

Aerospace series - Technical drawings - Representation of parts made of composite materials - Part 5: Seams

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Representation of parts made of composite
materials - Part 5: Seams

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 4408-005:2005 sisaldab Euroopa standardi EN 4408-005:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 15.07.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 4408-005:2005 consists of the English text of the European standard EN 4408-005:2005.</p> <p>This document is endorsed on 15.07.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This standard specifies the representation of seams of composite materials as well as the information to be indicated in technical drawings.</p>	<p>Scope: This standard specifies the representation of seams of composite materials as well as the information to be indicated in technical drawings.</p>
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ICS 01.100.99, 49.020

Võtmesõnad:

ICS 01.100.99; 49.020

English version

**Aerospace series - Technical drawings - Representation of parts
made of composite materials - Part 5: Seams**

Série aérospatiale - Dessins techniques - Représentation
des articles en matériaux composites - Partie 5 : Coutures

Luft- und Raumfahrt - Technische Zeichnungen -
Darstellung von Teilen aus Verbundwerkstoffen - Teil 5:
Nähte

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Foreword

This document (EN 4408-005:2005) has been prepared by the European Association of Aerospace Manufacturers - Standardization (AECMA-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 AECMA, 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of an identical text or by endorsement, at the latest by November 2005, and conflicting national standards shall be withdrawn at the latest by November 2005.

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Introduction

This document makes reference to textile standards which quote two types of seams, these being:

- assembly seam;
- reinforcing seam.

The assembly seam undergoes a mechanical effort which is not the case of the holding seam. This distinction may appear necessary in the case of dry fabrics, whereas in aerospace applications there is a systematic curing or densification, therefore it would appear difficult to distinguish them as far as the ready-for-use product is concerned.

The technical definition of seams is required for reinforcing seams.

1 Scope

This standard specifies the representation of seams of composite materials as well as the information to be indicated in technical drawings.

It is applicable to aerospace structures using items linked by seams in dry fabrics, prepregs, film, etc.

It shall be used together with EN 4408-001.

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 4408-001, *Aerospace series – Technical drawings – Representation of parts made of composite materials – Part 1: General rules.*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 4408-001 and the following apply.

3.1

assembly seam (retention)

it cannot endure any notable effort in using the item

3.2

fibre grafting

action of changing the direction of fibres in an element with or without penetration in another element

3.3

lacing

liaison obtained by a continuous link passed through previously perforated holes

3.4

needling

consolidation of a fibre lap by entanglement using numerous penetrations of spring needles

Needling is a means of fibre grafting (see Figure 1).