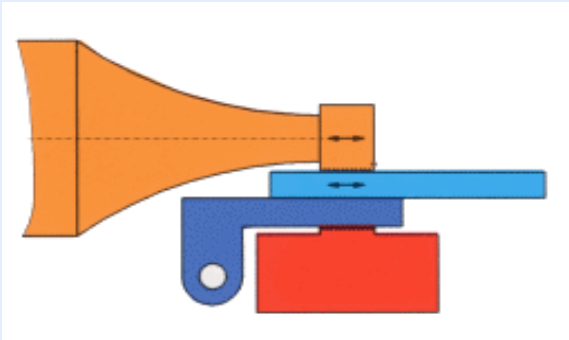


Linear Welding

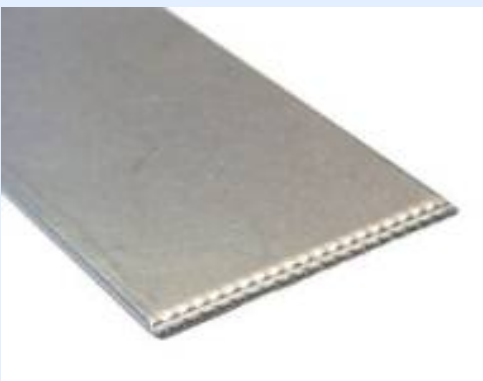
The process in particular can be used where other welding methods fail or are uneconomic.



Contrary to other welding processes, different types of materials can be bonded, as long as their hardness differences are not too great. Excellent results are possible with pure aluminum and copper. These metals can be bonded not only to themselves but also to many other metals, e.g. gold, silver, silicon, nickel etc.

As a rule the parts to be welded do not have to be pre-treated. The parts turned towards the welding tool must not be too thick or too heavy, otherwise there is no relative movement. In the case of aluminum sheet the maximum thickness is approx. 2mm, apart from this there is no limit. The conventional ultrasonic metal welding process, either on a continual basis for longitudinal seams (with rotating sonotrode) or linear, for round, square or rectangle spot welds, has many possible applications today, particularly in the electronics sector. The linear ultrasonic metal welding process is also suitable for ring welds with relatively small diameters.

Samples of linear welding



Tight welded rectangular tube- Aluminum



copper strands to brass contact



Flat battery for mobile phones - nickel to copper and aluminum



Copper wire to brass contact



Solid Body-copper to silver plated terminal



Solid body - brass to copper



Sliding contacts -copper wire to copper contact



Solid body -copper to copper

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