TC 41

International Standard 100

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

Pulleys for flat transmission belts — Crowns

Poulies pour courroies plates de transmission — Bombement

Second edition — 1984-04-15

UDC 621.85.051 : 621.852.41 **Ref. No. ISO 100-1984 (E)**

Descriptors : pulleys, belts, power transmission belts, dimensions, shape, profiles.

Price based on 1 page

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (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 authorized 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 100 was developed by Technical Committee ISO/TC 41, *Pulleys and belts (including veebelts)*, and was circulated to the member bodies in March 1983.

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

Australia	Germany, F.R.	South Africa, Rep. of
Austria	India	Spain
Belgium	Italy	Sweden
Czechoslovakia	Japan	United Kingdom
Finland	Korea, Dem. P. Rep. of	USA
France	Mexico	USSR

No member body expressed disapproval of the document.

This second edition cancels and replaces the first edition (i.e. ISO 100-1975).

Printed in Switzerland

Pulleys for flat transmission belts — Crowns

1 Scope and field of application

This International Standard lays down the shape and the minimum dimensions of crowns for flat transmission belts.

NOTE — The rim-widths and the diameters (and tolerances) of these pulleys are given in ISO 22 and ISO 99 respectively.

2 Shape of crown

It is recommended that the shape of the profile should be a regular, symmetrical curve.

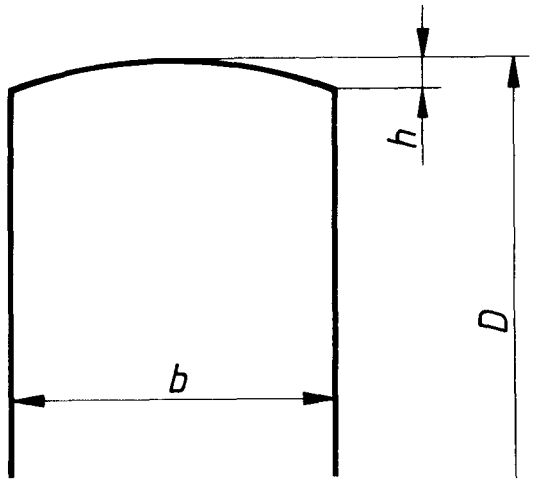
A symmetrical profile with a flat central part is acceptable provided that

a) the flat part is tangential to the curve;

b) its width is not more than 40 % of the width of the pulley.

3 Minimum dimensions of crown

The height of the crown h of a pulley for a flat transmission belt is given by one of the following tables, and varies with the diameter D of the pulley (and, for the larger diameters, with the width b of the rim).



3.1 Pulley diameters $40 \leqslant D \leqslant 710$

For this series of pulley diameters, the crown height varies only with the diameter of the pulley and is unrelated to the width of the rim.

Dimensions in millimetres

Pulley diameter D	Crown h_{min}
$40 \leqslant D \leqslant 112$	0,3
$125 \leqslant D \leqslant 140$	0,4
$160 \leqslant D \leqslant 180$	0,5
$200 \leqslant D \leqslant 224$	0,6
$250 \leqslant D \leqslant 355$	0,8
$400 \leqslant D \leqslant 500$	1,0
$560 \leqslant D \leqslant 710$	1,2

3.2 Pulley diameters $800 \leqslant D \leqslant 2\,000$

For this series of pulley diameters, the crown height varies with both the diameter of the pulley and the width.

Dimensions in millimetres

Pulley diameter D	Width $b < 250$	Width $b > 280$
	Crown h_{min}	
$800 < D < 1\,000$	1,2	1,5
$1\,120 < D < 1\,400$	1,5	2,0
$1\,600 < D < 2\,000$	1,8	2,5