

ISO 18278-2:2004-11 (E)

Resistance welding - Weldability - Part 2: Alternative procedures for the assessment of sheet steels for spot welding

Contents		Page
page	Foreword	vi
	Introduction	vii
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Purpose	2
5	Welding equipment	2
5.1	General	2
5.2	Electrodes	2
5.3	Welding current	3
5.4	Mechanical system	3
5.5	Parameter measurement	3
6	Range of qualification	4
7	Test specimen characteristics	4
7.1	Materials	4
7.2	Assemblies	4
8	Preliminary adjustments	4
8.1	Electrode position check under electrode force used for the test	4
8.2	Electrode conditioning	4
9	Determination of the acceptable welding current range	5
9.1	Test specimens	5
9.2	Welding parameters	5
9.3	Acceptance criteria	5
9.4	Procedure	6
10	Estimation of electrode lifetime N	6
10.1	Essentials of the test	6
10.2	Adjustment of machine settings	6
10.3	Procedure	6
10.4	Test criteria, interpretation of results	7
11	Specific conditions for steel sheet customer qualification	7
11.1	Purpose	7
11.2	Material	7
11.3	Assemblies	8
11.4	Welding parameters	8
11.5	Acceptance criteria	10
12	Test report	10
12.1	General	10
12.2	Available welding current range	10

12.3	Electrode lifetime	11
	Annex A (normative) Profile tolerances and control gauges for electrodes	12
	Annex B (normative) Electrode position check	14
	Annex C (normative) Determination of available welding current range	15
	Annex D (informative) Test specimens for mechanical characterisation	16
	Annex E (informative) Test sheet - Available welding current range	18
	Annex F (informative) Test sheet - Lifetime of electrodes	19
	Bibliography	20