
INTERNATIONAL STANDARD**481**

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

Textile machinery and accessories – Warper's beams – Terminology and main dimensions

Matériel pour l'industrie textile – Ensouples d'ourdissoir – Terminologie et dimensions principales

First edition – 1977-09-01 **iTeh STANDARD PREVIEW**
(standards.iteh.ai)

[ISO 481:1977](https://standards.iteh.ai/catalog/standards/sist/cfee7eb3-f214-497c-b09c-1009d9d1a398/iso-481-1977)

<https://standards.iteh.ai/catalog/standards/sist/cfee7eb3-f214-497c-b09c-1009d9d1a398/iso-481-1977>

UDC 677.053.728.5

Ref. No. ISO 481-1977 (E)

Descriptors : textile machinery, warpers, beams (textile machinery), specifications, dimensions, dimensional tolerances.

Price based on 4 pages

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 481 was developed by Technical Committee ISO/TC 72, *Textile machinery and accessories*, and was circulated to the member bodies in March 1976.

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

Brazil	Japan	Spain
Chile	Korea, Rep. of	Switzerland
Czechoslovakia	Mexico	Turkey
France	Netherlands	United Kingdom
Germany	Philippines	U.S.S.R.
India	Poland	
Italy	South Africa, Rep. of	

The member body of the following country expressed disapproval of the document on technical grounds :

Belgium

This International Standard cancels and replaces ISO Recommendation R 481-1966, of which it constitutes a technical revision.

Textile machinery and accessories – Warper's beams – Terminology and main dimensions

iTeh STANDARD PREVIEW (standards.iteh.ai)

1 SCOPE AND FIELD OF APPLICATION

This International Standard defines the basic terms and lays down the main dimensions and the variations of form and position for warper's beams. For cases where a limit for the residual unbalance must be fixed, a recommendation is made for the choice of quality grade.

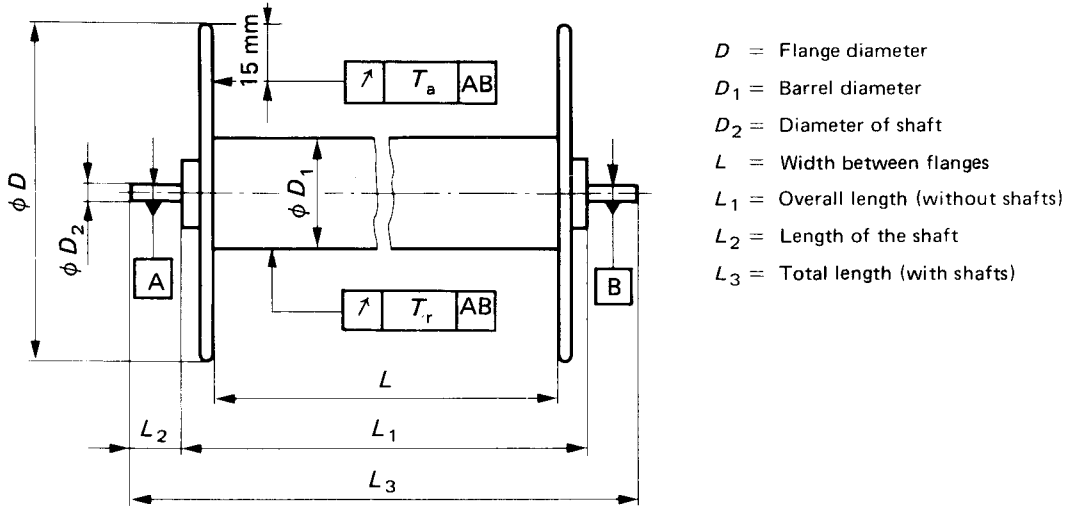
2 REFERENCES

ISO/R 286, *ISO system of limits and fits – Part 1 : General, tolerances and deviations.*

ISO 1940, *Balance quality of rotating rigid bodies.*

3 TERMINOLOGY AND MAIN DIMENSIONS

3.1 Warper's beams with shafts



- D = Flange diameter
- D_1 = Barrel diameter
- D_2 = Diameter of shaft
- L = Width between flanges
- L_1 = Overall length (without shafts)
- L_2 = Length of the shaft
- L_3 = Total length (with shafts)

FIGURE 1 – Warper's beams with shafts

iTeh STANDARD PREVIEW
(standards.iteh.ai)

TABLE 1 – Main dimensions

ISO 481:1977 Values in millimetres

D	D_1	D_2	L	L_1	L_2	L_3
$\pm 1,5$	min.	$h11^1)$	$+ 1,5$ 0	0 $- 2$		0 $- 3$
815	300	38	1 378 1 524 1 829	$L + 150$	120	$L_1 + 2 L_2$
915					150	
1 015					150	
1 065	360			$L + 170$		

NOTE – For warper's beams with shafts, driving holes shall be provided.

1) See ISO/R 286.

3.2 Warper's beams without shafts and with axial drive

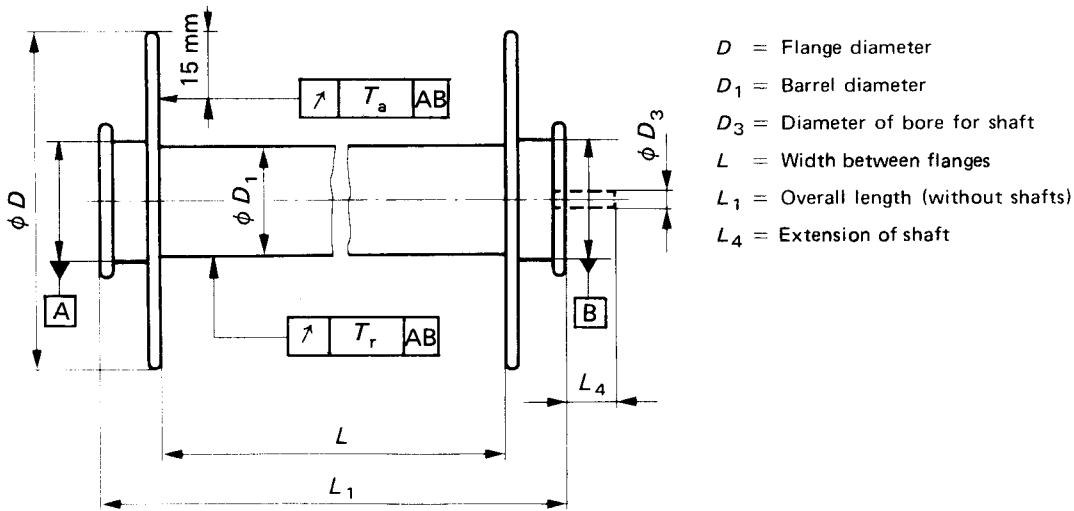


FIGURE 2 – Warper's beams without shafts and with axial drive

iTeh STANDARD PREVIEW
 TABLE 2 – Main dimensions
 (standards.iteh.ai)

Values in millimetres

D	D_1	D_3	L^*	L_1	L_4
$\pm 1,5$	min.		$+1,5$ 0	0 -2	
600	260	38	1 378 1 524 1 600 1 800 2 000	$L + 270$	120
800	300				
900					
1 000	360	50		$L + 300$	150
1 100					
1 200	400				

* If widths between flanges of more than 2 000 mm are necessary, intervals of 200 mm shall be selected.

4 ADMISSIBLE AXIAL RUN-OUT OF FLANGES

The admissible axial run-out of flanges, T_a , is measured following the indications on figures 1 and 2.

TABLE 3 – Admissible axial run-out of flanges

Values in millimetres

D	T_a
up to and including 915	0,5
over 915	0,75

5 ADMISSIBLE BARREL RUN-OUT

The admissible barrel run-out, T_r , measured at any point of the barrel, is given, in millimetres, by the formula

$$T_r = \frac{0,25 \times L}{1\,000}$$

where L is the width between flanges.

6 RESIDUAL UNBALANCE

Depending on the circumstances, it is sometimes necessary to fix a value for the residual unbalance of warper's beams. In general, a quality grade G 6,3¹⁾ will be appropriate. If special conditions call for another grade, this has to be specified.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO 481:1977](https://standards.iteh.ai/catalog/standards/sist/cfee7eb3-f214-497c-b09c-1009d9d1a398/iso-481-1977)

<https://standards.iteh.ai/catalog/standards/sist/cfee7eb3-f214-497c-b09c-1009d9d1a398/iso-481-1977>

1) See ISO 1940.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 481:1977

<https://standards.iteh.ai/catalog/standards/sist/cfee7eb3-f214-497c-b09c-1009d9d1a398/iso-481-1977>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 481:1977

<https://standards.iteh.ai/catalog/standards/sist/cfee7eb3-f214-497c-b09c-1009d9d1a398/iso-481-1977>