SLOVENSKI STANDARD
SIST EN 3642:2001

01-januar-2001

Aerospace series - Rivets, solid, 100° countersunk normal head with dome, in titanium TI-PO2, anodized, inch based series

Aerospace series - Rivets, solid, 100° countersunk normal head with dome, in titanium TI -PO2, anodized, inch based series

Luft- und Raumfahrt - Vollniete, mit 100° normalem Senkkopf mit Dom, aus Titan TI-PO2, anodisiert, Zoll-Reihe

Série aérospatiale - Rivets ordinaires, a tete fraisée 100° normale avec dôme, en titane TI-PO2, anodisés, série base inches

Ta slovenski standard je istoveten z: EN 3642:1996

ICS:

49.030.60 Kovice Rivets

SIST EN 3642:2001 en

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 3642

September 1996

ICS 49.040.20

Descriptors: aircraft industry, rivet, countersunk head rivet, titanium, characteristic, dimension, dimensional tolerance, designation

English version

Aerospace series - Rivets, solid, 100° countersunk normal head with dome, in titanium TI-PO2, anodized, inch based series

Série aérospatiale - Rivets ordinaires, à tête fraisée 100° normale avec dôme, en titane TI-PO2, anodisés, série base inches

Luft- und Raumfahrt - Vollniete, mit 100° normalem Senkkopf mit Dom, aus Titan TI-PO2, anodisiert, Zoll-Reihe

This European Standard was approved by CEN on 1996-06-29. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart,36 B-1050 Brussels

Foreword

This European Standard has been prepared by the European Association of Aerospace Manufacturers (AECMA).

After inquiries 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 AECMA, 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 March 1997, and conflicting national standards shall be withdrawn at the latest by March 1997.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This standard specifies the characteristics of solid rivets, with 100° countersunk normal head with dome, in titanium TI-P02, anodized, inch based series, for maximum operating temperature 315 °C.

2 Normative references

This European Standard incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

ISO 8080 Aerospace - Anodic treatment of titanium and titanium alloys - Sulfuric acid process

ISO 10299 Aerospace - Identification marking of solid rivets [1)]

EN 2424 Aerospace series - Marking of aerospace products

EN 3378 Aerospace series - Titanium TI-P02 - Annealed - $330 \leq R_c \leq 410$ MPa - Wire for rivet - $1{,}6 \leq d \leq 10$ mm [2)]

EN 3627 Aerospace series - Titanium solid rivets - Technical specification [1)]

3 Required characteristics

3.1 Configuration - Dimensions - Masses

See figure 1 and tables 1 and 2. Dimensions and tolerances are expressed in millimetres and apply after surface treatment.

3.2 Material

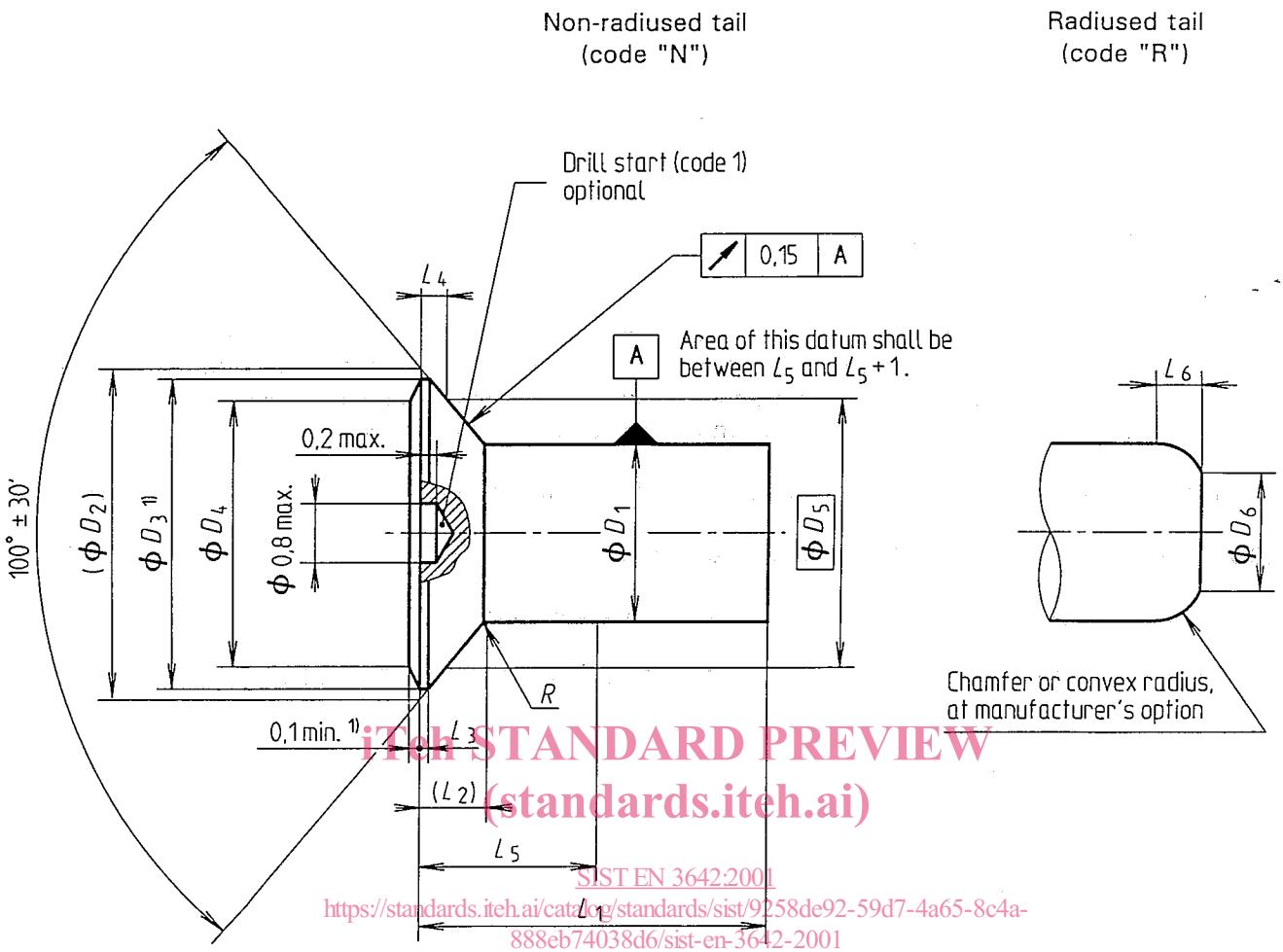
EN 3378

3.3 Surface treatment

ISO 8080

1) In preparation at the date of publication of this standard

2) Published as AECMA Prestandard at the date of publication of this standard



1) Blended convex form permissible within limiting dimensions

Figure 1

Table 1

Diameter code	D_1 1)		D_2 2)	D_3	D_4		D_5	D_6		L_2	L_3	L_4	L_5	L_6		R
	max.	min.		min.	max.	min.		max.	min.		min.	0 − 0,08		max.	min.	± 0,08
024	2,45	2,35	4,45	4	3,2	2,4	3,54	1,9	1,6	0,9	0,05	0,38	2,4	0,8	0,5	0,15
032	3,25	3,15	5,95	5,35	4,3	3,2	4,82	2,6	2,3	1,1	0,06	0,47	2,6	1	0,7	
036	3,65	3,55	6,7	6	4,8	3,6	5,46	2,9	2,5	1,3	0,07	0,52	2,9	1,1		0,25
040	4,05	3,94	7,4	6,6	5,3	4	5,79	3,2	2,8	1,4	0,08	0,68	3	1,2	0,8	
048	4,85	4,73	8,9	7,95	6,4	4,8	7,39	3,8	3,3	1,8	0,1	0,63	3,8	1,5	1	

1) D_1 max. may increase by 0,03, over length ($L_5 - L_2$).
2) Maximum condition

Table 2

Diameter code		024			032			036			040			048		
Length		1)		Mass 2)	1)		Mass 2)	1)		Mass 2)	1)		Mass 2)	1)		Mass 2)
code	L_1 $^{+0,5}_{0}$	N	R		N	R		N	R		N	R		N	R	
004	4	X	X	0,106	X	X	0,203	X	X	0,258						
005	5	X	X	0,126	X	X	0,239	X	X	0,302						
006	6	X	X	0,147	X	X	0,276	X	X	0,344	X	X	0,455			
007	7	X	X	0,167	X	X	0,312	X	X	0,385	X	X	0,511			
008	8	X	X	0,188	X	X	0,349	X	X	0,427	X	X	0,567	X	X	0,848
009	9	X	X	0,208	X	X	0,383	X	X	0,469	X	X	0,623	X	X	0,929
010	10	X	X	0,228	X	X	0,420	X	X	0,512	X	X	0,679	X	X	1,010
011	11	X	X	0,249	X	X	0,456	X	X	0,553	X	X	0,735	X	X	1,091
012	12	X	X	0,269	X	X	0,493	X	X	0,595	X	X	0,792	X	X	1,173
013	13	X	X	0,290	X	X	0,529	X	X	0,637	X	X	0,848	X	X	1,254
014	14	X	X	0,310	X	X	0,565	X	X	0,678	X	X	0,905	X	X	1,336
015	15	X	X	0,330	X	X	0,601	X	X	0,720	X	X	0,961	X	X	1,417
016	16	X	X	0,351	X	X	0,637	X	X	0,764	X	X	1,017	X	X	1,499
017	17	X		0,371	X	X	0,673	X	X	0,805	X	X	1,074	X	X	1,580
018	18	X		0,392	X	X	0,709	X	X	0,848	X	X	1,130	X	X	1,662
019	19	X		0,412	X		0,745	X	X	0,890	X	X	1,187	X	X	1,743
020	20	X		0,432	X		0,782	X	X	0,932	X	X	1,244	X	X	1,824
022	22				X		0,855	X		1,015	X	X	1,357	X	X	1,987
024	24				X		0,928	X		1,100	X	X	1,470	X	X	2,150
026	26							X		1,183	X		1,583	X	X	2,313
028	28							X		1,270	X		1,696	X	X	2,476
030	30										X		1,810	X		2,638
032	32										X		1,923	X		2,801
035	35													X		2,964
040	40													X		3,127

1) Tail end code (see figure 1)

2) Approximate values (kg/1 000 pieces), calculated on the basis of 4,45 kg/dm^3, given for information purposes only

4 Designation

EXAMPLE :

Description block	Identity block
RIVET	EN3642-024009R1

Number of this standard

Diameter code (see table 1)

Length code (see table 2)

Tail end code (see figure 1)

Drill start code (see figure 1)

NOTE : If necessary, the code I9005 shall be placed between the description block and the identity block.

5 Marking

5.1 Rivet

EN 2424, style G

5.2 Material

ISO 10299

6 Technical specification

EN 3627