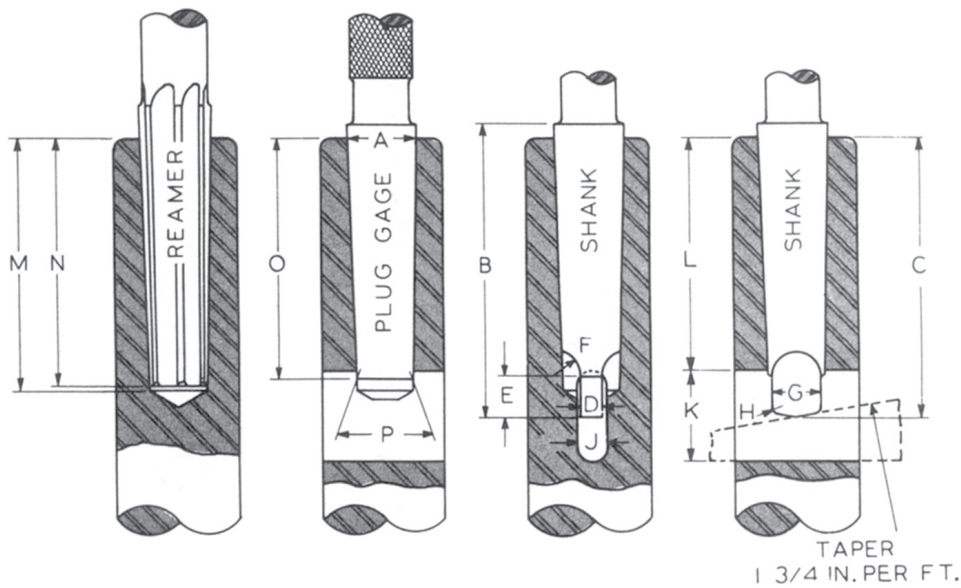


# Morse Taper Dimensions



NUMBER OF TAPER	DIA. OF PLUG AT SMALL END	DIA. AT END OF SOCKET	SHANK		DEPTH OF DRILLED HOLE	DEPTH OF REAMED HOLE	STANDARD PLUG DEPTH	TANG			TANG SLOT			END OF SOCKET TO TANG SLOT	TAPER PER INCH	TAPER PER FOOT	
			ENTIRE LENGTH	DEPTH				THICKNESS	LENGTH	RADIUS	DIAMETER	RADIUS	WIDTH				LENGTH
	P	A	B	C	M	N	O	D	E	F	G	H	J	K	L		
0	.25200	.35610	2 <sup>11</sup> / <sub>32</sub>	2 <sup>7</sup> / <sub>32</sub>	2 <sup>1</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>32</sub>	2	0.156	1/4	5/32	15/64	3/64	0.172	9/16	1 <sup>15</sup> / <sub>16</sub>	.052050	.62460
1	.36900	.47500	2 <sup>9</sup> / <sub>16</sub>	2 <sup>7</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>16</sub>	2 <sup>5</sup> / <sub>32</sub>	2 <sup>1</sup> / <sub>8</sub>	.203	3/8	3/16	1 <sup>1</sup> / <sub>32</sub>	3/64	0.218	3/4	2 <sup>1</sup> / <sub>16</sub>	.049882	.59858
2	.57200	.70000	3 <sup>1</sup> / <sub>8</sub>	2 <sup>15</sup> / <sub>16</sub>	2 <sup>21</sup> / <sub>32</sub>	2 <sup>39</sup> / <sub>64</sub>	2 <sup>9</sup> / <sub>16</sub>	0.250	7/16	1/4	1 <sup>7</sup> / <sub>32</sub>	1/16	0.266	7/8	2 <sup>1</sup> / <sub>2</sub>	.049951	.59941
3	.77800	.93800	3 <sup>7</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>16</sub>	3 <sup>5</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>16</sub>	0.312	9/16	9/32	2 <sup>3</sup> / <sub>32</sub>	5/64	0.328	1 <sup>3</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>16</sub>	.050195	.60235
4	1.02000	1.23100	4 <sup>7</sup> / <sub>8</sub>	4 <sup>5</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>16</sub>	0.469	5/8	5/16	3 <sup>1</sup> / <sub>32</sub>	3/32	0.484	1 <sup>1</sup> / <sub>4</sub>	3 <sup>7</sup> / <sub>8</sub>	.051938	.62326
4 <sup>1</sup> / <sub>2</sub>	1.26600	1.50000	5 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>8</sub>	4 <sup>5</sup> / <sub>8</sub>	4 <sup>9</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>2</sub>	0.562	1 <sup>1</sup> / <sub>16</sub>	3/8	1 <sup>13</sup> / <sub>64</sub>	1/8	0.578	1 <sup>3</sup> / <sub>8</sub>	4 <sup>5</sup> / <sub>16</sub>	.052000	.62400
5	1.47500	1.74800	6 <sup>1</sup> / <sub>8</sub>	5 <sup>7</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>16</sub>	5 <sup>1</sup> / <sub>4</sub>	5 <sup>3</sup> / <sub>16</sub>	0.625	3/4	3/8	1 <sup>13</sup> / <sub>32</sub>	1/8	0.656	1 <sup>1</sup> / <sub>2</sub>	4 <sup>15</sup> / <sub>16</sub>	.052626	.63151
6	2.11600	2.49400	8 <sup>9</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>4</sub>	7 <sup>13</sup> / <sub>32</sub>	7 <sup>2</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>4</sub>	0.750	1 <sup>1</sup> / <sub>8</sub>	1/2	2	5/32	0.781	1 <sup>3</sup> / <sub>4</sub>	7	.052138	.62565
7	2.75000	3.27000	11 <sup>1</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>4</sub>	10 <sup>9</sup> / <sub>32</sub>	10 <sup>5</sup> / <sub>16</sub>	10	1.125	1 <sup>3</sup> / <sub>8</sub>	3/4	2 <sup>5</sup> / <sub>8</sub>	3/16	1.156	2 <sup>5</sup> / <sub>8</sub>	9 <sup>1</sup> / <sub>2</sub>	.052000	.62400

The undercut shown on the tang having diameter G, and length E, may be eliminated at the option of the manufacturer provided the tang is heat-treated to a minimum Rockwell of C30 with 150Kg load.

TOLERANCES ON RATE OF TAPER, all sizes 0.0002 per foot. This tolerance may be applied on shanks only in the direction which increases the rate of taper and on sockets only in the direction which decreases the rate of taper.

## CUTTING FLUIDS

Coolants and lubricants offer many benefits including reduced friction and heat, enhanced chip removal, improved accuracy and surface finish, higher speeds and feeds, corrosion protection and increased tool life.

Proper selection and application of cutting fluids is critical to optimizing machining applications. **Please consult your cutting fluids supplier for advice on your specific machining application.**