



# SoundBonding application



## <LIB Multi-Step-Bonding of electrodes>

Bonding of **over 100 multi-layer foil at multi-point at once** with further evolved **MSB**

### [Clip-Ingot Bonding]

Energy can be concentrated on a tip of the tool because the shape of the tool for CIB is roundish. Unlike the bonding with mesh-patterned tool so far, this is a <beautiful> bonding method with a soft touch **without bonding marks** which is like stapled traces and **contamination**.



[Bonding of Al multi-layer foil and an Al plate at 2 points at once]



[Bonding of Cu multi-layer foil and a Cu plate at 2 points at once]



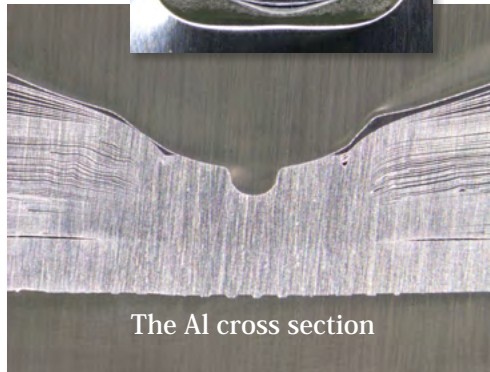
[Enlarged view of the bonding part]



[Enlarged view of the bonding part]

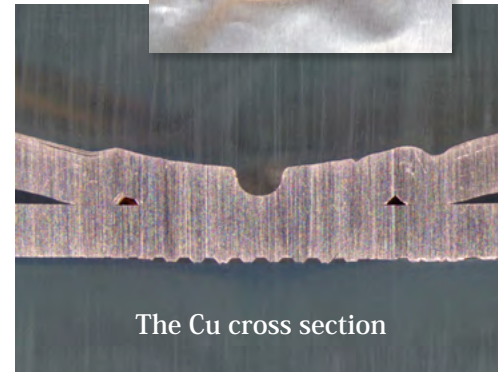
### [Evolved MST /Multi-Step Tool]

Tip of the MST is as roundish as CIB, but the tips are stacked in many layers. By this, energy is concentrated on the tip and smooth bonding can be obtained. As a result, **<bonding time can be shorten, damages to multi-layer foil can be prevented, noise can be less and bonding strength is increased more.>** (Patent)



The Al cross section

[Aluminum foil t=15 μm x 100 foil] without protective sheets



The Cu cross section

[Copper foil t=8 μm x 100 foil] without protective sheets

