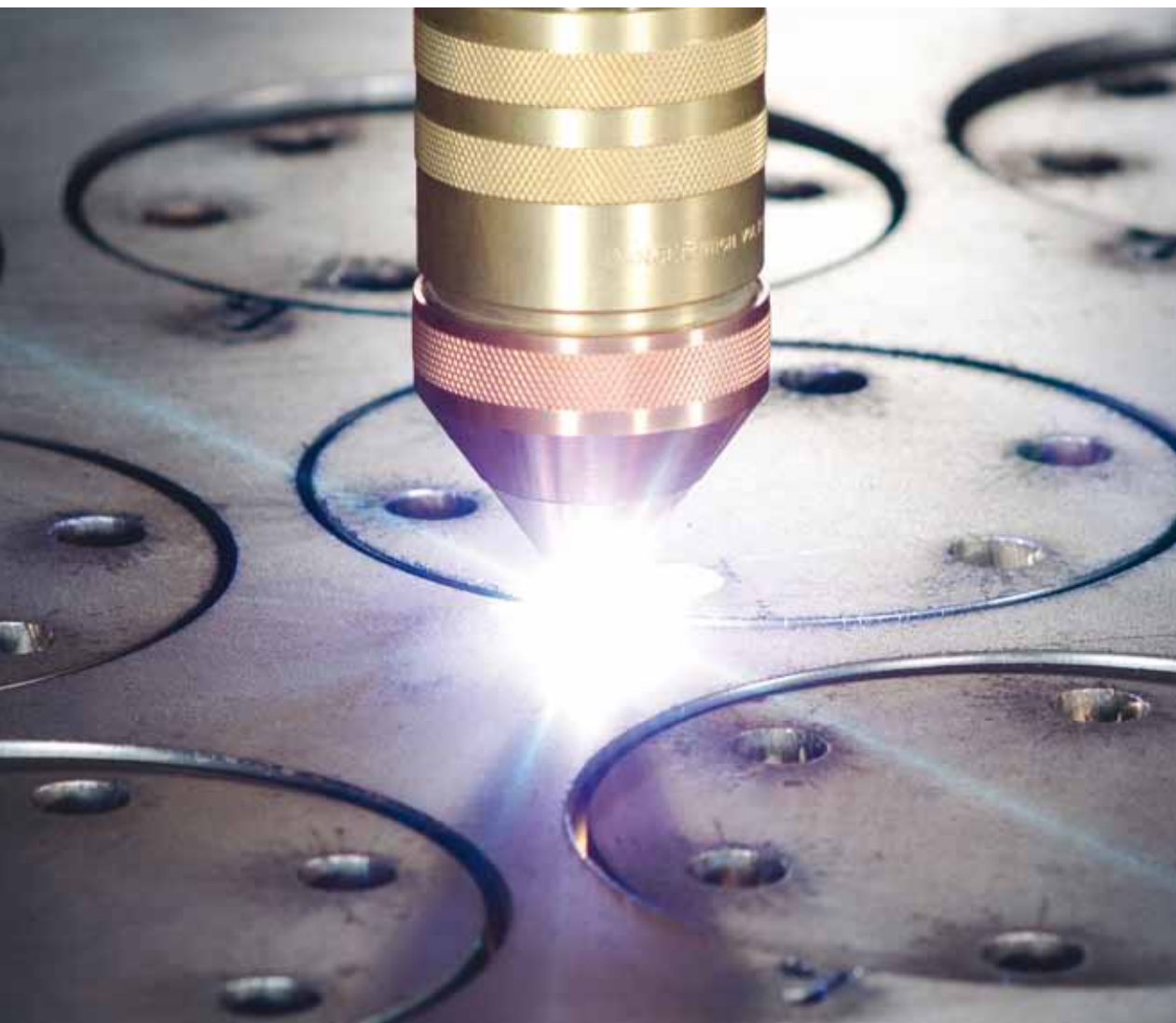




# SmartCycle™ Technology Integrated Plasma System

BETTER INTEGRATION • HIGHER PRODUCTIVITY



# SmartCycle™ Technology

Boosting productivity through total CNC and plasma system integration.

## ESAB continues to advance Integrated Plasma and CNC Cutting Technology

ESAB first introduced SmartCycle in 2003, reducing cycle times by skipping initial height sensing. Now SmartCycle Technology is extended to integrate the Vision T5 CNC, Smart Voltage Height Control, the m3 Plasma™ system, and Columbus III programming software. By integrating all of these systems to work seamlessly together, ESAB delivers the best, most automated system for enhancing plasma cutting productivity and reducing cycle time.

### Features and Benefits

#### • Faster Cycle Time

SmartCycle Technology is all about eliminating unproductive time and motion. By skipping initial height sensing where possible, and eliminating the full torch retract after every cut, the total time required to cut a nest can be dramatically reduced.

#### • Increased Productivity

Depending on part geometry, productivity gains can be significant. Nests filled with smaller parts with more holes will see dramatic improvements. Nests with large part and few holes will also see some benefit.

#### • Easier Operation

The power of ESAB's integration is the ability to control all process tools and systems through the Vision CNC. This level of integration makes operation easier, and allows the CNC to automate more of the system through advanced programming.

#### • Single Source Responsibility

Since we at ESAB make the entire system, write our own software, and stand behind everything we make, there's no need for you to juggle multiple vendors to support individual components. One call to ESAB is all it takes to get professional support for your entire system.

### The Benefits of Integration

ESAB's SmartCycle is a completely integrated system technology exclusive to ESAB. As the technology leader in machine and process automation and the only total system supplier, ESAB is uniquely qualified to integrate the entire plasma cutting process.



ESAB's PB-MB-1 High Speed Plasma Station for straight plasma cutting with the PT-36 Precision Plasmarc™ torch.

SmartCycle improves plasma cutting productivity by eliminating unnecessary tool motion and process delays between cuts. It uses ESAB's PB-MB-1 Plasma Torch Station, which features a position encoder for accurate Z-axis control. By controlling the vertical torch position directly from the CNC, the torch can be positioned at high speed to within a few inches of the plate before switching to a slower speed for more accurate plate sensing. For many cuts, the system also allows the torch to retract partially, then reposition to the next pierce height without having to sense the plate surface.

## Better Integration Higher Productivity

### Reducing Cycle Time

Traditional methods for reducing plasma cycle time require tedious programmer modifications to parts and nests, careful and continuous coordination between operators and programmers, or risky modifications to safety timers. The result is only marginal improvement at the risk of expensive machine damage.

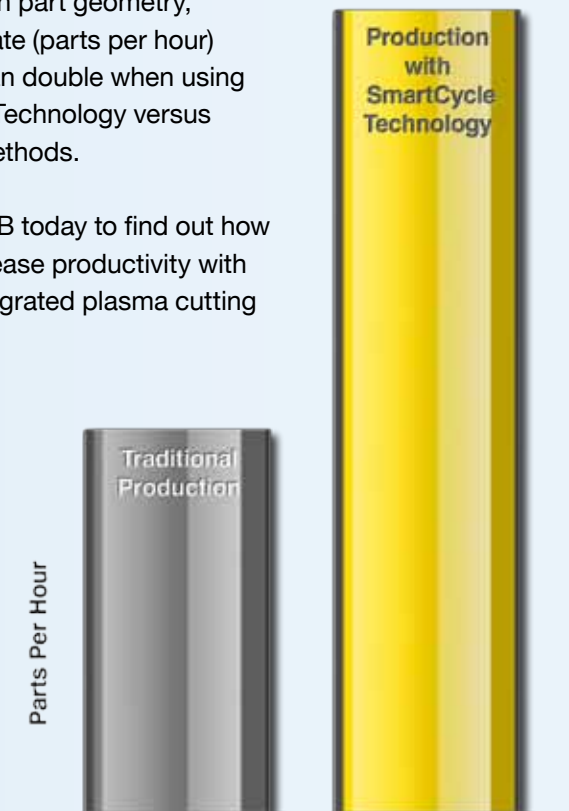
### A Better Solution

With SmartCycle Technology, no operator or programmer intervention is required. The Columbus software automatically identifies where optimization can be made, and adjusts the nest as required. The Vision T5 CNC, Smart Voltage Height Control, and m3 Plasma™ system work hand-in-hand to produce the highest quality parts in the shortest time possible.

### More Parts Per Hour

Depending on part geometry, production rate (parts per hour) can more than double when using SmartCycle Technology versus traditional methods.

Contact ESAB today to find out how you can increase productivity with an ESAB integrated plasma cutting system.



# ESAB Cutting Systems

Productivity - Service - Reliability



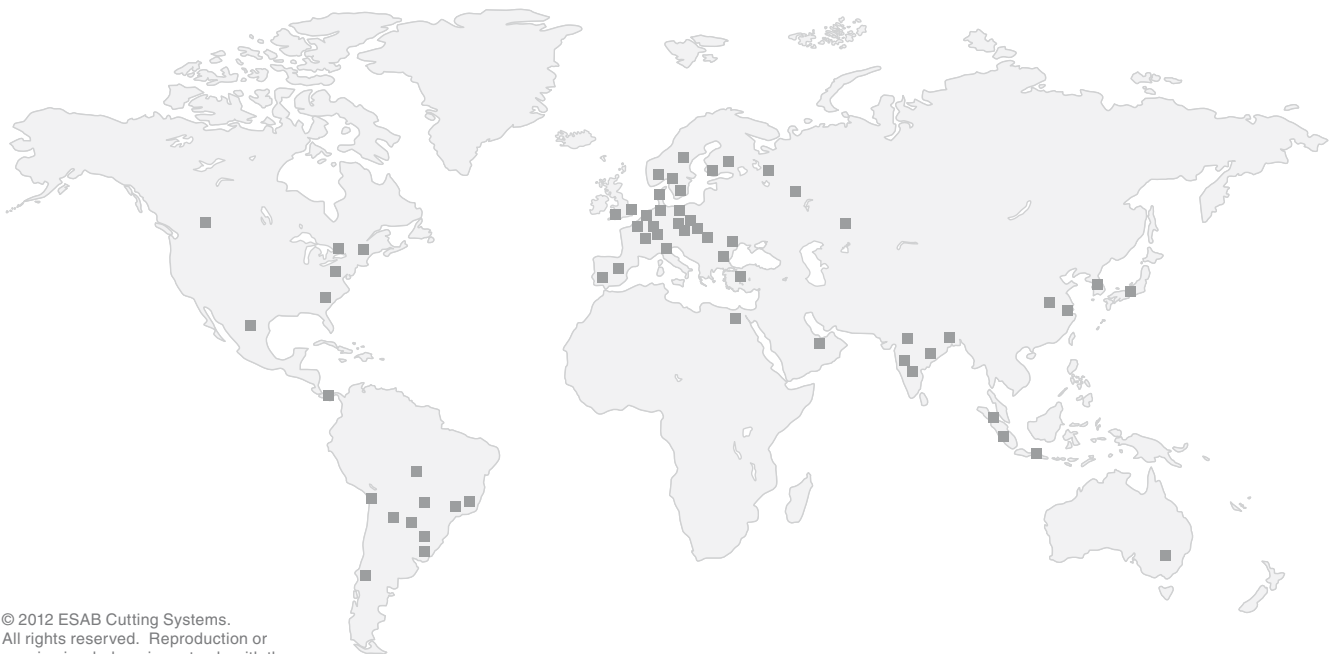
**When you buy ESAB**, you get more than just a machine. You get an experienced and dedicated partner supporting you throughout the life of your machine.

We are committed to exceeding your expectations of after-sales service and support, to providing an efficient supply chain for

spares, wear and consumables; and to offering a comprehensive range of services and products to ensure your continuing success.

Quality products, innovative technology and dedicated customer service... these are the hallmarks of your partnership with ESAB.

ESAB sales and service offices worldwide



© 2012 ESAB Cutting Systems.  
All rights reserved. Reproduction or copying in whole or in part only with the written permission of the publisher.



## ESAB Cutting Systems

U.S.A.  
411 S. Ebenezzer Rd.  
Florence, SC 29501  
Phone: 843-664-4394

Canada  
6010 Tomken Road  
Mississauga, Ontario L5T 1X9  
Phone: 905-670-0220

Web: [www.esab-cutting.com](http://www.esab-cutting.com)  
E-Mail: [us.mgr.cutting@esab.com](mailto:us.mgr.cutting@esab.com)

Mexico  
AVE. Diego Diaz de Berlanga No. 130  
Col. Nogalar  
San Nicolas de los Garza, N.L. 66480  
Monterrey, Mexico  
Phone: 81-8305-3700