



DMX AUTOMATED PLASMA BEVELLER



The reliable, easy-to-use, and compact system for safe, high-quality plasma bevel cutting.

THE FUTURE OF BEVEL CUTTING IS HERE.

DMX is the next generation of plasma bevel cutters.

While others use complex, heavy axis drive systems, ESAB has developed a new way of driving torch motion that improves performance and productivity.

DMX is proof that when it comes to plasma beveling, simpler is better.



Enhanced reliability

The revolutionary Direct Multi aXis motion system (DMX) features Advanced Collision Sensing that detects and absorbs a torch crash, then automatically resets the torch without requiring a head alignment.

Compact design

DMX can be mounted on smaller gantries, making quality bevel cutting more affordable and saving valuable floor space.

Easy operation

ESAB SmartBevel™ Technology simplifies bevel programming and delivers consistently accurate results.

Improved safety

Designed with a non-breakaway device and automatic torch reset, DMX eliminates dangerous operator tasks from the beveling process.



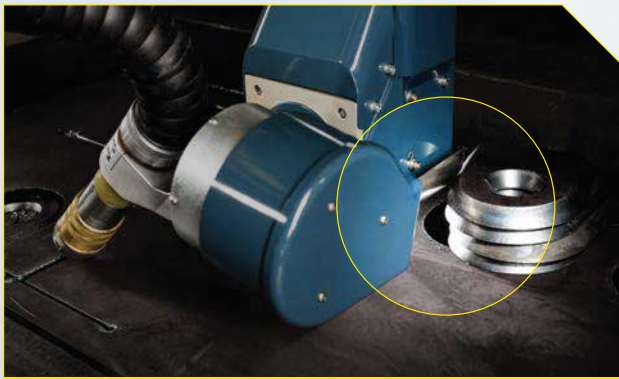
COMBIREX CXL

MAXIMUM RELIABILITY AND PRODUCTIVITY.

ESAB's exclusive DMX technology features a simplified mechanical design that uses substantially fewer parts than traditional bevel heads. Plus, instead of a rotating head, DMX utilizes Compound Motion for faster cycle times, no rotation limits, improved accuracy, longer consumable life, and more. The end result is an ultra-efficient plasma beveller that requires less maintenance and enhances output.

The DMX difference:

- **Advanced Collision Protection** — uses compliant motion in place of a breakaway device to detect and absorb torch collisions
- **Automatically resets torch after collision**, no head alignment required
- **No mechanical alignment after replacing components**
- **No torch bearing** — reduces cost and improves accuracy
- **No twisting of torch leads** — reduces maintenance and downtime



Multi-Point Collision Protection System

DMX's omni-directional torch collision protection system reduces downtime and eliminates potential safety hazards. Additionally, multiple sensors are used to protect other parts of the bevel head that come in close proximity to the table.



Complete Cable Protection System

To minimize maintenance and increase torch life, DMX includes a cable management package that protects all components from pierce spatter and heat.

Includes:

- Robotic-style torch lead sheath to protect the torch leads
- Complete set of covers and a fully enclosed cable chain to protect hoses and cables

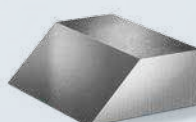
SIMPLE OPERATION. SUPERIOR RESULTS.

DMX is powered by ESAB SmartBevel™ Technology for easier programming and accurate bevel cutting with minimal operator intervention. SmartBevel™ includes beveling data and geometric compensations necessary to cut V, X, Y, and K bevels on mild steel from ¼ to 2 inch thick.

- Quick and accurate job setup
- Reduces scrap by eliminating trial and error
- Extensive data to automate a wider range of beveling applications than competitive packages and achieve the desired cut with fewer test runs
- Best practice bevel cut sequence is provided for improved accuracy and consistent quality
- Designed to support bevel cuts in accordance with AWS D1.1

BEVEL EDGES

V Bevel Top



Y Bevel Top



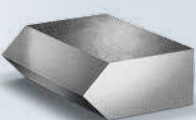
V Bevel Bottom



Y Bevel Bottom



X Bevel



K Bevel



BEVEL DATA RANGE FOR SMARTBEVEL™ TECHNOLOGY

CARBON STEEL

Thickness (in)	CURRENT (Amps)					
	100	130	200	260	360	450
.25 in.	V, Y					
.313 in.	V, Y	V, Y				
.375 in.		V, Y, X				
.438 in.		V, Y, X				
.500 in.		V, Y, X	V, Y, X			
.563 in.			V, Y, X			
.625 in.			V, Y, X			
.688 in.			V, Y, X	V, Y, X		
.750 in.			V, Y, X, K	V, Y, X, K		
.875 in.			V, Y, X, K	V, Y, X, K		
1.000 in.			V, Y, X, K	V, Y, X, K	V, Y, X, K	
1.250 in.					V, Y, X, K	V, Y, X, K
1.500 in.					V, Y, X, K	V, Y, X, K
1.750 in.						V, Y, X, K
2.000 in.						V, Y, X, K



COMPACT DESIGN FOR ECONOMICAL BEVEL CUTTING.

Featuring the latest direct drive motor technology, DMX is significantly smaller and lighter than traditional bevellers — all without sacrificing performance. The compact system can be mounted on a wide range of ESAB gantries, making high-quality bevel cutting more affordable and accessible.

- Compatible with smaller, less expensive machines
- Lower overall cost for plasma bevel cutting
- Smaller gantry saves floor space



SAFER, SMARTER, AND AN EXCEPTIONAL VALUE.

Motion Compliance

The DMX motion system detects and absorbs torch collisions, eliminating the need for a breakaway device. Plus, the torch automatically resets after a collision.

- Eliminates safety hazard of operator climbing on table
- Eliminates safety hazard of touching the torch
- Faster resets mean less downtime and higher productivity

One-Touch Precision Electronic Alignment

One-Touch is ESAB's new software and electronic system that precisely measures bevel torch motion in multiple axes and automatically calibrates them for precision bevel-cutting motion.

- One-step electronic alignment through the CNC—no mechanical aligning of the head
- Alignment device is easily used by the operator, does not require maintenance personnel
- Software Wizard guides the operator through simple setup
- The automatic alignment procedure self-calibrates the head for precise positioning and motion



Specifications

DMX AUTOMATED PLASMA BEVELLER

Cuts bevel angles up to	45 degrees
Bevel motion range	+/- 57 degrees
Service position	90 degrees for easier consumable changes
Rotational axis speed	>75 RPM
Rotational axis resolution	better than 1/1000 degree
Lifter stroke	300 mm
Lifter speed	11 m/min
Rated for cutting with up to	600 amps

World leader in welding and cutting technology and systems



ESAB operates at the forefront of welding and cutting technology. Over one hundred years of continuous improvement in products and processes enables us to meet the challenges of technological advance in every sector in which ESAB operates.

Quality and environment standards

Quality, the environment and safety are three key areas of focus. ESAB is one of few international companies to have achieved the ISO 14001 and OHSAS 18001 standards in Environmental, Health & Safety Management Systems across all our global manufacturing facilities. At ESAB, quality is an ongoing process that is at the heart of all our production processes and facilities worldwide.

Multinational manufacturing, local representation and an international network of independent distributors brings the benefits of ESAB quality and unrivalled expertise in materials and processes within reach of all our customers, wherever they are located.

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