

---

# INTERNATIONAL STANDARD



# 324

---

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

---

## Textile machinery and accessories – Cones for cross winding for dyeing purposes – Half angle of the cone $4^{\circ} 20'$

*Matériel pour l'industrie textile – Cônes pour bobinage croisé pour la teinture – Demi-angle du cône  $4^{\circ} 20'$*

**iTeh STANDARD PREVIEW**

First edition – 1978-05-15

**(standards.iteh.ai)**

ISO 324:1978

<https://standards.iteh.ai/catalog/standards/sist/ab8954b0-3560-41a2-9321-8f05e46f7678/iso-324-1978>

---

UDC 677.053

Ref. No. ISO 324-1978 (E)

**Descriptors** : textile machinery, winders, cones, winding, gauges, specifications, dimensions, dimensional tolerances, dimensional measurement.

Price based on 2 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 324 was developed by Technical Committee ISO/TC 72, *Textile machinery and accessories*, and was circulated to the member bodies in January 1977.

**STANDARD PREVIEW**  
**(standards.iteh.ai)**

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

Belgium	Italy	South Africa, Rep. of
Czechoslovakia	Korea, Rep. of	Spain
Egypt, Arab Rep. of	Mexico	Switzerland
France	Netherlands	United Kingdom
Germany	Philippines	U.S.S.R.
India	Poland	Yugoslavia
Ireland	Romania	

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

Turkey

This International Standard cancels and replaces ISO Recommendation R 324-1963, of which it constitutes a technical revision.

# Textile machinery and accessories – Cones for cross winding for dyeing purposes – Half angle of the cone 4° 20'

## iTeh STANDARD PREVIEW (standards.iteh.ai)

### 1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the dimensions and the tolerances of cones for cross winding for dyeing purposes, having a half angle of the cone of 4° 20', as well as the dimensions and tolerances of the gauges for measuring the cone.

b) treatment of surface;

c) wall thickness (corresponding to the nature of yarn);  
d) number, size and location of perforation and, if applicable, nature of the metal protecting rings.

The distance between the ends of the cone and edges of the nearest holes shall be  $16 \pm 0,5$  mm.

### 2 DIMENSIONS AND TOLERANCES

See the figures and tables on page 2.

Dimensions which are not specified are left to the discretion of the manufacturer.

The width of wound yarn shall not exceed  $L - 25$  mm.

The deviations from the nominal value 4° 20' of the half angle of cone are limited by the tolerances for  $D$ ,  $D_1$  and  $L$  as indicated in the table. They do not influence the practical use of the cones during the dyeing processes.

### 3 MATERIAL

The material may be a suitable metal or plastic or an impregnated or lacquered paper (resistant to boiling).

The following details shall be specified :

a) nature of yarn to be wound;

### 4 USE OF THE GAUGE

The inner dimensions of the cone are in accordance with this International Standard if the edge of the larger end of the cone, after it has been placed loosely on the gauge and then pressed home by hand, is between the tolerance marks.

To check the smaller diameter of the cone additionally, it shall be placed with the smaller end first on the gauge. The edge of the smaller end of the cone must then be between the tolerance marks on the corresponding end of the gauge.

### 5 CHECKING OF THE LENGTH OF THE CONE

To check the tolerances of the length of the cone, a suitable gauge for checking lengths, for example a slide-gauge, has to be used. The conical gauges shown cannot be used for this purpose.

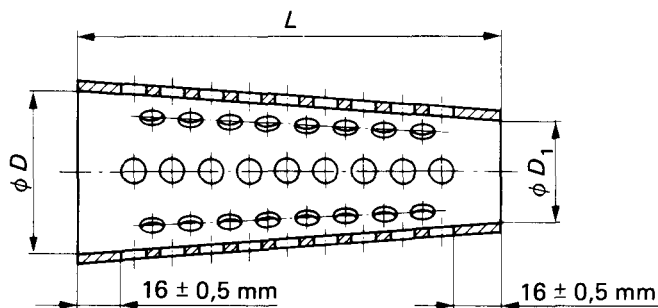
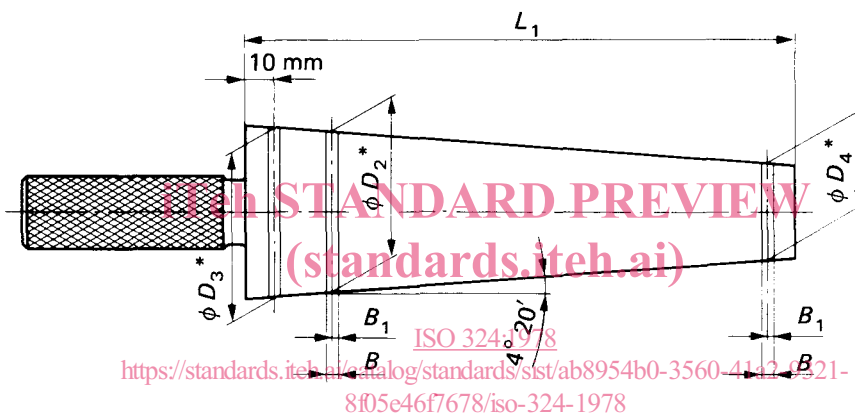


FIGURE 1 – Cone



$$B_1 = \frac{B}{2} \pm 0,03 \text{ mm}$$

FIGURE 2 – Gauge

TABLE 1 – Cones

Values in millimetres

D	Admissible deviations	$L \pm 1$	$D_1$	
				Admissible deviations
55	$\pm 0,25$	145	33	$\pm 0,25$
59		170		
77	$\pm 0,3$	145	55	$\pm 0,3$
81		170		

TABLE 2 – Gauges

Values in millimetres

$D_2^*$	$D_3^*$	$D_4^*$	$L_1$	$B \pm 0,03$
55	59	33	190	3,3
77	81	55	190	4

\* The tolerances of the cone diameters of the gauge, measured at any distance from the ends, shall be  $i_{s6}$  (see ISO/R 286, *ISO System of limits and fits – Part 1: General, tolerances and deviations*, page 23).