

**Aerospace series - Welded and brazed assemblies
for aerospace constructions - Weldability and
brazeability of materials - Part 001: General
requirements**

Aerospace series - Welded and brazed assemblies for
aerospace constructions - Weldability and brazeability
of materials - Part 001: General requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 4632-001:2008 sisaldab Euroopa standardi EN 4632-001:2008 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 20.06.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 20.06.2008.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 4632-001:2008 consists of the English text of the European standard EN 4632-001:2008.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 20.06.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 20.06.2008.</p> <p>The standard is available from Estonian standardisation organisation.</p>
--	---

ICS 49.025.01

Võtmesõnad:

Standardite reprodutseerimis- ja levitamiseõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:
Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

ICS 49.025.01

English Version

**Aerospace series - Welded and brazed assemblies for
aerospace constructions - Weldability and brazeability of
materials - Part 001: General requirements**

Série aérospatiale - Assemblages soudés et brasés pour
constructions aérospatiales - Soudabilité et brasabilité des
matériaux - Partie 001 : Généralités

Luft- und Raumfahrt - Schweiß- und Lötverbindungen für
die Luft- und Raumfahrt -Schweißbarkeitsgrad und
Lötbarkeitsgrad von Werkstoffen - Teil 001: Allgemeines

This European Standard was approved by CEN on 7 March 2008.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

Page

Foreword	3
Introduction	4
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Symbols, codes and abbreviations	7
5 Responsibilities	10
6 How to use this standard	10
7 Method of determining the degree of weldability and brazeability	10
Annex A (normative) Recommendations for brazing and diffusion assemblies	11
Annex B (normative) Model sheet	16
Annex C (normative) Model sheet	17

Foreword

This document (EN 4632-001:2008) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

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 October 2008, and conflicting national standards shall be withdrawn at the latest by October 2008.

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

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 the United Kingdom.

Introduction

This standard is the Part 001 of a series of standards about welded and brazed assemblies for aerospace constructions.

1 Scope

This standard defines weldability and brazeability degrees for metallic materials used in aerospace construction, for processes and techniques involving welding and brazing but excluding soldering.

It also defines rules to be observed to determine the degree of weldability and brazeability.

It is applicable without any restriction for the manufacturing of new parts and repair parts.

2 Normative references

The following referenced documents are indispensable for the application 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.

EN ISO 4063, *Welding and allied processes — Nomenclature of processes and reference numbers (ISO 4063:1998)*

EN 515, *Aluminium and aluminium alloys — Wrought products — Temper designations*

EN 573-3, *Aluminium and aluminium alloys — Chemical composition and form of wrought products — Part 3: Chemical composition and form of products*

EN 10052, *Vocabulary of heat treatment terms for ferrous products*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in Publications on Welding and Welding Applications and issued by the International Council of the French Language and the following apply.

3.1 Weldability

3.1.1

concept of weldability

it is considered that a metallic material is weldable to a given degree, by a given process and for a given application type, when it can be used to produce a weld provided that precautions corresponding to this degree are taken, and if the characteristics and consequences of the presence of the weld satisfy the required properties chosen as the basis for a judgement