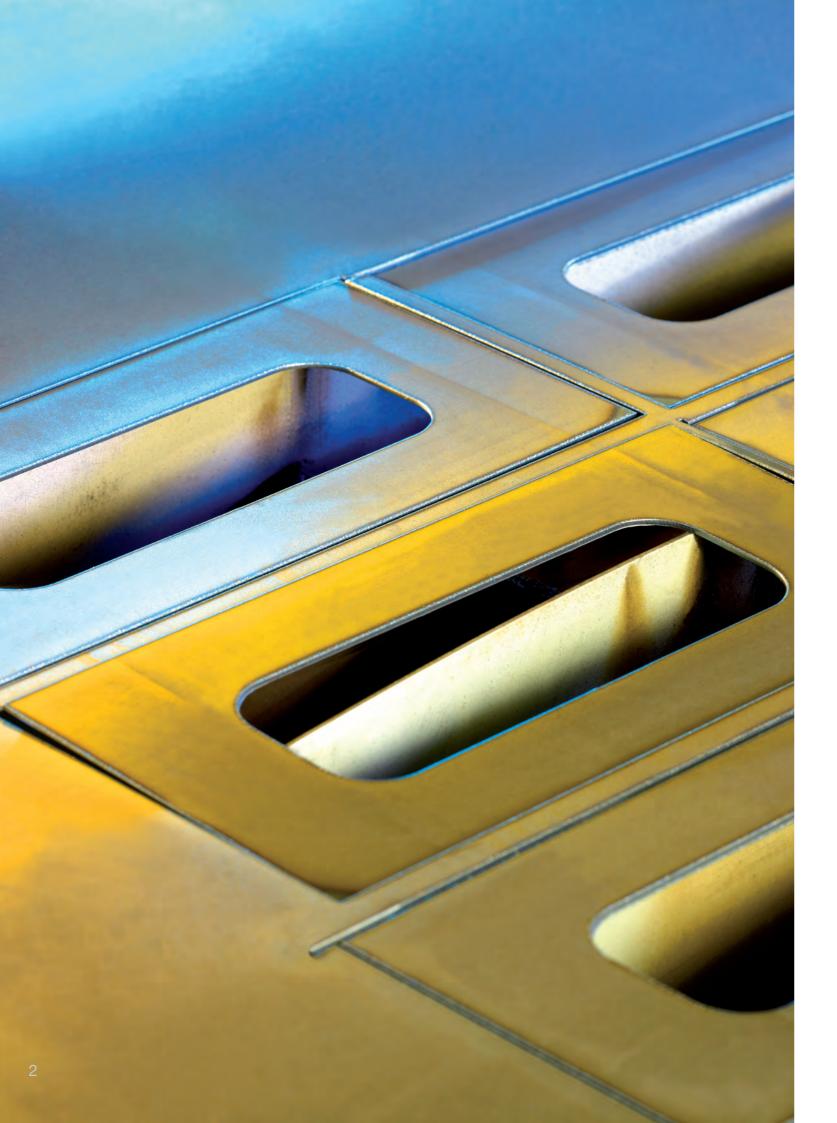


# **Cutting machines - Our product range.**

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.

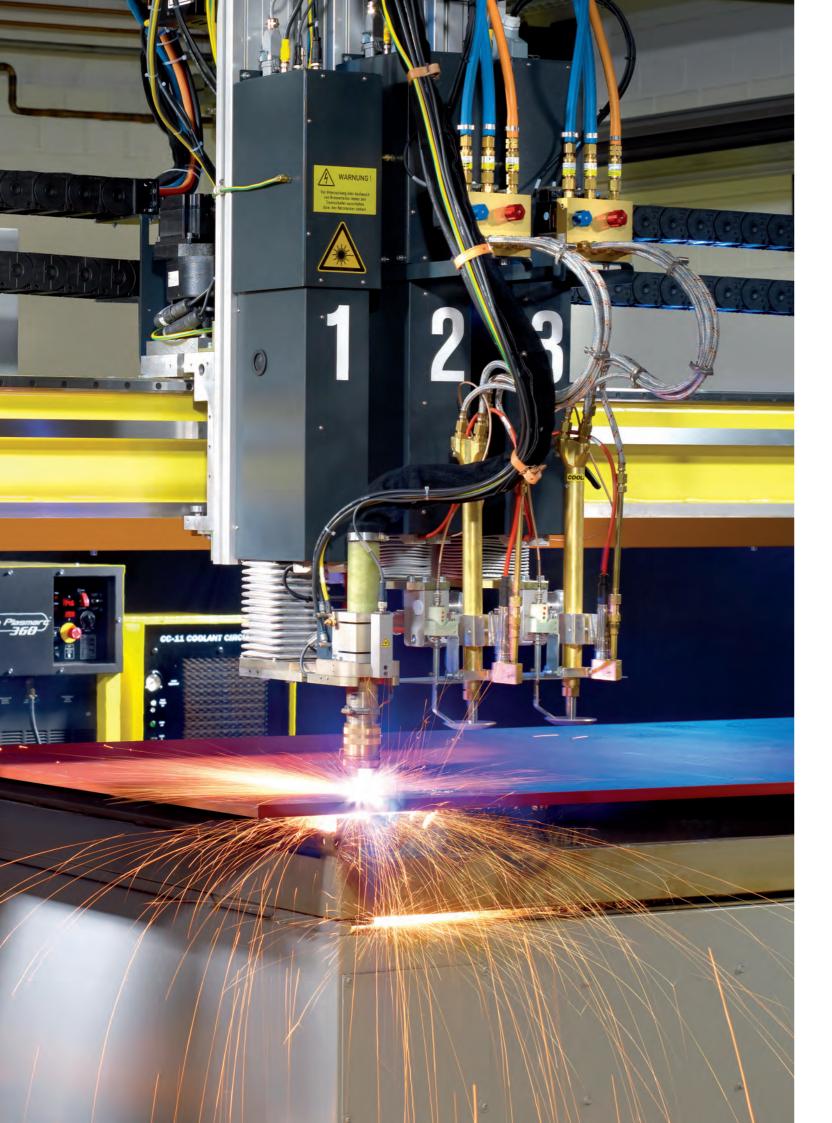
**Laser cutting** is capable of very high speeds and should be your cutting process of choice, particularly when cutting thin materials.

### PERFORMANCE FEATURES AT A GLANCE

Oxy-fuel cutting	Rating		Features
	Precision	•••	<ul><li>✓ use with construction steel</li><li>✓ cuts very thick material</li></ul>
4	Speed	••	<ul><li>✓ weld seam preparation in one step (I, V, Y, X and K seam)</li></ul>
	Economy	••••	
	Flexibility	••••	

Plasma cutting	Rating		Features
	Precision	••••	<ul><li>high cutting speed</li><li>cuts all conductive metals</li></ul>
	Speed	••••	<ul> <li>✓ high precision on all plates</li> <li>✓ virtually no burr formation</li> </ul>
	Economy	••••	easy to automate
	Flexibility	••••	

Laser cutting	Rating		Features
	Precision	••••	highest speed on thin material
	Speed	••••	<ul> <li>highest precision on thin plates and elaborate contours</li> <li>easy to automate</li> </ul>
<b>U</b>	Economy	•••	,
	Flexibility	•••	



# **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™ programming system
- Easy to upgrade with little effort thanks to modular development concept

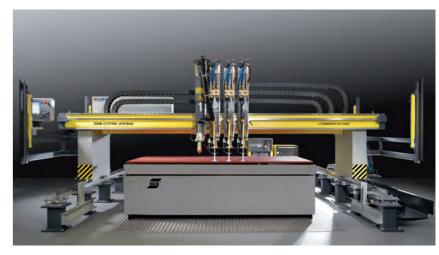
### Our new gantry cutting machine

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.



COMBIREX™ DX	2500	3000	3500	4000
Track width in mm	2500	3000	3500	4000
Recommended plate width <sup>1</sup> in mm	2000	2500	3000	3500
Machine width in mm	3600	4100	4600	5100
Cutting length <sup>2</sup> in mm	Max. 18	000		
Cutting processes	Plasma,	oxy-fuel		
Plasma technology <sup>3</sup>	<u> </u>			
Cutting thickness <sup>4</sup> in mm	Max. 60			
Number of torches	1			
Oxy-fuel technology <sup>5</sup>				
Cutting thickness in mm	Max. 20	0 edge cutti	ng	
Hole piercing in mm	Max. 15	0 (with 1 oxy	/-fuel torch)	
Number of torches	1 – 4			
Fuel gases	Acetyler	ne, propane,	natural gas	,
	mixed fu	iel gases		
Max. positioning speed in mm/min	24000			
Machine length in mm (incl. safety system)	2160			
Machine height in mm	2226 (inc	cluding trac	k height 465	mm)
Workpiece table height in mm	700			
Supply voltage	230 V/ 5	0/60 Hz		
Full load amperage	2 KVA			

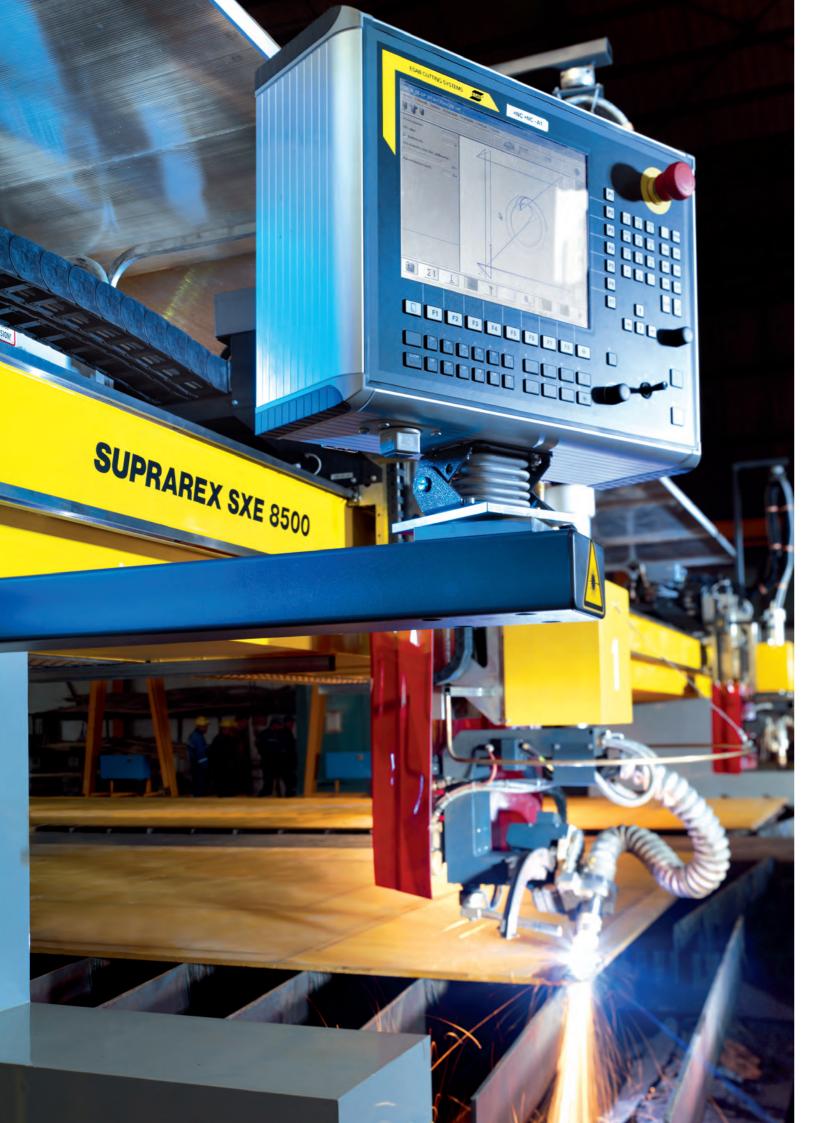
<sup>&</sup>lt;sup>1</sup> For 1 torch with oxy-fuel or plasma

<sup>&</sup>lt;sup>2</sup> At a track length of max. 20 m

Max. 1 plasma torch

<sup>&</sup>lt;sup>4</sup> Depending on the plasma system

<sup>5</sup> 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<sup>™</sup> 51 control and innovative COLUMBUS<sup>™</sup> 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.



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 <sup>1</sup> 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 gase
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 <sup>2</sup>	4.0 to 6.5 KVA	4.0 to 6.5 KVA

<sup>&</sup>lt;sup>1</sup> Depending on the plasma system // <sup>2</sup> 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.



NUMOREXTM	6000	6500	7000	7500	8000	8500
Track width in mm	6000	6500	7000	7500	8000	8000
Recommended plate width in mm	All form	nats				
Machine width in mm	7000	7500	8000	8500	9000	9500
Cutting length in mm	Variabl	e				
Cutting processes	Plasma	ı, oxy-fue	el			
Plasma technology						
Cutting thickness <sup>1</sup> in mm	Max. 6	0				
Number of torches	1-4					
Oxy-fuel technology						
Cutting thickness in mm	Max. 2	00/300				
Hole piercing in mm	1 x 150	, 4 x 100				
Number of torches	1-12					
Fuel gases	Acetyle	ene, prop	ane, nati	ıral gas, ı	mixed fue	el gases
Max. positioning speed in mm/min	24000/-	40000				
Machine length in mm <sup>2</sup>	4000					
Machine height in mm	3750					
Workpiece table height in mm	700					
Supply voltage	3 x 400	V/ 50/60	) Hz			
Full load amperage <sup>3</sup>	Up to n	nax. 20 k	(VA			

 $<sup>^{\</sup>rm 1}\,$  Depending on the plasma system  $\,/\!/\,^{\rm 2}\,$  Excluding platform  $\,/\!/\,^{\rm 3}\,$  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.



TELEREX™	7000	bis	33000
Track width in mm	7000		33000
Recommended plate width in mm	All formats	3	
Machine width in mm	Depending	on track an	d equipment
Cutting length in mm	Variable		
Cutting processes	Plasma, o	xy-fuel	
Machining processes	Marking, gr	rinding, sandb	lasting, panel production
Plasma technology			
Cutting thickness <sup>1</sup> 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 g	ases
Max. positioning speed in mm/min	24000/400	000	
Machine length in mm <sup>2</sup>	5200 to 85		
Machine height in mm	3750		
Workpiece table height in mm	650		
Supply voltage	3 x 400 V/	50/60 Hz	
Full load amperage <sup>3</sup>	Up to max	00.10.74	

Depending on the plasma system // 2 Including platform // 3 Depending on equipment



# **FALCON**<sup>™</sup>

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.



Track width in mm	3000
Recommended plate width in mm	2000
Machine width in mm	3400
Macrille width in min	3400
Cutting length in mm	6000
Cutting processes	Plasma, oxy-fuel
Plasma technology	
Cutting thickness <sup>1</sup> 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

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™ software.

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



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	TL1 ./. 2000			
Cutting processes	Plasma			
Cutting thickness <sup>2</sup> 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		·	

- <sup>1</sup> TL=Track Length variable, according to your specification
- Depending on the plasma system



# **E-VENT**<sup>™</sup>

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™ 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.



E-VENT <sup>TM</sup>	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	Plasma			
Cutting thickness <sup>1</sup> 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	800				
Supply voltage	220 V, 50/60 Hz				
Full load amperage	2 KVA				

Depending on the plasma system

<sup>\*</sup> 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 onboard 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 userfriendly. It uses the principle of mirror focusing, so there is no need for manual settings.

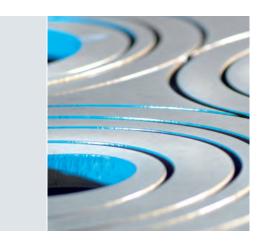


ALPHAREX™ AXD	5000	6000	7000
Track width in mm	5000	6000	7000
Recommended plate width in mm	3000	4000	5000
Machine width in mm	6300	7300	8300
Cutting length in mm	Max. 40000		
Cutting processes	CO <sub>2</sub> Laser		
Cutting thickness <sup>1</sup> in mm	25		
Max. number of torches	1		
Max. positioning 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		

 $<sup>^{\</sup>rm 1}\,$  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





### **ESAB CUTTING SYSTEMS GmbH**

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