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STN	**Odporové zváranie Zvariteľnosť Časť 3: Postupy vyhodnocovania zvariteľnosti pri bodovom zváraní (ISO 17278-3: 2017)**	**STN EN ISO 18278-3 05 1211**

Resistance welding - Weldability - Part 3: Evaluation procedures for weldability in spot weld bonding (ISO 18278-3:2017)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/18

Obsahuje: EN ISO 18278-3:2017, ISO 18278-3:2017

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 18278-3

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ICS 25.160.40

English Version

Resistance welding - Weldability - Part 3: Evaluation procedures for weldability in spot weld bonding (ISO 18278-3:2017)

Soudage par résistance - Soudabilité - Partie 3: Méthodes d'évaluation de l'aptitude au soudocollage par points (ISO 18278-3:2017)

Widerstandsschweißen - Schweißeignung - Teil 3: Verfahren zum Bewerten der Eignung für das Widerstandspunktschweißkleben (ISO 18278-3:2017)

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EN ISO 18278-3:2017 (E)

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European foreword

This document (EN ISO 18278-3:2017) has been prepared by Technical Committee ISO/TC 44 “Welding and allied processes” in collaboration with Technical Committee CEN/TC 121 “Welding and allied processes” the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2018, and conflicting national standards shall be withdrawn at the latest by March 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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Endorsement notice

The text of ISO 18278-3:2017 has been approved by CEN as EN ISO 18278-3:2017 without any modification.

INTERNATIONAL STANDARD

ISO 18278-3

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Resistance welding — Weldability —

Part 3: Evaluation procedures for weldability in spot weld bonding

Soudage par résistance — Soudabilité —

Partie 3: Méthodes d'évaluation de l'aptitude au soudocollage par points

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 44*, Welding and allied processes*, Subcommittee SC 6, *Resistance welding and allied mechanical joining*.

A list of all parts in the ISO 18278 series can be found on the ISO website.

Requests for official interpretations of any aspect of this document should be directed to the Secretariat of ISO/TC 44/SC 6 via your national standards body. A complete listing of these bodies can be found at www.iso.org.

Introduction

This document describes procedures for evaluating the weldability of weld bonding using the resistance spot welding process by determining the welding current range and electrode life.

These procedures can be used to evaluate the following:

a) the effect of electrode material, shape, dimensions and electrode cooling;

b) the effect of material types and thicknesses and coatings being welded;

c) the effect of welding conditions;

d) the effect of welding equipment;

e) the effect of adhesive on welding.

INTERNATIONAL STANDARD **ISO 18278-3:2017(E)**

Resistance welding — Weldability —

Part 3:
Evaluation procedures for weldability in spot weld bonding

1 Scope

This document specifies procedures for the determination of the acceptable welding current range and the electrode life for spot weld bonding using resistance spot welding with adhesive bonding.

This document is applicable for the evaluation of the weldability of prepared assemblies of uncoated and coated metal sheets with individual thicknesses from 0,4 mm to 6,0 mm.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 669, *Resistance welding — Resistance welding equipment — Mechanical and electrical requirements*

ISO 5182, *Resistance welding — Materials for electrodes and ancillary equipment*

ISO 5821, *Resistance welding — Spot welding electrode caps*

ISO 14373, *Resistance welding — Procedure for spot welding of uncoated and coated low carbon steels*

ISO 17677-1, *Resistance welding — Vocabulary — Part 1: Spot, projection and seam welding*

ISO 18278-1:2015, *Resistance welding — Weldability — Part 1: General requirements for the evaluation of weldability for resistance spot, seam and projection welding of metallic materials*

