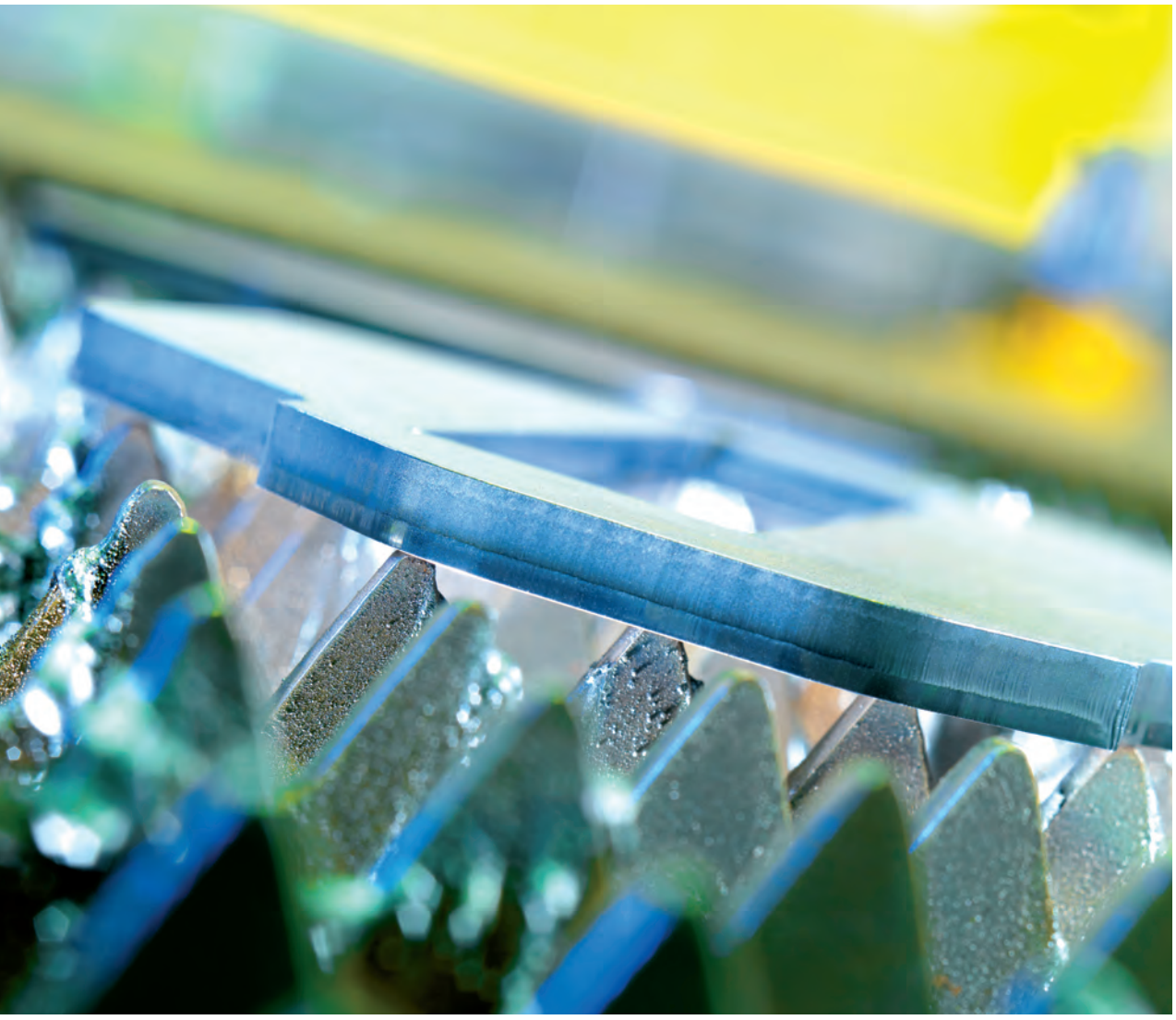
# Cutting machines - Our product range.

ONE PARTNER. FULL RANGE
OF CUTTING SERVICES.



# Expertise for maximum productivity.

ESAB cutting machines can handle the full range of thermal cutting processes – choose the one that best suits your needs.

**Plasma, oxy-fuel, laser** - individually or in combination – with ESAB cutting machines you can achieve optimum cut quality and high cutting speeds in each case.

**Oxy-fuel cutting** is now more economical and precise than ever. There is no better alternative for high material thicknesses. ESAB CUTTING SYSTEMS has experience in using oxy-fuel flame-cutting technology that stretches back to 1907.

**Plasma cutting** offers outstanding advantages, such as an unbeatable cost-benefit ratio, high cutting speeds and precise results.

**Laser cutting** is capable of very high speeds and should be your cutting process of choice, particularly when cutting thin materials.

## PERFORMANCE FEATURES AT A GLANCE



| Oxy-fuel cutting | Rating | Features |
|---|---|---|
| | Precision ●●● | ✅ use with construction steel |
| | Speed ●● | ✅ cuts very thick material |
| | Economy ●●●●● | ✅ weld seam preparation in one step (I, V, Y, X and K seam) |
| | Flexibility ●●●● | |



| Plasma cutting | Rating | Features |
|---|---|---|
| | Precision ●●●● | ✅ high cutting speed |
| | Speed ●●●●● | ✅ cuts all conductive metals |
| | Economy ●●●● | ✅ high precision on all plates |
| | Flexibility ●●●● | ✅ virtually no burr formation |
| | | ✅ easy to automate |



| Laser cutting | Rating | Features |
|---|---|---|
| | Precision ●●●●● | ✅ highest speed on thin material |
| | Speed ●●●● | ✅ highest precision on thin plates and elaborate contours |
| | Economy ●●● | ✅ easy to automate |
| | Flexibility ●●● | |

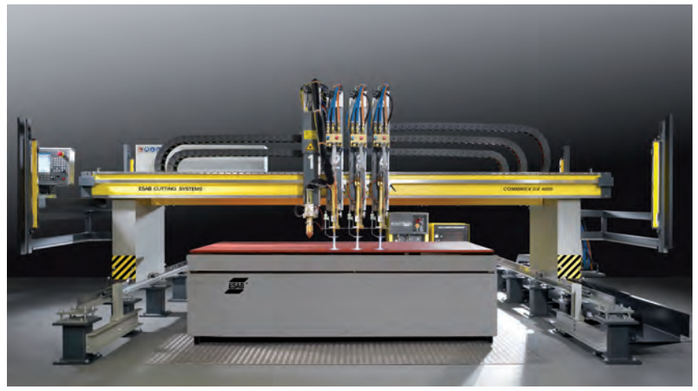
●●●●● very good


# COMBIREX™ DX

## New standards in terms of flexibility and precision.

**Your benefits:**

- Can be used as a plasma, oxy-fuel or combined plasma-oxy-fuel cutting machine
- Complete solution with the VISION™ 51 control and innovative COLUMBUS™ III programming system
- Easy to upgrade with little effort thanks to modular development concept



**Our new gantry cutting machine** offers you maximum flexibility: plasma and oxy-fuel cutting in combination or separately – both options are possible. Used with oxy-fuel, the COMBIREX™ DX cuts materials up to 200 mm thick. For plasma operation, select your system according to your current needs and upgrade it later when your needs have grown.

The COMBIREX™ DX can be fitted with a plasma torch or up to four oxy-fuel torches. The combined mode allows one plasma torch plus three oxy-fuel torches.

Thanks to its compact construction with a central track, the COMBIREX™ DX requires only a small amount of space and greatly simplifies loading and unloading.

Its unique features include an intelligent gas metering unit and positioning aid, which allow extremely precise operation with little effort. You can start cutting more quickly and easily, and achieve optimal results.

### TECHNICAL DATA

| COMBIREX™ DX | 2500 | 3000 | 3500 | 4000 |
|---|---|---|---|---|
| Track width in mm | 2500 | 3000 | 3500 | 4000 |
| Recommended plate width[1] in mm | 2000 | 2500 | 3000 | 3500 |
| Machine width in mm | 3600 | 4100 | 4600 | 5100 |
| Cutting length[2] in mm | Max. 18000 | | | |
| Cutting processes | Plasma, oxy-fuel | | | |
| Plasma technology[3] | | | | |
| Cutting thickness[4] in mm | Max. 60 | | | |
| Number of torches | 1 | | | |
| Oxy-fuel technology[5] | | | | |
| Cutting thickness in mm | Max. 200 edge cutting | | | |
| Hole piercing in mm | Max. 150 (with 1 oxy-fuel torch) | | | |
| Number of torches | 1 – 4 | | | |
| Fuel gases | Acetylene, propane, natural gas, mixed fuel gases | | | |
| Max. positioning speed in mm/min | 24000 | | | |
| Machine length in mm (incl. safety system) | 2160 | | | |
| Machine height in mm | 2226 (including track height 465 mm) | | | |
| Workpiece table height in mm | 700 | | | |
| Supply voltage | 230 V/ 50/60 Hz | | | |
| Full load amperage | 2 KVA | | | |

[1] For 1 torch with oxy-fuel or plasma
[2] At a track length of max. 20 m
[3] Max. 1 plasma torch
[4] Depending on the plasma system
[5] The number of oxy-fuel torches depends on the use of a plasma torch. If no plasma torch is installed, up to 4 oxy-fuel torches can be used.

# SUPRAREX™ SXE

## The all-rounder with impressive positioning speed.

**Your benefits:**

- Can be used as a plasma, oxy-fuel or combined plasma-oxy-fuel cutting machine
- Complete solution with the VISION™ 51 control and innovative COLUMBUS™ III programming system
- Modular machine system for complete freedom to configure according to your wishes

**The SUPRAREX™ SXE is** a powerful and extremely durable gantry cutting machine with an impressive positioning speed, making it a sound foundation for a wide range of cutting and marking tasks. It can be fitted with tools for cutting, weld seam preparation and marking.

Versatility is one of its strengths: the SUPRAREX™ SXE works with plasma, oxy-fuel or a combination of both processes. It uses the latest plasma technology and ESAB's many years of experience in oxy-fuel cutting.

**SUPRAREX™ SXE BIG**

**Big performance for large formats.**

As an enhancement to our SUPRAREX™ family, SUPRAREX™ SXE BIG offers you all the advantages of our all-rounder and is also an ideal way to substantially boost your productivity.

With two transverse motor carriages (Y1+Y2), the SUPRAREX™ SXE BIG allows you to process two workpieces simultaneously in just one step.

### TECHNICAL DATA

| SUPRAREX™ | SXE | SXE BIG |
|---|---|---|
| Track width in mm | 3000 - 6500 | 7000 - 8500 |
| Recommended plate width in mm | All formats | All formats |
| Machine width in mm | 3650 - 7150 | 7650 - 9150 |
| | | |
| Cutting length in mm | Variable | Variable |
| Cutting processes | Plasma, oxy-fuel | Plasma, oxy-fuel |
| | | |
| Plasma technology | | |
| Cutting thickness[1] in mm | Max. 60 | Max. 60 |
| Number of torches | 1 - 4 | 1 - 4 |
| | | |
| Oxy-fuel technology | | |
| Cutting thickness in mm | Max. 200/300 | Max. 200/300 |
| Hole piercing in mm | 1 x 150, 4 x 100 | 1 x 150, 4 x 100 |
| Number of torches | 1 - 6 | 1 - 12 |
| Fuel gases | Acetylene, propane, | Acetylene, propane, |
| | natural gas, mixed fuel gases | natural gas, mixed fuel gases |
| | | |
| Max. positioning speed in mm/min | 24000/40000 | 24000/40000 |
| Machine length in mm | 2000 | 2000 |
| Machine height in mm | 2000 | 2000 |
| Workpiece table height in mm | 700 | 700 |
| Supply voltage | 230 V/ 3 x 400 V/ 50/60Hz | 3 x 400 V/ 50/60 Hz |
| Full load amperage[2] | 4.0 to 6.5 KVA | 4.0 to 6.5 KVA |

[1] Depending on the plasma system // [2] Depending on equipment

# NUMOREX™

## Heavy-duty and robust for use under the toughest conditions.

**Your benefits:**

- Can be used as a plasma, oxy-fuel or combined plasma-oxy-fuel cutting machine
- High degree of automation with a variety of equipment options to meet individual needs
- Outstandingly suitable for heavy-duty operation under extreme conditions


**Our NUMOREX™ offers** an effective combination of performance and versatility. It features a transverse drive with precision rack and pinion, zero-backlash gearbox, AC motors and digital amplifiers. Hardened, oversized steel wheels carry the machine's weight on each side to ensure smooth movement. The drive system also delivers high acceleration for optimum performance, even on the smallest contours.

The NUMOREX™ is designed for heavy-duty operation even under the toughest conditions. For example, it allows simultaneous congruent or mirrored oxy-fuel cutting of up to 12 parts. The individual stations are prepared for the integration of state-of-the-art automated devices.

In plasma mode, the NUMOREX™ benefits from ESAB's knowledge of the latest plasma technology. Equipped with high-tech plasma torch carriages designed to allow technical enhancements to be integrated with little effort, the existing system can be upgraded at any time to meet your individual needs.

### TECHNICAL DATA

| NUMOREX™ | 6000 | 6500 | 7000 | 7500 | 8000 | 8500 |
|---|---|---|---|---|---|---|
| Track width in mm | 6000 | 6500 | 7000 | 7500 | 8000 | 8000 |
| Recommended plate width in mm | All formats | | | | | |
| Machine width in mm | 7000 | 7500 | 8000 | 8500 | 9000 | 9500 |
| | | | | | | |
| Cutting length in mm | Variable | | | | | |
| Cutting processes | Plasma, oxy-fuel | | | | | |
| | | | | | | |
| Plasma technology | | | | | | |
| Cutting thickness[1] in mm | Max. 60 | | | | | |
| Number of torches | 1-4 | | | | | |
| | | | | | | |
| Oxy-fuel technology | | | | | | |
| Cutting thickness in mm | Max. 200/300 | | | | | |
| Hole piercing in mm | 1 x 150, 4 x 100 | | | | | |
| Number of torches | 1-12 | | | | | |
| Fuel gases | Acetylene, propane, natural gas, mixed fuel gases | | | | | |
| | | | | | | |
| Max. positioning speed in mm/min | 24000/40000 | | | | | |
| Machine length in mm[2] | 4000 | | | | | |
| Machine height in mm | 3750 | | | | | |
| Workpiece table height in mm | 700 | | | | | |
| Supply voltage | 3 x 400 V/ 50/60 Hz | | | | | |
| Full load amperage[3] | Up to max. 20 KVA | | | | | |

[1] Depending on the plasma system // [2] Excluding platform // [3] Depending on equipment

# TELEREX™

## High-performance, large machine for huge processing tasks.

**Your benefits:**

- Can be used as a plasma, oxy-fuel or combined plasma-oxy-fuel cutting machine
- Large machine with a track width of up to 30000 mm
- Wide variety of possible applications with variable equipment to meet your needs

**The TELEREX™** expands the ESAB range of cutting machines in terms of size and performance.

As the leader and top performer among large machines, the TELEREX™ is used in shipbuilding, bridge building and pressure vessel production. The large number of TELEREX™ cutting gantries in use around the world provides impressive evidence of the machine's unparalleled productivity, economy and performance.

Endless rotating plasma bevel heads, fully-automatic triple torch systems for oxy-fuel operation, integrated sandblasting tools and grinding systems, marking tools in all variations and on-board filters for fume extraction make the TELEREX™ a highly versatile and high-performance cutting machine.


### TECHNICAL DATA

| TELEREX™ | 7000 | bis | 33000 |
|---|---|---|---|
| Track width in mm | 7000 | | 33000 |
| Recommended plate width in mm | All formats | | |
| Machine width in mm | Depending on track and equipment | | |
| Cutting length in mm | Variable | | |
| Cutting processes | Plasma, oxy-fuel | | |
| Machining processes | Marking, grinding, sandblasting, panel production | | |
| Plasma technology | | | |
| Cutting thickness[1] in mm | Max. 60 | | |
| Number of torches | 1-4 | | |
| Oxy-fuel technology | | | |
| Cutting thickness in mm | Max. 200/300 | | |
| Hole piercing in mm | 1 x 150, 4 x 100 | | |
| Number of torches | > 6 | | |
| Fuel gases | Acetylene, propane, natural gas, mixed fuel gases | | |
| Max. positioning speed in mm/min | 24000/40000 | | |
| Machine length in mm[2] | 5200 to 8500 | | |
| Machine height in mm | 3750 | | |
| Workpiece table height in mm | 650 | | |
| Supply voltage | 3 x 400 V/ 50/60 Hz | | |
| Full load amperage[3] | Up to max. 20 KVA | | |

[1] Depending on the plasma system // [2] Including platform // [3] Depending on equipment

# FALCON™

## Versatile and efficient with an optimal cost-benefit ratio.

**Your benefits:**

- Can be used as a plasma, oxy-fuel or combined plasma-oxy-fuel cutting machine
- Outstanding cost-benefit ratio
- Wide range of applications that can be expanded at any time to meet individual needs


**The focus of the FALCON™** is not just great user-friendliness but also its robust construction, which makes it ideal for cutting tasks even under the toughest conditions. The outstanding, solid workmanship reduces maintenance costs and ensures a long service life.

Simple loading and unloading of the table, high precision throughout the entire cutting area and an even, fast positioning speed ensure optimal efficiency in use. A transverse and longitudinal drive system with AC drives ensures precise cutting results throughout the entire cutting area.

The FALCON™ makes you flexible. When your needs grow, the machine can be upgraded at any time with little effort and adapted for new tasks. This helps you increase your productivity and make the greatest use of your capacity.

Combine the FALCON™ with ESAB's VISION™ 51 control to make efficient use of its range of options with reliably reproducible cut quality.

### TECHNICAL DATA

| FALCON™ | |
|---|---|
| Track width in mm | 3000 |
| Recommended plate width in mm | 2000 |
| Machine width in mm | 3400 |
| | |
| Cutting length in mm | 6000 |
| Cutting processes | Plasma, oxy-fuel |
| | |
| Plasma technology | |
| Cutting thickness[1] in mm | Max. 60 |
| Number of torches | 1 |
| | |
| Oxy-fuel technology | |
| Cutting thickness in mm | Max. 150 with one torch (edge cutting) |
| Hole piercing in mm | 1 x 100, 2 x 60 |
| Number of torches | 2 |
| Fuel gases | Propane |
| | |
| Max. positioning speed in mm/min | 9000 |
| Machine length in mm | 1950 |
| Machine height in mm | 1900 |
| Workpiece table height in mm | 700 |
| Supply voltage | 230 V/ 50/60 Hz |
| Full load amperage | 2 KVA |

[1] Depending on the plasma system

# EAGLE™

## Concentrated power in a compact design.

**Your benefits:**

- Full range of plasma cutting power with an unbeatable cost-benefit ratio
- Intelligent, space-saving machine concept
- Impressive acceleration and deceleration values


**With the EAGLE™** you opt for the great advantages of plasma cutting: the EAGLE™ is the result of our many years of experience and innovative developments in plasma. All the components and functions of the EAGLE™ are consistently designed to exploit the potential of plasma cutting to the full.

The EAGLE™ provides extraordinary cutting results in terms of cutting accuracy, productivity and quality at thicknesses from 0.75 to 30 mm (depending on the power source).

Special drive and guidance systems ensure impressive acceleration of 35000 mm/min. What makes the EAGLE™ so amazingly dynamic is the smooth, perfectly coordinated interaction of the integrated components such as the plasma torch and power source, the VISION™ control and the COLUMBUS™ III software.

The machine is also equipped with an innovative torch height control that ensures extremely precise, constant and reproducible cutting results.

### TECHNICAL DATA

| EAGLE™ | 2000 | 2500 | 3000 | 3500 |
|---|---|---|---|---|
| Track width in mm | 2000 | 2500 | 3000 | 3500 |
| Recommended plate width in mm | 1500 | 2000 | 2500 | 3000 |
| Machine width in mm | 2950 | 3450 | 4450 | 4450 |
| Cutting length in mm | TL[1] ./. 2000 | | | |
| Cutting processes | Plasma | | | |
| Cutting thickness[2] in mm | Up to 30 | | | |
| Max. number of torches | 1 | 2 | 2 | 2 |
| Max. positioning speed in mm/min | 35000 | | | |
| Machine length in mm | 1600 | | | |
| Machine height in mm | 1700 | | | |
| Workpiece table height in mm | 700 | | | |
| Supply voltage | 230 V/ 50/60 Hz | | | |
| Full load amperage | 2 KVA | | | |

[1] TL=Track Length variable, according to your specification
[2] Depending on the plasma system


# E-VENT™

## The turnkey plasma cutting machine for immediate use.

**Your benefits:**

- A turnkey machine, installed and ready for use in just one day
- Specially developed for automated manufacturing processes in the heating, ventilation, air conditioning and insulation sector
- Laser sensors for initial height detection for hole piercing

**The E-VENT™ has** a variety of innovations in store for you: the laser sensors for initial height detection for hole piercing and the integrated measurement of distance between the torch and material during the cutting process make for optimal cutting precision.

Another ground-breaking innovation is the individually configurable cutting grid in longitudinal and transverse directions. The innovative suction system is optimised for air handling, saving energy and 50 % suction volume.

Simply equip the E-VENT™ with the VISION™ 51 control, the COLUMBUS™ III programming system, the PT-37 plasma torch and a plasma power source* that uses air as a plasma cutting gas and you can start cutting immediately.


### TECHNICAL DATA

| E-VENT™ | DX | VX |
|---|---|---|
| Track width in mm | 2000 | 2000 |
| Recommended plate width in mm | 1500 | 1500 |
| Machine width in mm | 2500 | 2500 |
| | | |
| Cutting length in mm | 3000/ optional 6000 | |
| Cutting processes | Plasma | |
| Cutting thickness[1] in mm | Up to 20 | |
| Max. number of torches | 1 | |
| Max. positioning speed in mm/min | 30000 | |
| Machine length in mm | 7000 | |
| Machine height in mm | 2000 | |
| Workpiece table height in mm | 700 | |
| Supply voltage | 220 V, 50/60 Hz | |
| Full load amperage | 2 KVA | |

[1] Depending on the plasma system

* E-VENT™ DX with ESP-101 Plasmarc™ plasma power source, E-VENT™ VX with PowerCut™ 1300 plasma power source


# ALPHAREX™

## Consistently high cut quality on large formats.

**Your benefits:**

- State-of-the-art laser technology for large-format applications with optimal use of material
- On-board laser ensures consistently high cut quality throughout the entire working area, even at very large dimensions
- Maximum productivity thanks to laser process control

**Laser cutting with the ALPHAREX™** opens up new possibilities. Short production times even with complex geometries and in large formats at a consistently high quality level are its key strengths. The on-board laser source ensures the highest precision throughout the entire working area.

The ALPHAREX™ features optical sensors to detect the different states of the laser process. This automatically controls the cutting speed, identifying the end of piercing or any loss of cut. This means fewer rejects and consistently high cut quality, which eliminates the need for costly reworking.

The machine is also extremely user-friendly. It uses the principle of mirror focusing, so there is no need for manual settings.

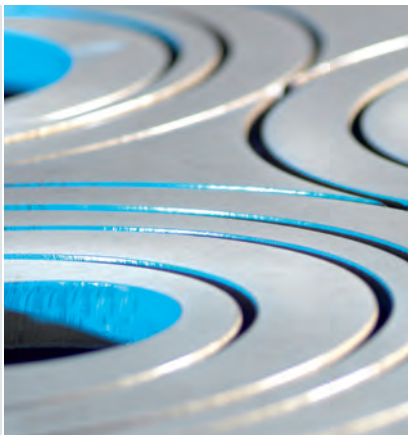
### TECHNICAL DATA

| ALPHAREX™ AXD | 5000 | 6000 | 7000 |
|---|---|---|---|
| Track width in mm | 5000 | 6000 | 7000 |
| Recommended plate width in mm | 3000 | 4000 | 5000 |
| Machine width in mm | 6300 | 7300 | 8300 |
| | | | |
| Cutting length in mm | Max. 40000 | | |
| Cutting processes | $CO_2$ Laser | | |
| Cutting thickness[1] in mm | 25 | | |
| Max. number of torches | 1 | | |
| Max. positioning speed in mm/min | 25000 | | |
| Machine length in mm | 5000 | | |
| Machine height in mm | Up to 5000 | | |
| Workpiece table height in mm | 700 | | |
| Supply voltage | 3 x 400 V/ 50/60 Hz | | |
| Full load amperage | 20 KVA | | |

[1] Depending on laser output; 25 mm equivalent to 6 kW laser output, construction steel

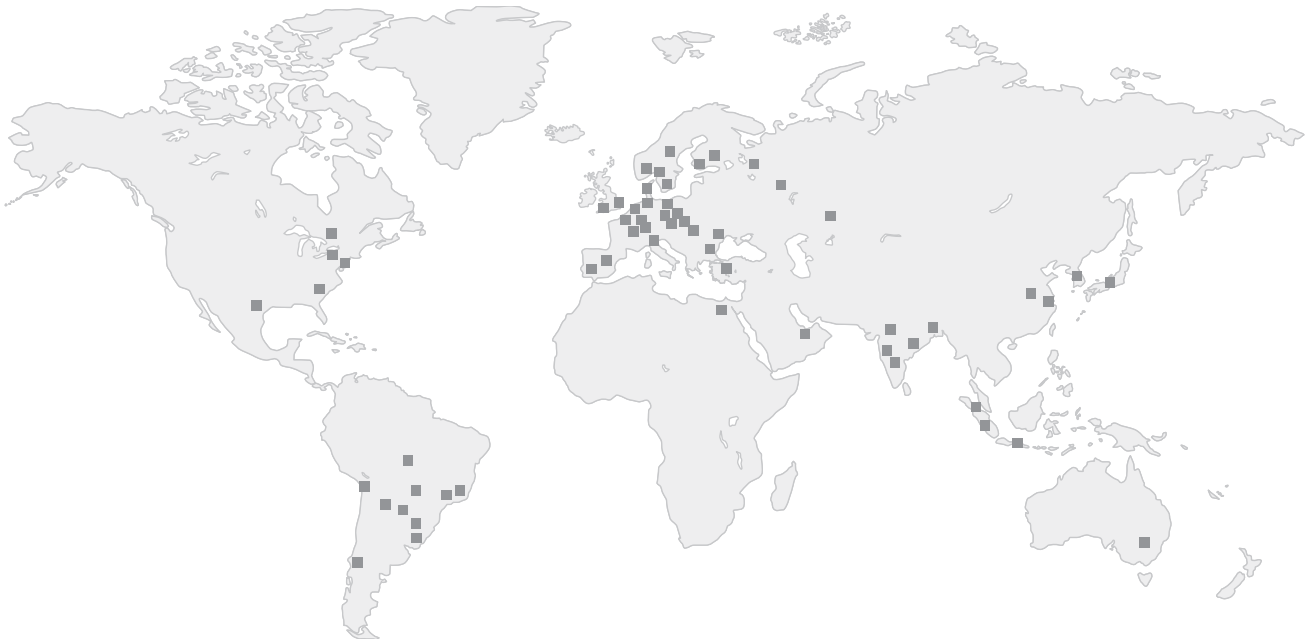
# ESAB CUTTING SYSTEMS.

Your partner in cutting.



**Seven decades of experience** and consistent focus on the needs of our customers are the foundations for the successful and comprehensive product range of our cutting machines. In keeping with the thermal cutting processes – plasma cutting, oxy-fuel cutting and laser cutting – ESAB has developed a range of machines that efficiently combine the highest cut quality with high cutting speeds, allowing intelligent integration into automated production processes. So in many sectors, the cutting machines contribute to optimising production and raising the profitability of our customers.

ESAB sales and service offices worldwide



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Reg. no. CUTTING MACHINES_EN_2012_03 · Technical modifications and errors excepted.