

DIN EN ISO 17657-2:2007-09 (E)

Resistance welding - Welding current measurement for resistance welding - Part 2: Welding current meter with current sensing coil (ISO 17657-2:2005)

Contents		Page
Foreword.....		3
Introduction		4
1 Scope		5
2 Normative references		5
3 Terms and definitions		5
4 Physical environment and operating conditions		6
5 Classification of welding current meters with their current sensing coil, and designation of product.....		6
5.1 Classes of welding current meter with current sensing coil		6
5.2 Designation of product		7
6 Requirements for welding current meter with current sensing coil		7
6.1 Welding current meter.....		7
6.2 Current sensing coil		7
6.3 Welding current meter with its current sensing coil.....		8
6.4 Integrator		8
6.5 Data processing unit		8
6.6 Display unit and output ports.....		8
6.7 Minimum and maximum duration of welding current.....		8
6.8 Maximum measuring current.....		9
6.9 Minimum measuring current		9
6.10 Phase-controlled current		9
6.11 Minimum time for current measurement.....		9
6.12 Fluctuation of supply voltage		9
6.13 Mechanical strength of current sensing coil		9
6.14 Setting position error of current sensing coil		9
6.15 Influence of ambient temperature		9
6.16 Test.....		10
6.16.1 Type test		10
6.16.2 Acceptance test		10
7 Test procedures		10
7.1 Maximum measuring current.....		10
7.2 Minimum measuring current		10
7.3 Phase-controlled current		11
7.4 Minimum time for current measurement.....		11
7.5 Fluctuation of supply voltage.....		11
7.6 Thermal test.....		12
8 Marking		12
Annex A (normative) Definition of indicated measuring time and its indicated current value.....		13
A1 Indicated measuring time		13
A2 Welding current value for the indicated measuring time		14
Annex B (informative) Set-up of a current sensing coil and construction of welding current meters		15