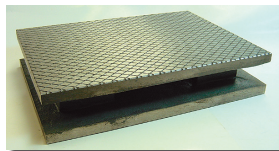


LAPPING / BENCH PLATE
SERIES 462:



10" x 14" x 2-3/4" Height
Precision ground on one side,
grooved on the other side.



| | |
|-----------|---------|
| Order No. | 2565000 |
| Price | |

**HARDNESS TESTERS -
ROCKWELL SYSTEM**
SERIES 251:



Hardness Testers are designed and manufactured for measuring hardness of metals and alloys of all kinds, hard or soft whether flat, round or irregular in shape. These testers are simple in design and easy to operate, yet sensitive and accurate testing results can be obtained. They are ideally suitable for laboratories, tool rooms, inspection and heat treatment departments, factories, schools, etc. These testers conform to IS:3804-1966 and BS:891-962 part I and part II for Rockwell testing.

STANDARD ACCESSORIES

- 5-3/4" Testing Table • 2-3/16" Testing Table
- 2-3/16" Testing Table with "V" groove • 120° Diamond Penetrator
- 1/16" Steel Ball Penetrator • Rockwell A Test Block
- Rockwell B Test Block • Rockwell C Test Blocks (3pcs.)
- Screwdrivers (2pc.) • Instruction Manual • Dustproof Cover

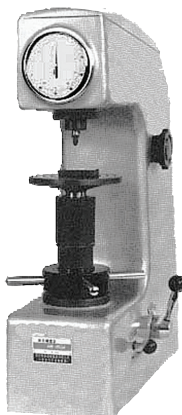
FEATURES

- Automatic weight selection

SPECIFICATIONS

Maximum Load (kgf.): 150
Load Range (kgf.): 60, 100, 150
Initial Range Load (kgf.): 10
Maximum Test Height: 4-1/4"
Depth of Throat: 5-1/4"
Size of Base: 7x18"
Machine Height: 24-1/2"
Approx. Net Weight: 150 lbs.

**Mitutoyo &
Starrett
Hardness
Testers
available.
See our
website or
inquire.**



| | |
|-----------|---------|
| Order No. | 1705500 |
| Price | |

**DIAMOND PENETRATOR -
ROCKWELL SYSTEM**
SERIES 251:



Fits all models.

| | |
|-----------|---------|
| Order No. | 1705100 |
| Price | |



HARDNESS TESTER FILES
SERIES 251:

SET INCLUDES:



| Color | Nominal | Actual Hardness |
|-------------|---------|-----------------|
| Red | RC40 | RC40-42 |
| Yellow | RC45 | RC45-47 |
| Light Green | RC50 | RC50-52 |
| Green | RC55 | RC55-57 |
| Blue | RC60 | RC60-62 |
| Black | RC65 | RC64-66 |

| | |
|-----------|--------|
| Order No. | 637750 |
| Price | |

The Hardness Tester Tat Fits in Your Pocket

Set of 6 pieces to check the hardness of metals in range of RC40 to RC65. Compact and easy to check the hardness of steel materials which can not be measured by testing machines. Convenient to check the hardness of material before cutting (Milling, Turning, Drilling, etc.) jobs. Convenient to check the hardness during/after heat treatment process. Each of 6 pieces is fitted with distinctive color coded and non-slip grip.

**PORTABLE HARDNESS
TESTERS**
SERIES 251:

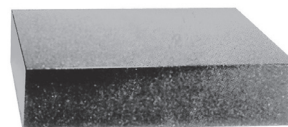


This low cost auxiliary hardness tester covers the entire range of heat treated steel from 20 to 65 RC hardness on the Rockwell C Scale. Can be used on any flat piece with a thickness of several inches down to 1/4". Will not mar the surface of parts. 11" high x 2-1/4" dia. base.



| | |
|-----------|---------|
| Order No. | 1705600 |
| Price | |

**SURFACE PLATES -
BLACK GRANITE**
SERIES 649:



- Lowest temperature coefficient, least responsive to temperature changes.
- Moisture and corrosion free, no rusting, no oiling, will not stain or discolor.
- Practically maintenance free, fast easy to clean.
- Smooth "Ball Bearing" surface.
- Resists dust and abrasives, non-magnetic.

TOOL ROOM ("B") GRADE - 0 LEDGE

| Size | T | ± A | Lbs. | Order No. | Price |
|---------|----|--------|------|-----------|-------|
| 9 x 12" | 2" | .0001" | 30 | 6491011 | |
| 12 x 18 | 3 | .0001 | 75 | 6491115 | |
| 18 x 24 | 3 | .00015 | 140 | 6491152 | |
| 24 x 36 | 4 | .0002 | 430 | 6491203 | |
| 36 x 48 | 4 | .0004 | 800 | 6491304 | |

INSPECTION ("A") GRADE - 2 LEDGE

| | | | | | |
|----------|---|---------|------|---------|--|
| 12 x 18" | 3 | .00005" | 70 | 6493115 | |
| 18 x 24 | 3 | .000075 | 135 | 6493152 | |
| 24 x 36 | 4 | .0001 | 365 | 6493203 | |
| 36 x 48 | 6 | .0002 | 1140 | 6493304 | |

T - Thickness ±A - Overall Lateral Accuracy

**GRANITE SURFACE PLATE
STANDS**
SERIES 649:



- Overall working height 36"
- With 4 leveling screws
- Support all grade surface plates



| Size | Weight | 0-ledge | 2-ledge | Price |
|--------|----------|---------|---------|-------|
| 18x24" | 100 lbs. | 6499000 | 6499100 | |
| 24x36" | 110 lbs. | 6499001 | 6499101 | |
| 36x48" | 210 lbs. | 6499002 | 6499102 | |



BLACK GRANITE SURFACE PLATES

SERIES 140:



Traceable to N.I.S.T.
Fed. Spec. GGG-P-463c



Special Sizes
quotes on request.

2 - LEDGE

All prices are FOB California.

OVERALL FLATNESS

The overall flatness specifications of STAR USA Granite products meet and surpass the requirement set forth by Federal Specification GGG-P-463c. This publication defines the three standard grades of tolerance for surface plates as follows:

- AA - Laboratory Grade:** For high precision operations in consistent temperature gauging rooms and metrology departments.
- A - Inspection Grade:** For general use in quality control areas.
- B - Toolroom Grade:** For shop work and production checking.

| SURFACE PLATES AA LABORATORY GRADE | | | | | | | |
|------------------------------------|-----------|-------|-----------|-------|---------------------|-------------------|-----------------------|
| Size W x L x T | O - LEDGE | | 2 - LEDGE | | Overall Accuracy | Repeat Reading | Shipping Weight lb |
| | Order No. | Price | Order No. | Price | | | |
| 8x12x2 | 1405001 | | - | | +/- .000025 | +/- .000017.5 | 28 |
| 9x12x3 | 1405002 | | - | | +/- .000025 | +/- .000017.5 | 40 |
| 12x12x3 | 1405003 | | - | | +/- .000025 | +/- .000017.5 | 54 |
| 12x18x3 | 1405004 | | 1405019 | | +/- .000025 | +/- .000017.5 | 81 |
| 18x18x4 | 1405005 | | 1405020 | | +/- .000025 | +/- .000017.5 | 156 |
| 18x24x4 | 1405006 | | 1405021 | | +/- .000037 | +/- .000017.5 | 208 |
| 24x24x4 | 1405007 | | 1405022 | | +/- .000037 | +/- .000022.5 | 278 |
| 24x36x6 | 1405008 | | 1405023 | | +/- .000050 | +/- .000022.5 | 601 |
| 24x48x6 | 1405009 | | 1405024 | | +/- .000075 | +/- .000022.5 | 802 |
| 30x48x6 | 1405010 | | 1405025 | | +/- .000087 | +/- .000022.5 | 1,002 |
| 36x36x6 | 1405011 | | 1405026 | | +/- .000075 | +/- .000022.5 | 902 |
| 36x48x6 | 1405012 | | 1405027 | | +/- .0001 | +/- .000022.5 | 1,203 |
| 36x60x8 | 1405013 | | 1405028 | | +/- .000125 | +/- .000030 | 1,966 |
| 36x72x10 | 1405014 | | 1405029 | | +/- .00015 | +/- .000030 | 2,914 |
| 48x48x8 | 1405015 | | 1405030 | | +/- .0001 | +/- .000030 | 2,097 |
| 48x60x8 | 1405016 | | 1405031 | | +/- .00015 | +/- .000030 | 2,621 |
| 48x72x10 | 1405017 | | 1405032 | | +/- .000175 | +/- .000030 | 3,885 |
| 48x96x12 | 1405018 | | 1405033 | | +/- .00025 | +/- .000037.5 | 5,920 |

| SURFACE PLATES A INSPECTION GRADE | | | | | | | |
|-----------------------------------|-----------|-------|-----------|-------|---------------------|-------------------|-----------------------|
| Size W x L x T | O - LEDGE | | 2 - LEDGE | | Overall Accuracy | Repeat Reading | Shipping Weight lb |
| | Order No. | Price | Order No. | Price | | | |
| 8x12x2 | 1405034 | | - | | +/- .000050 | +/- .000030 | 28 |
| 9x12x3 | 1405035 | | - | | +/- .000050 | +/- .000030 | 40 |
| 12x12x3 | 1405036 | | - | | +/- .000050 | +/- .000030 | 54 |
| 12x18x3 | 1405037 | | 1405052 | | +/- .000050 | +/- .000030 | 81 |
| 18x18x3 | 1405038 | | 1405053 | | +/- .000050 | +/- .000030 | 121 |
| 18x24x3 | 1405039 | | 1405054 | | +/- .000075 | +/- .000030 | 162 |
| 24x24x3 | 1405040 | | 1405055 | | +/- .000075 | +/- .000035 | 216 |
| 24x36x4 | 1405041 | | 1405056 | | +/- .0001 | +/- .000035 | 416 |
| 24x48x6 | 1405042 | | 1405057 | | +/- .00015 | +/- .000035 | 802 |
| 30x48x6 | 1405043 | | 1405058 | | +/- .000175 | +/- .000035 | 1,002 |
| 36x36x6 | 1405044 | | 1405059 | | +/- .00015 | +/- .000035 | 902 |
| 36x48x6 | 1405045 | | 1405060 | | +/- .0002 | +/- .000035 | 1,203 |
| 36x60x6 | 1405046 | | 1405061 | | +/- .00025 | +/- .000040 | 1,503 |
| 36x72x8 | 1405047 | | 1405062 | | +/- .0003 | +/- .000040 | 2,359 |
| 48x48x6 | 1405048 | | 1405063 | | +/- .0002 | +/- .000040 | 1,603 |
| 48x60x6 | 1405049 | | 1405064 | | +/- .0003 | +/- .000040 | 2,004 |
| 48x72x8 | 1405050 | | 1405065 | | +/- .00035 | +/- .000040 | 3,145 |
| 48x96x10 | 1405051 | | 1405066 | | +/- .0005 | +/- .000050 | 4,933 |

(Continued)



BLACK GRANITE SURFACE PLATES / STANDS / COVERS

SERIES 140:
(Continued)



All prices are FOB California.

| SURFACE PLATES B TOOLROOM GRADE | | | | | | | |
|---------------------------------|-----------|-------|-----------|-------|---------------------|-------------------|-----------------------|
| Size W x L x T | O - LEDGE | | 2 - LEDGE | | Overall Accuracy | Repeat Reading | Shipping Weight lb |
| | Order No. | Price | Order No. | Price | | | |
| 8x12x2 | 1405067 | | - | | +/- .0001 | +/- .000055 | 28 |
| 9x12x3 | 1405068 | | - | | +/- .0001 | +/- .000055 | 40 |
| 12x12x3 | 1405069 | | - | | +/- .0001 | +/- .000055 | 54 |
| 12x18x3 | 1405070 | | 1405085 | | +/- .0001 | +/- .000055 | 81 |
| 18x18x3 | 1405071 | | 1405086 | | +/- .0001 | +/- .000055 | 121 |
| 18x24x3 | 1405072 | | 1405087 | | +/- .00015 | +/- .000055 | 162 |
| 24x24x3 | 1405073 | | 1405088 | | +/- .00015 | +/- .000060 | 216 |
| 24x36x4 | 1405074 | | 1405089 | | +/- .0002 | +/- .000060 | 416 |
| 24x48x6 | 1405075 | | 1405090 | | +/- .0003 | +/- .000060 | 802 |
| 30x48x6 | 1405076 | | 1405091 | | +/- .00035 | +/- .000060 | 1,002 |
| 36x36x6 | 1405077 | | 1405092 | | +/- .0003 | +/- .000060 | 902 |
| 36x48x6 | 1405078 | | 1405093 | | +/- .0004 | +/- .000060 | 1,203 |
| 36x60x6 | 1405079 | | 1405094 | | +/- .0005 | +/- .000080 | 1,503 |
| 36x72x6 | 1405080 | | 1405095 | | +/- .0006 | +/- .000080 | 1,804 |
| 48x48x6 | 1405081 | | 1405096 | | +/- .0004 | +/- .000080 | 1,603 |
| 48x60x6 | 1405082 | | 1405097 | | +/- .0006 | +/- .000080 | 2,004 |
| 48x72x6 | 1405083 | | 1405098 | | +/- .0007 | +/- .000080 | 2,405 |
| 48x96x8 | 1405084 | | 1405099 | | +/- .001 | +/- .0001 | 3,947 |

O-Ledge Plate with Stationary Stand



Plate Cover



State thickness of plate when ordering covers.

Standard working height of stand with plate is 36" measured from the top of the plate to the floor.

| STEEL SUPPORT STANDS AND COVERS | | | | | | | | |
|---------------------------------|--------------------|------------------|-------|------------------------------|-------|-----------------------|------------------------------|-------|
| Size W x L | Plate Thickness | Stationary Stand | | Castered Stand with Locks | | Shipping Weight lb | Vinyl Surface Plate Cover | |
| | | Order No. | Price | Order No. | Price | | Order No. | Price |
| 12x12 | - | - | | - | | - | - | |
| 12x18 | up to 4" | 1405101 | | 1405117 | | 95 | 1405134 | |
| 18x18 | up to 4" | 1405102 | | 1405118 | | 95 | 1405135 | |
| 18x24 | up to 4" | 1405103 | | 1405119 | | 95 | 1405136 | |
| 24x24 | up to 4" | 1405104 | | 1405120 | | 100 | 1405137 | |
| 24x36 | up to 4" | 1405105 | | 1405121 | | 120 | 1405138 | |
| 24x36 | 5" to 6" | 1405106 | | 1405122 | | 170 | 1405139 | |
| 24x48 | up to 6" | 1405107 | | 1405123 | | 200 | 1405140 | |
| 30x48 | up to 6" | 1405108 | | 1405124 | | 220 | 1405141 | |
| 36x36 | up to 6" | 1405109 | | 1405125 | | 210 | 1405142 | |
| 36x48 | up to 8" | 1405110 | | 1405126 | | 225 | 1405143 | |
| 36x60 | up to 8" | 1405111 | | 1405127 | | 245 | 1405144 | |
| 36x72 | up to 10" | 1405112 | | 1405128 | | 260 | 1405145 | |
| 48x48 | up to 8" | 1405113 | | 1405129 | | 250 | 1405146 | |
| 48x60 | up to 8" | 1405114 | | 1405130 | | 275 | 1405147 | |
| 48x72 | up to 10" | 1405115 | | 1405131 | | 380 | 1405148 | |
| 48x96 | up to 12" | 1405116 | | 1405132 | | 530 | 1405149 | |

PREMIUM GRANITE CLEANER

| Size | Order No. | Price |
|--------------------|-----------|-------|
| 1 Pint | 1405150 | |
| 1 Case of 12 Pints | 1405151 | |



Penetrates the granite surface to loosen dirt, grime, and residue. It leaves the surface clean, which cuts down wear on precision surfaces.

Sold in pint size squeeze bottles.

PRECISION TOOLS