



SUPRAREX™ HDX



The high-performance cutting machine delivering exceptional strength and productivity.

POWER MEETS INNOVATION.

Continuing ESAB's tradition of state-of-art thermal cutting systems, SUPRAREX HDX offers outstanding performance from a large gantry. From its robust design to cutting-edge technology, every aspect of the machine is intended to boost productivity—all while meeting or exceeding rigorous safety regulations. Plus, a modular design allows you to customise the machine to your specific needs. With equal parts strength and intelligence, SUPRAREX HDX is the ultimate heavy-duty cutting solution.



Superior Strength

A heavy-duty design and quality craftsmanship ensure long-lasting reliability and service life.

Enhanced Productivity

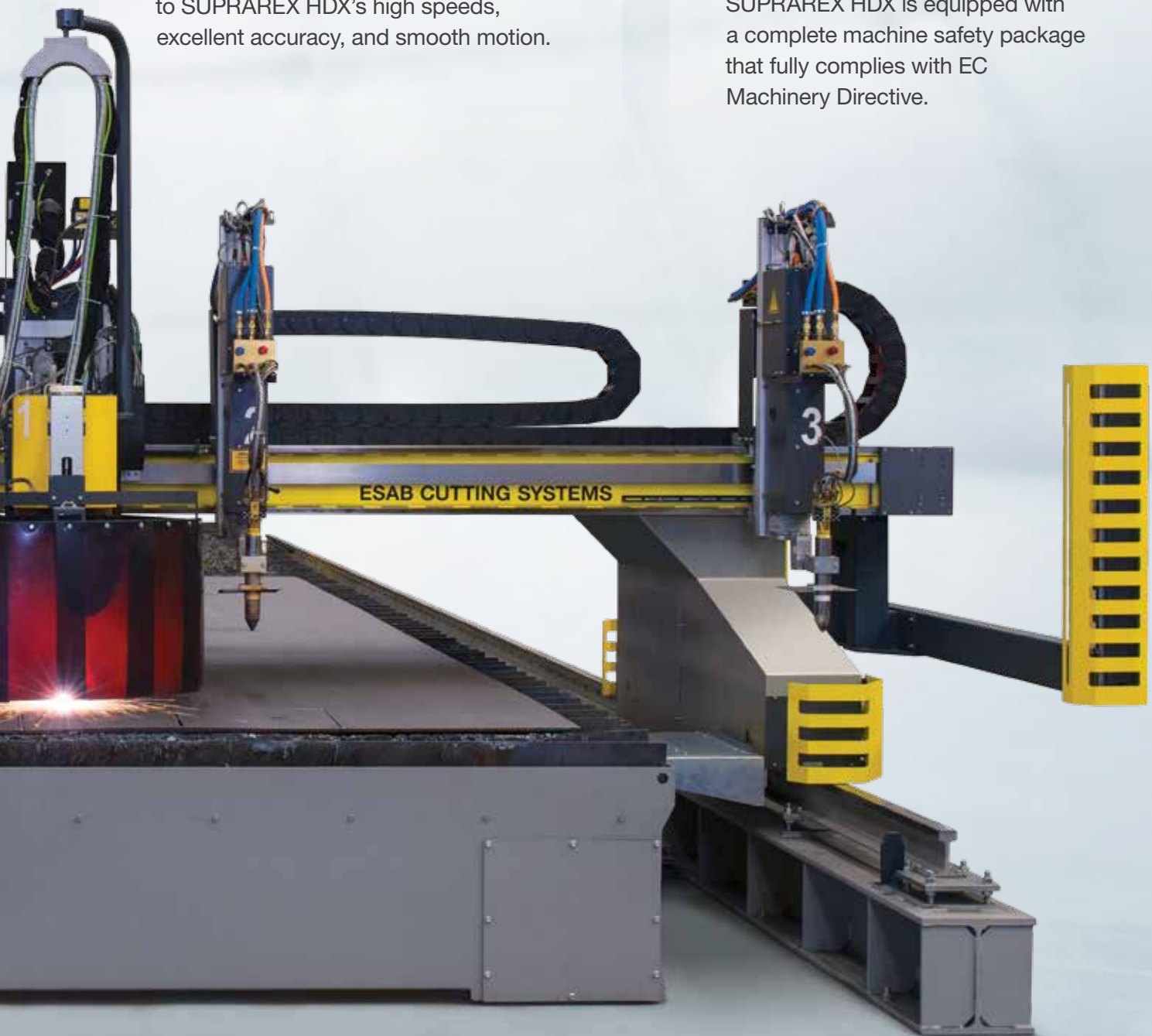
ESAB's advanced, easy-to-use automation technology and flexible process tools help increase output for any cutting application.

Consistent Performance

Produce premium-quality parts thanks to SUPRAREX HDX's high speeds, excellent accuracy, and smooth motion.

Industry-leading Safety

SUPRAREX HDX is equipped with a complete machine safety package that fully complies with EC Machinery Directive.



BUILT STRONGER TO WORK LONGER.

Heavy-duty design.

Expertly engineered and constructed, SUPRAREX HDX is sturdy enough to withstand your harsh working environment and deliver exceptional durability.

- High-stiffness, heavy-duty, engineered beam assemblies provide best-in-class machine motion
- All welded and precision-machined end trucks provide stability required for precise machine positioning
- Heavy-duty, accurate platform for plate beveling with plasma and oxy-fuel

Single-source quality.

Only ESAB offers the complete solution—eliminating the need for mixing and matching components from different vendors. You can cut with confidence knowing your machine, plasma, CNC, software, height control, and gas torches have all been designed and built as a cohesive, optimised system.

Benefits of a single-source supplier:

- Increased reliability
- Simpler maintenance
- Lower operation cost over lifetime of system
- Streamlined support



A PERFORMANCE POWERHOUSE.

SUPRAREX HDX provides the speed, accuracy, and efficiency necessary to produce high-quality parts with unparalleled cut precision and edge smoothness. When you add in a reputation for reliability and durability, the result is a solid foundation for economical cutting and marking with plasma and oxy-fuel.

- High-performance drive system provides outstanding dynamic accuracy and smooth motion
- Precision preset drive engagement yields smoother motion and longer pinion life
- Impressive acceleration and deceleration values
- High positioning speed reduces part-to-part cycle time for higher throughput



MAXIMISING PRODUCTIVITY.

Technology and automation.

ESAB's cutting-edge control system and software come standard on SUPRAREX HDX, making it an ideal choice for automated production of virtually any cutting application.

- ESAB Vision® CNC fully automates all process control for every cutting or marking tool with a built-in process database, dramatically boosting productivity
- ESAB Columbus® software makes it incredibly easy to program your machine and automate the cutting, marking, and labeling processes
- Simple controls for complex cutting tools and processes, such as beveling, inkjet marking, laser cutting, grinding, milling, and drilling

Integration and flexibility.

All components of SUPRAREX HDX—from the cutting table and power supply to peripheral environmental technology—have been perfectly integrated together, resulting in lower maintenance requirements and a longer service life.

- Large gantry sizes support cutting maximum sheet sizes, enabling you cut more parts with less material handling
- Capable of carrying up to 12 gas torch stations, up to four plasma tools, or up to two bevel cutting stations, as well as a variety of plate marking tool options
- Flexible design and modular tool stations for custom configurations



LEADING THE WAY IN SAFETY.

Safety is an area ESAB takes extremely seriously. That is why SUPRAREX HDX comes with industry-leading, innovative safety features that provide complete machine protection and full compliance with EC Machinery Directive.

SUPRAREX HDX's safety package includes:

- Light curtains protecting front and rear of machine
- Programming to automatically ignore nuisance interruptions
- Safety bumpers over light curtains provide complete envelope protection
- Safety bumpers on front and rear of side trucks
- CNC swivel mount tucks inside of protected envelope, with automatic switching to safe speed range
- Safety-rated controller manages all E-stop and safety functions



Light Curtains



Truck Bumpers



CNC Swivel



MORE PROCESS TOOLS. MORE OPPORTUNITIES.

No matter what your production requirements, SUPRAREX HDX is ready to get the job done with a wide range of tools for cutting, weld seam preparation, and marking with advanced plasma or oxy-fuel cutting technology. In addition to selecting the right tools to fit your needs, you can customise your machine through a variety of options, including gantry size, CNC features, software, cameras, and more.

Tools Available

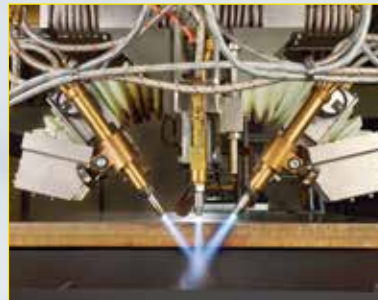
1. Oxy-fuel cutting on mild steel
2. Precision plasma cutting
3. Plasma cutting of bolt-ready holes
4. Plasma bevel cutting
5. Oxy-fuel three-torch bevel cutting
6. Oxy-fuel single torch beveling for thick plate and complex bevel cuts
7. Dome/dished-end cutting with plasma or oxy-fuel
8. Pipe cutting with plasma or oxy-fuel
9. Automated grate/grid cutting
10. Plasma cutting and marking with a single torch
11. Pneumatic punch or scribe marking
12. Fine text marking with pin-stamp
13. High-speed text labelling with ink-jet



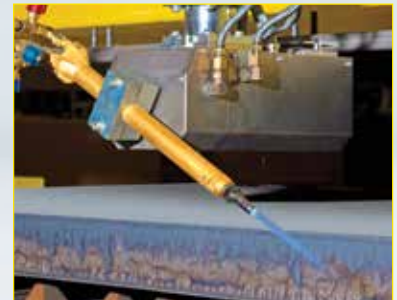
Oxy-Fuel Cutting



Plasma Cutting



Oxy-Fuel
Bevel Cutting



Oxy-Fuel Single-Torch
Bevel Cutting



**High-Accuracy Plasma
Bevel Cutting**



Plasma Bevel Cutting

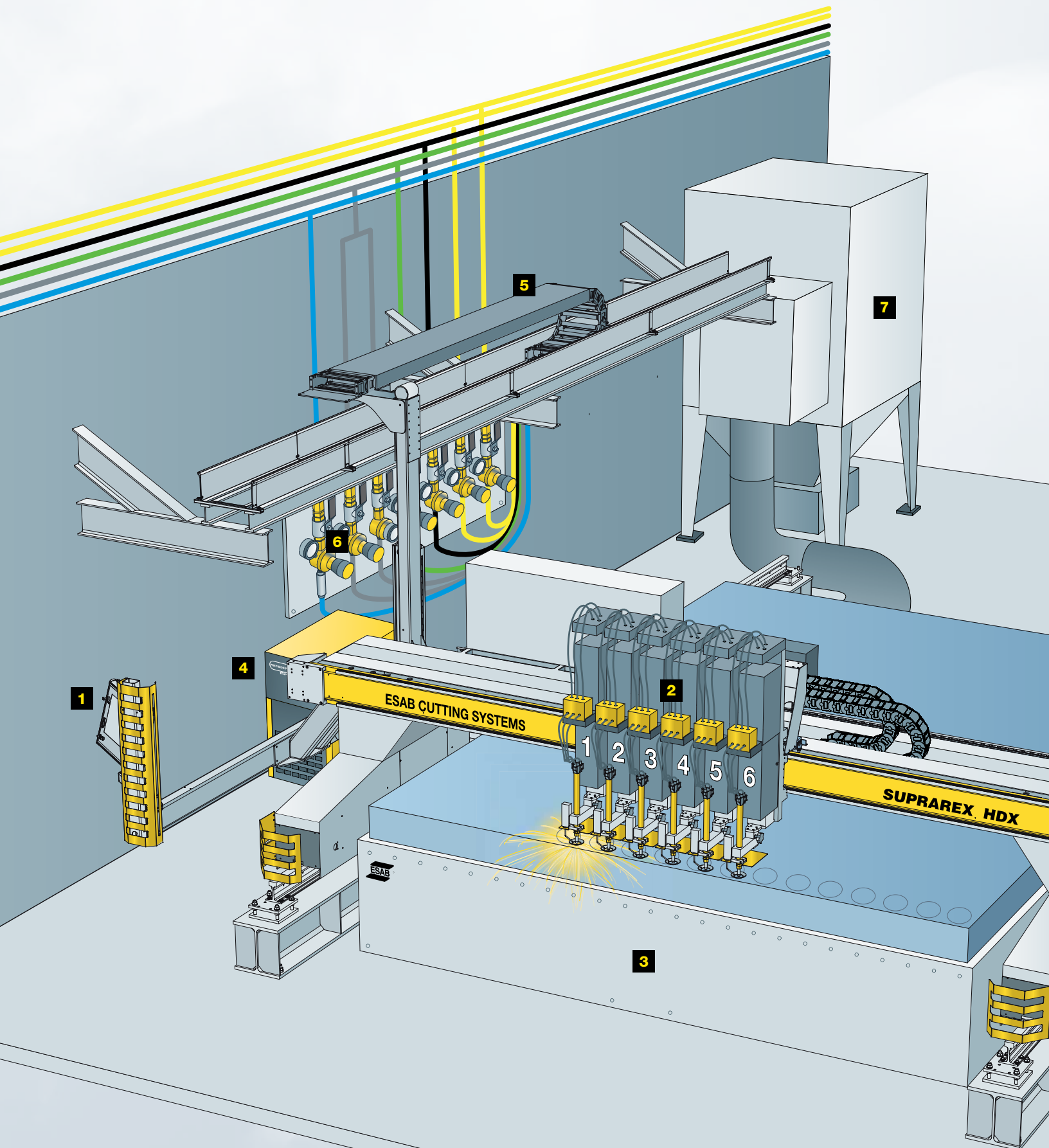


Grate/Grid Cutting

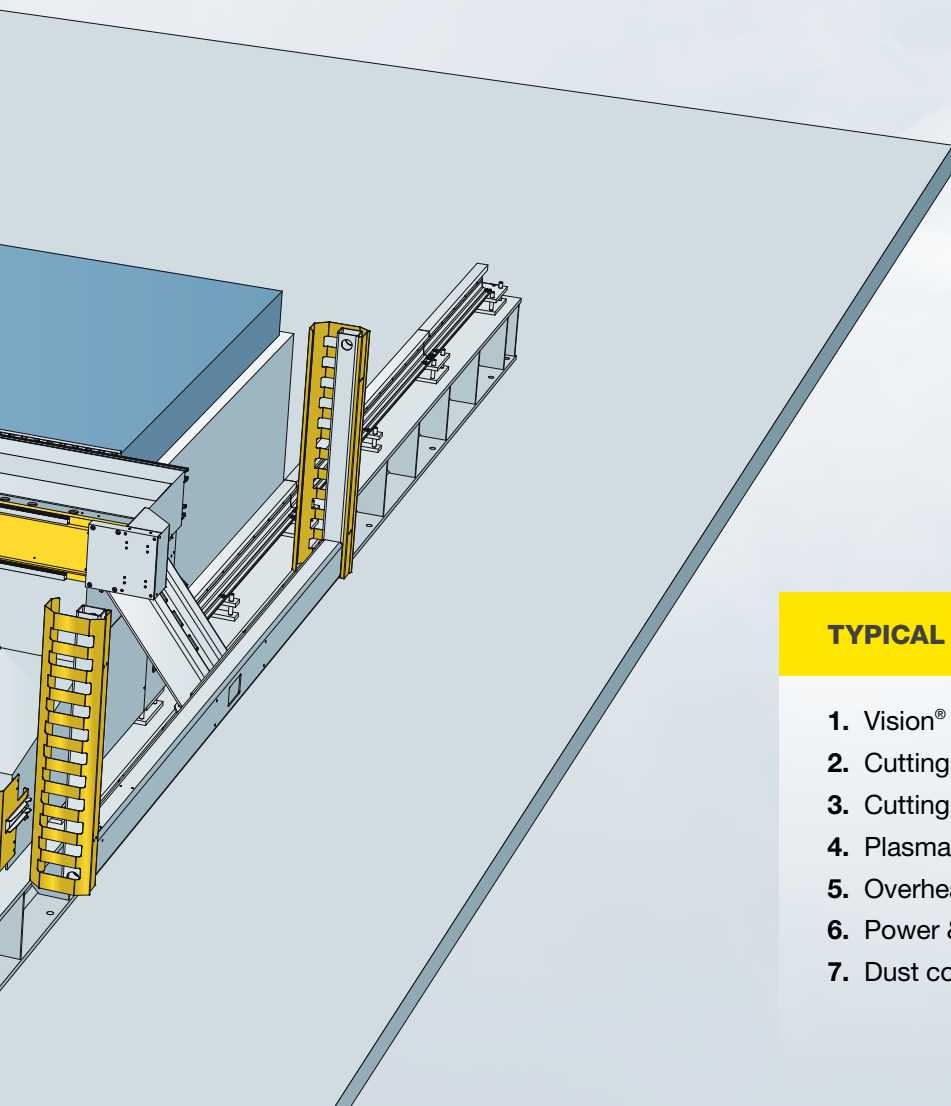


Dome/Pipe Cutting

SPECIFICATIONS.



SUPRAREX HDX	
Track width	3,000 - 8,500 mm
Processes	Plasma and Oxy-Fuel
Plasma cutting thickness	Depending on plasma system
Maximum plasma torches	4
Oxy-fuel cutting thickness	200 mm as standard; 300 mm optional
Maximum oxy-fuel torches	12
Maximum plasma bevel units	1 or 2 depending on machine width
Maximum oxy-fuel bevel units	1 or 2 depending on machine width
Maximum positioning speed	Maximum positioning speed (24 m/min or 40 m/min) depending on drive selection
Machine parking length	Machine parking length approx 3000 mm
Overall machine width	4,900 – 9,150 mm including safety system
Overall machine height	2,900 mm/overhead cable chain
Cutting table surface height	700 ± 50 mm
Rail height, floor mounted rails	approx 220 mm from floor to top of rail
Rail height, H-beam mounted rails	approx 500 mm from floor to top of rail



TYPICAL LAYOUT OF THE SUPRAREX HDX

1. Vision® controller
2. Cutting tool stations
3. Cutting table
4. Plasma power source
5. Overhead cable chain & tray
6. Power & gas supplies
7. Dust collector

UNRIVALED SERVICE AND SUPPORT.

Like all ESAB products, SUPRAREX HDX is backed by our commitment to superior customer service and support. Our skilled customer service department is prepared to quickly answer any questions, address problems, and help with the maintenance and upgrading of your ESAB equipment and software. We offer:

- Value packages, including machine and process audits to maximise your investment
- Proactive preventive maintenance programs and maintenance contracts to keep your equipment and software up and running
- ESAB plasma consumables for the perfect cut
- Specialised repair services
- Retrofit upgrade products and packages for the latest in machine, control, and software technology
- Complete product and process training, including advanced training programs

Our products are backed with the most comprehensive warranty in the business. With ESAB, you can be confident that the product you purchased will meet your needs today and in the future. Ask your ESAB sales representative or distributor for a complete ESAB solution.

For more information, visit esab-cutting.com



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