

Pre-weld Joint Preparation for Electron Beam Welding

Unless otherwise noted, all of the electron beam welding joint designs featured require sharp corners, edges, etc. Do not chamfer the corners during the deburring operation.

The surface finish of mating edges should be 120 RMS, or smoother. The gap allowance should be 0.005 inches, less for thinner materials. Larger gaps can cause an under-fill condition.

Maximum allowable mismatch is a structural, rather than a welding consideration, since the electron beam welding process can accommodate a large amount of mismatch.

Cleanliness is extremely important for electron beam welding. All parts must be free from organic materials, plating and braze alloys in the joint area, etc.

Thank you! Electron Beam Welding LLC