

ESAB

ESAB is a world-leading manufacturer and supplier of welding consumables and equipment ('Welding'), and cutting and automation solutions.

ESAB's welding consumables product range, which includes fluxes, electrodes, and cored and solid wires, covers welding processes for a variety of materials from mild steels to advanced alloys. ESAB supplies complete arc welding and cutting solutions, from simple welding transformers or inverters to advanced, fully automated installations.

ESAB has a leading position in processes and technologies, including cored and solid wire welding, aluminium welding, submerged arc welding, friction stir welding and advanced cutting solutions.

Europe accounts for almost one-half of ESAB's revenue. ESAB also has significant operations in North and South America, and is increasing its presence in China and elsewhere in Asia.



Plasma cutting Bevelhead, manufactured by ESAB

2005 highlights

	2005 £m	2004 £m	Increase %
Welding	607.8	532.4	14.2
Cutting and automation	112.3	92.5	21.4
Revenue	720.1	624.9	15.2
Welding	65.5	43.4	50.9
Cutting and automation	8.9	5.8	53.4
Adjusted operating profit,	74.4	49.2	51.2
Share of profits of associates (post tax)	3.4	2.4	
Capital expenditure	16.8	8.4	
Depreciation	(11.9)	(12.1)	
Adjusted operating margin	10.3%	7.9%	
Employees	6,507	6,413	

¹ before exceptional items

- ESAB achieved an adjusted operating profit in 2005 of £74.4 million (2004: £49.2 million), an increase of 51.2 per cent and its adjusted operating margin increased from 7.9 per cent in 2004 to 10.3 per cent in 2005.
- ESAB strengthened its presence in South America by increasing its ownership in the South American welding and cutting businesses from 51 per cent to 100 per cent.
- In China:
 - ESAB opened a new cutting factory in Shanghai in November 2005;
 - ESAB began construction of a consumables plant in Zhangjiagang, Jiangsu province, which is due to commence production in July 2006; and
 - ESAB signed a large contract with a major steel producer, Baoshan Iron and Steel Company Ltd to supply automated welding technology.
- ESAB achieved worldwide ISO 14001 certification.

Overview of performance

ESAB recorded an excellent performance in 2005 with sales of £720.1 million (2004: £624.9 million), an increase of 15.2 per cent, and adjusted operating profit of £74.4 million (2004: £49.2 million), an increase of 51.2 per cent. Adjusted operating margins improved to 10.3 per cent (2004: 7.9 per cent).

The sales growth of 15.2 per cent reflected favourable market conditions in most markets and modest growth in volume in certain product areas. Of this increase, some 3 per cent was due to favourable movements in exchange rates.

The substantial increase in adjusted operating profit achieved by ESAB in 2005 reflects the strong underlying demand for ESAB products and the on-going operational and other benefits derived from the restructuring programmes completed in recent years.

Industries and segmentation

Welding is used to some extent in most industries. The most familiar applications for ESAB's products are in the production of capital goods and infrastructure assets such as ships, trains and bridges. Process industries such as food, drink, paper, plastics and energy also make extensive use of plant and machinery, the manufacture of which involves an element of welding. Major global end-user segments are:

- shipbuilding and the oil and gas industries, which are the largest and most demanding users of both welding and cutting products;
- construction, where welding plays an important role in the assembly of buildings, bridges, railways, and pipelines;
- transport, which includes production of cars, trucks, buses, trains and aircraft, requires technically demanding welding solutions within highly automated production environments. This sector also includes 'off road' vehicles such as excavators, dumpers, and agricultural equipment, which require high levels of welding;
- process industries, which include petrochemicals, pulp and paper and food, use many types of stainless steels and alloyed materials that require technically demanding welding solutions; and

What differentiates ESAB?

ESAB through its world-wide network of manufacturing plants, sales and distribution facilities and well trained staff, is able to offer cost effective 'global solutions to local customers'. Key to this is its ability to provide total solutions including arc welding equipment, consumables and cutting. ESAB's brand, which has been developed over more than 100 years, reassures customers of its expertise, reliability, responsiveness and long-term commitment.

- the energy sector, like process industries, uses stainless steel and other alloys, particularly where added strength and reliability are required for components used, for example, in nuclear power plants. Considerable quantities of welding consumables are used when nuclear and other energy generating plants are being constructed. With the search for renewable and environmentally friendly energy sources, wind towers are a rapidly growing sub segment of the energy sector. In their construction, wind towers consume relatively high levels of welding consumables.

ESAB has continued to commercialise new products for the fabrication, automotive and engineering sectors where high performance solutions create value for the customer. For example, by focusing on the demands of the growing wind turbine sector, ESAB has developed equipment and consumables for continuous sub-arc welding ('SAW') of steel components designed to withstand punishing conditions in offshore wind farms in northern Europe.

In cutting, ESAB has developed a strong range of machines to meet the high specification applications that deliver better cut quality, higher cutting speeds, lower operating costs and integration into automated production methods. This range of machines is based around oxy-fuel cutting, plasma cutting and laser cutting technologies and reflects ESAB's 65 years of experience in the cutting industry.

Industry overview

Demand for welding products is determined largely by worldwide consumption of steel and, to a lesser but growing extent, of other metals, such as aluminium, used in shipbuilding and the fabrication of capital equipment.

The International Iron and Steel Institute ('IISI') estimates world output of crude steel in 2005 at 1.1072 billion metric tonnes, surpassing last year's level by 5.8 per cent or an increase of 60.8 million metric tonnes (mmt). China produced 349.4 mmt and therefore accounted for 31.6 per cent of global steel production (2004: 26.8 per cent) and the rest of the world suffered an overall decline of 8.1 mmt or 1.1 per cent, with the NAFTA and the European Union registering the biggest declines of 5.3 per cent and 3.6 per cent, respectively.



Business review (continued)

Activity in the markets for ESAB's aluminium welding wire has remained strong throughout 2005. These include shipbuilding, where advanced alloys are being increasingly used to construct high performance aluminium sections of boats and ships, and in the automotive industry, where leading manufacturers recognise the high performance characteristics of ESAB's products in the robotic welding of vehicles.

Regional overview

Europe remains ESAB's most important region in terms of both sales and production capacity. In recent years some of the welding consumables production lines and manufacturing of certain standard equipment ranges have been relocated within Europe from higher cost Western European locations to Central Europe, where production costs are lower. In North America some production has also been relocated from the USA to Mexico. A relatively minor proportion of ESAB's total consumables' manufacturing capacity is located in Asia, and it is planned that such capacity will be increased in future years.

All of ESAB's automated installations are manufactured at Laxå in Sweden, whereas cutting machines are manufactured at Karben in Germany, Florence in the USA and at the new cutting factory in Shanghai.

Regional markets

During 2005, ESAB experienced sales growth in all five regions. However, in Europe, its biggest region, growth was below the levels achieved in other, faster growing, regions of the world.

Europe

For ESAB's businesses in its Europe region (which includes its operations in Russia and the Commonwealth of Independent States ('CIS')), it was a year of relative consolidation following the operational restructurings in recent years.

In Europe, ESAB experienced sales growth in 2005 of 9.5 per cent, with particularly strong growth in countries such as Italy, Finland, Germany, Russia and Hungary of between 16 and 46 per cent.

ESAB was awarded the 2006 Frost & Sullivan Award for Competitive Strategy Leadership for its notable performance in the Russian and Ukrainian welding equipment and consumables markets.

China

In 2005, ESAB significantly increased its presence in China by:

- opening its new cutting machines factory in Shanghai in November;
- beginning construction of a new consumables plant in Zhangjiagang, Jiangsu province which is due to commence production in July 2006; and
- signing a large contract with a major steel producer, Baoshan Iron and Steel Company Ltd to supply automated welding technology.

Those market sectors that have contributed most strongly to ESAB's growth in Europe have been shipbuilding, offshore, automotive, energy, general fabrication and construction. ESAB was able to provide productivity enhancing solutions to the automotive industry through its Aristo welding machines.

Sales in the CIS developed strongly in 2005, with Ukraine, Azerbaijan, Kazakhstan and Belarus all achieving substantial revenue growth. All these countries offer significant future growth opportunities. ESAB also experienced good growth in other emerging markets, such as Turkey, Romania and Bulgaria.

Pilot lean manufacturing projects were undertaken in two of ESAB's European factories by way of a precursor to a wider roll-out of this programme elsewhere in 2006 and 2007. In addition, an outdated solid wire plant in Verbania in Northern Italy was closed in December 2005.

The cutting business generally performed well, and experienced particularly good growth in medium range machines and the aftermarket.

Whilst many of ESAB's markets in Western Europe are essentially mature, there are opportunities for growth elsewhere in Europe and particular attention will be focused on further developing the Russian and other rapidly growing markets such as Turkey, Romania and Bulgaria. During 2006, sales offices and demonstration centres will be established in certain CIS countries.

In Western Europe, ESAB will continue to focus on sectors such as shipbuilding, automotive and energy, and on improving its overall market share.

North America

ESAB Group Inc ('EGI') has a leading presence in North America. Its products are predominantly used in general metal fabrication, construction, transport, shipbuilding, process equipment, mobile machinery and automotive sectors.

2005 was a progressive year for EGI in a generally positive trading environment. In 2005, EGI achieved good growth in both revenue and profitability in welding consumables because of increased levels of activity in the industry sectors served by EGI and the introduction of a number of new products.



The new cutting machine factory in Shanghai

ESAB, founded in Gothenburg, Sweden, in 1904, has grown to span five continents. It has 26 manufacturing facilities, strategically located near to end users, ESAB's associates have a further five manufacturing facilities and a further facility is under construction in Chennai. ESAB sells its products in most countries of the world.



- Locations of ESAB's manufacturing facilities
- Locations of ESAB's associates' manufacturing facilities

ESAB: revenue by destination

	2005 £m	2004 £m	Growth %
Europe	345.4	315.3	9.5
North America	197.1	166.4	18.4
South America	90.3	71.5	26.3
China	14.9	11.6	28.4
Rest of world	72.4	60.1	20.5
Total	<u>720.1</u>	<u>624.9</u>	<u>15.2</u>

Business review (continued)

The equipment and cutting businesses also performed well.

EGI's profitability improvement also benefited from a number of cost reduction measures and procurement initiatives.

In 2006, EGI envisages that the generally favourable economic conditions seen in 2005 will continue. A continuation of the short-term uplift in demand is also expected from reconstruction work to repair the devastation caused by Hurricane Katrina, which was first seen in the final quarter of 2005.

South America

ESAB's presence in the region was strengthened during the year as a result of its ownership in the South American welding and cutting businesses being increased from 51 per cent to 100 per cent.

Sales in Brazil increased, even though the relative competitiveness of the local steel industry was reduced as a consequence of the appreciation of the Brazilian Real. Eutectic sales, which are made under licence by ESAB in Brazil, increased by more than 50 per cent over the previous year.

Sales grew marginally ahead of the market in Argentina, and more than doubled in Chile, albeit from a low base.

Better trading conditions are forecast in Brazil for 2006 for certain key industries such as mining, pipelines, energy and shipyards. The outlook in Argentina is also positive with industry sectors served by ESAB generally expected to grow.

ESAB is seeking to expand its businesses in Chile and in other South American countries by strengthening its sales and marketing operations. A new regional sales office and warehouse facility is being established in Panama to serve the Central American market.

China

In 2005, ESAB established a sales and distribution company in Shanghai and a new warehouse facility in Waigaoxiao.

A new ESAB cutting factory was opened in November 2005 in Shanghai. This facility is targeted to become a centre of excellence for cutting products, which will support both the Chinese market and other markets in Asia.

Construction commenced in August 2005 of a solid wire and flux cored manufacturing plant in Zhangjiagang, Jiangsu province. This plant is due to commence production in July 2006.

In November 2005, ESAB signed a large contract with a major steel producer, Baoshan Iron and Steel Company Ltd, to supply automated welding technology. The manufacturer produces around 20 million tonnes of steel a year and ESAB will supply automated systems, equipment and consumables.

Rest of world

Asia (excluding China)

In 2005, ESAB performed well in Singapore, Indonesia and Australia, helped in part by the escalation of energy and commodity prices. Sales also improved in Japan due to investments by key industrial customers in the liquefied natural gas market.

ESAB's growth will target the most dynamic industries such as the automotive, shipbuilding and energy sectors.

Increasing growth in the sales of consumables and expanding opportunities in Vietnam and Australia, as well as product development to improve the product range available in the region, will be key in 2006.

Middle East and Africa

In the Middle East, ESAB's revenue and profits have seen continued growth in 2005. In the UAE, ESAB has reinforced its leading position and has focused on added value and after sales service for its customers. Changes made by ESAB to its distribution arrangements have led to ESAB increasing its share of the Saudi Arabian market.

ESAB intends to increase its presence in the faster growing economies of the Middle Eastern region. Good growth potential exists in the energy sector and related infrastructure/industrial activities, shipbuilding and repair and steel fabrication in 2006 and beyond. In 2005, ESAB was selected as the major supplier for the Dubai Drydocks expansion project. Water treatment and desalination are other key industries that ESAB will be focusing on in 2006.

In Africa, ESAB's operations remain limited but it is seeking to increase sales where suitable opportunities exist.

Associated undertakings

ESAB owns 38 per cent of ESAB India Limited and 50 per cent of ESAB SeAH Corporation, a South Korean company. ESAB's share of the post tax profits of associates was £3.4 million (2004: £2.4 million), an increase of 42 per cent.

India

During 2005, ESAB India achieved significantly improved revenues and profits, due to favourable market conditions and actions taken to improve its production efficiencies and product availabilities.

A new equipment assembly factory is being built by ESAB India in Irungattukottai, Chennai, which should be fully operational in 2007.

South Korea

ESAB SeAH Corporation, which is one of the leading producers of flux cored wire in South Korea, has continued to perform strongly. The South Korean market is expected to grow in 2006 due to increasing demand from domestic shipyards.

Technical developments and new products

2005 was a significant year in terms of technical development.

Welding consumables and equipment

On the research side, co-operation continues with various institutes, universities and steel producers in the search for weld metals to match properties of new materials. Fields of research, which range from high strength steels to advanced corrosion resistant alloys and high temperature grades, will form the basis for a number of new product launches.

New solid wires for high temperature and high strength applications have been included in ESAB's successful AristoRod range. The range of stainless steel solid wires was also expanded to give superior product quality and consistency.

During the Essen Welding Fair ESAB exhibited its welding power source 'QSet'. The welding power source is a newly designed unit capable of delivering 300 amperes and has a unique QSet function, which makes it easier for the user to set the parameters of the welding machine for the parts they are welding.

As a leader in aluminium welding, EGI's subsidiary Alco Tec launched a range of welding wires in the patented Marathon Pac™, specifically aimed at mechanised welding.

Cutting and automation

Key product developments in 2005 included M3 plasma, a more accurate and productive cutting and marking machine. These machines have the potential to deliver cutting speeds that are 30 per cent faster than other, conventional systems and consequently offer customers significant savings in energy, gas and cutting consumables.

A Railtrac FW1000 Flexi Weaver
for oscillated welding



South America – ESAB's increasing presence in a growing market

ESAB first established a presence in South America in 1947. Its first manufacturing operation was opened in 1955 in Brazil in partnership with a local company. Later, during the 1990s, ESAB entered the smaller, but important, Argentine market, through the acquisition of a shareholding in Conarco.

In 2004, ESAB increased its equity shareholding in the overall South American business venture from 38 to 51 per cent. In 2005, ESAB acquired the outstanding 49 per cent from the Acevedo family for a total cost of £26.4 million.

By combining access to ESAB's global technology and resources with a distinctive South American identity, ESAB is now a market leader in South America. For many years, the business has had a large manufacturing facility in Brazil at Belo Horizonte, where an additional plant has been newly established on a separate site to manufacture an increased range of welding consumables and equipment. In Argentina, ESAB also has two manufacturing facilities.



AristoRod – a success story

In 2003, ESAB launched the OK AristoRod™, a copper free MAG (Metal Active Gas) welding wire, to the European market and since then sales of this product have continued to increase year on year. The wire is currently used within most industry segments such as general construction, automotive components and shipbuilding.

Since the 1950s, the standard wire for MAG welding had been copper coated. With customers demanding higher productivity, ESAB saw the need for a new high performance wire and developed AristoRod, a wire electrode without copper coating and with a number of unique properties.

AristoRod is treated with ESAB's unique Advanced Surface Characteristics ('ASC') technology, taking MAG welding operations to new levels of performance and efficiency in each of robotic, mechanised and manual welding.

AristoRod is changing the face of MAG welding due to the many advantages that it offers. These include consistent and reliable welding performance at high electrical currents, low amounts of welding spatter and high rust resistance for better storage protection.

The AristoRod wire is available in a variety of sizes to suit welding applications, ranging from manual welding through to continuous Marathon Pac solutions for robotic welding installations.

ESAB is developing a high performance PC based control system designed specifically for cutting machines.

ESAB is a leader in welding equipment for integration with robots and other welding automation systems. ESAB's new design of welding packages for robotic applications brings productivity benefits to customers from the higher volume production of manual inverter based welding power sources.

Future developments and longer term growth prospects **Market expansion**

ESAB will continue to invest in growth markets, particularly in China, Russia, the CIS countries and southern Asia.

ESAB's increasing presence and capabilities in China are demonstrated by the new consumables factory being built and scheduled to commence production in July 2006, the cutting factory opened in November 2005 and the winning of a large new contract to supply automated welding technology.

Sales and demonstration centres are being established in the CIS countries. Infrastructure is also being expanded in parts of South East Asia. ESAB is reviewing how best to service these markets, and may as a consequence locate additional production capacity in the region. The Indian market for welding consumables has experienced considerable recent growth and ESAB, through its associated company ESAB India, anticipates further growth as the Indian economy continues to grow.

The South American markets, especially Brazil, Argentina and Chile, also present attractive opportunities. The prospects for ESAB's business throughout South America also benefit from ESAB having acquired 100 per cent ownership of the business, which has enabled it to introduce a number of new products and technologies into South America.

In Europe, it is ESAB's intention to expand in those markets where it has a lower than average market share, but only where profitable growth is achievable. ESAB will continue to optimise its channel strategy, which has led to improved market access and revenue in 2005.

Investment in further sales resources and new product launches should enable the equipment business to grow in key markets.

Widening the range of ESAB's leading Marathon Pac™ consumable products also provides opportunities for growth by offering significantly enhanced productivity to a broader range of its customers.

The continuing strength of the shipbuilding and offshore and energy market sectors will create additional demand for welding equipment, flux cored wire and other welding consumables and ESAB is well placed to benefit from future growth in these sectors.

New products and applications

ESAB is also developing new products and welding applications for use in the construction of plant and machinery (including pipelines, wind towers, offshore wind-farms and platforms) for the energy sector. Other opportunities include desalination plants to counter shortages of fresh water.

Shipbuilding is likely to remain one of the most important industry sectors served by ESAB. This is due to growing world trade, the need to replace life-expired vessels and the increasing requirement for double-hulled ships.

ESAB together with its associate company, ESAB India Ltd, has established a new research and development facility for welding and related engineering in India, which is owned 75 per cent by ESAB and 25 per cent by ESAB India.

Lean manufacturing

ESAB recognises that it will need continuously to reduce its manufacturing, supply and distribution and other operational costs to retain its competitiveness, particularly against manufacturers located in low cost countries. During 2005, ESAB commenced a process to introduce 'Lean' manufacturing and continuous improvement processes into its organisation.

Initial pilot programmes were set up in selected parts of the organisation, supported by professional 'Lean' manufacturing and continuous improvement practitioners. The pilots were designed specifically to facilitate learning and to introduce a new range of 'Lean' and related tools and techniques into ESAB. The 'Lean' pilots have proved successful and it is planned that the programme will be rolled out across ESAB in Europe, South America and the Far East.

International Welding and Cutting Fair, Essen, Germany

ESAB took the opportunity to showcase its progress in process and product development such as Tandem Twin SAW technology for wind towers, SuperPulse and Robot Packages, M3 High Speed Cutting and AristoRod advanced welding wires for robot applications. By investing in the development of these technically demanding applications, ESAB continues to demonstrate its commitment to improving productivity for its customers.

