

Electron Beam Welding

Artech Welders specializes in advanced Electron Beam Welding (EBW), a high-precision welding technique ideal for creating strong, high-quality welds. This process employs a focused beam of high-velocity electrons to melt the materials being joined. The electron beam is generated and applied in a vacuum environment, ensuring deep penetration and no contamination.

> 1st time in India with technology transfer from BARC





Deep penetration



No contamination

About Artech Welders

30+ years of expertise in welding	Pioneers in Capacitor Discharge Projection welding in India	Welding solutions for critical & specialised applications
3500+ Customers	In-house dedicated R&D Team	Nationwide network for service support



High-precision Welding

EBW is particularly effective for welding complex components with high depth-to-width ratios, offering exceptional weld strength and low distortion. Artech Welders' EBW solutions are designed for efficiency and reliability, meeting the demanding requirements of industries such as aerospace, automotive, and medical device manufacturing.





Electron Beam Welding Specifications

Electron Gun Capacity 60 kV, 4 kW	Work Chamber size 460 mm x 480 mm x 560 mm	Manipulator : An XY coordination table of 150 x 150 mm is mounted in the chamber with a demountable type rotary table with vertical and horizontal axes.	
Electron gun vacuum 1 x 10-6 mbar	Chamber vacuum 5 x 10-6 mbar.		

Advantages of EBW

High weld	High weld	Narrow	Low heat input and distortion	Low heat
speed	penetration	weld bead		affected zone
Reactive	Refractory	Thick to thin	Dissimilar	Filler material is not needed.
materials can	materials can	materials can	materials can	
be welded	be welded	be welded	be welded	

Materials weldable by EBW

- All conventional weldable materials
 - Niobium
 - Super alloys
- Molybdenum Zirconium

Titanium

- Dissimilar metals

- Tantalum

Our Customers



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Prompt. Nationwide Support.

- Pune (HQ)
- Bengaluru
- _ Coimbatore
- Ahmedabad 🗕 Raipur

– Delhi