

# ISO 18595:2021 (E)

## Resistance welding — Spot welding of aluminium and aluminium alloys — Weldability, welding and testing

---

### Contents

	Foreword
1	Scope
2	Normative references
3	Terms and definitions
4	Material
4.1	Form
4.2	Types of aluminium alloys
5	Surface conditions
6	Edge distance, edge conditions, form of component and weld spacing
7	Electrodes
7.1	Materials
7.2	Dimensions
7.3	Cooling electrodes
8	Qualification of welds
8.1	General
8.2	Weldability test
8.3	Pre-production tests
8.4	Routine tests
8.4.1	Type of tests
8.4.2	Frequency of testing
9	Weld quality requirements
9.1	Weld diameter
9.2	Weld dimensions
9.3	Weld fracture mode
9.4	Weld strength
9.5	Weld appearance — Surface condition
10	Multi-weld arrays
Annex A	(informative) Typical spot welding conditions
Annex B	(informative) Non-exhaustive list of aluminium alloys covered by this document
Annex C	(informative) Typical information to appear on a welding procedure sheet for spot welding