools, devices and other equipment, and 15.1 per cent in buildings and accommodations. Many of the key enterprises are owned by foreigners. The manufacturers of automotive parts started to establish research and test labs for new products in Poland.

In 2001, 165,600 people were employed in the automotive sector with an average monthly wage of 2,266 Polish Zloty (507.78 Euro).

The Polish market for used cars is large. However, in 2003, it decreased. Likewise, the significance of finished products for the industry decreases while the manufacture of spare parts and automotive components is becoming more important. The centre of the automotive subcontracting industry is Upper Silesia.

Shipbuilding is included in the industry of manufacturing means of transportation. At present, the Polish shipbuilding industry undergoes the process of consolidation. Polish dockyards are mainly situated in the coastal areas in the north-west and north-east of the country. The enterprises have specialised in the manufacture of container ships and small coasters. The Polish shipbuilding industry owns 4 per cent of the world-wide shipbuilding capacity.



Currently, the Polish automation technology faces difficult market conditions. The market is dominated by foreign enterprises. The role of the purely Polish companies is limited to components or customised products. As far as modern control and measuring instruments are concerned, the country mainly depends on imports. In 2001, the Polish industrial automation sector produced goods amounting to a value of 3 billion Polish Zloty (671 million Euro). 60 per cent of the value were earned by manufacturing electrical distributors and control devices.

In contrast to the last years, building activity now also starts in cities other than Warsaw which is to the benefit of the metal working industry of Poland. Mainly trade, production and recreational amenities are being established. Structures made of aluminium are considered to be a growing market. The EU – Germany especially – is Poland's most important export partner.

In the year 2002, Poland produced metals and alloys amounting to a value of 5.2 million Euro. In 2003, the production of crude steel grew in this industry. The enterprises working in the production of metals and metal compounds are mainly small and medium-sized. In 2002, this industry employed 77,000 people with an average monthly wage of 2,334 Polish Zloty (523 Euro).

The metal products produced had a value of 6.6 million Euro in 2002. In this sector, too, the typical company is small or medium-sized. In 2002, 200,100 people were employed.

In 2002, the Polish mechanical engineering sector produced goods amounting to a value of 6.5 million Euro. The 202,500 employees worked 42.4 hour a week earning 550 Euro per month in 2002. Poland imports high precision and quality tools as well as welding technology and material.

## Sweden

In the year 2000, Sweden's fine steel industry with its nimble strategy of market niches for high-quality products and its export orientation was still extraordinarily successful. Then, the market value of the annual production amounted to 42.9 billion Swedish krona (4.7 billion Euro). With the recession in 2001, the situation changed, and in the year 2003, real industrial production in the metal and ore sector dropped by as much as 1.7 per cent. Nevertheless, Sweden is the leading metal ore producer in the EU. The mines are situated in central Sweden and around Kiruna and Malmberget. Steel production is concentrated to central Sweden with special emphasis on the production of high quality alloyed steel.

In 2002, the Swedish automotive industry earned turnovers of 26 billion Euro. Though the automotive industry grew in 2003, the sector expects a stagnant demand in vehicles and automotive parts for the next years. The automotive sector is mainly located in southern and central Sweden.

The Swedish automotive industry is turning more international, which applies both to automotive subcontractors and manufacturers. Swedish car manufacturers have the lead in terms of developing telematics and active safety systems technology, design and mechanical engineering. They also hold a strong position for engines, engine parts and powertrains.

The Swedish automotive industry employs 185,000 people with 75,000 people working in the subcontracting sector. 50 per cent of the automotive subcontractors are small-sized enterprises.

The automation technology sector is situated in central Sweden. The industry offers a broad range of automation modules such as industrial robots, transportation means, industrial computers, pneumatic and hydraulic equipment as well as other mechanical and electrical components. Automation equipment and systems are developed in close co-operation with the industry.

The metal finishing industry of Sweden exports two thirds of its output. The sector employed 385,000 people in 2002 which means half of the people working in the finishing industry and in mining. The majority of the enterprises in this industry is small or medium-sized.

Modern production methods, quality and innovative ideas represent the key advantages of the industry. It is, therefore, not surprising that 65 per cent of the total costs are spent in research and development. For the year 2004, steel companies and metal finishing enterprises in particular expect a distinct recovery.

## Serbia & Montenegro

The consequences of war-related destruction and the economic uncertainty after the political restart can still be felt in Serbia today. At present, it is difficult to give a comprehensive overview of the Serbian metal industry, even more so since restructuring and privatisation measures have not yet been completed. The figures change frequently and reflect a very imprecise image of the current market situation in the Serbian metal industry.

As a matter of fact, the economy of Serbia/Montenegro recovered remarkably fast after the political upheaval in October 2000. With the introduction of a controlled floating, the dinar became stunningly stable : The inflation rate of the year 2001 fell to 38 per cent, and in 2002 to 20 per cent - a complete success compared to three-digit inflation rates prior to the floating. The gross domestic product of Serbia/Montenegro grew by five per cent in 2001.

Privatisation and restructuring - the banking sector included - have made great progress, a tax reform has been started. With the introduction of new privatisation legislation, work legislation according to European standards and a modern legal basis for foreign enterprises, the Serbian government has undertaken a lot to attract foreign investors to a financial commitment in Serbia. The improved environment was absolutely necessary to relieve the precarious economic situation of the country and offer realistic prospects of foreign investment to the Serbian enterprises which suffered from a chronic lack of financial means.

A look into the economy of the country reveals the effects of an investment hold-up caused by years of isolation and the creeping erosion of technical equipment : The country has an urgent need of (new) equipment in many industries, mainly of agrarian machinery and packaging machines. The domestic production of Serbia does by far not cover this demand in equipment, vehicles, industrial robots and machines.

According to information by the German Office for Foreign Trade (BfAI), experts estimate that “today, the Serbian manufacturers cannot even supply 20 per cent of the technology needed in agriculture”. This implies good market opportunities for foreign manufacturers – however, the rural enterprises do not have the money to buy the equipment. Since 2002, a few businesses have HERMES guarantees resulting in a slightly improved situation compared to the years 2000/2001.

In the present phase of restructuring and privatisation, most of the enterprises do neither have a clear view of their short nor medium-term future. There is hardly any enterprise which does not struggle with enormous liquidity problems.

The difficulties become most obvious at Zastava Automobil in Kragujevac. The year 2002 was meant to bring about the turn for the largest passenger car and commercial vehicle manufacturer in Serbia. Production, however, stayed far behind expectations, mainly because of non-delivered engines from the Belgrad-located engine manufacturers FAM and FMM. For 2002, 18,000 cars were planned, but only 10,500 vehicles were actually produced. The delivering difficulties of the engine manufacturers, in turn, were mainly caused by the enormous problems of their subcontractors. Zastava Automobil now hopes for assistance by the Italian automotive manufacturer Fiat.

The situation is difficult, but not hopeless - mechanical engineering, in particular packaging machines, represents an example. In an analysis of May 2003, the German Office for Foreign Trade expected “the packaging machine sector to develop into one of the most dynamic machine markets of the country” and “Serbia/Montenegro to climb to the largest selling market for packaging technology in the central and southern Balkan after Greece during the next years”.

The “many years of investment hold-up, strong growth rates in the food and stimulant industry, rapidly growing demands of the population regarding the look and quality of the goods” as well as a “strikingly strong tendency towards packaging intensive super markets” are mentioned as reasons. Serbian food producers would have an opportunity to return to the foreign markets only if they managed to produce goods with a convincing packaging quality. The Serbian engineering of packaging machines, however, was “not competitive neither in quality nor technology after many years of negligence”.

## UK

Whilst some technologies of the metal forming and finishing industries are very well established, others are newly emerging. Increasingly, metal forming companies are producing specialised products or systems aimed at particular markets. In addition to direct exports, many of the component parts produced by the sector are indirectly exported via overseas sales of the end product.

In Great Britain, there are 40 manufacturers of vehicles and 7,000 enterprises producing automotive parts. According to information by the British automotive association, 1.82 million vehicles were produced in 2002, representing a plus of 8 per cent compared to the previous year. Thus, the stagnation of the year 2001 was compensated. In 2002, the turnover of the entire industry amounted to 53.1 billion Euro. The 376,000 people employed in the industry earned 12.20 Pound on average (18.24 Euro at present).

Mechanical engineering and the production of metals and alloys are also very export-oriented. In mechanical engineering, exporting earns a third of the turnovers. In 2002, mechanical engineering achieved a turnover of 32 billion Pound (47.8 billion Euro), and the turnovers with machine tools reached 191.5 million Pound (286.3 million Euro). The employment figures as specified by the International Labour Organisation (ILO) and in industry-own sources differ greatly. ILO stated 489,000 employees for 2002, while own figures of mechanical engineering mention 850,000 workplaces. The average hourly wage in 2002 was 10.66 Pound (15.94 Euro at present).

Half of the goods produced in the metal and alloy sector is exported. Great Britain is the third largest lead producer of the world, other important products are copper and aluminium. In 2002, the industry employed 250,000 people worked in the production of metals and alloys according to own information sources.

For many years worldwide demand has grown steadily in the non-ferrous metals industries sector. More aluminium is produced each year than any other non-ferrous metal, its main user industries in the UK being transport, construction and packaging. Construction takes up 54% of the market of extrusions, most of this being suitable for export. Of the other major base metals processed, copper accounts for nearly 50% of the sector’s total net output, but the UK is also the world’s third largest producer of lead.

The UK’s metal forming and finishing industries employ around 250,000 people in 7,000 companies, which account for about £8 billion of sales. Whilst some technologies are very well established, others are newly emerging.

Increasingly, metal forming companies are producing specialised products or systems aimed at particular markets. In addition to direct exports, many of the component parts produced by the sector are indirectly exported via overseas sales of the end product - e.g. as vital components in a diverse range of products, from jet engine turbine blades to artificial hips. In 2002, the turnovers of the metal finishing industry amounted to 8 billion Pound (almost 12 billion Euro), the average hourly wage was 11.03 Pound (16.49 Euro).

The metal finishing industry is the most productive sector of the finishing industry. The British economic climate index, however, does not reflect this situation : automotive industry and mechanical engineering expect a promising future, whereas the manufacturers of metal products have a rather pessimistic outlook for the future.

*(Source : EEPC Duesseldorf Office)*