

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 1571

SHANKS FOR PNEUMATIC TOOLS
AND FITTING DIMENSIONS OF CHUCK-BUSHINGS

PART II

1st EDITION

August 1970

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Printed in Switzerland

Also issued in French and Russian. Copies to be obtained through the national standards organizations.

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SHANKS FOR PNEUMATIC TOOLS AND FITTING DIMENSIONS OF CHUCK-BUSHINGS

PART II

1. SCOPE

This ISO Recommendation relates to shanks for pneumatic tools. It is a continuation and a supplement of ISO Recommendation R 1180, *Shanks for pneumatic tools and fitting dimensions of chuck-bushing – Part I*.

This ISO Recommendation deals with the following types :

- Breaker and spade shanks (see Tables 1 and 2)
- Light rivet snap shanks, tapered (see Tables 3 and 4)
- Light rivet snap shanks, parallel (see Tables 5 and 6).

Other types of tools will be dealt with in further ISO Recommendations, as the corresponding studies are completed.

Pneumatic hammers and their chuck-bushings are not covered by this ISO Recommendation, but those features of chuck-bushings (dimensions and tolerances) which ensure interchangeability are listed in this Recommendation.

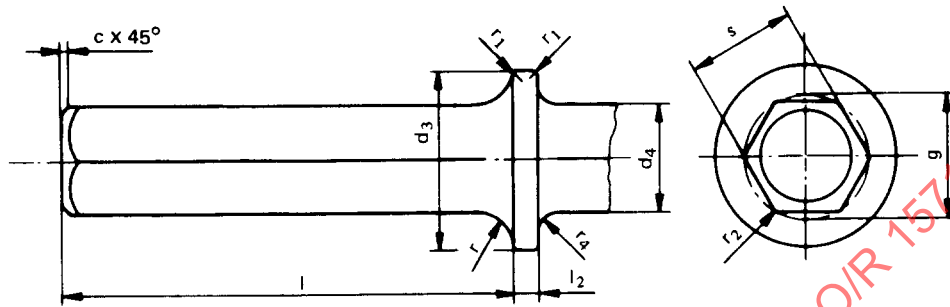
For each tool mentioned above, this ISO Recommendation provides a table giving

- (1) recommended dimensions in millimetres,
- (2) recommended dimensions in inches.

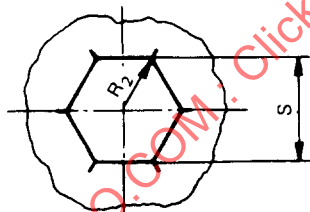
2. INTERCHANGEABILITY

The numerical values retained in this ISO Recommendation ensure interchangeability even if the shank and the corresponding chuck-bushing are not manufactured in the same system of units.

3. BREAKER AND SPADE SHANKS AND CHUCK-BUSHINGS



Shank



Bushing

FIG. 1 — Breaker and spade shanks and chuck-bushings

TABLE 1 — Recommended dimensions in millimetres

Designation	Shank											Bushing		
	s	l ± 0.5	l_2	d_3 0 - 1	d_4 max.	g^* 0 - 0.3	r max.	r_1	r_2 0 - 1	r_4 0 - 1	c	S + 0.35 + 0.05	R + 1 0	R_2 max.
22	22.4 ⁰ _{-0.4}	82.5	12	41	28**	25.2	4.5	1.6	3	4	1.6	22.4	4.5	1.2
25	25.6 ⁰ _{-0.6}	108.0	12	41	28**	29.0	4.5	1.6	3	4	1.6	25.6	4.5	1.2

TABLE 2 — Recommended dimensions in inches

Designation	Shank											Bushing		
	s	l ± 0.020	l_2	d_3 0 - 0.039	d_4 max.	g^* 0 - 0.012	r max.	r_1	r_2 0 - 0.039	r_4 0 - 0.039	c	S + 0.014 + 0.002	R + 0.039 0	R_2 max.
$\frac{7}{8}$	0.882 ⁰ _{-0.016}	3.248	0.472	1.614	1.102**	0.992	0.177	0.063	0.118	0.157	0.063	0.882	0.177	0.047
1	1.008 ⁰ _{-0.024}	4.252	0.472	1.614	1.102**	1.142	0.177	0.063	0.118	0.157	0.063	1.008	0.177	0.047

* Diameter g is calculated to correspond to radius r_2 on the corners of the hexagon.

** Alternative : 22 or 25 mm (7/8 or 1 in) hexagon.

NOTE. — The cutting edge, if any, of the tool should be perpendicular to one of the hexagon sides.

4. LIGHT RIVET SNAP SHANKS AND CHUCK-BUSHINGS, TAPERED

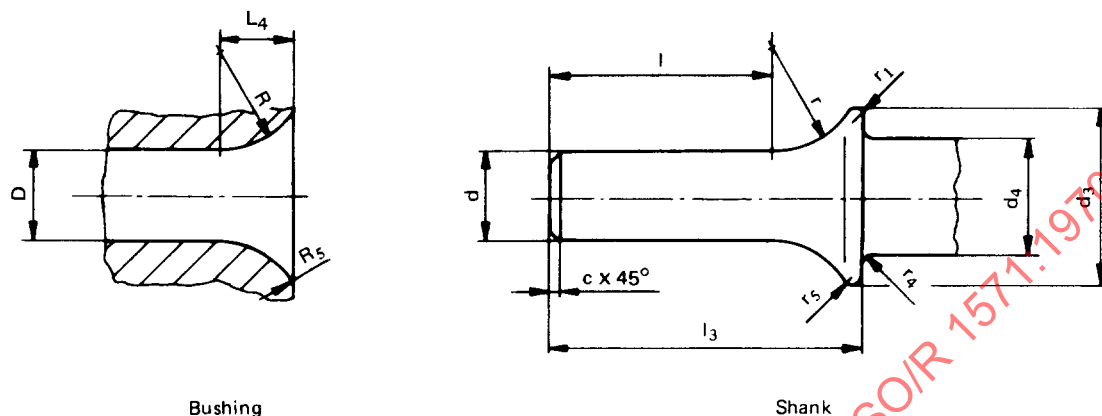


FIG. 2 — Light rivet snap shanks and chuck-bushings, tapered

TABLE 3 — Recommended dimensions in millimetres

Shank										Bushing			
d	l	l_3	d_3	d_4	r	r_1	r_4	r_5	c	D	L_4	R	R_5
f8				max.	0 - 1	0 - 0.5	0 - 0.5			H8		+ 1 0	
10.2	29.5	42	19.0	13	13	1	1.5	1	0.8	10.2	8	13	1
12.7	28.0	42	21.5	17	19	1	1.5	1	0.8	12.7	10	19	1

TABLE 4 — Recommended dimensions in inches

Shank										Bushing			
d	l	l_3	d_3	d_4	r	r_1	r_4	r_5	c	D	L_4	R	R_5
f8				max.	0 - 0.039	0 - 0.020	0 - 0.020			H8		+ 0.039 0	
0.402	1.161	1.654	0.748	0.512	0.512	0.039	0.059	0.039	0.032	0.402	0.315	0.512	0.039
0.500	1.102	1.654	0.846	0.669	0.748	0.039	0.059	0.039	0.032	0.500	0.394	0.748	0.039