



Arbor Spacers

- Full Hard Shim Temper
- 10 UOM Qty
- Steel Material

Quickly and accurately space grinding tools, saws, slitting blades, milling cutters and other machining tools. Notched arbor spacers can fit over shaft keys and help securely hold the shim or bushing in place.



Shim Thickness	Inside Dia.	Outside Dia.	Keyway Width	Keyway Depth	Item No.
0.001 in	1.0 in	1.5 in	1/4 in	3/32 in	5FB78
	1.5 in	2.125 in	3/8 in	3/32 in	5FE88
0.002 in	1.0 in	1.5 in	1/4 in	3/32 in	5FB80
	1.75 in	2.75 in	7/16 in	3/16 in	5FE70
0.003 in	1.0 in	1.5 in	1/4 in	3/32 in	5FB81
	2.0 in	2.75 in	1/2 in	3/16 in	5FY21
0.004 in	1.0 in	1.5 in	1/4 in	3/32 in	5FB82
	1.5 in	2.125 in	3/8 in	3/32 in	5FE93
0.005 in	1.75 in	2.75 in	7/16 in	3/16 in	5FE73
	2.0 in	2.75 in	1/2 in	3/16 in	5FY23
0.015 in	0.875 in	1.375 in	3/8 in	3/16 in	5FB69
	1.5 in	2.125 in	3/8 in	3/32 in	5FE99
	1.75 in	2.75 in	7/16 in	3/16 in	5FE79
	2.0 in	2.75 in	1/2 in	3/16 in	5FY29
0.01 in	1.5 in	2.125 in	3/8 in	3/32 in	5FE97
	1.75 in	2.75 in	7/16 in	3/16 in	5FE77
	2.0 in	2.75 in	1/2 in	3/16 in	5FY27

Shim Thickness	Inside Dia.	Outside Dia.	Keyway Width	Keyway Depth	Item No.
0.025 in	0.75 in	1.125 in	3/16 in	3/64 in	5FB51
	1.5 in	2.125 in	3/8 in	3/32 in	5FY11
	1.75 in	2.75 in	7/16 in	3/16 in	5FE81
	2.0 in	2.75 in	1/2 in	3/16 in	5FY31
0.02 in	1.5 in	2.125 in	3/8 in	3/32 in	5FY10
	1.75 in	2.75 in	7/16 in	3/16 in	5FE80
	2.0 in	2.75 in	1/2 in	3/16 in	5FY30
	1.5 in	2.125 in	3/8 in	3/32 in	5FY12
0.031 in	1.75 in	2.75 in	7/16 in	3/16 in	5FE82
	2.0 in	2.75 in	1/2 in	3/16 in	5FY32
	1.5 in	2.125 in	3/8 in	3/32 in	5FY14
	1.75 in	2.75 in	7/16 in	3/16 in	5FE84
0.062 in	2.0 in	2.75 in	1/2 in	3/16 in	5FY34
	1.0 in	1.5 in	1/4 in	3/32 in	5FB95
0.093 in	0.5 in	0.75 in	3/16 in	3/64 in	5FB16
	1.75 in	2.75 in	7/16 in	3/16 in	5FE86
	2.0 in	2.75 in	1/2 in	3/16 in	5FY36

Carbon Steel Information

Material	Tensile Strength (psi)*	Yield Strength (psi)*	Hardness (BHN)*	Toughness	Wear Resistance	Formability	Machinability†	Weldability
Low Carbon Grade								
Low Carbon - Cold Rolled	38,000 to 50,000	25,000 to 35,000	107 Max.	Fair	Fair	Excellent	Good	Excellent
Low Carbon - Hot Rolled	58,000 to 80,000	36,000	107 Max.	Fair	Fair	Excellent	Good	Excellent
1009	60,000	33,000	149	Fair	Fair	Fair	Good	Excellent
1015	58,000	42,000	149	Fair	Fair	Good	Good	Excellent
1018	65,000 to 85,000	55,000 to 75,000	167	Fair	Fair	Good	Good	Excellent
Medium Carbon Grade								
1045	90,000	59,000	—	Good	Poor	Fair	Fair	Poor
1144	100,000	95,500	223	Good	Poor	Fair	Good	Poor
Screw Machine Grade								
12L14	78,000 to 85,000	60,000 to 75,000	187	Poor	Poor	Poor	Excellent	Not Recommended
1215	78,000 to 95,000	60,000 to 80,000	187	Poor	Fair	Not Recommended	Excellent	Not Recommended

* Typical levels @ 1" dia. † Compared to AISI 1212, which has 100% machinability.

Carbon Steel—Plates

- Standards: ASTM A36 (hot-rolled)
- Length and width tolerances: +0.125/-0.000"

Note: Additional sizes are available; call 1-800-GRAINGER (472-4643).

Thickness (Decimal)	Thickness Tolerance	1 FT. x 1 FT. Item No.	2 FT. x 1 FT. Item No.	4 FT. x 1 FT. Item No.	4 FT. x 2 FT. Item No.
A36 Steel					
0.125 in	+/-0.030 in	3DR78	3DR79	3DRU1	3DRU2
0.187 in	+/-0.030 in	3DRU3	3DRU4	3DRU5	3DRU6
0.25 in	+/-0.030 in	3DRU7	3DRU8	3DRU9	3DRV1
1008 Steel					
0.032 in	+/-0.0015 in	3DRX4	3DRX5	3DRX6	3DRX7
0.047 in	+/-0.002 in	3DRW9	3DRX1	3DRX2	3DRX3
0.062 in	+/-0.0025 in	3DRW5	3DRW6	3DRW7	3DRW8



Carbon Steel—Tread Plates

- 1009 alloy steel meets ASTM A786
- Length and width tolerances: +0.125/-0.000"

Easily welded material provides excellent skid resistance.

Note: Additional sizes are available; call 1-800-GRAINGER (472-4643).

Thickness	Thickness Tolerance	1 ft x 1 ft Item No.	2 ft x 1 ft Item No.	4 ft x 1 ft Item No.	4 ft x 2 ft Item No.
1/8 in	+/-0.015 in	3DRV2	3DRV3	3DRV4	3DRV5
3/16 in	+/-0.017 in	3DRV6	3DRV7	3DRV8	3DRV9
1/4 in	+/-0.017 in	3DRW1	3DRW2	3DRW3	3DRW4



Carbon Steel—90° Angles

- Low carbon alloy steel
- Length tolerance: ±0.125"
- Overall length 6 ft.

Note: Additional sizes are available; call 1-800-GRAINGER (472-4643).

Leg Length	Leg Length Tolerance	Thickness	Item No.
1/4 in Thickness			
1 in	+/-0.0313 in	+/-0.010 in	2AU73
1 1/2 in	+/-0.046 in	+/-0.010 in	2AU74
2 in	+/-0.046 in	+/-0.010 in	2AU75
2 1/2 in	+/-0.0625 in	+/-0.015 in	2AU76
3 in	+/-0.125 in	+/-0.015 in	2AHN1
4 in	+/-0.125 in	+/-0.015 in	2AHN2
1/2 in Thickness			
3/4 in	+/-0.0313 in	+/-0.008 in	2AHL9
1 in	+/-0.0313 in	+/-0.008 in	2AUR7
1 1/4 in	+/-0.046 in	+/-0.010 in	2AUR8
1 1/2 in	+/-0.046 in	+/-0.010 in	2AUR9
2 in	+/-0.046 in	+/-0.010 in	2AUT11
3/8 in Thickness			
1 1/2 in	+/-0.046 in	+/-0.010 in	2AUT2



Carbon Steel—Structural Square Tubes

- 1015 alloy meets ASTM A500 Grade B
- Length tolerance: +0.125/-0.000"
- Length 6 ft.

Note: Additional sizes are available; call 1-800-GRAINGER (472-4643).

Outside Dia.	Outside Dia. Tolerance	Wall Thickness Tolerance	Item No.
0.13 in Wall Thickness			
3/4"	+/-0.025"	+/-0.013 in	3DRR4
1"	+/-0.025"	+/-0.013 in	3DRR5
1 1/4"	+/-0.025"	+/-0.013 in	3DRR6
1 1/2"	+/-0.025"	+/-0.013 in	3DRR7
2"	+/-0.025"	+/-0.013 in	3DRR8
3"	+/-0.025"	+/-0.013 in	3DRR9
0.19 in Wall Thickness			
1 1/2"	+/-0.025"	+/-0.019 in	3DRT1
2"	+/-0.025"	+/-0.019 in	3DRT2
2 1/2"	+/-0.025"	+/-0.019 in	3DRT3
3"	+/-0.025"	+/-0.019 in	3DRT4
0.25 in Wall Thickness			
2"	+/-0.025"	+/-0.025 in	3DRT5
3"	+/-0.025"	+/-0.025 in	3DRT6
4"	+/-0.025"	+/-0.025 in	3DRT7



Carbon Steel—Hexagonal Rods

- 1018 alloy meets ASTM 108, UNS# G10180, AISI 1018
- 12L14 alloy meets ASTM 108, UNS# G1244
- Length tolerance: 1-ft. ±1.000", 3-ft. ±3.000", 6-ft. ±6.000"

Note: Additional sizes are available; call 1-800-GRAINGER (472-4643).

Hex Width	Hex Width Tolerance	1 FT LENGTH Item No.	3 FT LENGTH Item No.	6 FT LENGTH Item No.
1018 Carbon Steel				
1/2 in	+0.000/-0.002 in	—	—	2HJN1
5/8 in	+0.000/-0.002 in	—	—	2HJN2
3/4 in	+0.000/-0.002 in	—	—	2HJN3
1 in	+0.000/-0.003 in	2AVF5	—	2HJN5
1 1/4 in	+0.000/-0.003 in	2AVF6	2AVG1	2HJN6
1 1/2 in	+0.000/-0.003 in	—	—	2HJN7
2 in	+0.000/-0.004 in	—	2AVG3	—
2 1/2 in	+0.000/-0.004 in	2AVF9	2AVG4	2HJN9

Hex Width	Hex Width Tolerance	1 FT LENGTH Item No.	3 FT LENGTH Item No.	6 FT LENGTH Item No.
12L14 Carbon Steel				
5/8 in	+/-0.002 in	4YNE7	4YNE7	—
3/4 in	+/-0.002 in	4YNE9	4YNE1	4YNE2
7/8 in	+/-0.002 in	4YNF3	4YNF4	—
1 in	+/-0.002 in	4YNF6	4YNF7	2HJW1
1 1/4 in	+/-0.002 in	4YNF9	4YNG1	2HJW2
1 1/2 in	+/-0.003 in	4YNG3	4YNG4	2HJW3
1 3/4 in	+/-0.003 in	4YNG6	4YNG7	2HJW4
2 in	+/-0.003 in	4YNG9	4YNH1	2HJW5
2 1/4 in	+0.000/-0.003 in	—	2HJV4	—
2 1/2 in	+0.000/-0.003 in	—	—	2HJV7
2 3/4 in	+0.000/-0.004 in	2HJV1	—	—
3 in	+0.000/-0.004 in	—	2HJV7	2HJV9
3 1/4 in	+0.000/-0.005 in	2HJV3	—	—