

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 256

SECTION CHECKING OF V BELTS
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ISO/R 256:1962

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BRIEF HISTORY

The ISO Recommendation R 256, *Section Checking of V-Belts*, was drawn up by Technical Committee ISO/TC 41, *Pulleys and Belts, (Including V-Belts)*, the Secretariat of which is held by the Association Française de Normalisation (AFNOR).

Work on this question by the Technical Committee, began in 1951 and led in 1959 to the adoption of a Draft ISO Recommendation.

On May 1960, this Draft ISO Recommendation (No. 376) was circulated to all the ISO Member Bodies for enquiry. It was approved by the following Member Bodies:

Belgium	France	Portugal
Brazil	Germany	Romania
Chile	Greece	Spain
Colombia	India	Sweden
Czechoslovakia	Israel	Switzerland
Denmark	Japan	United Kingdom
Finland	Netherlands	U.S.A.
		U.S.S.R.

Three Member Bodies opposed the approval of the Draft:

Australia Hungary New Zealand

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in March 1962, to accept it as an ISO RECOMMENDATION.

SECTION CHECKING OF V-BELTS

1. SCOPE

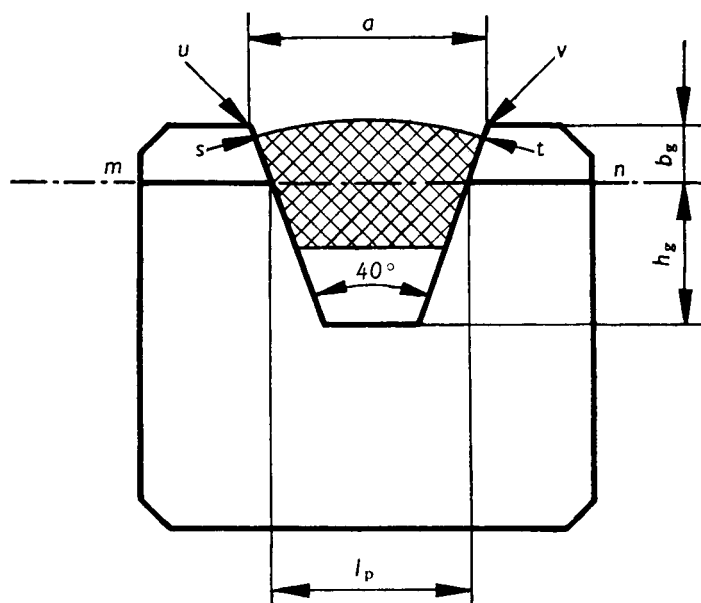
The purpose of this ISO Recommendation is the verification of the section of V-belts by means of flat V-gauges defined by their dimensions.

2. METHOD OF CHECKING

Along a straight portion of the belt kept under tension, the cross-section should be such that

- (a) the belt, when placed without appreciable stress in a V-gauge, the dimensions of which are given below, does not run to the bottom of the gauge,
- (b) the edges of the top width s and t (see figure below) are not higher than the points u and v situated at the top of the gauge, and
- (c) the guiding-mark mn drawn on the gauge cuts the whole width of the belt in its upper half.

The pitch width of the belt l_p is the width of the gauge at the level of this guiding-mark mn , drawn on the gauge.



3. DIMENSIONS OF THE GAUGE

3.1 Dimensions in millimetres

Belt		Gauge				
Pitch width l_p	Approximate height	$a (\pm 0.05)$	$b_g (\pm 0.05)$	$h_g (\pm 0.05)$	Angle	Approximate thickness
5.3	4	6.7	1.9	3.4	$40^\circ \pm 10'$	3
8.5	6	10.7	3.0	5.5		
11	8	13.8	3.9	7.1		
14	11	17.6	4.9	9.1		
19	14	23.8	6.6	12.4		
27	19	33.9	9.5	17.5		
32	25	40.2	11.2	20.8		

3.2 Dimensions in inches

Belt		Gauge				
Pitch width l_p	Approximate height	$a (\pm 0.002)$	$b_g (\pm 0.002)$	$h_g (\pm 0.002)$	Angle	Approximate thickness
0.21	0.16	0.26	0.07	0.13	$40^\circ \pm 10'$	0.12
0.34	0.23	0.42	0.12	0.22		
0.43	0.32	0.54	0.15	0.28		
0.55	0.43	0.69	0.19	0.36		
0.75	0.55	0.94	0.26	0.49		
1.06	0.75	1.33	0.37	0.69		
1.26	0.99	1.58	0.44	0.82		

NOTES

1. The gauge dimensions are proportional to the pitch width:

$$b_g = 0.35 l_p$$

$$h_g = l_p - b_g = 0.65 l_p$$

2. In cases where the angle of the belt sides to be checked is sensibly different from 40° , the tolerance of $\pm 10'$ remains applicable and the dimension a is given by the following formula:

$$a = l_p + 2 b_g \operatorname{tg} \frac{\alpha}{2}$$