Taper Shank

Standard, Undersized, & Oversized

Styles: 2410, 2411, 2412

CLEVELAND

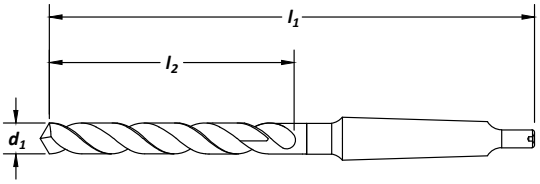
Note

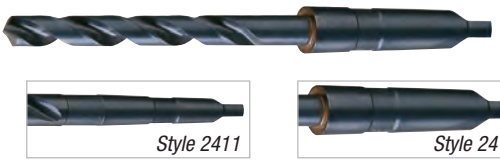
Undersized and oversized shank drills available from stock in popular sizes.

Operating parameters: See Technical section

Morse Taper Shank specs: See Technical section

ASME B94.11M | HSS | 118° | Helix Regular 21° to 34° | Taper Shank | Surface Treatment: Black Oxide





Style 2411 | Style 2412

Feature:

General purpose use in steel and iron.

drill diameter d_1	decimal equiv.	overall length l_1 (in)	flute length l_2 (in)	morse taper	order number 2410 standard	2411 undersized	2412 oversized
1/8	.1250	5.125	1.875	1	C12040	—	—
5/32	.1562	5.375	2.125	1	C12052	—	—
3/16	.1875	5.750	2.500	1	C12064	—	—
13/64	.2031	6.000	2.750	1	C12069	—	—
7/32	.2188	6.000	2.750	1	C12075	—	—
15/64	.2344	6.125	2.875	1	C12082	—	—
1/4-E	.2500	6.125	2.875	1	C12091	—	—
17/64	.2656	6.250	3.000	1	C12099	—	—
9/32	.2812	6.250	3.000	1	C12113	—	—
19/64	.2969	6.375	3.125	1	C12117	—	—
5/16	.3125	6.375	3.125	1	C12124	—	—
21/64	.3281	6.500	3.250	1	C12132	—	—
11/32	.3438	6.500	3.250	1	C12139	—	—
23/64	.3594	6.750	3.500	1	C12147	—	—
3/8	.3750	6.750	3.500	1	C12154	—	—
25/64	.3906	7.000	3.625	1	C12162	—	—
13/32	.4062	7.000	3.625	1	C12167	—	—
27/64	.4219	7.250	3.875	1	C12170	—	—
7/16	.4375	7.250	3.875	1	C12173	—	—
29/64	.4531	7.500	4.125	1	C12176	—	—
15/32	.4688	7.500	4.125	1	C12178	—	—
31/64	.4844	8.250	4.375	2	C12181	—	—
1/2	.5000	8.250	4.375	2	C12183	—	
1/2	.5000	7.750	4.375	1	—	C12483	—
33/64	.5156	8.500	4.625	2	C12186	—	—
17/32	.5312	8.500	4.625	2	C12188	—	—
35/64	.5469	8.750	4.875	2	C12191	—	—
9/16	.5625	8.750	4.875	2	C12194	—	—
37/64	.5781	8.750	4.875	2	C12196	—	—
19/32	.5938	8.750	4.875	2	C12199	—	—
39/64	.6094	8.750	4.875	2	C12201	—	—
5/8	.6250	8.750	4.875	2	C12204	—	—
41/64	.6406	9.000	5.125	2	C12207	—	—
21/32	.6562	9.000	5.125	2	C12209	—	—
43/64	.6719	9.250	5.375	2	C12212	—	—
11/16	.6875	9.250	5.375	2	C12214	—	—
11/16	.6875	10.000	5.375	3	—	—	C12670
45/64	.7031	9.500	5.625	2	C12216	—	—
23/32	.7188	9.500	5.625	2	C12218	—	—
47/64	.7344	9.750	5.875	2	C12220	—	—
3/4	.7500	9.750	5.875	2	C12222	—	—

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drill diameter d_1	decimal equiv.	overall length l_1 (in)	flute length l_2 (in)	morse taper	order number 2410 standard	2411 undersized	2412 oversized
3/4	.7500	10.500	5.875	3	—	—	C12678
49/64	.7656	9.875	6.000	2	C12223	—	—
25/32	.7812	9.875	6.000	2	C12225	—	—
51/64	.7969	10.750	6.125	3	C12227	—	—
13/16	.8125	10.750	6.125	3	C12229	—	—
53/64	.8281	10.750	6.125	3	C12231	—	—
27/32	.8438	10.750	6.125	3	C12232	—	—
55/64	.8594	10.750	6.125	3	C12234	—	—
7/8	.8750	10.750	6.125	3	C12236	—	—
7/8	.8750	10.000	6.125	2	—	C12505	—
57/64	.8906	10.750	6.125	3	C12238	—	—
29/32	.9062	10.750	6.125	3	C12240	—	—
59/64	.9219	10.750	6.125	3	C12241	—	—
15/16	.9375	10.750	6.125	3	C12243	—	—
31/32	.9688	11.000	6.375	3	C12247	—	—
63/64	.9844	11.000	6.375	3	C12249	—	—
1	1.0000	11.000	6.375	3	C12250	—	—
1	1.0000	12.000	6.375	4	—	—	C12684
1-1/64	1.0156	11.125	6.500	3	C12252	—	—
1-1/32	1.0312	11.125	6.500	3	C12254	—	—
1-1/16	1.0625	11.250	6.625	3	C12257	—	—
1-1/16	1.0625	12.250	6.625	4	—	—	C12691
1-1/8	1.1250	12.750	7.125	4	C12265	—	—
1-1/8	1.1250	11.750	7.125	3	—	C12518	—
1-3/16	1.1875	13.000	7.375	4	C12272	—	—
1-1/4	1.2500	13.500	7.875	4	C12279	—	—
1-1/4	1.2500	12.500	7.875	3	—	C12532	—
1-5/16	1.3125	14.250	8.625	4	C12286	—	—
1-11/32	1.3438	14.375	8.750	4	C12290	—	—
1-3/8	1.3750	14.500	8.875	4	C12293	—	—
1-7/16	1.4375	14.750	9.125	4	C12301	—	—
1-15/32	1.4688	14.875	9.250	4	C12304	—	—
1-1/2	1.5000	15.000	9.375	4	C12308	—	—
1-17/32	1.5312	15.000	9.375	4	—	C12541	—
1-9/16	1.5625	16.625	9.625	5	C12315	—	—
1-5/8	1.6250	17.000	10.000	5	C12322	—	—
1-3/4	1.7500	17.125	10.125	5	C12336	—	—
1-3/4	1.7500	16.250	10.375	4	—	C12566	—
1-7/8	1.8750	17.375	10.375	5	C12351	—	—
2	2.0000	17.375	10.375	5	C12365	—	—

Material Reference

	Steel (HRc)				Stainless Steel			Cast Iron (HRc)		Aluminum and Non-Ferrous	Hi-Temp Alloy		Hardened Steel (HRc)
	Low Carbon		Alloy		Austenitic	Martensitic	PH	Gray	Nodular		Ni, Co, Fe Based Super Alloy	Titanium	
Hardness	13-38	>38	16-38	> 38	300 Series	400 series		18-22	22-32				>45
Black Oxide	☆		☆					☆	✦				

☆ = Best Performance ✦ = Acceptable