| TNI | Kozmická technika<br>Príručka o konštrukčných materiáloch<br>Časť 3: Prenos zaťaženia a návrh spojov a návrh konštrukcií | TNI<br>CEN/TR<br>17603-32-03<br><br>31 0540 |
|---|---|---|

Space engineering - Structural materials handbook - Part 3: Load transfer and design of joints and design of structures

Táto technická normalizačná informácia obsahuje anglickú verziu CEN/TR 17603-32-03:2022.
This Technical standard information includes the English version of CEN/TR 17603-32-03:2022.

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# TECHNICAL REPORT
# RAPPORT TECHNIQUE
# TECHNISCHER BERICHT

**CEN/TR 17603-32-03**

January 2022

ICS 49.140

English version

# Space engineering - Structural materials handbook - Part 3: Load transfer and design of joints and design of structures

Ingénierie spatiale - Manuel des matériaux structuraux - Partie 3 : Transfert des charges, conception des jonctions et conception des structures

Raumfahrttechnik - Handbuch der Konstruktionswerkstoffe - Teil 3: Lastabtragung und Bemessung von Verbindungen und Konstruktion von Bauwerken

This Technical Report was approved by CEN on 22 November 2021. It has been drawn up by the Technical Committee CEN/CLC/JTC 5.



**CEN-CENELEC Management Centre:**
**Rue de la Science 23, B-1040 Brussels**



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# Table of contents

## Figures

## Tables

# European Foreword

This document (CEN/TR 17603-32-03:2022) has been prepared by Technical Committee CEN/CLC/JTC 5 “Space”, the secretariat of which is held by DIN.

It is highlighted that this technical report does not contain any requirement but only collection of data or descriptions and guidelines about how to organize and perform the work in support of EN 16603-32.

This Technical report (CEN/TR 17603-32-03:2022) originates from ECSS-E-HB-32-20 Part 3A.

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This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This document has been developed to cover specifically space systems and has therefore precedence over any TR covering the same scope but with a wider domain of applicability (e.g.: aerospace).

# Introduction

The Structural materials handbook is published in 8 Parts.

A glossary of terms, definitions and abbreviated terms for these handbooks is contained in Part 8.

The parts are as follows:

| | | | |
|---|---|---|---|
| TR 17603-32-01 | Part 1 | Overview and material properties and applications | Clauses 1 - 9 |
| TR 17603-32-02 | Part 2 | Design calculation methods and general design aspects | Clauses 10 - 22 |
| TR 17603-32-03 | Part 3 | Load transfer and design of joints and design of structures | Clauses 23 - 32 |
| TR 17603-32-04 | Part 4 | Integrity control, verification guidelines and manufacturing | Clauses 33 - 45 |
| TR 17603-32-05 | Part 5 | New advanced materials, advanced metallic materials, general design aspects and load transfer and design of joints | Clauses 46 - 63 |
| TR 17603-32-06 | Part 6 | Fracture and material modelling, case studies and design and integrity control and inspection | Clauses 64 - 81 |
| TR 17603-32-07 | Part 7 | Thermal and environmental integrity, manufacturing aspects, in-orbit and health monitoring, soft materials, hybrid materials and nanotechnoligies | Clauses 82 - 107 |
| TR 17603-32-08 | Part 8 | Glossary | |