

ISO 18278-2:2016-01 (E)

Resistance welding - Weldability - Part 2: Evaluation procedures for weldability in spot welding

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Welding equipment	2
4.1	General	2
4.2	Electrodes	2
4.3	Welding current	2
4.4	Mechanical settings	2
4.5	Measurement of parameters	2
4.5.1	Welding current and electrode force	2
4.5.2	Electrode cooling water flow rate	2
4.6	Measurement of results	3
4.6.1	Weld diameter	3
4.6.2	Detection of expulsion	3
5	Preliminary adjustments	3
5.1	Electrode alignment	3
5.2	Electrode conditioning	3
6	Determination of the welding current range	3
6.1	Test specimens	3
6.2	Welding parameters	3
6.3	Test procedure	3
6.4	Current range criteria	4
6.5	Three sheet and multiple stack-ups	4
7	Estimation of electrode life	4
7.1	Test specimens	4
7.2	Welding parameters	4
7.3	Procedure	5
7.4	Test criteria, interpretation of results	5
8	Test report	6
8.1	General	6
8.2	Welding current range	6
8.3	Electrode life	6
Annex A (informative) Electrode alignment		7
Annex B (informative) Specific conditions for steel sheet customer qualification		9
Annex C (informative) Test specimens for mechanical characterization		12
Annex D (informative) Example of test report for welding current range		14

Annex E (informative) Example of test report for electrode life test	15
Bibliography	16