VBA GLOBAL PRO
AUTOMATED PLASMA BEVEL SYSTEM

Delivering unparalleled accuracy and reliability for high-production plasma beveling.
SETTING THE STANDARD FOR BEVEL QUALITY.

ESAB’s VBA Global PRO has earned its reputation as the industry’s most accurate plasma bevel system. Whether cutting small parts with a single bevel or large shell plates with multi-pass bevels, the system is ideal for your high-volume needs. Plus, as part of a complete, integrated ESAB cutting solution, the VBA Global PRO offers exceptional ease-of-use due to SmartBevel Technology.
Outstanding accuracy

Featuring automatic tactile sensing, the VBA Global PRO provides unsurpassed bevel cutting accuracy regardless of part size or bevel complexity.

Enhanced reliability

Expert design and precision machining form a durable bevel system for high-production environments.

Highly productive

The VBA Global PRO provides long-lasting productivity from a well-protected, robust mechanical system.
DESIGNED FOR ULTIMATE PRECISION.

The VBA Global PRO excels at accurate plasma bevel cutting, and is fully programmable to perform both bevel and straight cuts. The system automatically switches between precision tactile sensing and Smart Voltage Height Control, resulting in quality, consistent parts that meet your intricate specifications.

- **Tactile sensor** – ESAB’s proprietary system precisely maintains torch height relative to the plate surface.
- **Dual-mode initial height sensing** uses pneumatically balanced tool-tip sensing and an electrical plate sensor for accurate, light-touch plate sensing.
- **Encoder-equipped Z-axis lifter** controls the initial height and enables Smart Voltage Height Control.
- **Capable of high-quality hole cutting** with Precision Hole Technology™ when cutting vertically.

**Smart Voltage Height Control**

While traditional systems maintain consistent arc voltage by lowering the torch toward the plate as the electrode wears, ESAB’s Smart Voltage Height Control uses a built-in process database to automatically set the optimal cutting height and adjust arc voltage.

**BENEFITS:**

- Improves cut quality
- Maximizes consumable life
- Lowers operating cost
- Enhances productivity
Continuing ESAB’s legacy of innovative engineering and quality construction, the rugged VBA Global PRO is designed for large gantries and an excellent choice for high-production facilities. A simple protractor-based design automatically puts the torch tip at the focal point of tilt and rotation—resulting in reduced machine motion and improved reliability.

- Magnetic breakaway devices protect torch and tactile sensor
- Split-gear zero backlash feedback system for accurate rotation control
- Heavy-duty vertical lifter with dual linear rails and oversized ball-screw
- Digital AC amplifiers and brushless motors for both Z-axis and rotation drives provide optimum high-speed motion
VERSATILITY TO MAXIMIZE PRODUCTIVITY.

VBA Global Pro can be utilized for a wide range of bevel cutting applications using dry or underwater tables. The system can make straight and bevel cuts on the same part, enhancing uptime and boosting overall productivity. Plus, the head can be programmed to change bevel angle on the fly, and rotation is automatically controlled so the head is always perpendicular to the direction of travel.

- +/- 45 degree maximum achievable cut angle
- +/- 540 degree automatic rotation
- 100 amp—up to 450 amp oxygen plasma—allows bevel cutting of carbon steel up to 2 in. (50.8 mm) thick up to 45 degrees
- Torch height is controlled within 0.012 in. (.30 mm) of the plate surface, regardless of cutting speed or thickness
VBA Global Pro is powered by ESAB Smart Bevel Technology for easier programming and accurate bevel cutting with minimal operator intervention. Smart Bevel includes beveling data and all geometric compensations necessary to cut V, X, Y, and K bevels on mild steel from ¼ to 2 in. 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
- Provides bevel cuts in accordance with AWS D1.1

### BEVEL DATA RANGE FOR SMARTBEVEL™ TECHNOLOGY

#### CARBON STEEL

<table>
<thead>
<tr>
<th>Thickness (in)</th>
<th>CURRENT (Amps)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100</td>
</tr>
<tr>
<td>.25 in.</td>
<td>V, Y</td>
</tr>
<tr>
<td>.313 in.</td>
<td>V, Y</td>
</tr>
<tr>
<td>.375 in.</td>
<td>V, Y</td>
</tr>
<tr>
<td>.438 in.</td>
<td>V, Y</td>
</tr>
<tr>
<td>.500 in.</td>
<td>V, Y</td>
</tr>
<tr>
<td>.563 in.</td>
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</tr>
<tr>
<td>.625 in.</td>
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</tr>
<tr>
<td>.688 in.</td>
<td>V, Y</td>
</tr>
<tr>
<td>.750 in.</td>
<td>V, Y</td>
</tr>
<tr>
<td>.875 in.</td>
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</tr>
<tr>
<td>1.000 in.</td>
<td>V, Y</td>
</tr>
<tr>
<td>1.250 in.</td>
<td>V, Y</td>
</tr>
<tr>
<td>1.500 in.</td>
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</tr>
<tr>
<td>1.750 in.</td>
<td>V, Y</td>
</tr>
<tr>
<td>2.000 in.</td>
<td>V, Y</td>
</tr>
</tbody>
</table>

### BEVEL EDGES

- **V Bevel Top**
- **Y Bevel Top**
- **V Bevel Bottom**
- **Y Bevel Bottom**
- **X Bevel**
- **K Bevel**
UNRIVALLED SERVICE AND SUPPORT.

Like all ESAB products, VBA Global Pro 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