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Aerospace series - Anthropometric dimensioning of aircraft seats

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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**Aerospace series - Anthropometric dimensioning of
aircraft seats**

Série aérospatiale - Dimensionnement
anthropométrique des sièges passagers d'avion

Luft- und Raumfahrt - Anthropometrische
Dimensionierung von Flugzeugsitzen

This European Standard was approved by CEN on 19 February 2018.

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EN 4730:2018 (E)**European foreword**

This document (EN 4730:2018) 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 document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2019, and conflicting national standards shall be withdrawn at the latest by May 2019.

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

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Introduction

Flight passengers in commercial aviation spend the predominant part of their journey — which can take 12 hours or more — on their seats. Therefore, aircraft passenger seats are designed to minimize passengers' discomfort. This includes the consideration of body size and its variation within the target population.

This document gives guidance on the use of anthropometric data for the dimensioning of aircraft seats to accommodate specific populations as well as mixed populations including the world population. This document also gives advice on how to quantify seat comfort in terms of anthropometric accommodation rates.

EN 4730:2018 (E)**1 Scope**

This document describes the application of anthropometric data for the dimensioning of aircraft passenger seats. The focus is on the use of statistical parameters of anthropometrical measurements as given in CEN ISO/TR 7250-2 and similar sources. Even if methods described in this document might be applicable for feasibility and safety issues the scope of this document is design for comfort.

The aim of this document is to give advice to designers to include methods of human-centred design into the design of aircraft seats.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 4723:2015, *Aerospace series — Standardized measurement methods for comfort and living space criteria for aircraft passenger seats*

EN ISO 15535:2012, *General requirements for establishing anthropometric databases (ISO 15535:2012)*

EN ISO 7250-1, *Basic human body measurements for technological design — Part 1: Body measurement definitions and landmarks*

CEN ISO/TR 7250-2, *Basic human body measurements for technological design — Part 2: Statistical summaries of body measurements from national populations*

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