

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.

ESAB Cutting Systems

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.

Improved safety

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

Easy operation

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



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:

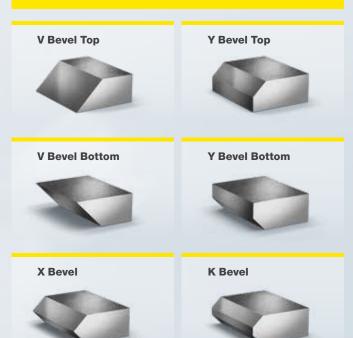
- Robotic-style torch lead sheath to protect the torch leads
- Complete set of covers and a fully enclosed cable chain to protect hoses and cables

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



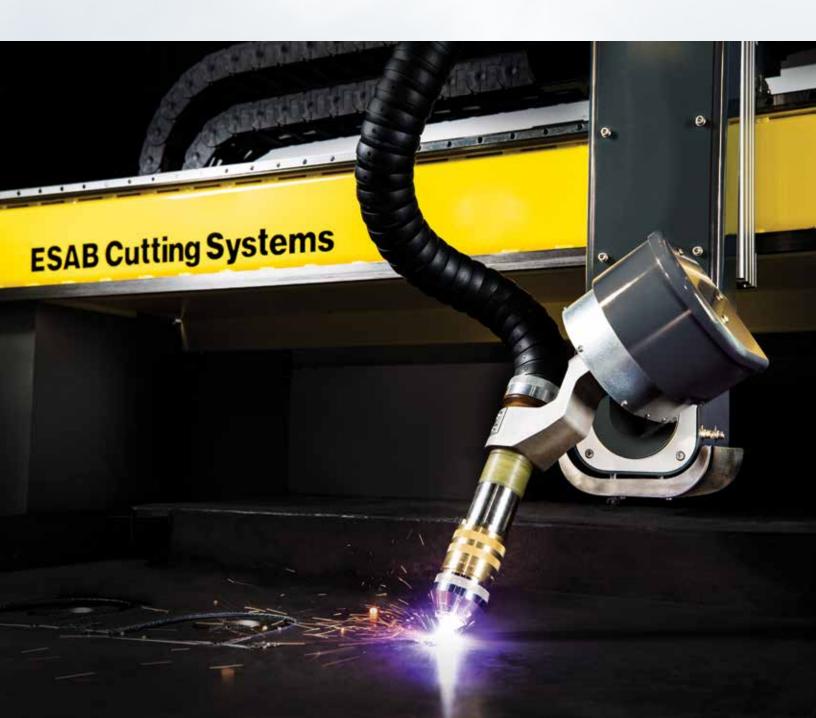


BEVEL DATA RANGE FOR SMARTBEVEL™ TECHNOLOGY						
CARBON STEEL						
Thickness (in)	CURRENT (Amps)					
	100	130	200	260	360	450
0.250	V, Y					
0.313	V, Y	V, Y				
0.375		V, Y, X				
0.500		V, Y, X	V, Y, X			
0.625			V, Y, X			
0.750			V, Y, X, K	V, Y, X, K		
0.875			V, Y, X, K	V, Y, X, K		
1.000			V, Y, X, K	V, Y, X, K	V, Y, X, K	
1.250					V, Y, X, K	V, Y, X, K
1.500					V, Y, X, K	V, Y, X, K
1.750						V, Y, X, K
2.000						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





Two-Year Limited Warranty

ESAB is so confident in the new DMX design that we offer it with a two-year limited warranty that covers defects in materials and workmanship for all major electrical and mechanical parts of the bevel head. This includes the lift motor, lifter screw, lifter bearings and rails, bevel head motors, limit switches, cables, and connectors.

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		

UNRIVALED SERVICE AND SUPPORT.

Like all ESAB products, the DMX Automated Plasma Beveller 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 maximize 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
- Specialized 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

And, 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/dmx





