ICS 49.025.40 SLOVENSKÁ TECHNICKÁ NORMA Máj 2016

STN	**Letectvo a kozmonautika. Plasty zosilnené vláknami. Skúšobná metóda. Stanovenie šmykových vlastností v rovine (± 45° skúška ťahom).**	**STN EN 6031** 31 7726

Aerospace series - Fibre reinforced plastics - Test method - Determination of in-plane shear properties (? 45? tensile test)

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. 04/16

Obsahuje: EN 6031:2015

122827

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 6031

November 2015

ICS 49.025.40

English Version

Aerospace series - Fibre reinforced plastics - Test method - Determination of in-plane shear properties (± 45° tensile test)

Série aérospatiale - Matières plastiques renforcées de fibres - Méthode d'essai - Détermination des propriétés en cisaillement plan (traction il ± 45°)

Luft- und Raumfahrt - Faserverstärkte Kunststoffe - Prüfverfahren - Bestimmung der Schubeigenschaften (± 45° Zugversuch)

This European Standard was approved by CEN on 21 June 2014.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Ref. No. EN 6031:2015 E

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European foreword

This document (EN 6031:2015) 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of an identical text or by endorsement, at the latest by May 2016, and conflicting national standards shall be withdrawn at the latest by May 2016.

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1 Scope

This European Standard specifies the procedure for the determination of the in-plane shear strength and modulus of fibre composites. The procedure is based on the uni-axial tensile stress-strain response of a ± 45° laminate which is symmetrically laminated about the mid-plane.

This standard is applicable to composite laminates manufactured from unidirectional tape or woven fabric reinforcement.

This standard does not give any directions necessary to meet the health and safety requirements. It is the responsibility of the user of this standard to consult and establish appropriate health and safety precautions.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 2374, *Aerospace series — Glass fibre reinforced mouldings and sandwich composites — Production of test panels*

EN 2489, *Aerospace series — Fibre reinforced plastics — Determination of the action of test fluids*

EN 2565, *Aerospace series — Preparation of carbon fibre reinforced resin panels for test purposes* 1)

EN 2743, *Aerospace series — Fibre reinforced plastics — Standard procedures for conditioning prior to testing unaged materials*

EN 2823, *Aerospace series — Fibre reinforced plastics — Test method for the determination of the effect of exposure to humid atmosphere on physical and mechanical characteristics* 1)

1) Published as ASD-STAN Prestandard at the date of publication of this standard. http://www.asd-stan.org/