

Bi-Metal Contact Strip

Bi-metal Contact Strip is a clad material consisting of a base metal backing strip with a cover of contact material.

A wide range of materials can be used as the backing or the substrate including most copper based alloys, stainless steel and some nickel alloys. The contact material consists of any noble or silver alloy which is capable of being bonded to the substrate.

Bi-metal strip is produced either by cold bonding, seam welding, or electron beam welding. The forms available are inlay, onlay, edgelay or through-lay.

Cold bonding, which is primarily used for inlays, is based on reduction in thickness of the base material by up to 60%. The base metal backing material is skived to allow the introduction of the precious metal strip to be inlaid, bonded and rolled to required thickness before slitting and coiling.

The seam welding process can be used to produce either inlay or onlay strip.

Inlay is produced by skiving the strip and inlaying the contact material. It is then rolled to the required thickness. Onlay is produced by attaching the contact material to the surface of the base metal strip. The two materials are bonded by the use of rotating electrodes to affect a resistance weld.

The bi-metal contact strip can be supplied either direct to customers for stamping out within their own factories or it may be stamped into precision components by P&B Metal Components Ltd.