SLOVENSKI STANDARD
SIST EN ISO 18594:2007

01-julij-2007

Točkovno, bradavičasto in kolutno uporovno varjenje – Metoda določanja prehodne upornosti na aluminiju in jeklu (ISO 18594:2007)

Resistance spot-, projection- and seam-welding - Method for determining the transition resistance on aluminium and steel material (ISO 18594:2007)

Widerstandspunkt-, Buckel- und Rollennahtschweißen - Verfahren für das Bestimmen des Übergangswiderstands von Aluminium- und Stahlwerkstoffen (ISO 18594:2007)

Soudage par résistance par points, par bossage et à la molette - Méthode pour la détermination de la résistance de transition sur l'aluminium et sur l'acier (ISO 18594:2007)

Ta slovenski standard je istoveten z: **EN ISO 18594:2007**

ICS:

25.160.10	Varilni postopki in varjenje	Welding processes
77.080.10	Železo	Irons
77.120.10	Aluminij in aluminijeve zlitine	Aluminium and aluminium alloys

SIST EN ISO 18594:2007 **en,fr,de**

EUROPEAN STANDARD

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EUROPÄISCHE NORM

EN ISO 18594

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English Version

Resistance spot-, projection- and seam-welding - Method for determining the transition resistance on aluminium and steel material (ISO 18594:2007)

Soudage par résistance par points, par bossage et à la molette - Méthode pour la détermination de la résistance de transition sur l'aluminium et sur l'acier (ISO 18594:2007)

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This European Standard was approved by CEN on 17 February 2007.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN ISO 18594:2007) has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" in collaboration with Technical Committee CEN/TC 121 "Welding", 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of an identical text or by endorsement, at the latest by September 2007, and conflicting national standards shall be withdrawn at the latest by September 2007.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

The text of ISO 18594:2007 has been approved by CEN as EN ISO 18594:2007 without any modifications.

INTERNATIONAL STANDARD

ISO 18594

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Resistance spot-, projection- and seam-welding — Method for determining the transition resistance on aluminium and steel material

Soudage par résistance par points, par bossages et à la molette — Méthode pour la détermination de la résistance de transition sur l'aluminium et sur l'acier

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Foreword

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ISO 18594 was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 6, *Resistance welding*.

Requests for official interpretations of any aspect of this International Standard 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.

Resistance spot-, projection- and seam-welding — Method for determining the transition resistance on aluminium and steel material

1 Scope

This International Standard specifies the procedure and the experimental set-up for determining the transition resistance of a single sheet or two overlapping sheets of aluminium or steel, with or without surface treatment, and with or without surface coating.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1
contact resistance
electric property of a contact area between two bodies which opposes and limits the passage through it of a steady current

EXAMPLE The contacts between electrode/electrode, electrode/sheet and sheet/sheet.

2.2
bulk resistance
ohmic resistance of an electrical conductor

2.3
total resistance
R
electrical resistance as measured between the sensing clamps (includes both bulk and contact resistances)

See Figure 1 and Figure 2.

2.4
set-up resistance
R_s
resistance of the experimental set-up between the sensing clamps without metal sheet(s) between the electrodes, the two electrodes being in direct contact

See Figure 2 b), (R_0+R_1+R_7).

2.5
transition resistance
R_t
total resistance minus the set-up resistance