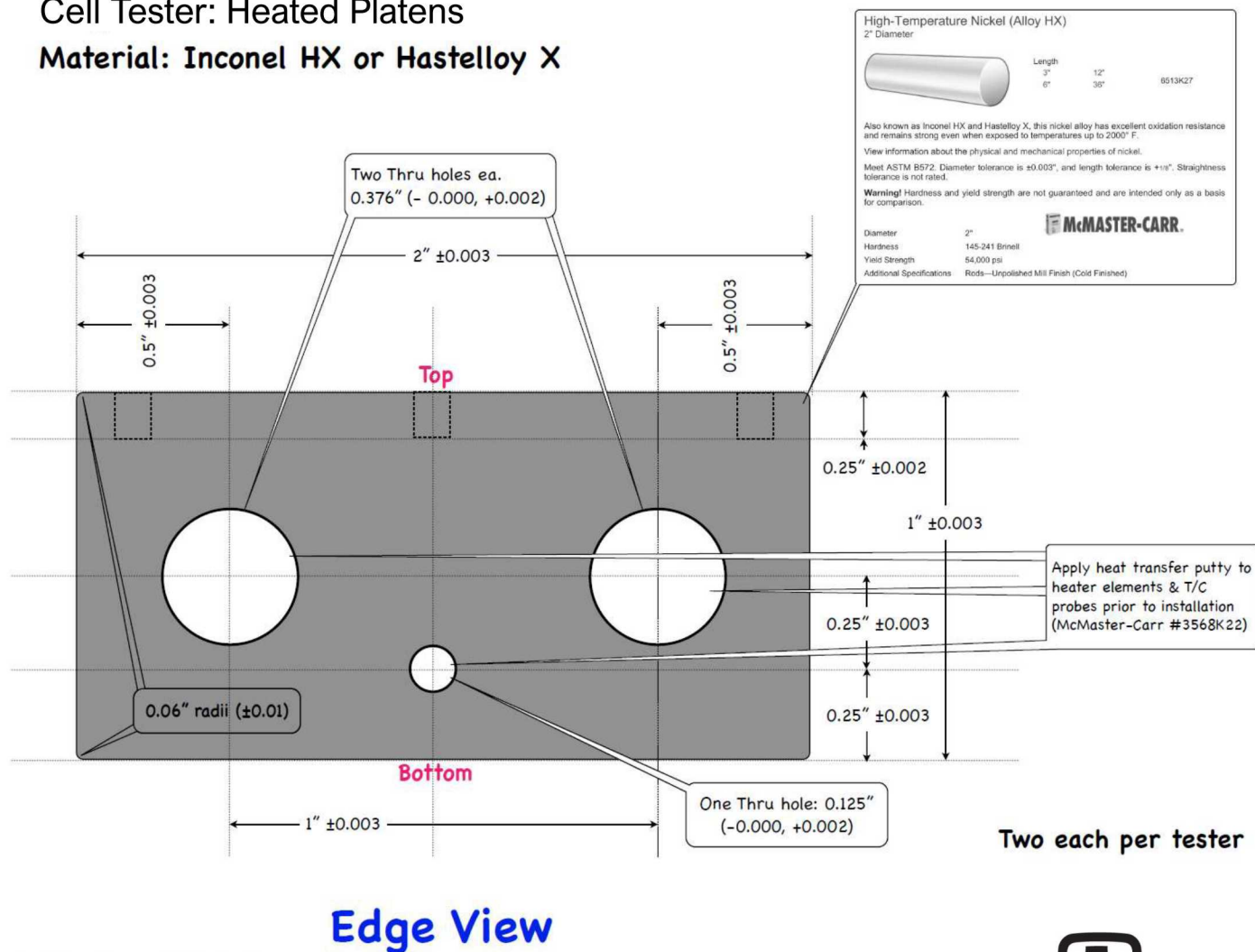


Cell Tester: Heated Platens

Material: Inconel HX or Hastelloy X



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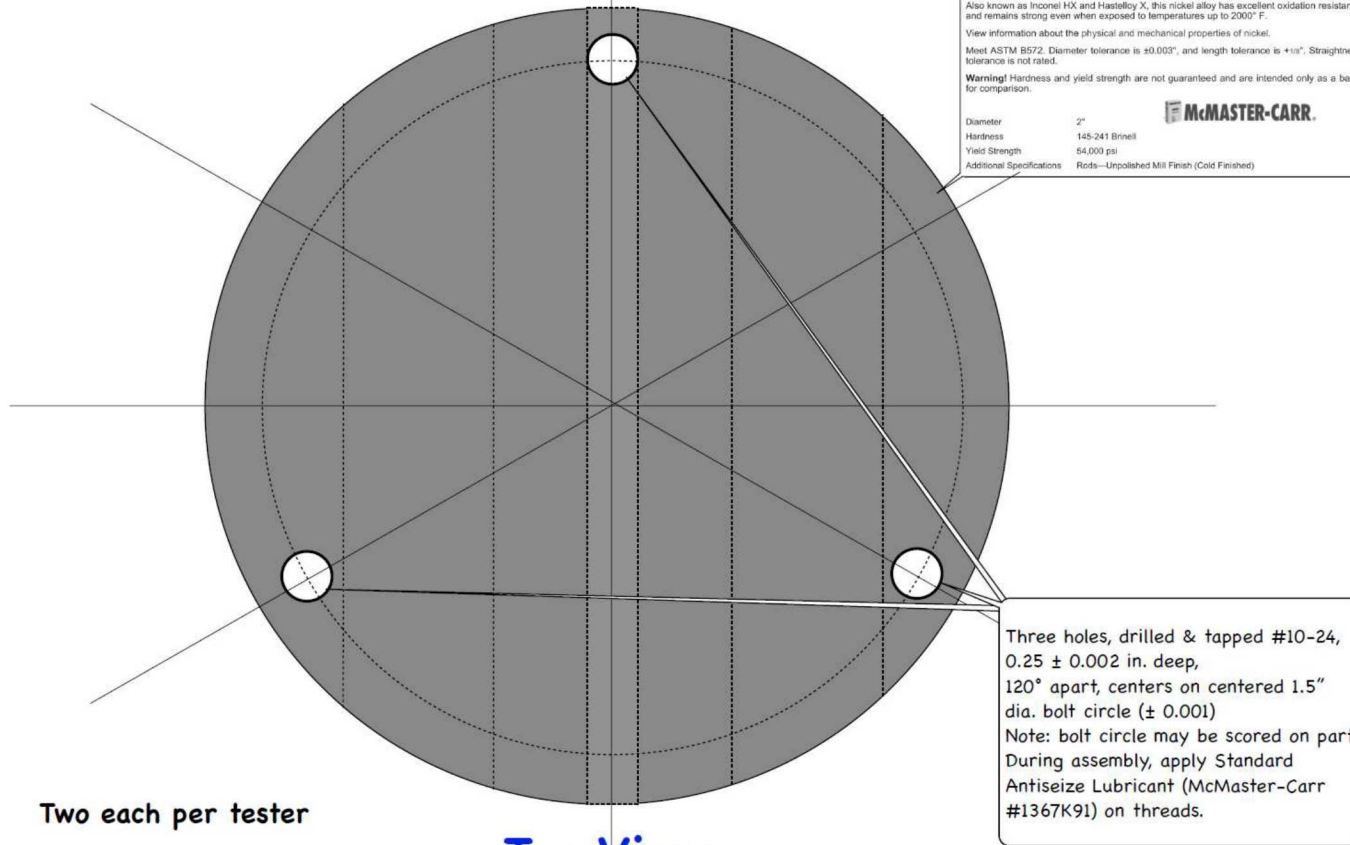


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Friday, January 24, 2014

Cell Tester: Heated Platens

Material: Inconel HX or Hastelloy X (continued)



Two each per tester

Top View

All linear tolerances ± 0.001 (unless specified otherwise)
(Unless otherwise specified, all degree tolerances are ± 0.05)

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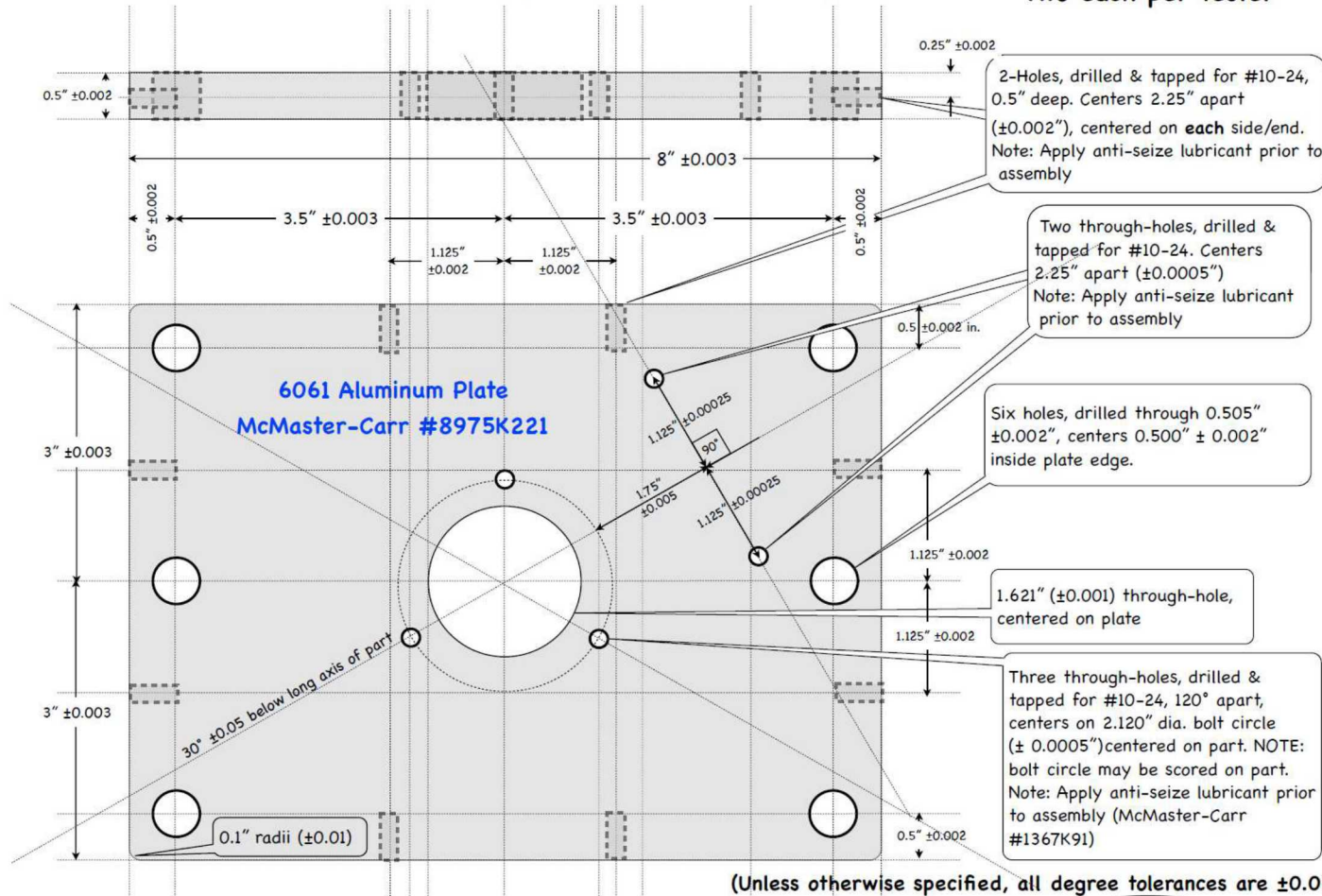
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Friday, January 24, 2014

Cell Tester: Header and Footer Plate (0.5" Aluminum Plate)

Two each per tester



Friday, January 24, 2014

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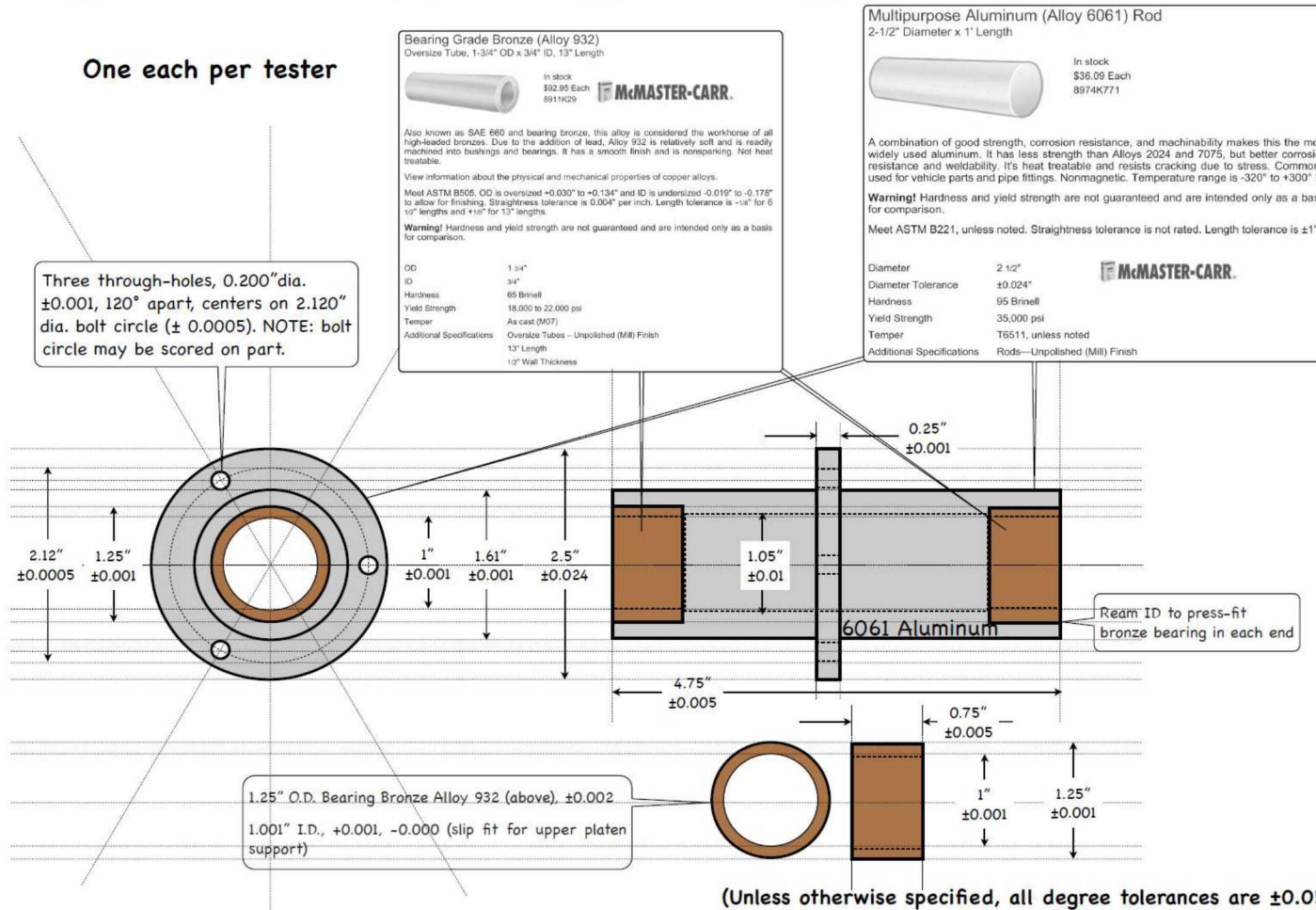
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Cell Tester: Upper Platen Support Bearing

One each per tester



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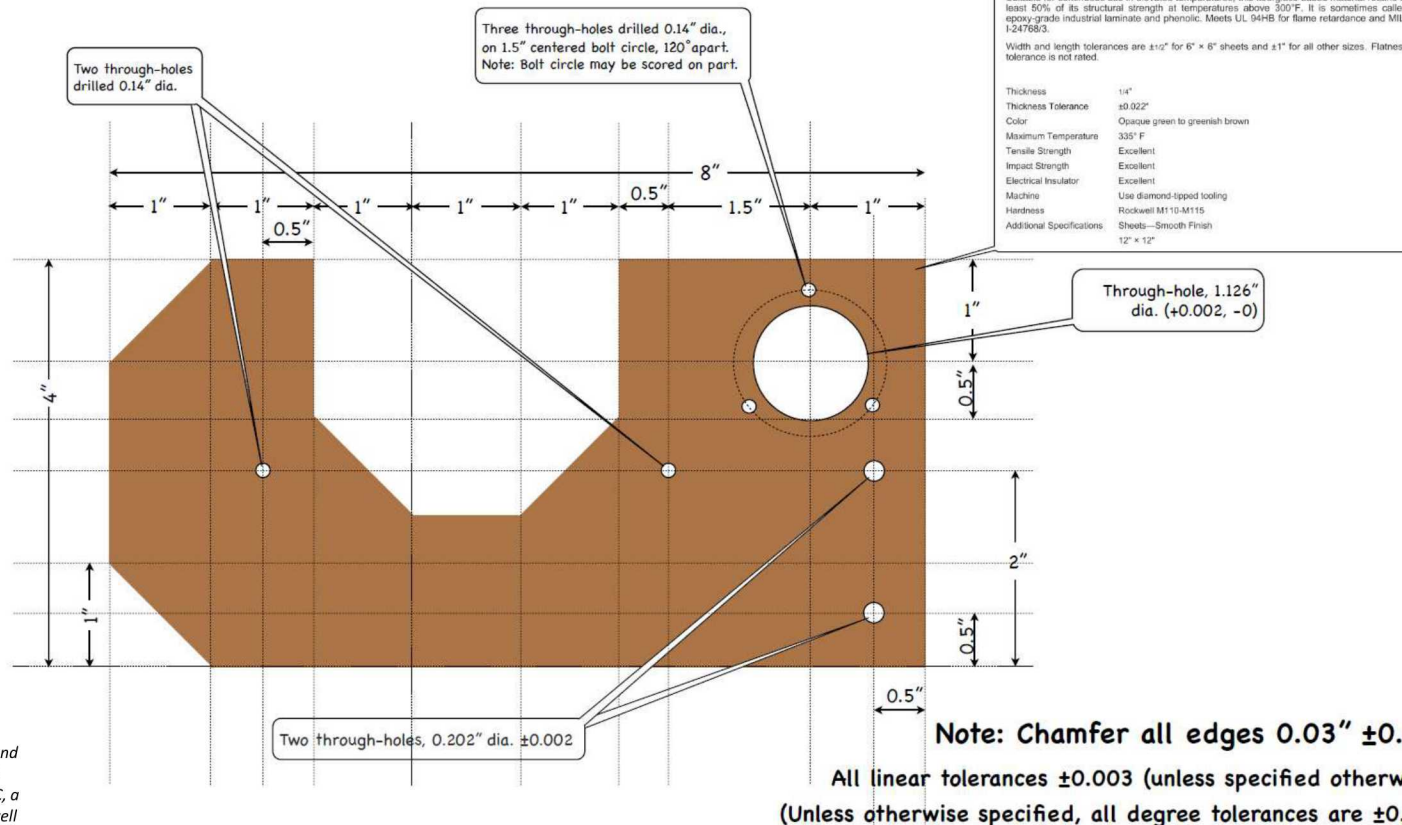
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Cell Tester: Sample Holder (0.25" Phenolic Sheet)

One each per tester



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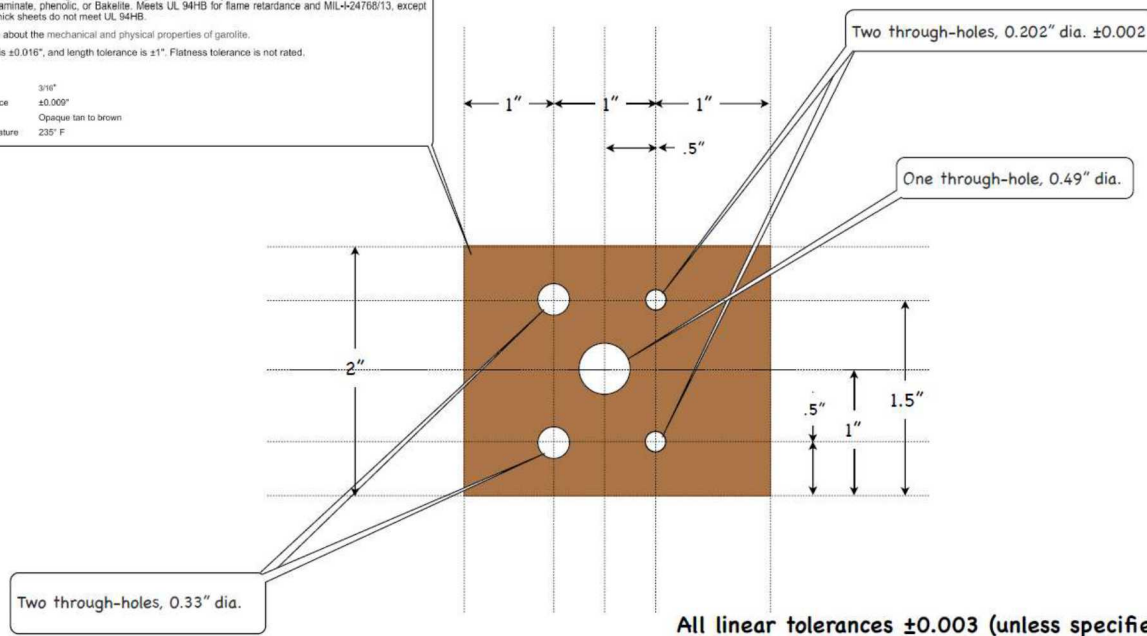
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Cell Tester: Test Lead Connector Clip (0.25" Phenolic Sheet)

One each per tester



Note: Chamfer all edges $0.03" \pm 0.01$



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Friday, January 24, 2014

Cell Tester: Test Lead Connector Strip Bracket

One each per tester

Note: Chamfer all edges $0.03'' \pm 0.01$

Architectural Aluminum (Alloy 6063)
90 Degree Angle, 1/8" Thickness, 1" x 1" Legs, 8' Length



In stock
\$20.55 Each
88805K48

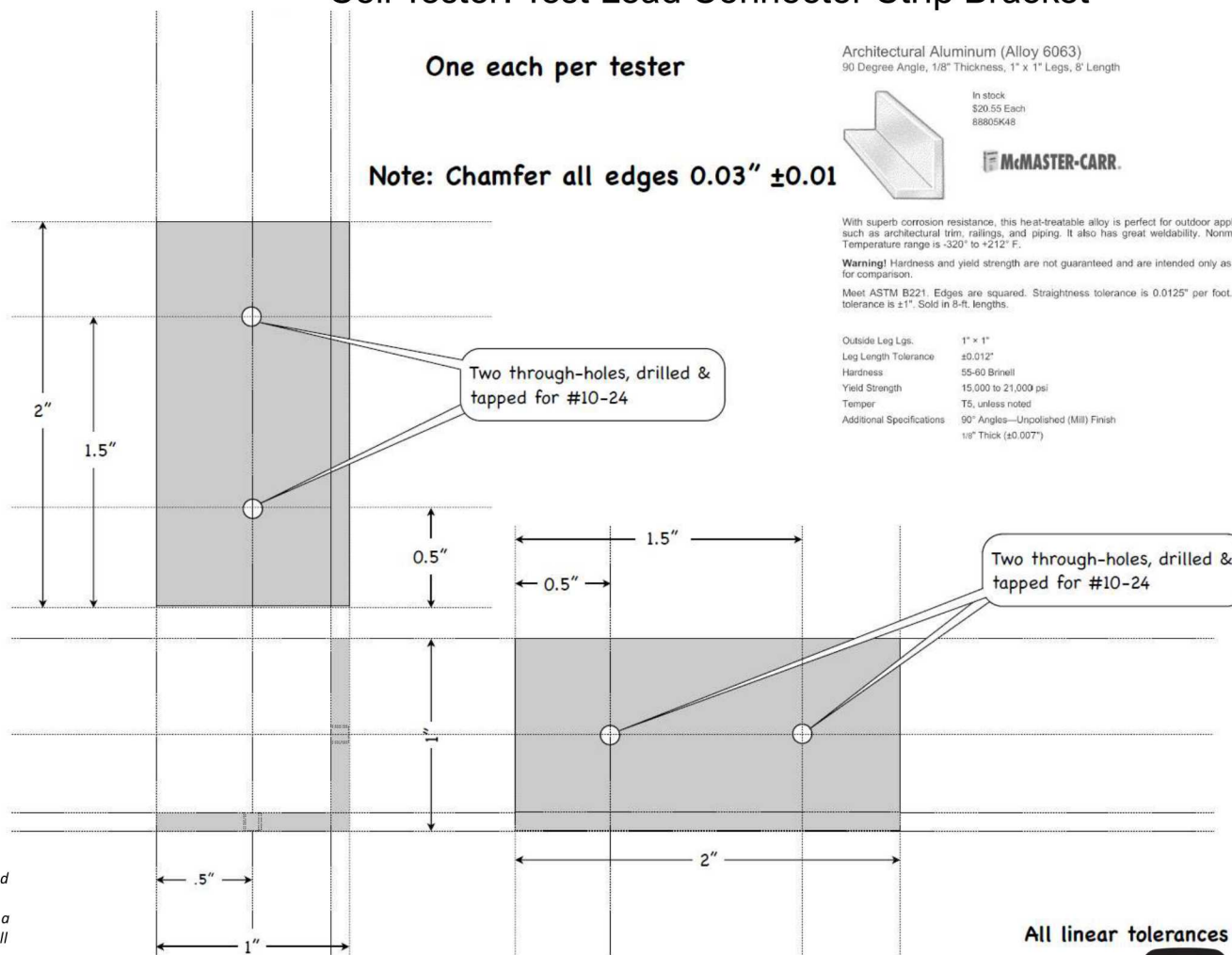
McMASTER-CARR.

With superb corrosion resistance, this heat-treatable alloy is perfect for outdoor applications such as architectural trim, railings, and piping. It also has great weldability. Nonmagnetic. Temperature range is -320° to +212° F.

Warning! Hardness and yield strength are not guaranteed and are intended only as a basis for comparison.

Meet ASTM B221. Edges are squared. Straightness tolerance is 0.0125" per foot. Length tolerance is $\pm 1''$. Sold in 8-ft. lengths.

Outside Leg Lgs.	1" x 1"
Leg Length Tolerance	$\pm 0.012''$
Hardness	55-60 Brinell
Yield Strength	15,000 to 21,000 psi
Temper	T5, unless noted
Additional Specifications	90° Angles—Unpolished (Mill) Finish 1/8" Thick ($\pm 0.007''$)



All linear tolerances ± 0.003

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McMaster-Carr Part:

Bearing Grade Bronze (Alloy 932)
Oversize Tube, 1-3/4" OD x 3/4" ID, 13" Length

 In stock
\$92.95 Each
8911K29

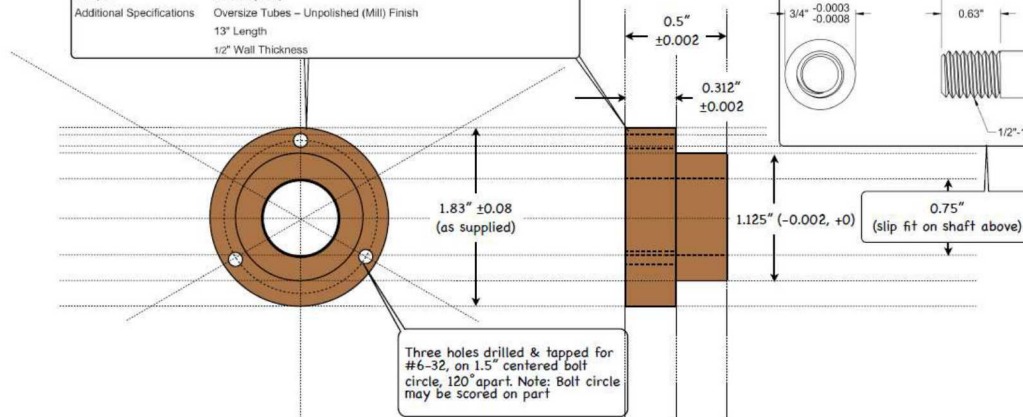
Also known as SAE 660 and bearing bronze, this alloy is considered the workhorse of all high-leaded bronzes. Due to the addition of lead, Alloy 932 is relatively soft and is readily machined into bushings and bearings. It has a smooth finish and is nonsparking. Not heat treatable.

View information about the physical and mechanical properties of copper alloys.

Meet ASTM B505. OD is oversized +0.030" to +0.134" and ID is undersized -0.019" to -0.178" to allow for finishing. Straightness tolerance is 0.004" per inch. Length tolerance is -1/8" for 6 1/2" lengths and +1/8" for 13" lengths.

Warning! Hardness and yield strength are not guaranteed and are intended only as a basis for comparison.

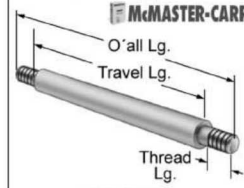
OD	1 3/4"
ID	3/4"
Hardness	65 Brinell
Yield Strength	18,000 to 22,000 psi
Temper	As cast (M07)
Additional Specifications	Oversize Tubes - Unpolished (Mill) Finish
	13" Length
	1/2" Wall Thickness



One each per tester

Cell Tester: Sample Holder Bearing

Hardened Precision Shaft
3/4" Diameter, 10" Overall Length, 1/2"-13 Thread Both Ends

 In stock
\$60.34 Each
830724

O'all Lg.
Travel Lg.
Thread Lg.
With Two Threaded Ends

Externally threaded ends have been machined for you—just mount these ready-to-use shafts through a through-hole and secure with a nut. Made of 52100 steel, all are case hardened and precision ground with exacting diameter and straightness tolerances. Shafts have a 10-16 rms micron finish. Case hardness is Rockwell C60-C64. Straightness tolerance is 0.001" to 0.002" per foot. Ends are beveled.

Shaft Diameter	3/4"
Thread Size	1/2"-13
Thread Length	0.63"
Overall Length	10"

Technical drawing of the shaft assembly. The shaft has a diameter of 3/4" $(-0.0003, -0.0008)$. The thread length is 0.63". The overall length is 10". The shaft is 0.75" (slip fit on shaft above). The shaft has a 1/2"-13 Thread.

0.75"
(slip fit on shaft above)



Unless specified otherwise:

Linear tolerances ± 0.001 , Degree tolerances are ± 0.05



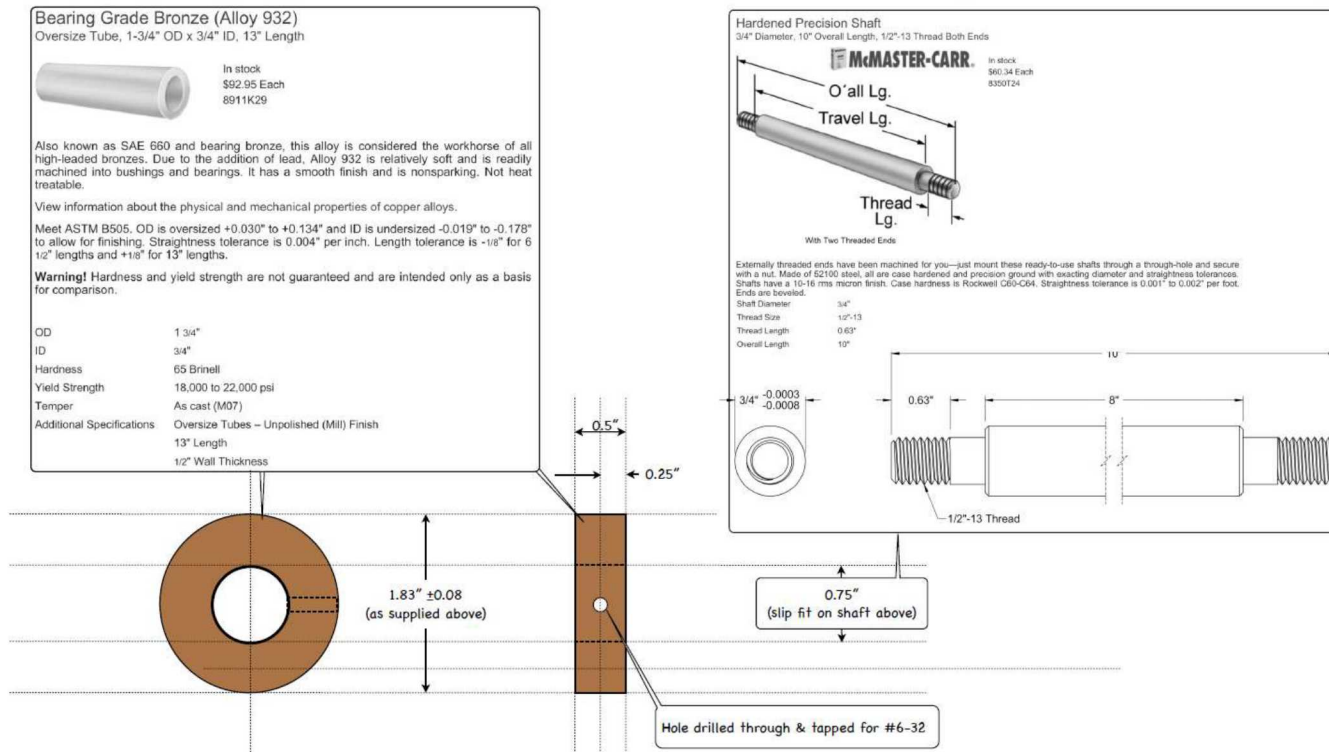
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McMaster-Carr Part:

Cell Tester: Sample Holder Bearing Stop



One each per tester

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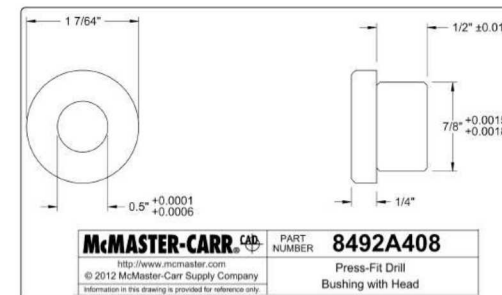
Friday, January 24, 2014

All tolerances ±0.001 (unless specified otherwise)

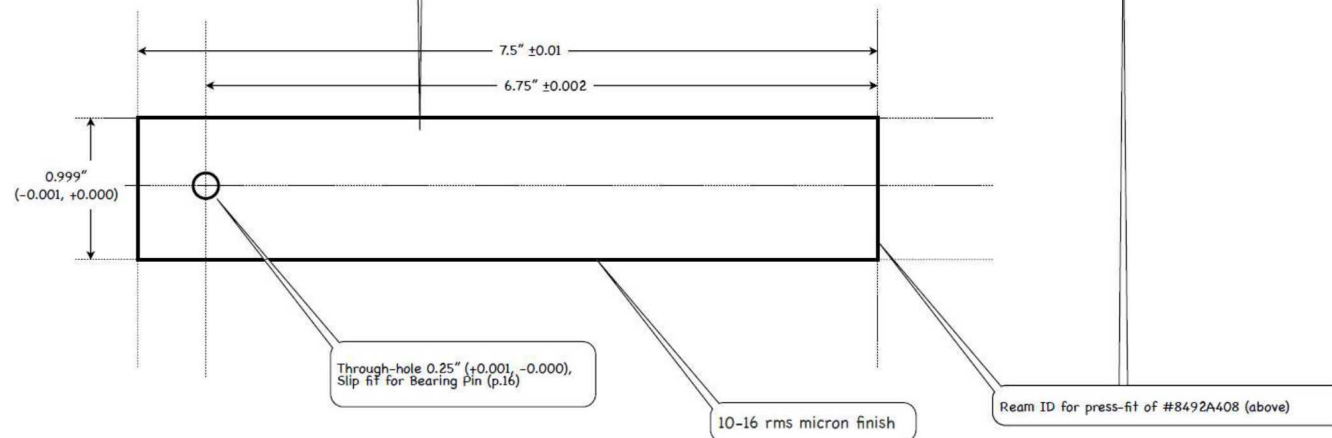


Cell Tester: Upper Platen Support

McMaster-Carr Part:



One each per tester



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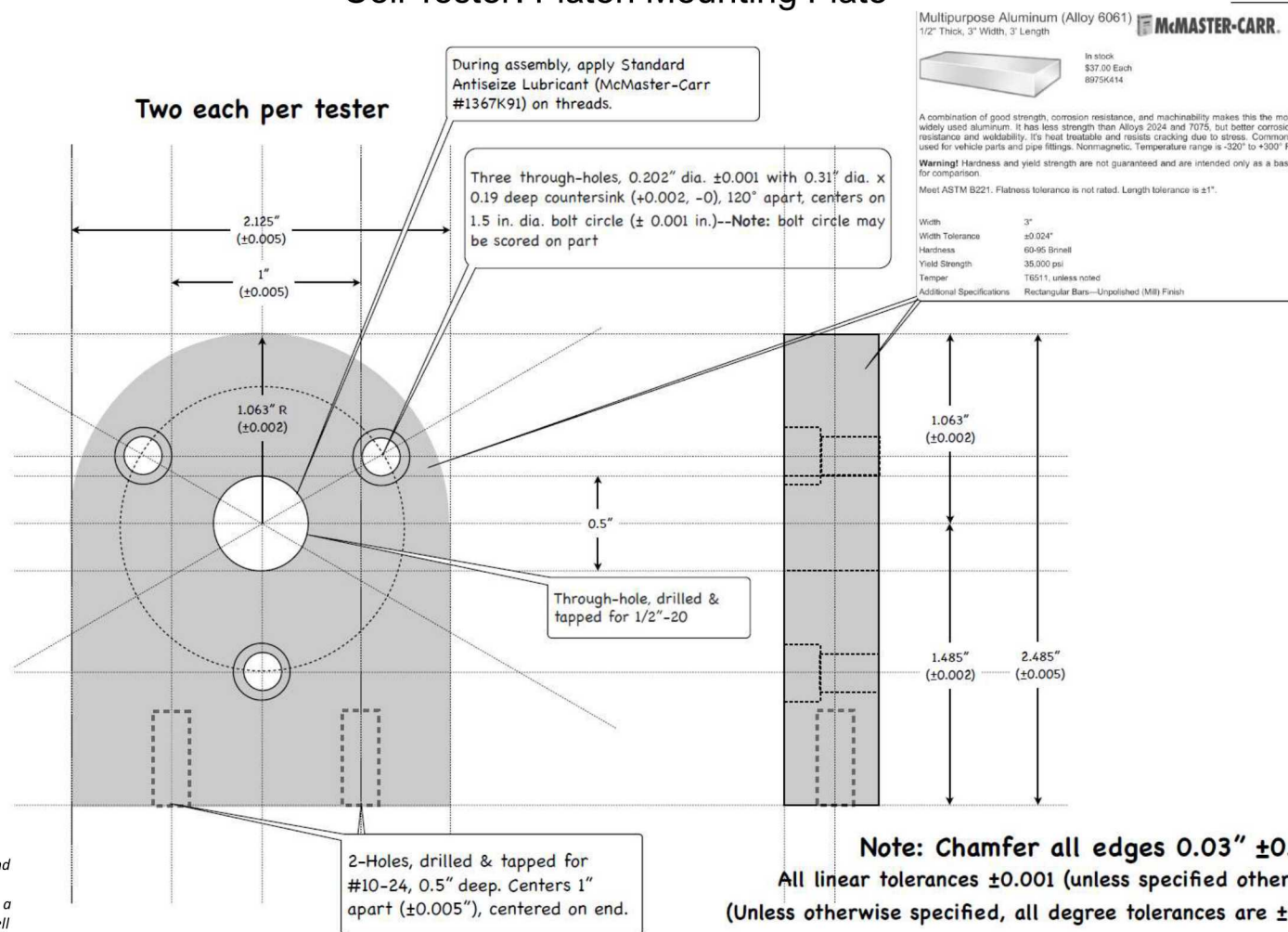
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Cell Tester: Platen Mounting Plate



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Cell Tester: Heater and Thermocouple Cable Support

Two each per tester

Note: Chamfer all edges 0.03" ±0.01

Multipurpose Aluminum (Alloy 6061)
1/2" Thick, 3" Width, 3' Length

McMASTER-CARR

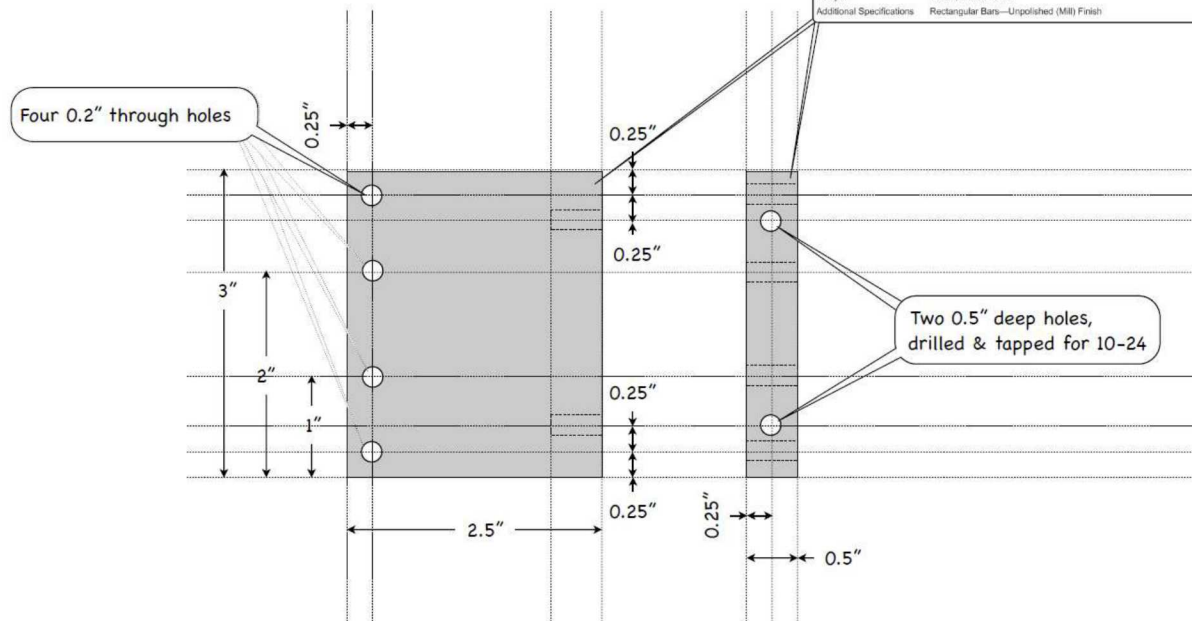
In stock
\$37.00 Each
8975K414

A combination of good strength, corrosion resistance, and machinability makes this the most widely used aluminum. It has less strength than Alloys 2024 and 7075, but better corrosion resistance and weldability. It's heat treatable and resists cracking due to stress. Commonly used for vehicle parts and pipe fittings. Nonmagnetic. Temperature range is -320° to +300° F.

Warning! Hardness and yield strength are not guaranteed and are intended only as a basis for comparison.

Meet ASTM B221. Flatness tolerance is not rated. Length tolerance is ±1".

Width	3"
Width Tolerance	±0.024"
Hardness	60-95 Brinell
Yield Strength	35,000 psi
Temper	T6511, unless noted
Additional Specifications	Rectangular Bars—Unpolished (MI) Finish



All linear tolerances ±0.003



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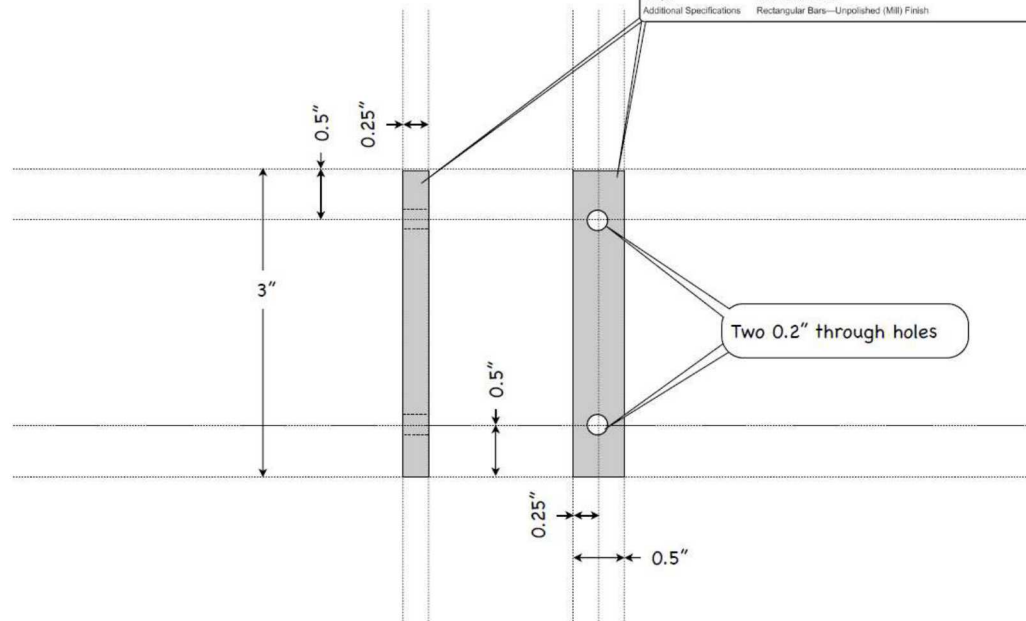
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Cell Tester: Heater and Thermocouple Cable Support Cap

Two each per tester

Note: Chamfer all edges $0.06'' \pm 0.005$



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All linear tolerances ± 0.003

NNSA
National Nuclear Security Administration



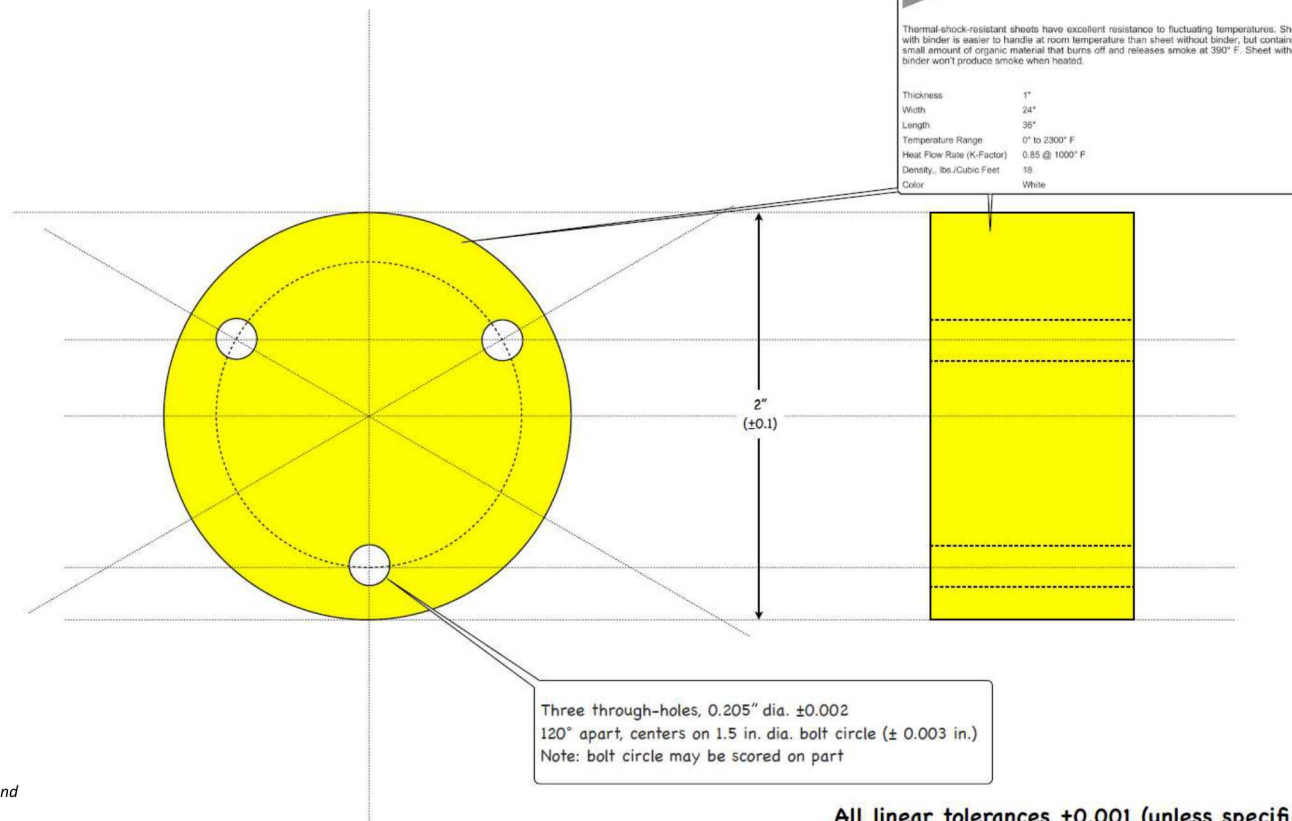
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Cell Tester: Platen Insulation

Two each per tester



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All linear tolerances ±0.001 (unless specified otherwise)
(Unless otherwise specified, all degree tolerances are ±0.05)

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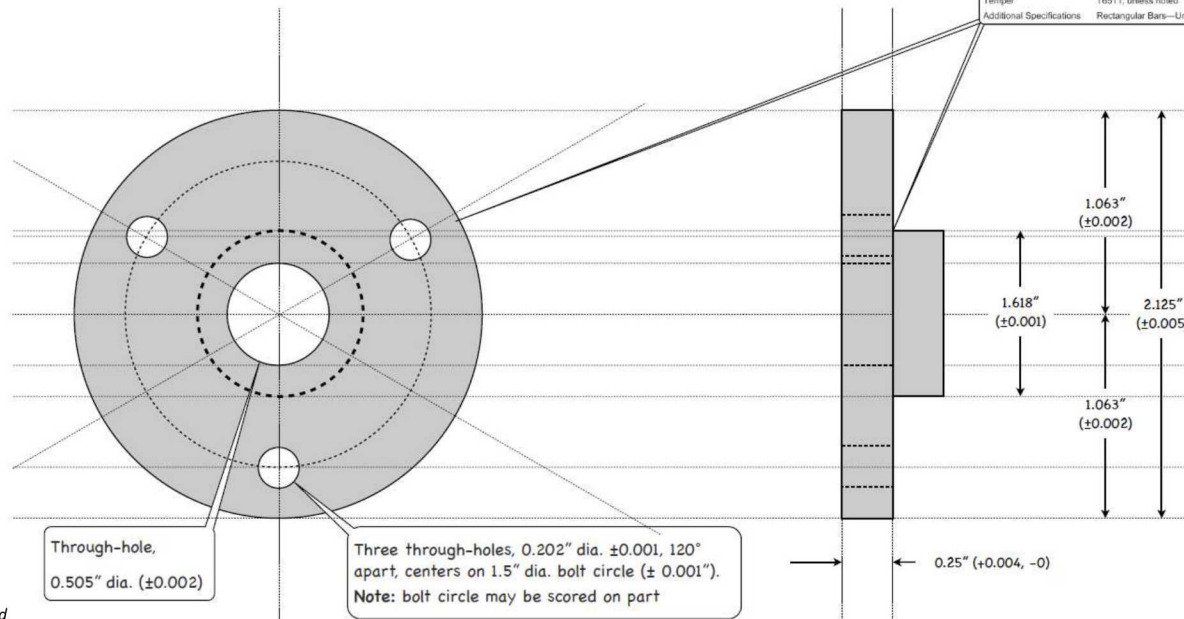


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Cell Tester: Lower Platen Support

One each per tester

Note: Chamfer all edges $0.03'' \pm 0.01$



All linear tolerances ± 0.001 (unless specified otherwise)
(Unless otherwise specified, all degree tolerances are ± 0.05)

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Cell Tester: Weight Platform

One each per tester

Note: Chamfer all edges 0.06" \pm 0.01

During assembly, apply Standard Antiseize Lubricant (McMaster-Carr #1367K91) on threads.

Multipurpose Aluminum (Alloy 6061)
3/4" Thick x 5" Wide x 1' Length

McMASTER-CARR

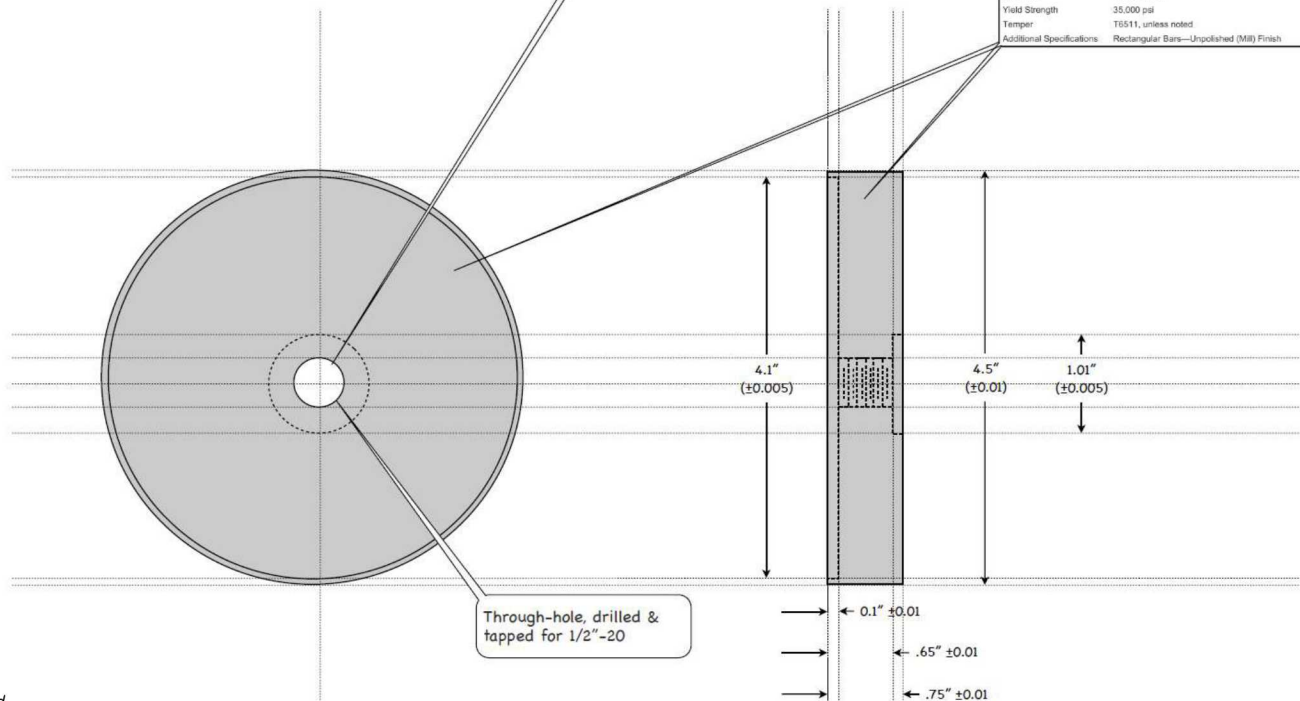
In stock
\$30.35 Each
8979K491

A combination of good strength, corrosion resistance, and machinability makes this the most widely used aluminum. It has less strength than Alloys 2024 and 7075, but better corrosion resistance and weldability. It's heat treatable and resists cracking due to stress. Commonly used for vehicle parts and pipe fittings. Nonmagnetic. Temperature range is -300° to +300° F.

Warning! Hardness and yield strength are not guaranteed and are intended only as a basis for comparison.

Meets ASTM B221. Flatness tolerance is not noted. Length tolerance is $\pm 1"$.

Width	5"
Width Tolerance	$\pm 0.034"$
Hardness	60-95 Brinell
Yield Strength	35,000 psi
Temper	T6511, unless noted
Additional Specifications	Rectangular Bars—Unpolished (Mill) Finish



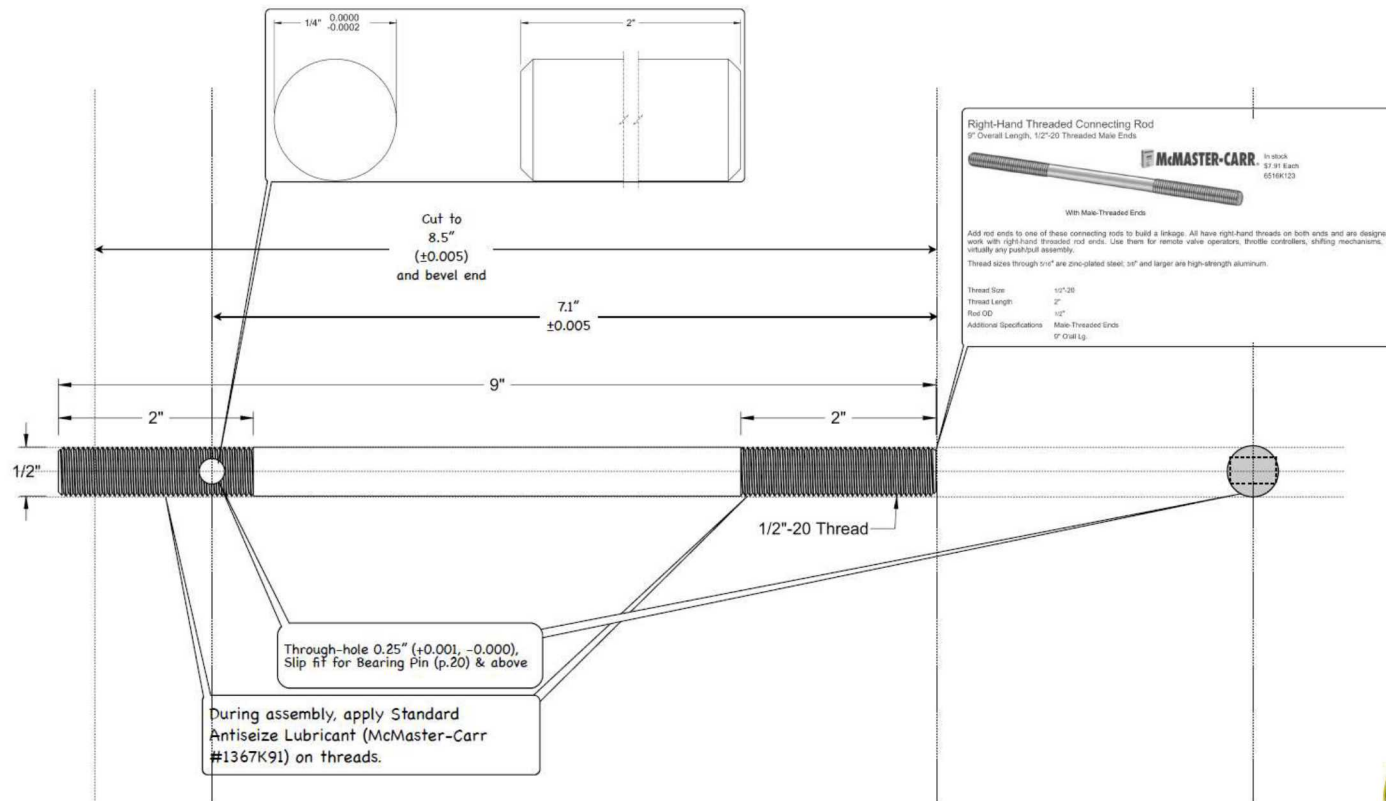
All linear tolerances ± 0.003 (unless specified otherwise)



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Cell Tester: Weight Platform & Upper Platen Connector

One each per tester



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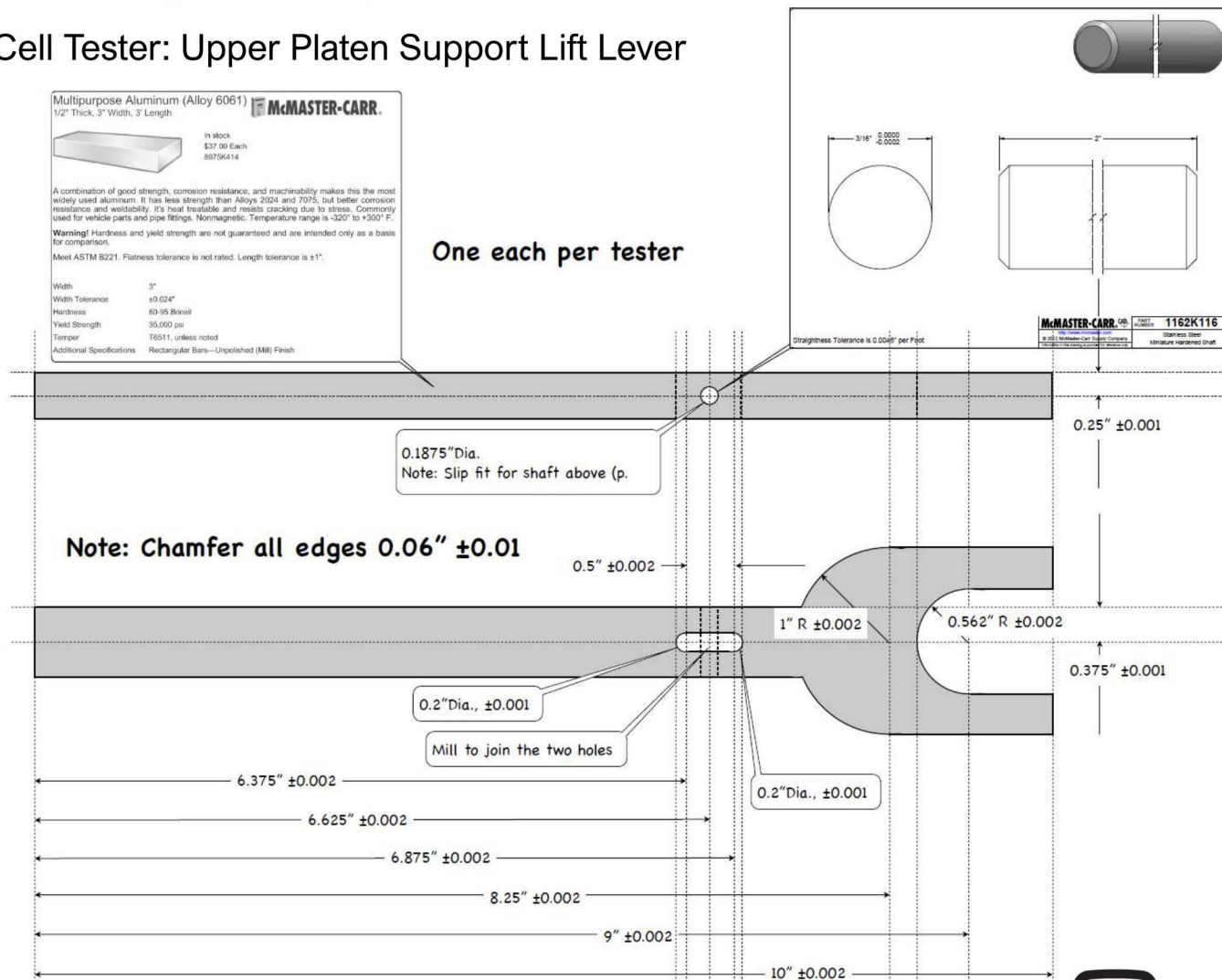
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Cell Tester: Upper Platen Support Lift Lever



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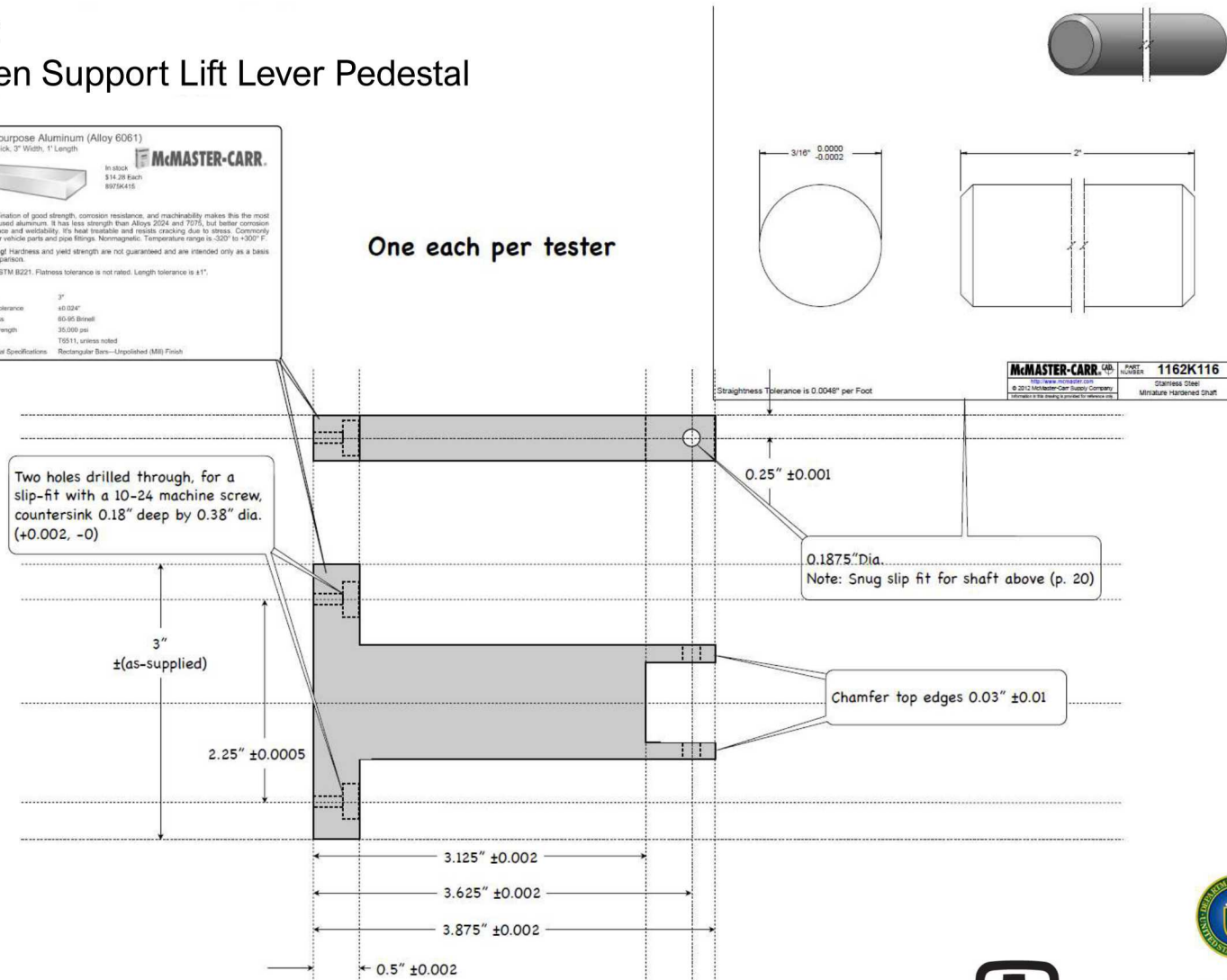
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Cell Tester: Upper Platen Support Lift Lever Pedestal



One each per tester



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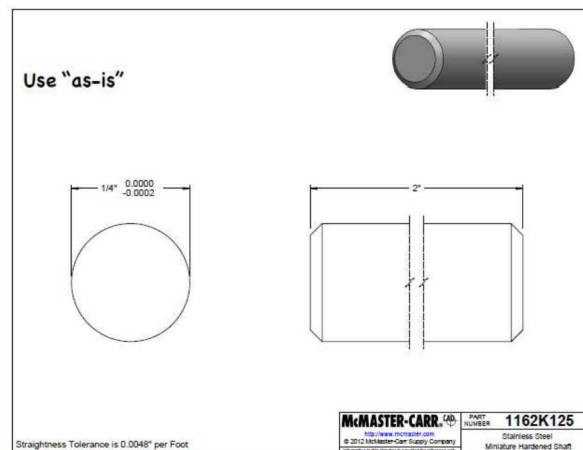
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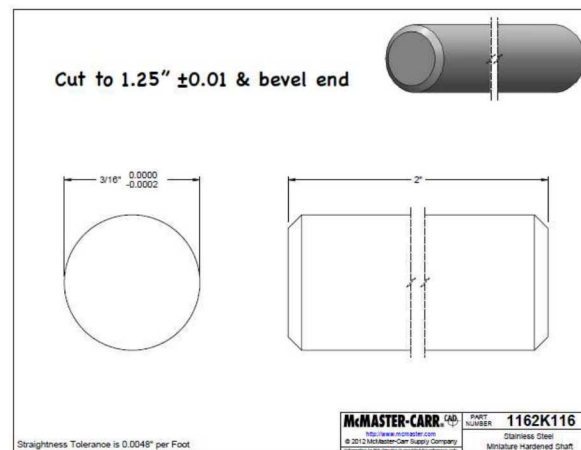
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Friday, January 24, 2014

Cell Tester: Lift Lever Fulcrum and Bearing Pins



Bearing Pin:
One each per tester



Lever Fulcrum Pin:
One each per tester

Cell Tester: Parts List

McMaster-Carr #	Part Description	# needed per tester	\$
1162K116	Hardened Precision 17-4 Stainless Steel Shaft 3/16" Diameter, 2" Length	1	14.00
1162K125	Hardened Precision 17-4 Stainless Steel Shaft 1/4" Diameter, 2" Length	1	15.23
8350T24	Hardened Precision Shaft 3/4" Diameter, 8" Long--10" Overall Length, 1/2"-13 Thread Both Ends	4	241.36
8880SK48	Architectural Aluminum (Alloy 6063) 90 Degree Angle, 1/8" Thickness, 1" x 1" Legs	1	20.55
6513K27	High-Temperature Nickel (Alloy HX) 2" Diameter	1	142.03
8974K771	Multipurpose Aluminum (Alloy 6061) Rod 2-1/2" Diameter x 1' Length	1	36.09
8975K414	Multipurpose Aluminum (Alloy 6061) 1/2" Thick, 3" Width, 3' Length	1	37.00
8975K221	Multipurpose Aluminum (Alloy 6061) 1/2" Thick, 6" Width, 3' Length	1	68.31
8975K491	Multipurpose Aluminum (Alloy 6061) 3/4" Thick x 5" Wide x 1' Length	1	62.19
6516K123	Aluminum Threaded Connecting Rod, 9" Overall Length, 1/2"-20 Threaded Male Ends	1	7.91
8710K124	High-Temperature Garolite (G-11), 1/4" Thick, 12" x 12"	1	48.49
96006A649	Socket Head Cap Screw 10-24 Thread, 3/4" Length--Black Oxide 18-8 Stainless Steel	1 pk. (25)	6.47
96006A646	Socket Head Cap Screw 10-24 Thread, 1/2" Length--Black Oxide 18-8 Stainless Steel	1 pk. (50)	10.36
92185A251	Socket Head Cap Screw 10-24 Thread, 1-1/2" Length--Type 316 Stainless Steel	1 pk. (10)	5.83
97763A142	Button Head Socket Cap Screw, 6-32 Thread, 3/8" Length--Black-Oxide Stainless Steel	1 Pk (100)	6.89
97763A143	Button Head Socket Cap Screw, 6-32 Thread, 1/2" Length--Black-Oxide Stainless Steel	1 pk. (50)	4.15
92949A150	Button Head Socket Cap Screw, 6-32 Thread, 5/8" Length--18-8 Stainless Steel	1 pk. (100)	4.56
91355A100	Flange Button Head Socket Cap Screw, Alloy Steel, 10-24 Thread, 3/8" Length	1 pk. (50)	13.81
91034A120	Coupling Nut, 1/2"-13 Thread Size, 1-1/4" Length, 7/8" Width--Black-Oxide Steel	4	20.40
92316A714	Hex Flange Cap Screw 1/2"-13 Thread, 1-1/4" Length, Fully Threaded	1 pk. (25)	16.04
92316A750	Hex Flange Cap Screw 1/2"-20 Thread, 1-1/4" Length, Fully Threaded	1 pk. (10)	6.52
94758A033	Flange Hex Nut, 1/2"-13 Thread Size, 7/8" Width, 11/16" Overall Height--18-8 Stainless Steel	5	39.40
8911K29	Bearing Grade Bronze (Alloy 932) Oversize Tube, 1-3/4" OD x 3/4" ID, 13" Length	1	92.95
89785K869	Tubing 1" OD, .87" ID, .065" Wall--Type 316 Smooth-Bore Seamless Stainless Steel	1	20.75
8492A408	Press-Fit Drill Bushing with Head 0.5" (1/2") ID, 7/8" OD, 1/2" Length	1	13.21
99604A125	Silicone Sealing Washer, 1/2" Screw Size, 1-1/16" OD, .093" Thick	1 pk. (25)	11.41
3568K22	Heat-Transfer Putty, Quart Container, 1250 Degree F Max	1	32.73
1367K91	Standard Antiseize Lubricant, 4-Ounce Brush-Top Can	1	10.52
9322K64	Garolite Strip - 3/16" Thick, 3" x 48", Grade LE	1	25.80
		Total =	1034.96

Note: Items with this background color need be ordered only once for 3 or more testers



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