SLOVENSKI STANDARD
SIST EN 2573:2022

01-december-2022

Nadomešča:
SIST EN 2573:2007

Aeronavtika - Jeklo X6CrNiTi18-10 (1.4541) - Taljeno na zraku - Popuščano - Žice - 0,25 mm ≤ De ≤ 3 mm - Rm ≤ 780 MPa

Aerospace series - Steel X6CrNiTi18-10 (1.4541) - Air melted - Softened - Wires - 0,25 mm ≤ De ≤ 3 mm - Rm ≤ 780 MPa

Luft- und Raumfahrt - Stahl X6CrNiTi18-10 (1.4541) - Lufterschmolzen - Weichgeglüht - Drähte - 0,25 mm ≤ De ≤ 3 mm - Rm ≤ 780 MPa

Série aérospatiale - Acier X6CrNiTi18-10 (1.4541) - Élaboré à l'air - Adouci - Fils - 0,25 mm ≤ De ≤ 3 mm - Rm ≤ 780 MPa

Ta slovenski standard je istoveten z: **EN 2573:2022**

ICS:

49.025.10	Jekla	Steels
77.140.65	Jeklene žice, jeklene vrvi in verige	Steel wire, wire ropes and link chains

SIST EN 2573:2022 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 2573

October 2022

ICS 49.025.10

Supersedes EN 2573:2007

English Version

Aerospace series - Steel X6CrNiTi18-10 (1.4541) - Air melted - Softened - Wires - 0,25 mm ≤ D_e ≤ 3 mm - R_m ≤ 780 MPa

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This European Standard was approved by CEN on 8 May 2022.

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

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

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European foreword

This document 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 document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, 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of an identical text or by endorsement, at the latest by April 2023, and conflicting national standards shall be withdrawn at the latest by April 2023.

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.

This document supersedes EN 2573:2007.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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Introduction

This document is part of the series of EN metallic material standards for aerospace applications. The general organization of this series is described in EN 4258.

This document has been prepared in accordance with EN 4500-005.

1 Scope

This document specifies the requirements relating to:

Steel X6CrNiTi18–10 (1.4541)

Air melted

Softened

Wires

0,25 mm ≤ D_e ≤ 3 mm

R_m ≤ 780 MPa

for aerospace applications.

Material number: 1.4541.

ASD-STAN designation: FE-PA3601.

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 4700-004, *Aerospace series — Steel and heat resisting alloys — Wrought products — Technical specification — Part 004: Wire*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at https://www.electropedia.org/

4 Requirements

According to Table 1.

Table 1 — Requirements for steel X6CrNiTi18–10 (1.4541)

1	Material designation		Steel X6CrNiTi18–10 (1.4541)								
2	Chemical composition %	Element	C	Si	Mn	S	P	Cr	Ni	Ti	Fe
		min.	—	—	—	—	—	17	9	5 × C	Base
		max.	0,08	1	2	0,030	0,045	19	12	0,70	
3	Method of melting		Air melted								
4.1	Form		Wires								
4.2	Method of production		Drawn								

4.3	Limit dimension(s)	mm	$0{,}25 \leq D_e \leq 3$
5	Technical specification		EN 4700-004

6.1	Delivery condition	Softened
	Heat treatment	$1\,050\ °C \leq \theta \leq 1\,100\ °C$/AC or WQ
6.2	Delivery condition code	U
7	Use condition	Delivery condition
	Heat treatment	—

Characteristics

8.1	Test sample(s)				According to EN 4700-004
8.2	Test piece(s)				According to EN 4700-004
8.3	Heat treatment				Delivery condition
9	Dimensions concerned			mm	$0{,}25 \leq D_e \leq 3$
10	Thickness of cladding on each face			%	—
11	Direction of test piece				L
12	T	Temperature	θ	°C	Ambient
13	T	Proof stress	$R_{p0,2}$	MPa	—
14	T	Strength	R_m	MPa	≤ 780
15	T	Elongation	A	%	≥ 40
16	T	Reduction of area	Z	%	—
17	Hardness				—
18	Shear strength		R_c	MPa	—
19	Bending		k	—	—
20	Impact strength				—
21	C	Temperature	θ	°C	—
22	C	Time		h	—
23	C	Stress	σ_a	MPa	—
24	C	Elongation	a	%	—
25	C	Rupture stress	σ_R	MPa	—
26	C	Elongation at rupture	A	%	—
27	Notes (see line 98)				—
37	Reverse bend			—	EN 4700-004

		7	9 bends minimum
95	Marking inspection	—	According to EN 4700-004
96	Dimensional inspection	—	According to EN 4700-004
98	Notes	—	—
99	Typical use	—	Locking wire

100	—	Product qualification	—	According to EN 4700-004 Qualification programme to be agreed between manufacturer and purchaser.