
International Standard



657/16

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

**Hot-rolled steel sections —
Part 16 : Sloping flange column sections (metric series) —
Dimensions and sectional properties**

Profilés en acier laminés à chaud —

Partie 16 : Colonnes à ailes inclinées (série métrique) — Dimensions et caractéristiques rapportées aux axes

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[ISO 657-16:1980](https://standards.iteh.ai/catalog/standards/sist/a16ab37a-b734-48c8-ad76-b3a6def02ad9/iso-657-16-1980)

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Descriptors : metal sections, steel products, hot rolled products, sectional properties, dimensions.

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

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 657/16 (formerly ISO/DIS 4972/1) was developed by Technical Committee ISO/TC 17, *Steel*, and was circulated to the member bodies in January 1978.

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

| | | |
|---------------------|------------------------|-----------------------|
| Australia | Germany, F.R. | Poland |
| Belgium | India | Romania |
| Bulgaria | Iran | South Africa, Rep. of |
| Canada | Ireland | Switzerland |
| Czechoslovakia | Italy | Turkey |
| Denmark | Korea, Dem. P. Rep. of | United Kingdom |
| Egypt, Arab Rep. of | Korea, Rep. of | USSR |
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The member bodies of the following countries expressed disapproval of the document on technical grounds:

Sweden
USA

Hot-rolled steel sections — Part 16 : Sloping flange column sections (metric series) — Dimensions and sectional properties

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1 SCOPE AND FIELD OF APPLICATION

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

2 DESIGNATION

Sloping flange column sections shall be designated by the letters SC followed by the depth of the column.

Example : SC 100

3 DIMENSIONS AND SECTIONAL PROPERTIES

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

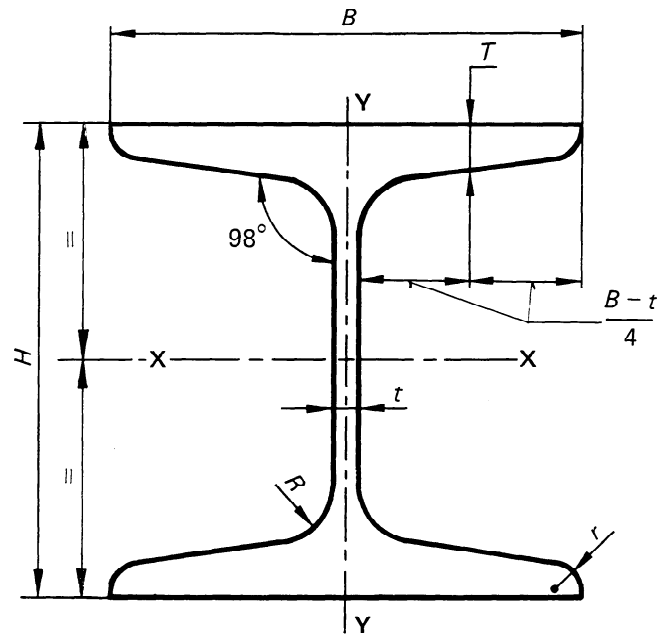


TABLE - Dimensions and sectional properties

| Designation | Mass M kg/m | Sectional area A cm ² | Dimensions | | | | | | Sectional properties about axes | | | | | |
|-------------|---------------------|--|------------|-----|------|-----|-------|-------|---------------------------------|-------|-------|-------|-------|-------|
| | | | | | | | | | X - X | | | Y - Y | | |
| | | | H | B | t | T | R^* | r^* | I_x | Z_x | r_x | I_y | Z_y | r_y |
| mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm |
| SC 100 | 20,0 | 25,5 | 100 | 100 | 6,0 | 10 | 12 | 6,0 | 436 | 87,2 | 4,13 | 136 | 27,2 | 2,31 |
| SC 120 | 26,2 | 33,4 | 120 | 120 | 6,5 | 11 | 12 | 6,0 | 842 | 140 | 5,02 | 255 | 42,6 | 2,76 |
| SC 140 | 33,3 | 42,4 | 140 | 140 | 7,0 | 12 | 12 | 6,0 | 1470 | 211 | 5,89 | 438 | 62,5 | 3,21 |
| SC 160 | 41,9 | 53,4 | 160 | 160 | 8,0 | 13 | 15 | 7,5 | 2420 | 303 | 6,74 | 695 | 86,8 | 3,61 |
| SC 180 | 50,5 | 64,4 | 180 | 180 | 8,5 | 14 | 15 | 7,5 | 3740 | 415 | 7,62 | 1060 | 117 | 4,05 |
| SC 200 | 60,3 | 76,8 | 200 | 200 | 9,0 | 15 | 18 | 9,0 | 5530 | 553 | 8,48 | 1530 | 153 | 4,46 |
| SC 220 | 70,4 | 89,8 | 220 | 220 | 9,5 | 16 | 18 | 9,0 | 7880 | 716 | 9,35 | 2160 | 196 | 4,90 |
| SC 250 | 85,6 | 109 | 250 | 250 | 10,0 | 17 | 23 | 11,5 | 12500 | 997 | 10,7 | 3260 | 260 | 5,46 |

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