

ISO 18785-3:2018 (E)

Friction stir spot welding — Aluminium — Part 3: Qualification of welding personnel

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Qualification
4.1	General
4.2	FSSW weld setter qualification
4.3	Essential variables and the ranges of qualification
4.3.1	General
4.3.2	Friction stir spot welding variant
4.3.3	Welding equipment
4.3.4	Parent materials
4.3.5	Weld joint geometry
4.3.6	Range of qualification
4.4	Qualification methods
4.4.1	Qualification based on a standard welding test
4.4.2	Qualification based on a welding procedure test
4.4.3	Qualification based on a pre-production test or production test
4.4.4	Qualification based on a production welding sample test
4.5	Test welds
4.5.1	General
4.5.2	Testing of welds
4.5.2.1	Visual testing and acceptance levels
4.5.2.2	Mechanical testing
4.5.2.2.1	Extent of testing
4.5.2.2.2	Macroscopic examination (optional)
4.5.3	Re-testing
4.6	Test record
5	Certificate
5.1	General
5.2	Period of validity
5.2.1	Initial qualification
5.2.2	Confirmation of the validity
5.2.3	Prolongation of the validity
Annex A	(informative) Functional knowledge of the welding unit
A.1	General
A.2	Welding sequences/procedures
Annex B	(informative) Weld setter qualification test certificate