

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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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

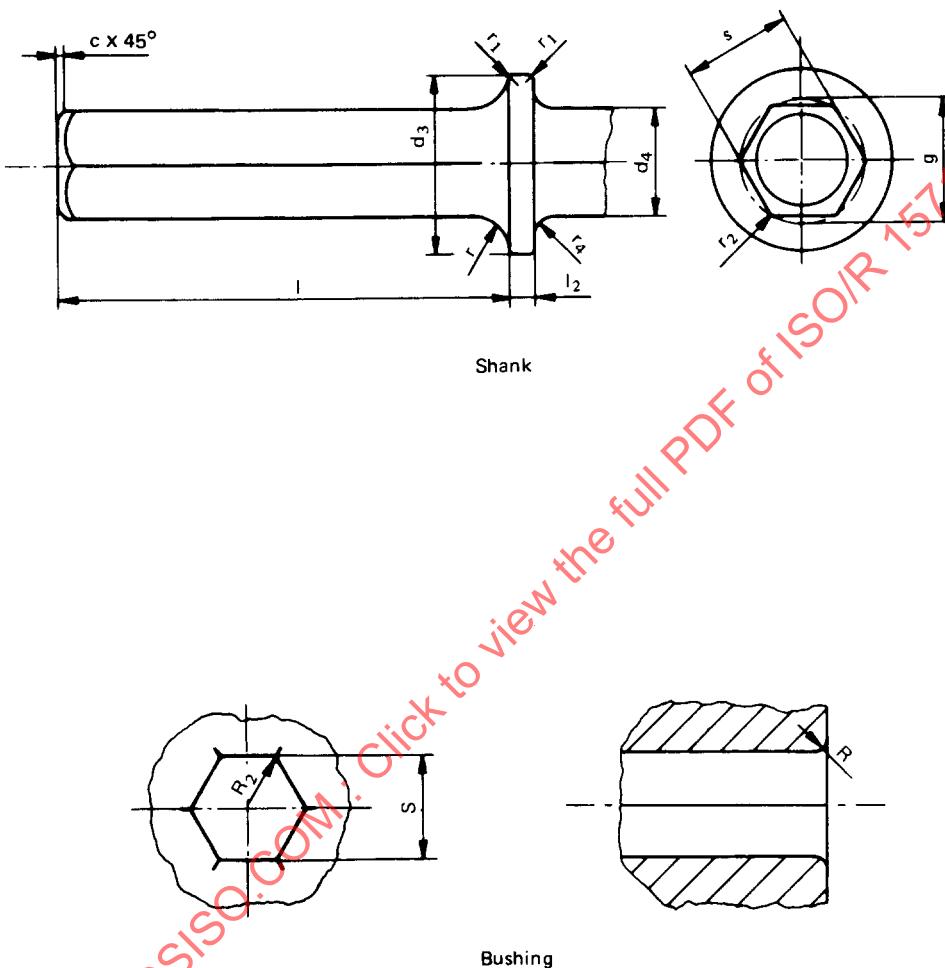


FIG. 1 — Breaker and spade shanks and chuck-bushings

TABLE 1 - Recommended dimensions in millimetres

Designa- tion	s	Shank										Bushing		
		<i>l</i> ± 0.5	<i>l</i> ₂	<i>d</i> ₃ 0 - 1	<i>d</i> ₄ max.	<i>g</i> [*] 0 - 0.3	<i>r</i> max.	<i>r</i> ₁	<i>r</i> ₂ 0 - 1	<i>r</i> ₄ 0 - 1	<i>c</i>	<i>S</i> $+ 0.35$ $+ 0.05$	<i>R</i> $+ 1$ 0	<i>R</i> ₂ max.
22	22.4 - 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 - 0.6	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

Designa- tion	s	Shank										Bushing		
		<i>l</i> ± 0.020	<i>l</i> ₂	<i>d</i> ₃ 0 - 0.039	<i>d</i> ₄ max	<i>g</i> [*] 0 - 0.012	<i>r</i> max.	<i>r</i> ₁	<i>r</i> ₂ 0 - 0.039	<i>r</i> ₄ 0 - 0.039	<i>c</i>	<i>S</i> $+ 0.014$ $+ 0.002$	<i>R</i> $+ 0.039$ 0	<i>R</i> ₂ max.
$\frac{7}{8}$	0.882 - 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 - 0.024	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

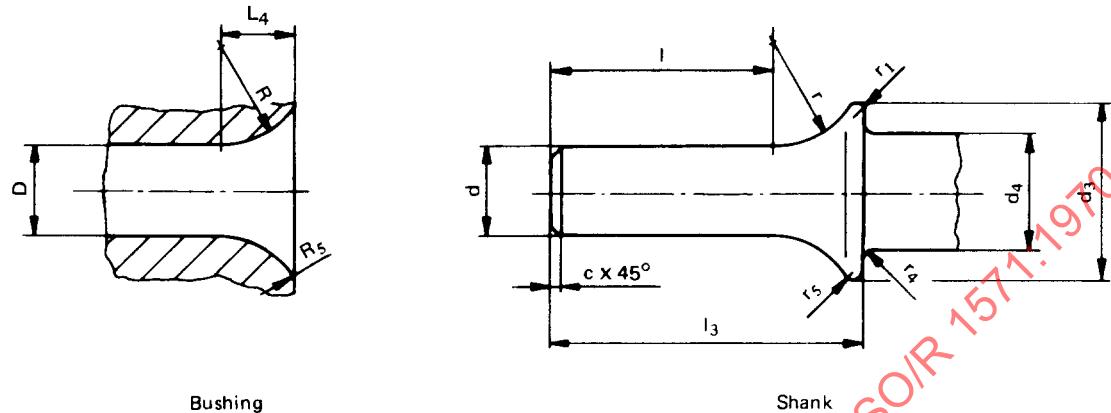


FIG. 2 - Light rivet snap shanks and chuck-bushings, tapered

TABLE 3 - Recommended dimensions in millimetres

Shank										Bushing			
<i>d</i>	<i>l</i>	<i>l</i> ₃	<i>d</i> ₃	<i>d</i> ₄	<i>r</i>	<i>r</i> ₁	<i>r</i> ₄	<i>r</i> ₅	<i>c</i>	<i>D</i>	<i>L</i> ₄	<i>R</i>	<i>R</i> 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			
<i>d</i>	<i>l</i>	<i>l</i> ₃	<i>d</i> ₃	<i>d</i> ₄	<i>r</i>	<i>r</i> ₁	<i>r</i> ₄	<i>r</i> ₅	<i>c</i>	<i>D</i>	<i>L</i> ₄	<i>R</i>	<i>R</i> 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