



Aluminium Resistance Welding H-Trode™

The ideal cap electrode for resistance welding of 5000, 6000 and 7000 grade aluminium components

The Luvata H-Trode[™] cap electrode is a high conductivity cold-formed copper electrode. The combination of advanced copper metallurgy and our cold-forming technology gives you an electrode that outperforms conventional electrodes when welding aluminium.

Benefits include:

- Compatible with standard spot welding equipment
- Increased productivity
- Cost-effective electrode for aluminium welding
- High-conductivity
- Non-stick properties



Compatible with conventional spot welding equipment

Alternative welding solutions have been developed for aluminium, but equipment is expensive, large and more difficult to implement than conventional spot welding. H-Trode electrodes enable stable spot welding of aluminium alloys using conventional spot welding equipment.

Increased productivity

Compared to alternative joining methods, spot welding using H-Trode electrodes and standard dressing equipment significantly increases productivity.

Most cost-effective electrode for aluminium welding

H-Trode's increased life expectancy, maintenance savings and consistent quality welds assure you the highest return on your investment for welding aluminium.

Physical properties

All H-Trode electrodes are cold worked and most items are fully cold formed to ensure the maximum hardness. H-Trode has a high-conductivity of minimum 92% IACS.

About Luvata

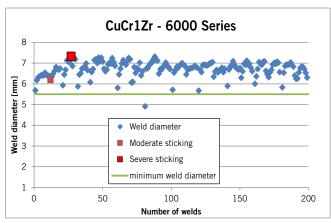
Luvata is a world leader in metal solutions manufacturing and related engineering services to industries such as renewable energy, automotive, healthcare, and power generation and distribution. The company's continued success is attributed to its longevity, technological excellence and strategy of building partnerships beyond metals. Employing over 1,400 staff in 6 countries, Luvata works in partnership with customers such as ABB, CERN, Siemens and Toyota. Luvata is a group company of Mitsubishi Materials Corporation.

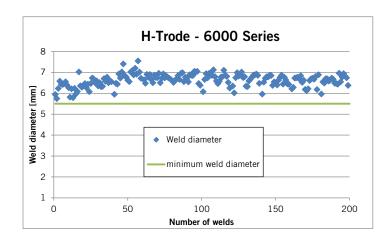


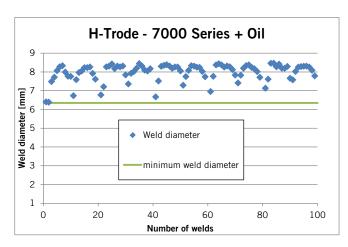
Non-stick properties

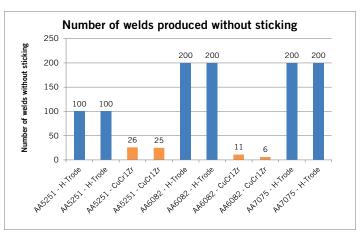
A resistance weld forms where the electrical resistance in an assembly is highest. H-Trode's superior conductivity means that the maximum electrical resistance in an assembly is always clearly between the aluminium sheets. This reduces heat generated between the sheet and electrode, which in turn reduces sticking.

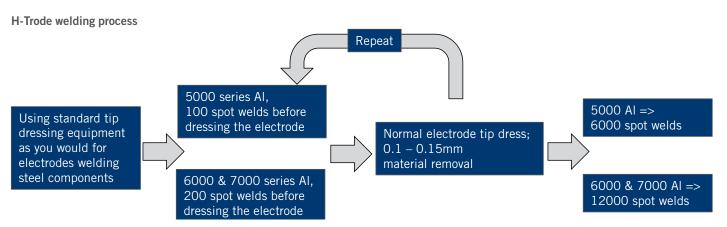
H-Trode non-stick performance comparison











Luvata Ohio Inc. 1376 Pittsburgh Drive Delaware Ohio 43015 USA Tel: +1 740 363 1981 Luvata Welwyn Garden Ltd. Centrapark Bessemer Road Welwyn Garden City Hertfordshire AL7 1HT United Kingdom Tel: +44 1707 379789 MM Metal Products Suzhou 53 Sanzhuang Street Weiting Town Suzhou Industrial Park Jiangsu Province

Jiangsu Province 215121 China Tel: +86 512 6285 1018 Luvata Sao Paulo Avenida dos Autonomistas, nº 4.900 Galpão PR406-B 06194-060 Osasco - SP, Brazil Tel: +55 11 3513 2003



luvata.com