

Sound Bonding Application



Sound Power Clip-Ingot-Bonding

〈MST/Multi-StepTool which has been improved on the basis of tools for CIB〉

[Sound Power CIB]

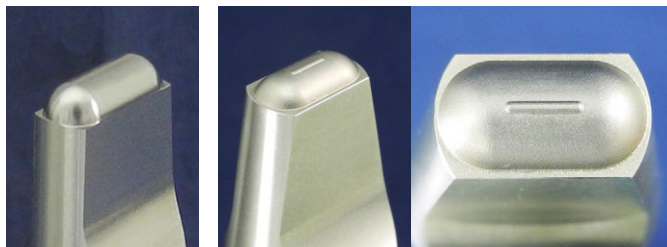
Unlike the bonding with mesh-patterned tool so far, this is a <beautiful> bonding method that parts are bonded with a soft touch and bonding marks like stapled traces don't remain.

At the interface, ingot and alloy layers are formed by energy concentration and <bonding strength can be ensured> more than ever before. Moreover damages to parts and <generation of metal powder are prevented> during bonding. (Patents pending)

[MST which has been improved is...]

Energy is concentrated on a tip of the tool because the shape of the tool for CIB is roundish.

Comparing to CIB, the tool for MST is formed into multi-steps and energy is concentrated more and parts can be bonded smoothly. According to this, <damages to foil can be prevented, noise can be less and bonding strength is increased more.> (Patents pending)



Tool for CIB

Multi-Step Tool



[2 shots for bonding of Al multi-foil and an Al plate]



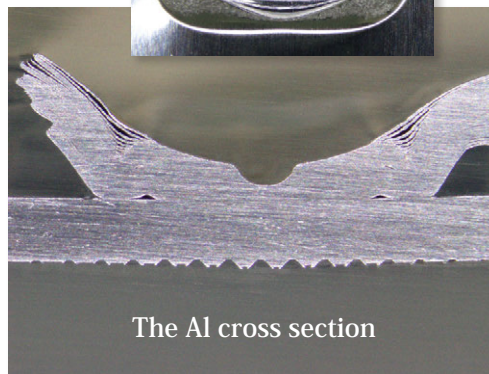
[2 shots for bonding of Cu multi-foil and a Cu plate]



[Enlarged view of the bonding part]

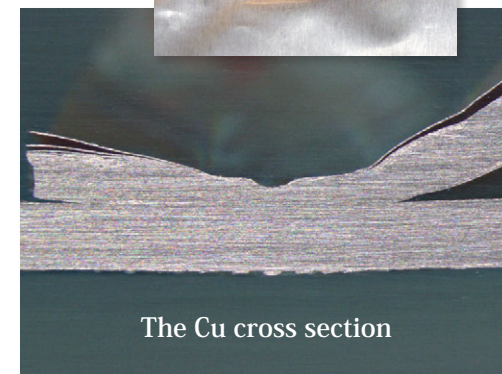


[Enlarged view of the bonding part]



The Al cross section

[Aluminum foil $t=20\mu\text{m}$ x 40sheets] without protective sheets



The Cu cross section

[Copper foil $t=8\mu\text{m}$ x 50sheets] without protective sheets