

Summary

During this process a high energy Electron Beam melts a narrow region at the joining interfaces. Electron Beam Welding produces a minimal Heat Affected Zone (HAZ) in the materials being joined but requires the welding to be done in a vacuum atmosphere. This vacuum all but eliminates the introduction of impurities and is operationally efficient in regards to speed and repeatability. Benefits of Electron Beam Welding are no filler material, deep penetration, narrow heat affected zone, minimum distortion to work piece with near parent metal strength if not improved strength. Electron Beam Welding allows you to mate dissimilar metals as well.

Specifications

Materials	Nickel Based Alloys Cobalt Based Alloys Stainless Steel Titanium Aluminum Steel Most other metals
Active Chamber Size	36" cube
Non Active Chamber Size (extension of Active Chamber)	24" dia x 16' length
Weld Depth Penetration	.003" - 2.0" (based on material)

