SLOVENSKI STANDARD
SIST EN 10365:2017

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Vroče valjani jekleni profili I in H - Mere in mase

Hot rolled steel channels, I and H sections - Dimensions and masses

Warmgewalzter U-Profilstahl, I und H Träger - Maße und Masse

Profilés en U en aciers laminés à chaud, poutrelles I et H - Dimensions, masses et propriétés des profilés

Ta slovenski standard je istoveten z: **EN 10365:2017**

ICS:

77.140.70 Jekleni profili Steel profiles

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EUROPEAN STANDARD

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English Version

Hot rolled steel channels, I and H sections - Dimensions and masses

Profilés en U en aciers laminés à chaud, poutrelles I et H - Dimensions et masses

Warmgewalzter U-Profilstahl, I- und H-Träger - Maße und Masse

This European Standard was approved by CEN on 14 November 2016.

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

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European foreword

This document (EN 10365:2017) has been prepared by Technical Committee ECISS/TC 103 “Structural steels other than reinforcements”, the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by April 2017, and conflicting national standards shall be withdrawn at the latest by July 2017.

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 project was submitted to the Enquiry under reference prEN 16828.

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1 Scope

This European standard specifies the nominal dimensions and masses of the hot rolled steel channels, I and H sections.

The following shapes are covered by this standard:

Sections:

- Parallel flange I sections IPE;
- Wide flange beams HE;
- Extra wide flange beams HL and HLZ;
- Wide flange columns HD;
- Wide flange bearing piles HP and UBP;
- Universal beams UB;
- Universal columns UC;
- Taper flange I sections IPN and J.

Channels:

- Parallel flange channels UPE and PFC;
- Taper flange channels UPN, U and CH.

These requirements do not apply to hot rolled steel channels, I and H sections from stainless steel.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 10024, *Hot rolled taper flange I sections - Tolerances on shape and dimensions*

EN 10025-1, *Hot rolled products of structural steels - Part 1: General technical delivery conditions*

EN 10025-2, *Hot rolled products of structural steels - Part 2: Technical delivery conditions for non-alloy structural steels*

EN 10025-3, *Hot rolled products of structural steels - Part 3: Technical delivery conditions for normalized/normalized rolled weldable fine grain structural steels*

EN 10025-4, *Hot rolled products of structural steels - Part 4: Technical delivery conditions for thermomechanical rolled weldable fine grain structural steels*

EN 10025-5, *Hot rolled products of structural steels - Part 5: Technical delivery conditions for structural steels with improved atmospheric corrosion resistance*

EN 10034, *Structural steel I and H sections - Tolerances on shape and dimensions*

EN 10079, *Definition of steel products*

EN 10279, *Hot rolled steel channels - Tolerances on shape, dimensions and mass*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 10079 apply.

4 Designation

A section shall be designated according to Tables 1 to 15.

This form of designation shall be used in any enquiry and order.

5 Dimensions and masses

Hot rolled steel channels, I and H sections complying with this European Standard shall be manufactured with the specified dimensions given in the Table 1 to 15 and according to Figures 1 to 4 below.

Radii of fillets and toes of shape profiles vary with individual manufacturers and therefore are not specified.

The masses per unit length specified in Tables 1 to 15 were calculated on the basis of a density of 7850 kg/m³.

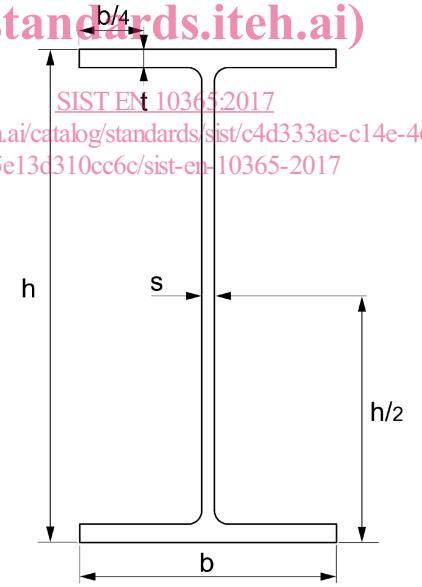

Figure 1 — IPE, HE, HL, HD, HP, UBP, UB and UC parallel flange sections

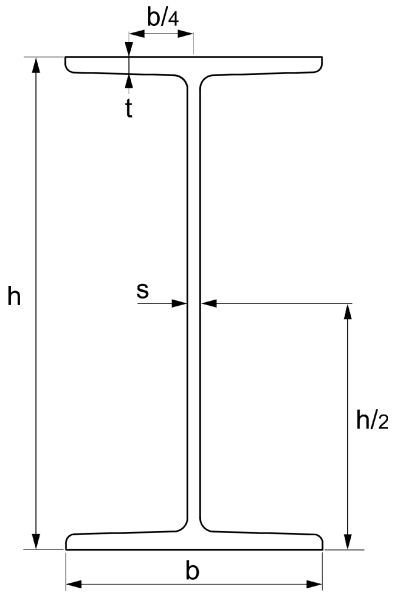

Figure 2 — Taper flange I sections IPN, J and extra wide flange beams HLZ

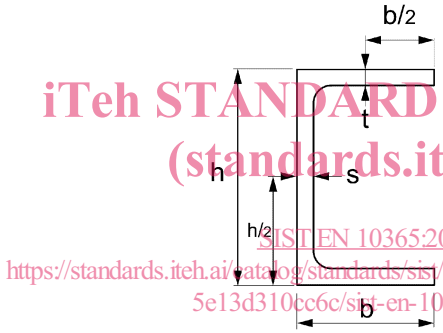

Figure 3 — Parallel flange channels UPE and PFC

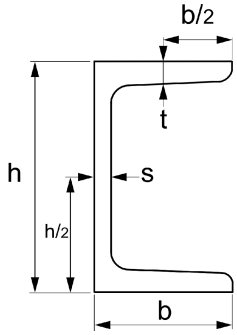

Figure 4 — Taper flange channels UPN, U and CH

6 Tolerances on dimensions, shape and mass

Tolerances on dimensions, shape and mass shall be as given in EN 10034 for I (parallel flanges) and H sections.

Tolerances on dimensions, shape and mass shall be as given in EN 10024 for taper flange I sections.

Tolerances on dimensions, shape and mass shall be as given in EN 10279 for channels.

Tolerances for shapes not included in the mentioned standards shall be as agreed upon between the manufacturer and the purchaser.

7 Material

Sections and channels shall preferably be made from steel of a grade as specified in EN 10025-1, EN 10025-2, EN 10025-3, EN 10025-4 and EN 10025-5. Other steel grades as specified in EN 10225, EN 10028-2 and EN 10273 may also be used for specific applications.

The desired steel grade shall be specified at the time of ordering.

Table 1 — Parallel flange I sections IPE

Designation		Dimensions				
	G	*h*	*b*	*s*	*t*	*A*
	kg/m	mm	mm	mm	mm	cm²
IPE AA 80	4,9	78,0	46,0	3,2	4,2	6,3
IPE A 80	5,0	78,0	46,0	3,3	4,2	6,4
IPE 80	6,0	80,0	46,0	3,8	5,2	7,6
IPE AA 100	6,7	97,6	55,0	3,6	4,5	8,6
IPE A 100	6,9	98,0	55,0	3,6	4,7	8,8
IPE 100	8,1	100,0	55,0	4,1	5,7	10,3
IPE AA 120	8,4	117,0	64,0	3,8	4,8	10,7
IPE A 120	8,7	117,6	64,0	3,8	5,1	11,0
IPE 120	10,4	120,0	64,0	4,4	6,3	13,2
IPE AA 140	10,1	136,6	73,0	3,8	5,2	12,8
IPE A 140	10,5	137,4	73,0	3,8	5,6	13,4
IPE 140	12,9	140,0	73,0	4,7	6,9	16,4
IPE AA 160	12,3	156,4	82,0	4,0	5,6	15,7
IPE A 160	12,7	157,0	82,0	4,0	5,9	16,2
IPE 160	15,8	160,0	82,0	5,0	7,4	20,1
IPE AA 180	14,9	176,4	91,0	4,3	6,2	19,0
IPE A 180	15,4	177,0	91,0	4,3	6,5	19,6
IPE 180	18,8	180,0	91,0	5,3	8,0	23,9
IPE O 180	21,3	182,0	92,0	6,0	9,0	27,1
IPE AA 200	18,0	196,4	100,0	4,5	6,7	22,9
IPE A 200	18,4	197,0	100,0	4,5	7,0	23,5
IPE 200	22,4	200,0	100,0	5,6	8,5	28,5
IPE O 200	25,1	202,0	102,0	6,2	9,5	32,0
IPE AA 220	21,2	216,4	110,0	4,7	7,4	27,0
IPE A 220	22,2	217,0	110,0	5,0	7,7	28,3
IPE 220	26,2	220,0	110,0	5,9	9,2	33,4
IPE O 220	29,4	222,0	112,0	6,6	10,2	37,4
IPE AA 240	24,9	236,4	120,0	4,8	8,0	31,7
IPE A 240	26,2	237,0	120,0	5,2	8,3	33,3
IPE 240	30,7	240,0	120,0	6,2	9,8	39,1
IPE O 240	34,3	242,0	122,0	7,0	10,8	43,7

Designation		Dimensions				
	G	*h*	*b*	*s*	*t*	*A*
	kg/m	mm	mm	mm	mm	cm²
IPE A 270	30,7	267,0	135,0	5,5	8,7	39,2
IPE 270	36,1	270,0	135,0	6,6	10,2	45,9
IPE O 270	42,3	274,0	136,0	7,5	12,2	53,8
IPE A 300	36,5	297,0	150,0	6,1	9,2	46,5
IPE 300	42,2	300,0	150,0	7,1	10,7	53,8
IPE O 300	49,3	304,0	152,0	8,0	12,7	62,8
IPE A 330	43,0	327,0	160,0	6,5	10,0	54,7
IPE 330	49,1	330,0	160,0	7,5	11,5	62,6
IPE O 330	57,0	334,0	162,0	8,5	13,5	72,6
IPE A 360	50,2	357,6	170,0	6,6	11,5	64,0
IPE 360	57,1	360,0	170,0	8,0	12,7	72,7
IPE O 360	66,0	364,0	172,0	9,2	14,7	84,1
IPE A 400	57,4	397,0	180,0	7,0	12,0	73,1
IPE 400	66,3	400,0	180,0	8,6	13,5	84,5
IPE O 400	75,7	404,0	182,0	9,7	15,5	96,4
IPE V 400	84,0	408,0	182,0	10,6	17,5	107,0
IPE A 450	67,2	447,0	190,0	7,6	13,1	85,6
IPE 450	77,6	450,0	190,0	9,4	14,6	98,8
IPE O 450	92,4	456,0	192,0	11,0	17,6	117,7
IPE V 450	107	460,0	194,0	12,4	19,6	132,0
IPE A 500	79,4	497,0	200,0	8,4	14,5	101,1
IPE 500	90,7	500,0	200,0	10,2	16,0	115,5
IPE O 500	107	506,0	202,0	12,0	19,0	136,7
IPE V 500	129	514,0	204,0	14,2	23,0	164,1
IPE A 550	92,1	547,0	210,0	9,0	15,7	117,3
IPE 550	106	550,0	210,0	11,1	17,2	134,4
IPE O 550	123	556,0	212,0	12,7	20,2	156,1
IPE V 550	159	566,0	216,0	17,1	25,2	202,0
IPE A 600	108	597,0	220,0	9,8	17,5	137,0
IPE 600	122	600,0	220,0	12,0	19,0	156,0
IPE O 600	154	610,0	224,0	15,0	24,0	196,8
IPE V 600	184	618,0	228,0	18,0	28,0	233,8

Designation		Dimensions				
	G	*h*	*b*	*s*	*t*	*A*
	kg/m	mm	mm	mm	mm	cm²
IPE 750 × 134	134	750,0	264,0	12,0	15,5	170,6
IPE 750 × 147	147	753,0	265,0	13,2	17,0	187,5
IPE 750 × 173	173	762,0	267,0	14,4	21,6	221,3
IPE 750 × 196	196	770,0	268,0	15,6	25,4	250,8