

Chapter - 3

Production Process Details

ERA Mk-II element has primarily three components and they are manufactured by different fabrication techniques. The metallic components of ERA Mk-II are fabricated by deep drawing process whereas silicone rubber liner is manufactured by casting. The preparation of explosive composition and manufacturing process of High Explosive Sheet are documented in doc No. DRDO-HEMR-EDS-PRM-06-2022.

3.1 Fabrication of Metallic Component

There are two metallic components, Container and Lid in ERA Mk-II element. These are manufactured by Deep Drawing Process as per enclosed drawing no. HEMRL/EDS/AERA/T-90/DRG/001/1 and HEMRL/EDS/AERA/T-90/DRG/001/2. The material is Cold Reduced Low carbon Sheet as per specification no. IS 513 (CR2) enclosed as Appendix-. After completing the deep drawing process, the clean metallic components to be paint on outer and inner side with fire resistant olive green colour of paint as per specification no. IND/ME/620 enclosed as Appendix-.

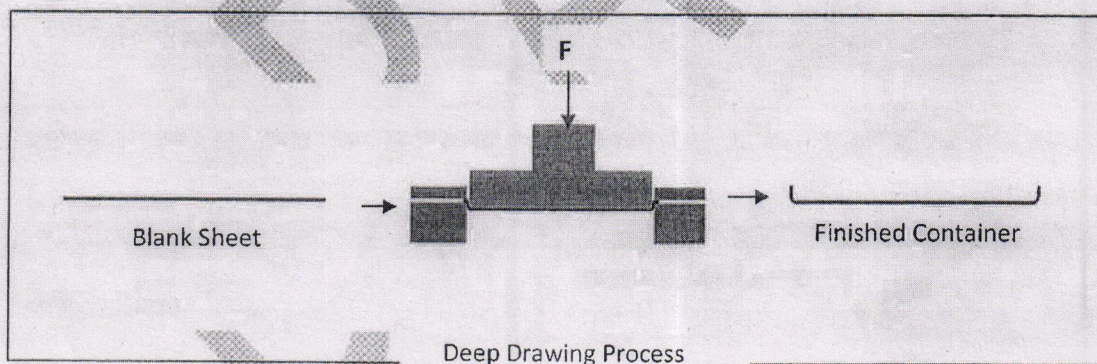


Fig 6. Deep Drawing Process

3.2 Production of Silicon Rubber liner

A Silicone Rubber liner is used as shock attenuator in ERA Mk-II element to prevent the sympathetic detonation of adjacent reactive elements. The Silicon Rubber liner is manufactured by die casting process. All the properties and dimensions should be matched with the specification no HEMRL/EDS/SPEC/SR/I enclosed as Appendix-B