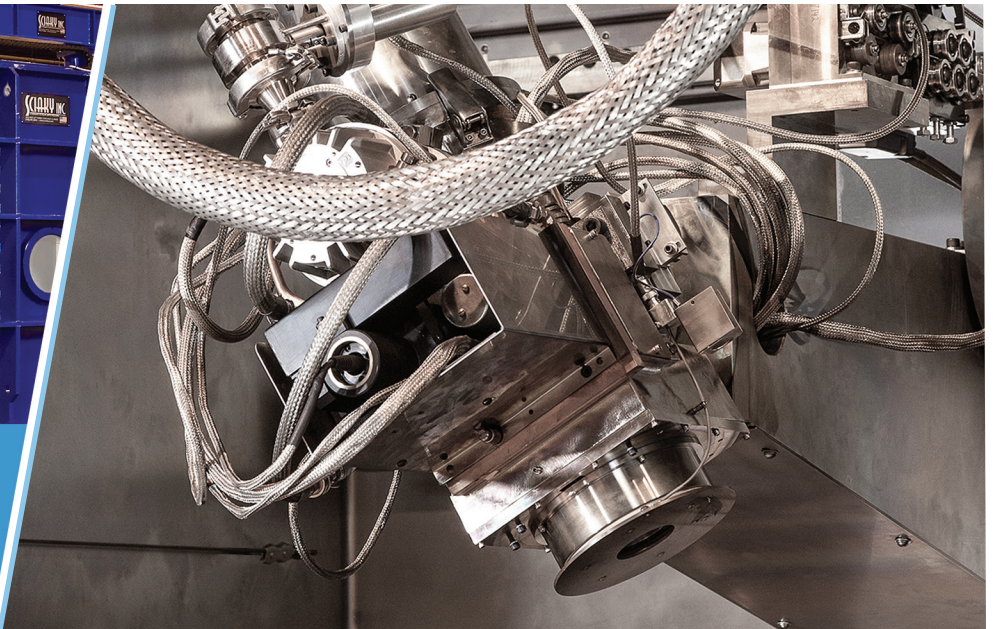


SCIAYK'S EXCLUSIVE 60/60  
ELECTRON BEAM GUN PACKAGE



SCIAYK OFFERS THE WIDEST RANGE  
OF ELECTRON BEAM WELDING  
SYSTEMS IN THE WORLD

## Sciaky Electron Beam Internal Moving Gun Welding System

Sciaky's Moving Gun Electron Beam Welding System is the most versatile electron beam system on the market today. The multi-axis gun motion operates at half the chamber volume of fixed/external gun systems, provides beam access for unusual joint configurations, and significantly simplifies part tooling.

### UNMATCHED PRECISION & PERFORMANCE

Sciaky's exclusive 60/60 electron beam gun package has an improved, narrow beam geometry capable of producing welds with characteristics comparable to those produced by high voltage equipment. It also has superior operational stability. The direct-mounted, turbomolecular gun vacuum pump is equipped with isolation valves for superior performance and easy access to gun components during filament change, making this gun package the most advanced in its class. The gun can be mounted in various mechanical configurations, including servo axes of motion. Options include servo gun tilt and servo rotary mechanisms.

### INTUITIVE OPERATOR INTERFACE

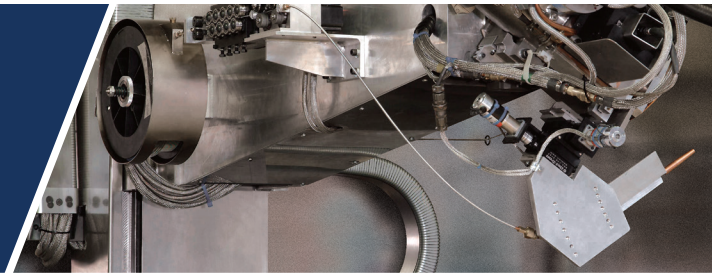
Sciaky's operator interface is configured for all routine programming, file manipulation and operative process control functions. Additional virtual hardware allows the beam supply to be enabled and provides chamber vacuum control, video control and deflection monitoring. A separate portable pendant can be provided for parameter display, program control, critical parameters override and mechanical axes jogging.

### TOTAL PROCESS CONTROL

Sciaky's W2020 Computer Control provides total control over process parameters with +/- 1% accuracy and facilitates up to 10 axes of motion control. Capabilities include process monitoring with data acquisition, networking and off-line programming. The open architecture allows for easy upgrading. The easy-to-use operator interface includes system diagnostics and three levels of program access for security. The viewing system features high-resolution, precision gun column optics with a high-resolution camera and monitor. Controls for focus, shutter, iris and adjustable crosshair are provided.

1+(877)450-2518 [sciaky.com](http://sciaky.com)

Sciaky's EB Welding Systems can be upgraded to an Electron Beam Additive Manufacturing (EBAM®) System by adding a wirefeed gun package.



## OPTIONS FOR PUMPING SYSTEMS, POWER SUPPLY & AXES MOTION

- ▶ Turbomolecular pump on gun
- ▶ Roughing and diffusion pumps on chamber
- ▶ 15 - 42kW power supply
- ▶ X, Y and Z are standard on all systems
- ▶ Horizontal or Vertical Rotary Positioner
- ▶ Rotary/Tilt Positioner
- ▶ Wirefeed, Motorized Wire Nozzle and EBAM (retrofittable or upgradeable)
- ▶ Custom Vision Systems
- ▶ Head and Tail Stock
- ▶ Hand Wheels/Joystick
- ▶ Carriage Runout Platform(s)
- ▶ Remote Process Monitoring
- ▶ Special Beam Deflection Systems
- ▶ Beam diagnostics

## STANDARD CHAMBER SIZES FOR SCIAKY MOVING GUN ELECTRON BEAM WELDING SYSTEMS

**EBAM  
68**

**Chamber Dimensions:**  
68" (1727 mm) x  
68" (1727 mm) x  
110" (2794 mm)

**Work Envelope:**  
28" (711 mm) wide x  
25" (635 mm) deep x  
63" (1600 mm) high

**EBAM  
88**

**Chamber Dimensions:**  
88" (2235 mm) x  
88" (2235 mm) x  
110" (2794 mm)

**Work Envelope:**  
48" (1219 mm) wide x  
35" (889 mm) deep x  
63" (1600 mm) high

**EBAM  
110**

**Chamber Dimensions:**  
110" (2794 mm) x  
110" (2794 mm) x  
110" (2794 mm)

**Work Envelope:**  
70" (1778 mm) wide x  
47" (1194 mm) deep x  
63" (1600 mm) high

**EBAM  
150**

**Chamber Dimensions:**  
150" (3810 mm) x  
150" (3810 mm) x  
120" (3048 mm)

**Work Envelope:**  
110" (2794 mm) wide x  
62" (1575 mm) deep x  
62" (1575 mm) high

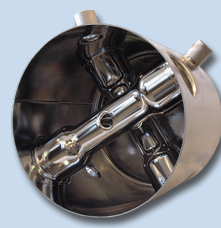
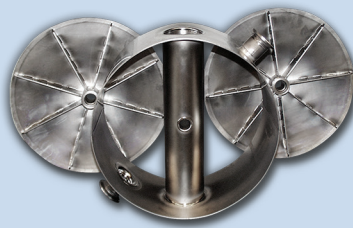
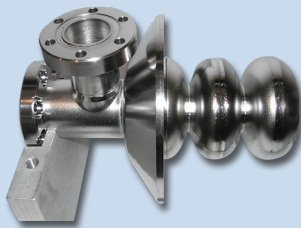
**EBAM  
300**

**Chamber Dimensions:**  
300" (7620 mm) x  
108" (2743 mm) x  
132" (3353 mm)

**Work Envelope:**  
228" (5791 mm) wide x  
48" (1219 mm) deep x  
48" (1219 mm) high

Special chamber sizes can be designed specifically to optimize the work or part envelope for your application.

To learn about Sciaky's patented technology, visit [www.sciaky.com/patents](http://www.sciaky.com/patents)



To learn more about Sciaky's Electron Beam Additive Manufacturing (EBAM) Technology, call us at 1-877-450-2518, or visit [sciaky.com](http://sciaky.com).