
International Standard



657/11

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

**Hot-rolled steel sections —
Part 11 : Sloping flange channel sections (Metric series) —
Dimensions and sectional properties**

Profilés en acier laminés à chaud — Partie 11 : Profils en U à ailes inclinées (Série métrique) — Dimensions et caractéristiques rapportées aux axes

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Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 657/11 was developed by Technical Committee ISO/TC 17, *Steel*, and was circulated to the member bodies in October 1977.

It has been approved by the member bodies of the following countries :

Austria	Germany, F.R.	Netherlands
Belgium	India	New Zealand
Bulgaria	Iran	Norway
Canada	Ireland	Poland
Chile	Italy	Romania
Denmark	Korea, Dem. P. Rep. of	South Africa, Rep. of
Egypt, Arab Rep. of	Korea, Rep. of	Switzerland
France	Mexico	Turkey

The member bodies of the following countries expressed disapproval of the document on technical grounds :

Czechoslovakia	Sweden
Hungary	USA
Spain	USSR

Hot-rolled steel sections — Part 11 : Sloping flange channel sections (Metric series) — Dimensions and sectional properties

1 Scope and field of application

This International Standard specifies dimensions and sectional properties of metric series hot-rolled steel sloping flange channel sections.

2 Designation

Sloping flange channel sections shall be designated by the

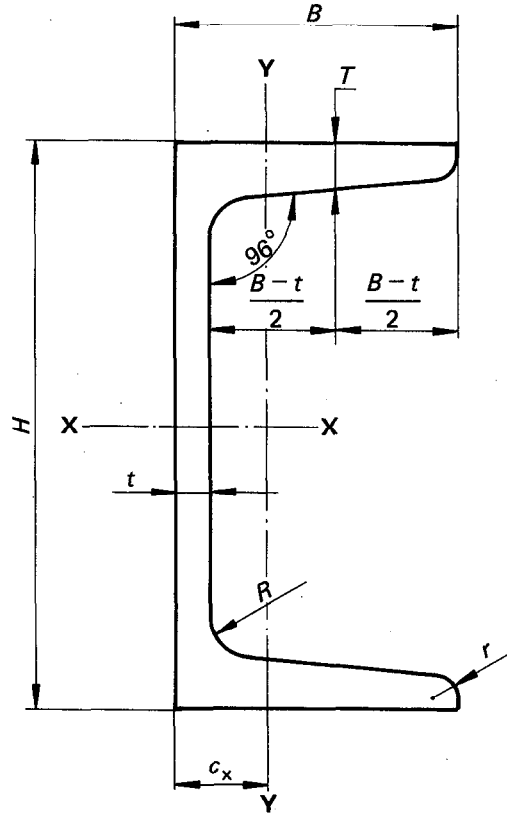
letters CH followed by the depth and mass per metre.

Example : CH 160 × 18

3 Dimensions and sectional properties

The dimensions and sectional properties of sloping flange channel sections are given in the table.

Table – Dimensions and sectional properties of hot-rolled steel sloping flange channel sections (Metric series)



Designation	Mass <i>M</i> kg/m	Sectional area <i>A</i> cm ²	Dimensions						Centroid <i>c_x</i> cm	Sectional properties about axes					
										X - X			Y - Y		
			<i>H</i> mm	<i>B</i> mm	<i>T</i> mm	<i>t</i> mm	<i>R</i> [*] mm	<i>r</i> [*] mm		<i>I_x</i> cm ⁴	<i>Z_x</i> cm ³	<i>r_x</i> cm	<i>I_y</i> cm ⁴	<i>Z_y</i> cm ³	<i>r_y</i> cm
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
CH 80 × 8	8,23	10,5	80	45	7,5	5,5	8,0	4,0	1,43	102	25,6	3,12	18,0	5,85	1,30
CH 100 × 10	10,3	13,1	100	50	8,0	5,9	8,0	4,5	1,51	200	40,0	3,91	27,2	7,77	1,44
CH 120 × 12	12,5	16,0	120	55	8,5	6,3	8,0	4,5	1,60	350	58,4	4,68	39,5	10,1	1,57
CH 140 × 15	15,0	19,2	140	60	9,0	6,7	9,0	4,5	1,68	570	81,4	5,45	55,3	12,8	1,67
CH 160 × 18	18,2	23,2	160	65	10,0	7,2	9,0	5,5	1,81	900	113	6,22	79,0	16,8	1,81
CH 180 × 21	21,3	27,2	180	70	10,5	7,7	10,0	5,5	1,90	1 320	147	6,98	105	20,6	1,94
CH 200 × 25	25,2	32,1	200	75	11,5	8,2	12,0	6,0	2,02	1 930	193	7,75	142	26,0	2,10
CH 220 × 29	28,7	36,6	220	80	12,0	8,7	12,0	6,5	2,11	2 640	240	8,50	183	31,0	2,23
CH 250 × 34	33,9	43,2	250	85	13,0	9,2	13,5	7,0	2,20	4 000	320	9,63	240	38,2	2,36
CH 300 × 45	45,2	57,5	300	100	15,0	10,0	15,0	8,0	2,60	7 800	520	11,6	452	61,1	2,80
CH 350 × 52	51,8	66,0	350	100	16,0	10,5	16,0	8,0	2,48	11 900	678	13,4	496	66,3	2,74
CH 400 × 59	58,9	75,0	400	100	17,0	11,0	17,0	8,5	2,38	17 200	858	15,2	541	71,0	2,68

* The fillet and toe radii (*R* and *r*) are given only for information and for calculating the properties of the sections.

