



## SG-1645

### Tridex Burr-Free Electrochemical NC/CNC Surface Grinder

The Tridex SG-1645 Burr-Free Electrochemical NC/CNC Surface Grinder is a faster alternative to traditional surface grinding. By providing burr-free and low force grinds that leave no heat-affected zones it virtually eliminates the need for deburring or other corrective secondary operations.

The SG- 1645 comes standard with conversational NC control with the option for Mitsubishi CNC controls. For grinding points on wires or medical needles, the Tridex PGS-100 Point Grinding System can be easily integrated.



**Electrochemical grinding (ECG) yields a burr-free finish, ideal for applications in the medical device industry, aerospace, and many other fields**



### Key Features

- Robust stationary table design makes the machine easier to automate and provides more robust machine guarding.
- Wheel moves in X, Y, and Z axes.
- Available Index Table Pallet Changer allows the operator to load the next part while grinding is in operation.
- Easily integrates with automation to increase process efficiency.
- Standard simple conversational control with color HMI touchscreen. Full CNC is optional.
- Standard MPG Handwheel.
- Heavy duty cast iron weighs 8,000 lbs for superior tolerance and finish.
- Precise flange mounted electrolytic grinding spindle.
- Stainless steel electrolyte tank sealed against mist and leaks.
- Feed components are protected from electrolyte.
- Integration of the Tridex PGS-100 Point Grinding System is simple for grinding points on wire and medical needles.

**To learn more about the SG-1645, including a comprehensive list of features and specifications, please visit:**



## Specifications

<b>Axis Travel:</b>	X: 18.1" (460mm); Y: 15" (380mm); Z: 6.3" (160mm)
<b>Table Size:</b>	22.8" (580mm) x 8.6" (220mm)
<b>Positioning Accuracy:</b>	+/- .0001"/4" (0.0025mm/100mm)
<b>Repeatability:</b>	+/- .00004" (0.001mm)
<b>Traverse Speeds:</b>	Max. 600"/min (15m/min)
<b>High Precision Spindle:</b>	Sealed Ceramic Bearings, Direct Coupled
<b>Spindle Motor:</b>	80 psi ma7.5hp (5.6KW) Direct Drive AC Spindle Motor - No Drive Belt, 0 - 4,000 RPMminimum
<b>Power Supply:</b>	0-20V DC, 300A Solid State (600A Optional)

<b>Control:</b>	Mitsubishi conversational color touch screen standard; CNC optional; Removable MPG Handwheel
<b>Electrolyte Supply Tank:</b>	50 Gallon (200 Liter) Sealed Stainless Steel
<b>Safety Standards:</b>	Meets CE and ISO 13849.1 Safety Standards
<b>Machine Weight:</b>	8,000 lbs (3628kg)
<b>Machine Footprint:</b>	W: 80" (2,030mm) ; D: 76.5" (1,945mm); H: 75.5" (1,915mm)
<b>Air:</b>	4CFM @ 80PSI

## Applications For Ecg

**Medical Devices:**

- Bevel Grinding
- Slot Cutting
- Stylet Grinding
- Form Grinding
- Needle Pointing
- Trocar Pointing
- Menghini Pointing
- Phaco Tips
- Biopsy Tools
- Implant Feature Grinding
- Dental Products
- Skive Manufacturing

**Aerospace:**

- Z Notch Grinding after Weld Repair
- Honeycomb Grinding
- Honeycomb Removal
- Vane Tip Grinding
- Castle Nut Slot Grinding
- Fuel Nozzle Slotting

## Workable Materials

- Stainless Steel
- Inconel
- Nickel Titanium, Nitinol
- Cobalt-Chrome
- Hastelloy

- Other high temperature alloys
- Zirconium
- Sintered Metals
- Magnetic Metals, NdFeB, SmCo



An MMT Company

Glebar is proud to be an **MMT** company – the sole source for automated, process-driven medical manufacturing. Medical Manufacturing Technologies (MMT) brings together applications expertise, technical solutions, and aftermarket support to revolutionize medical device manufacturing.