

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ADDENDUM 1
TO
ISO
RECOMMENDATION
R 297 - 1963

7/24 TAPERS FOR TOOL SHANKS

7/24 TAPERS Nos. 45 AND 55

1st EDITION

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BRIEF HISTORY

The Addendum 1 to ISO Recommendation R 297-1963 concerns standardization of 7/24 tapers Nos. 45 and 55. Study of this question was undertaken by Technical Committee ISO/TC 39, *Machine tools*, and led to the adoption of Draft ISO Recommendation No. 1962.

This Draft ISO Recommendation was circulated to all the ISO Member Bodies for enquiry in April 1970. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Belgium	Ireland	Spain
Chile	Israel	Sweden
Czechoslovakia	Japan	Switzerland
France	Netherlands	Thailand
Germany	Poland	U.A.R.
Greece	Portugal	United Kingdom
Hungary	Romania	U.S.A.
India	South Africa, Rep. of	

No Member Body opposed the approval of the Draft.

This Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided to accept it as ADDENDUM 1 to ISO Recommendation R 297-1963.

7/24 TAPERS FOR TOOL SHANKS

7/24 TAPERS Nos. 45 AND 55

SCOPE

This Addendum to ISO Recommendation R 297-1963 specifies the characteristics of 7/24 tapers Nos. 45 and 55 which, like tapers Nos. 30, 40, 50 and 60, apply generally to all machine tools.

7/24 TAPERS FOR SPINDLE NOSES (See section 3 of ISO/R 297-1963)

TABLE 1
Dimensions in millimetres

Designation	No. 45	No. 55
D_1 (1)	57.150	88.900
D_2 h5	101.6	152.4
d_1 H12	32.4	50.4
d_2 min.	21	27
L min.	120	178
g_1 (2)	M 12	M 20
a min.	20	30
f (3)	80	120.6
m min.	18	25
n max.	9.5	12.5
$\frac{O}{2}$ min.	30	48
b_1 (4)	19	25.4
e min.	9.5	12.5
K max.	19.5	26.5
z_1 (5)	0.4	0.4
v (4)	± 0.03	± 0.04
(3) Tolerance on position of fixing holes	0.075	0.100

(1), (2), (4), (5) - See ISO/R 297-1963.

TABLE 2
Dimensions in inches

Designation	No. 45	No. 55
D_1 (1)	$2 \frac{1}{4}$	$3 \frac{1}{2}$
D_2 h5	4.000	6.000
d_1	1.286 1.278	1.991 1.983
d_2 min.	$\frac{25}{32}$	$1 \frac{1}{16}$
L min.	$4 \frac{3}{4}$	7
g_1 (2)	UNC $\frac{1}{2}$	UNC $\frac{3}{4}$
a min.	$\frac{13}{16}$	1
f (3)	3.150	4.750
m min.	$\frac{11}{16}$	1
n max.	$\frac{3}{8}$	$\frac{1}{2}$
$\frac{O}{2}$ min.	1.155	1.875
b_1 (4)	0.7506 0.7502	1.0006 1.0002
c min.	$\frac{3}{8}$	$\frac{1}{2}$
K max.	$\frac{3}{4}$	1
z_1 (5)	$\frac{1}{64}$	$\frac{1}{64}$
v (4)	± 0.0012	± 0.0016
(3) Tolerance on position of fixing holes	0.003	0.005