



SLOVENSKI STANDARD
oSIST prEN 2252:2021

01-april-2021

Aeronavtika - Jeklo 15CrMoV6 (1.7334) - Izkovki - Palice - De ≤ 100 mm - 1080 MPa ≤ Rm ≤ 1250 MPa

Aerospace series - Steel 15CrMoV6 (1.7334) - Forgings - Bars - De ≤ 100 mm - 1 080 MPa ≤ Rm ≤ 1 250 MPa

Luft- und Raumfahrt - Stahl 15CrMoV6 (1.7334) - Gesenk- und Freiformschmiedestücke - Stangen - De ≤ 100 mm - 1 080 MPa ≤ Rm ≤ 1 250 MPa

Série aérospatiale - Acier 15CrMoV6 (1.7334) - Pièces forgées ou matricées - Barres - De ≤ 100 mm - 1 080 MPa ≤ Rm ≤ 1 250 MPa

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Ta slovenski standard je istoveten z: prEN 2252

ICS:

49.025.10 Jekla Steels

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 2252

February 2021

ICS 49.025.10

Will supersede EN 2252:2012

English Version

Aerospace series - Steel 15CrMoV6 (1.7334) - Forgings - Bars - $D_e \leq 100 \text{ mm}$ - $1\ 080 \text{ MPa} \leq R_m \leq 1\ 250 \text{ MPa}$

Série aérospatiale - Acier 15CrMoV6 (1.7334) - Pièces
forgées ou matricées - Barres - $D_e \leq 100 \text{ mm}$ - $1\ 080$
 $\text{MPa} \leq R_m \leq 1\ 250 \text{ MPa}$

Luft- und Raumfahrt - Stahl 15CrMoV6 (1.7334) -
Gesenk- und Freiformschmiedestücke - Stangen - $D_e \leq$
 100 mm - $1\ 080 \text{ MPa} \leq R_m \leq 1\ 250 \text{ MPa}$

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee ASD-STAN.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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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 (prEN 2252:2021) 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 is currently submitted to the CEN Enquiry.

This document will supersede EN 2252:2012.

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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.

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1 Scope

This document specifies the requirements relating to:

Steel 15CrMoV6 (1.7334)
Forgings
Bars
 $D_e \leq 100$ mm
 $1\ 080\text{MPa} \leq R_m \leq 1\ 250\ \text{MPa}$

for aerospace applications.

W.nr: 1.7334.

ASD-STAN designation: FE-PL1505.

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 2951, *Aerospace series — Metallic materials — Micrographic determination of content of non-metallic inclusions*

EN 4700-005, *Aerospace series — Steel and heat resisting alloys — Wrought products — Technical specification — Part 005: Forging stock*

EN 4700-006, *Aerospace series — Steel and heat resisting alloys — Wrought products — Technical specification — Part 006: Pre-production and production forgings*

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 <http://www.electropedia.org/>

4 Requirements

See Table 1.

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Table 1 — Requirements for steel 15CrMoV6 (1.7334)

1	Material designation		Steel 15CrMoV6 (1.7334)								
2	Chemical composition %	Element	C	Si	Mn	P	S	Cr	Mo	V	Fe
		min.	0,12	—	0,80	—	—	1,25	0,80	0,20	Base
		max.	0,18	0,20	1,10	0,020	0,015	1,50	1,00	0,30	
3	Method of melting		Air melted								
4.1	Form		Forgings								
4.2	Method of production		Forged from forging stock EN 4700-005								
4.3	Limit dimension(s)	mm	$D_e \leq 100$								
5	Technical specification		See EN 4700-006.								

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6.1	Delivery condition	Annealed	Hardened and tempered
	Heat treatment	oSIST prEN 2252:2021 https://standards.iteh.ai/catalog/standards/sist/32bd6449-39a8-4bf4-a68d-38f8d05f8890/osist-pren-2252-2021	$955\text{ °C} \leq \theta \leq 995\text{ °C/WQ}$ or OQ $+ 595\text{ °C} \leq \theta \leq 645\text{ °C}$
6.2	Delivery condition code	A	U
7	Use condition	Hardened and tempered	Delivery condition
	Heat treatment	Delivery condition $955\text{ °C} \leq \theta \leq 995\text{ °C/WQ}$ or OQ $+ 595\text{ °C} \leq \theta \leq 645\text{ °C}$	—

Characteristics

8.1	Test sample(s)		See EN 4700-006.									
8.2	Test piece(s)		See EN 4700-006.									
8.3	Heat treatment		Annealed					Hardened and tempered				
9	Dimensions concerned	mm	$D_e \leq 100$									
10	Thickness of cladding on each face	%	—									
11	Direction of test piece		L									

12		Temperature	θ	°C	Ambient		
13		Proof stress	$R_{p0,2}$	MPa	—	≥ 930	
14	T	Strength	R_m	MPa	—	$1\ 080 \leq R_m \leq 1\ 250$	
15		Elongation	A	%	—	≥ 10	
16		Reduction of area	Z	%	—	—	
17	Hardness			HB	≤ 197	$321 \leq HB \leq 380$	
18	Shear strength			R_c	MPa	—	
19	Bending			k	—	—	
20	Impact strength			J	—	≥ 30	
21	C	Temperature	θ	—	<p>iTeh STANDARD PREVIEW (standards.iteh.ai) oSIST prEN 2252:2021 https://standards.iteh.ai/catalog/standards/sist/32bd6449-39a8-4bf4-a68d-38f8d05f6890/osist-pren-2252-2021</p>		
22		Time		h			—
23		Stress	σ_a	MPa			—
24		Elongation	a	%			—
25		Rupture stress	σ_R	MPa			—
26		Elongation at rupture	A	%			—
27	Notes (see line 98)		—				
34	Grain size		—	See EN 4700-006.			
			7	$G \geq 5$			
44	External defects		—	See EN 4700-006.			
50	Cleanliness/inclusion content		—	See EN 4700-006.			
			1	See EN 2951.			
			7	Category 1			
51	Macrostructure		—	See EN 4700-006.			
61	Internal defects		—	See EN 4700-006.			
			7	Class 3			

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95	Marking inspection	—	See EN 4700-006.
96	Dimensional inspection	—	See EN 4700-006.
98	Notes	—	—
99	Typical use	—	Low alloy general purpose steel
100	—	Product qualification	—
			Qualification programme to be agreed between manufacturer and purchaser.
			<p style="text-align: center;">iTeh STANDARD PREVIEW (standards.iteh.ai)</p>

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