

CATALOG

Since - 1971



PRECISION INSPECTION EQUIPMENTS

Effective From 15-05-2019



V-MACH INTERNATIONAL



## CAST IRON SURFACE PLATES

As Per IS : 2285-2003

### SIZES

mm/ Inches

250 x 250

300 x 300/12"x12"

300 x 450/12"x18"

400 x 400

450 x 450/18"x18"

400 x 630

450 x 600/18"x24"

630 x 630/24"x24"

750 x 600

900 x 600/24"x36"

1000 x 630

900 x 900/36"x36"

1000 x 1000

1200 x 600

1200 x 900/36"x48"

1200 x 1200/48"x48"

1600 x 1000

2000 x 1000

1800 x 1200

1500 x 1500

2000 x 1500

2500 x 1500

2000 x 2000

3000 x 1000

3000 x 1500

3000 x 2000

4000 x 1000

5000 x 1000

- We offer a qualitative range of precision Cast Iron Surface Plate. These cast iron surface plates provide an accurate reference or datum plane for precision gauging, marking, inspection and tooling setup.

- Cast iron surface plates are made of good quality close grain cast iron as per IS-210:1993 conforming to grade FG-220.

- The meticulous manufacturing processes that are carried out at our premises make these surface plates apt for machine shops, quality control, and standard rooms.

- Our precision cast iron surface plates are used in the application where strict accuracy is required hence, these plates are appropriate for high precision work and are ideal for blue matching.

- Our surface plates are amply ribbed to ensure minimum deflection under load.

- Our team of qualified engineers carries out rigorous quality control inspection to test these surface plates as per IS-2285:2003 for flatness, repeatability, durability etc. The final inspection of surface plate is undertaken by a high precision computerized electronic level, WYLER SWISS make.

Maximum deviation from flatness over the entire area expressed in Microns as per IS 2285 – 2003

Some of the unique features of cast iron surface plates are:

- Our castings are stress relieved either by natural aging or by artificial seasoning.

- We also provide rexine cover for top surface protection.

- We offer fabricated stand with leveling screws . The overall working height of surface plate with stand and leveling screw will be 900 mm (approx), from floor level.Option for vibration pads to reduce vibration is also available.

- We provide computerized calibration certificate traceable to National Physical Laboratory (NPL, Government of India ) New Delhi along with each surface plate.

- We also have an In-House NABL accredited Laboratory.

*\* All Surface plates are provided with Rexin Cover*

*Other Sizes on Request*



## GRANITE SURFACE PLATES

As Per IS : 7327-2003

<b>Sizes</b> (mm)	<p>Granite surface plates are manufactured using natural black granite stone, quarried from earth in its natural form. These plates are precision lapped to high standards of flatness to achieve accuracy and are used as bases for mounting sophisticated mechanical, electronic and optical gauging systems. Our quality inspectors and engineers put a strict vigilance at all the stages of the production procedure to ensure high quality plates. Further, the final inspection is carried out by a High Precision Computerized Electronic Level made by WYLER OF SWITZERLAND. Our range of Granite surface plates are utilized in Precision tool rooms, Engineering industries and Research laboratories.</p> <p>Some of the unique features of our range of plates are:</p> <ul style="list-style-type: none"> <li>• Uniformity in Hardness</li> <li>• Accurate under load conditions</li> <li>• Vibration absorbent</li> <li>• Easy to clean</li> <li>• Rust-proof ,Non-corrosive</li> <li>• Thermal stability</li> <li>• Wrap resistant</li> <li>• Low porosity</li> <li>• Non-abrasive ,non-magnetic</li> </ul> <p>These advantages make black granite surface plates inherently stable and unmatched against any other material.</p> <p>These plates are supplied with computerized calibration certificate traceable to National Physical Laboratory (NPL, Govt Of India ) New Delhi .</p> <p>Rexin covers are provided with each surface plate for protection of top surface .</p> <p>We provide fabricated stand with levelling screws on request by our clients. The overall working height of surface plates with stand and levelling screw will be 900 MM (approx) from floor level.</p>
300 x 300 x 50	
400 x 400 x 63	
450 x 450 x 63	
630 x 400 x 80	
630 x 630 x 80	
900 x 600 x 100	
1000 x 630 x 150	
900 x 900 x 100	
1000 x 1000 x 150	
1200 x 900 x 150	
1200 x 1200 x 150	
1600 x 1000 x 200	
2000 x 1000 x 200	
1500 x 1500 x 200	
2000 x 1500 x 200	
2500 x 1500 x 200	
2000 x 2000 x 250	
3000 x 1000 x 250	
3000 x 1500 x 250	
3000 x 2000 x 300	
4000 x 1000 x 250	
5000 x 1000 x 300	

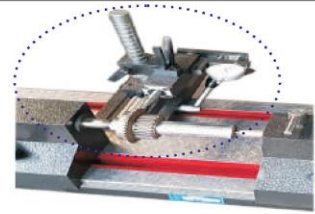
*\* All Surface plates are provided with Rexin Cover*

*Other Sizes on Request*



## CAST IRON BENCH CENTRES

As Per IS : 5980-1978



**GEAR TESTER (PCD)**

<b>CENTRE DISTANCE (mm)</b>	<b>CENTRE HEIGHT (mm)</b>
300	125
300	160
500	160
500	200
750	160
750	200
1000	160
1000	200
1250	160
1250	200
1500	160
1500	200
2000	200
2000	250

Product Details:

Material = Cast Iron  
 Brand = Luthra  
 Tip Material = Carbide  
 Usage = Industrial  
 Operation Type = Manual

Indian Standard IS 5980-1978

We offer a qualitative range of Cast Iron Bench Centers that are an accurate and quick method for inspecting radial run out of camshafts, crankshafts, and cylindrical shafts.

These are manufactured as per IS:5980-1978.

Some of the salient features of our Bench centers:

The base of the bench center and its heads are stress relieved.

One of the centers is spring loaded to ensure uniform pressure while holding and easy loading and unloading of work.

Centers are made from high carbon steel hardened and ground finish, having morse taper MT-3 and are replaceable.

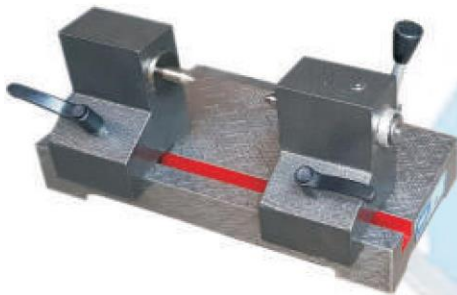
Both heads are adjustable for easy and quick setting of the required distance between centers.

The bed of the bench center is provided with two T-slots parallel to each other.

## CAST IRON MINI BENCH CENTRES

(Spring Loaded)

As Per IS : 5980-1978



<b>CENTRE DISTANCE (mm)</b>	<b>CENTRE HEIGHT (mm)</b>
150	75
225	75

## GRANITE MINI BENCH CENTRES

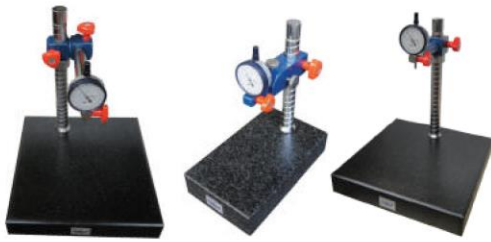
(Spring Loaded)

As Per IS : 5980-1978



<b>CENTRE DISTANCE (mm)</b>	<b>CENTRE HEIGHT (mm)</b>
150	75
225	75

Other Sizes on Request



## GRANITE COMPARATOR STANDS

<b>MODEL*</b>	<b>BASE SIZE</b> (mm)	<b>BASE TYPE</b>	<b>GAUGING BRACKET</b>	<b>MEASURING HEIGHT</b> (mm)
LGS-1	100 x 150	PLAIN	CENTRE	100
LGS-2	100 x 150	PLAIN	FINE ADJ.	100
LGS-3	100 x 150	SERRATED	CENTRE	100
LGS-4	100 x 150	SERRATED	FINE ADJ.	100
LGS-5	150 x 150	PLAIN	CENTRE	100
LGS-6	150 x 150	PLAIN	FINE ADJ.	100
LGS-7	150 x 150	SERRATED	FINE ADJ.	100
LGS-8	250 x 150	PLAIN	CENTRE	150
LGS-9	250 x 150	PLAIN	FINE ADJ.	150
LGS-10	250 x 150	PLAIN	ECCENTRIC	150
LGS-11	250 x 150	SERRATED	CENTRE	150
LGS-12	250 x 150	SERRATED	FINE ADJ.	150
LGS-13	250 x 150	SERRATED	ECCENTRIC	150
LGS-14	300 x 200	PLAIN	CENTRE	200
LGS-15	300 x 200	PLAIN	FINE ADJ.	200
LGS-16	300 x 200	PLAIN	ECCENTRIC	200
LGS-17	300 x 200	SERRATED	CENTRE	200
LGS-18	300 x 200	SERRATED	FINE ADJ.	200
LGS-19	300 x 200	SERRATED	ECCENTRIC	200
LGS-20	300 x 300	PLAIN	CENTRE	250
LGS-21	300 x 300	PLAIN	FINE ADJ.	250
LGS-22	300 x 300	PLAIN	ECCENTRIC	250
LGS-23	300 x 300	SERRATED	CENTRE	250
LGS-24	300 x 300	SERRATED	FINE ADJ.	250
LGS-25	300 x 300	SERRATED	ECCENTRIC	250
LGS-26	300 x 300	PLAIN	DOUBLE ECCENTRIC	250
LGS-27	300 x 300	PLAIN	UNIVERSAL ARM	250
LGS-28	400 x 400	PLAIN	CENTRE	300
LGS-29	400 x 400	PLAIN	FINE ADJ.	300
LGS-30	400 x 400	PLAIN	ECCENTRIC	300

**Eccentric : Horizontal & Vertical movement of Dial Indicator**  
**\*Price Without Dial Indicator**

**Other Sizes on Request**

## GRANITE BENCH CENTRES

As Per IS : 5980-1978



<b>CENTRE DISTANCE</b> (mm)	<b>CENTRE HEIGHT</b> (mm)	<b>CENTRE DISTANCE</b> (mm)	<b>CENTRE HEIGHT</b> (mm)
300	125	500	200
300	160	750	160
500	160	750	200

### Product Details:

We hold pleasure in presenting ourselves as one of the significant manufacturers, suppliers and exporters of Mini Bench Centre Granite Base. This mini bench center is made with naturally occurred black granite stone. Each product is featured with two cast iron made heads, mounted towards vertical direction. Offered product is ideally useful in measuring parallelism and concentricity of different rotational components. Mini Bench Centre Granite Base, we offer is highly demanded for the below enlisted attributes:

- High thermal stability
- Low porosity
- Corrosion resistance
- Vibration-free performance

### Other details:

#### Mini Bench Centre Granite Base

Granite Mini Bench Centre is made of black granite base which is naturally seasoned and provide better finish and accuracy .T-Slot made of steel is fixed within granite base on which two cast iron heads are mounted, both the heads can be moved to the desired positions depending upon the size of component to be checked. One of the centre is spring loaded to ensure uniform pressure while holding work piece and easy loading and unloading without disturbing the accuracy of the centres.

Luthra Granite Mini Bench Centres are specially designed for checking concentricity, parallelism and true rotations of components having smaller dimensions. These are widely used in industries manufacturing smaller CNC turned automobiles parts, watch spares and microscopic parts etc. where higher accuracies are required. Centres are made from high carbon steel hardened and ground finish, having morse taper MT-1 and are replaceable.

Cast iron heads are artificially stress relieved to avoid distortions. Granite base have outstanding advantages over cast iron base.

- Hardness uniformity.
- Accurate under load conditions.
- Vibration absorbent.
- Easy to clean.
- Rustproof, Noncorrosive.
- Wrap resistant.

Each Luthra granite mini bench centre is provided with computerised calibration certificate traceable to NPL (Govt. Of India)

*Other Sizes on Request*



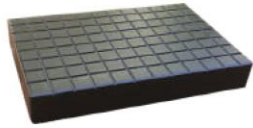
## CAST IRON COMPARATOR STANDS

<b>MODEL*</b>	<b>ANVIL SIZE</b> (mm)	<b>ANVIL TYPE</b>	<b>GAUGING BRACKET</b>	<b>MEASURING HEIGHT</b> (mm)
LCS-1	DIA 60	HARDENED	CENTRE	100
LCS-2	DIA 60	HARDENED & SERRATED	FINE ADJ.	100
LCS-3	70X70	HARDENED	CENTRE	100
LCS-4	70X70	HARDENED & SERRATED	FINE ADJ.	100
LCS-5	100X125	HARDENED	CENTRE	150
LCS-6	100X125	HARDENED	FINE ADJ.	150
LCS-7	100X125	HARDENED & SERRATED	FINE ADJ.	150
LCS-8	100X125	HARDENED & SERRATED	ECCENTRIC	150
LCS-9	150X150	CAST IRON	CENTRE	150
LCS-10	150X150	CAST IRON	FINE ADJ.	150
LCS-11	150X150	HARDENED & SERRATED	FINE ADJ.	150
LCS-12	225X150	CAST IRON	CENTRE	200
LCS-13	225X150	CAST IRON	ECCENTRIC	200
LCS-14	225X150	CAST IRON & SERRATED	FINE ADJ.	200
LCS-15	225X150	HARDENED	CENTRE	200
LCS-16	225X150	HARDENED	FINE ADJ.	200
LCS-17	225X150	HARDENED & SERRATED	ECCENTRIC	200
LCS-18	200X200	CAST IRON & SERRATED	CENTRE	200
LCS-19	200X200	CAST IRON	FINE ADJ.	200
LCS-20	200X200	CAST IRON	ECCENTRIC	200
LCS-21	200X200	HARDENED	CENTRE	200
LCS-22	200X200	HARDENED	ECCENTRIC	200
LCS-23	200X200	HARDENED & SERRATED	FINE ADJ.	200
LCS-24	300X200	HARDENED & SERRATED	FINE ADJ.	250
LCS-25	300X200	HARDENED & SERRATED	ECCENTRIC	250
LCS-26	300X250	HARDENED	CENTRE	250
LCS-27	300X250	HARDENED & SERRATED	ECCENTRIC	250
LCS-28	300X300	CAST IRON	CENTRE	250
LCS-29	300X300	CAST IRON	FINE ADJ.	250
LCS-30	300X300	CAST IRON	ECCENTRIC	250
LCS-31	300X300	CAST IRON	Double ECC.	250
LCS-32	300X300	HARDENED	FINE ADJ.	250
LCS-33	300X300	HARDENED	ECCENTRIC	250

**Eccentric : Horizontal & Vertical movement of Dial Indicator**

**\*Price Without Dial Indicator**

**Other Sizes on Request**

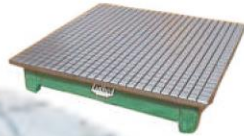
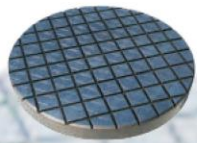


## GRANITE LAPPING PLATES

As Per IS : 7327 - 2003

SIZES (mm)	SIZES (mm)
150 x 100 x 50	400 x 400 x 63
250 x 150 x 50	630 x 400 x 80
300 x 200 x 50	630 x 630 x 80
300 x 300 x 50	

We provide Granite Lapping Plates that are used for accurate hand lapping of material such as nylon, plastics, ceramics and other non-ferrous material. These are available in Square and Rectangular sizes and are made up of black granite. Each of the plates has 3 mm wide and 3 mm deep serrations on working surface equally spaced at 25 mm and have lapped surface finish.



## CAST IRON LAPPING PLATES

As Per IS : 2285 - 2003

ROUND SIZE (mm)	SIZE (mm) L x W
100	200 x 200
150	250 x 250
200	300 x 300
250	400 x 400
300	450 x 450
400	600 x 450
450	600 x 600
600	900 x 600
900	1000 x 1000

We provide our clients with qualitative Cast Iron Lapping Plates that are used for accurate hand lapping of various materials like nylon, plastics, ceramics and other non-ferrous material. These cast iron lapping plates are available in round and rectangular sizes and have 3 mm wide and 3 mm deep serrations on working surface equally spaced at 25 mm. Our iron lapping plates are manufactured using closed grain graded casting as per IS 210: 1993 confirming to Grade FG- 220.

## STRAIGHT EDGES

Engineer's (Steel) Flat Section

As Per IS : 2220 - 1991 (GRADE-I)



SIZES (mm) (L x W x T)
300 x 40 x 8
450 x 40 x 8
600 x 40 x 8
1000 x 50 x 12
1200 x 50 x 12
1500 x 70 x 12
2000 x 70 x 12
2500 x 70 x 15
3000 x 70 x 18
4000 x 100 x 20
5000 x 100 x 20
6000 x 120 x 20

### Product Description

Backed by our five decades of colossal industry experience, we sustain to come up with an impeccable range of Engineer's Steel Straight Edges. These edges are manufactured using superior quality mild & carbon steel in close sync with international quality norms. Offered edges are handy to check-out the desired hardness, straightness and parallelism of the applied subject material. Our clients can avail these steel edges in different patterns, dimensions and specifications. Engineer's Steel Straight Edges, we offer are high in demand among the clients for the below enlisted attributes:

- High precision measurement
- Easy handling
- Simpler operations
- Hassle-free performance

**Bevelled Edge 30% Extra**

\* Provided with wooden safe storage box.

Other Sizes on Request



<b>SIZES (mm)</b> (L x H x W)	<b>SIZES (mm)</b> (L x H x W)
600 x 40 x 8	2000 x 70 x 14
1000 x 45 x 10	2500 x 70 x 14
1200 x 45 x 10	3000 x 70 x 18
1500 x 55 x 14	4000 x 90 x 18

\* Provided with wooden safe storage box.

<b>SIZES (mm)</b> (L x H x W)	<b>SIZES (mm)</b> (L x H x W)
500 x 100 x 40	3500 x 300 x 75
1000 x 100 x 40	4000 x 300 x 75
1500 x 150 x 50	5000 x 300 x 75
2000 x 150 x 50	6000 x 300 x 80
2500 x 220 x 60	7000 x 400 x 80
3000 x 220 x 60	8000 x 400 x 80

We are one of the well-known manufacturers of Cast Iron Straight Edges that are widely used for erection, commissioning and leveling purpose. I- section straight edges is used to checking the surface flatness of large precision area such as surface tables and machine tables etc. Cast iron straight edges are also used for blue matching during hand scrapping operations .I-section straight edges have the wide and parallel working surface for application of spirit level. Luthra I –Section straight Edge are made as per IS 5268:1991 Grade-1.

Luthra Cast Iron I-Section Straight Edges are made of good quality closed grain cast iron strictly as per IS 210:1993 confirming to Grade FG-220.

Castings are stress relieved either by natural ageing or by artificial seasoning.

Hardness 170-220 BHN.

Hand scrapped for surface finish of Grade-1 accuracy.

\* Provided with wooden Protection cover

<b>SIZES (mm)</b> (L x H x W)	<b>SIZES (mm)</b> (mm)
1000 x 110 x 50	3000 x 110 x 50
1500 x 110 x 50	3500 x 110 x 50
2000 x 110 x 50	4000 x 150 x 50
2500 x 110 x 50	5000 x 150 x 50

\* Provided with wooden safe storage box and Protection cover

## ALUMINIUM LIGHT WEIGHT STRAIGHT EDGES (Flat Section)

As Per IS : 2220 - 1991



## C.I. STRAIGHT EDGES

### I - Section (Parallel Type)

As Per IS : 5268 - 1991



## ALUMINIUM LIGHT WEIGHT STRAIGHT EDGES (Parallel Type)

With Steel Re-inforced Working Surfaces  
As Per IS : 2220 - 1991



Other Sizes on Request



**GRANITE SQUARE**  
(Triangular)

SIZE (mm)
300 x 200 x 60
400 x 250 x 60
630 x 400 x 60
1000 x 630 x 100



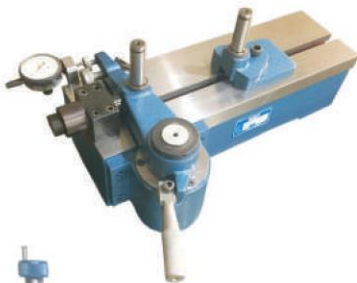
**GRANITE MASTER SQUARE**

SIZE (mm)
300 x 300 x 60
400 x 400 x 60
630 x 630 x 80
1000 x 1000 x 100



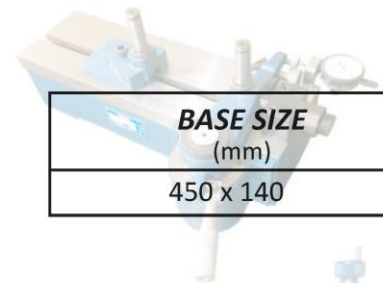
**C.I MASTER SQUARE**

SIZE (mm) L x W x T
300 x 300 x 50
400 x 400 x 60
630 x 630 x 80



**GEAR ROLL TESTER**

Maximum Gear Dia-200mm



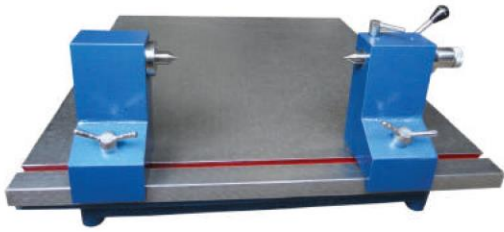
BASE SIZE (mm)
450 x 140



**SURFACE ROUGHNESS TESTER STAND**  
(Granite Base)

SIZE (mm)
400 x 250

Other Sizes on Request



**C.I. SURFACE PLATES  
WITH  
BENCH CENTRE**

As Per IS : 2285-2003 & 5980-1978



**GRANITE SURFACE PLATE  
WITH  
BENCH CENTRE**

As Per IS : 7327-2003 & 5980-1978



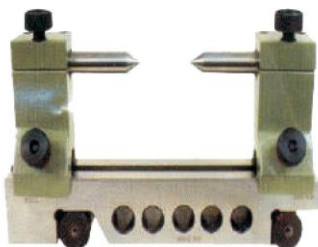
**UNIVERSAL BENCH CENTRE  
VERTICAL CUM HORIZONTAL**

To Be Used on Surface Plate Only



**UNIVERSAL BENCH CENTRE  
VERTICAL CUM HORIZONTAL  
(with Lead Screw & Hand Wheel)**

To Be Used on Surface Plate Only



**SINE CENTRE**

As Per IS : 5979-1981



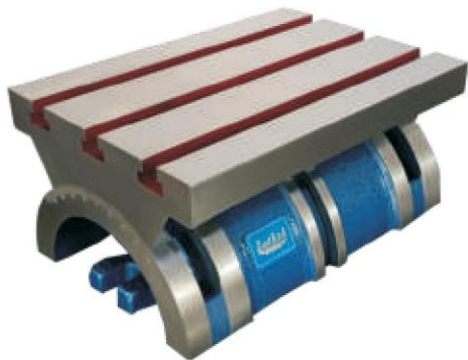
**SINE BAR**

As Per IS : 5359-1983

*Other Sizes on Request*

## **TILTING TABLE**

(Tilting Angle 0°-45°)



## **STEEL PARALLELS**

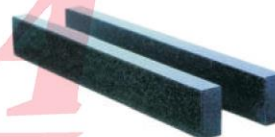
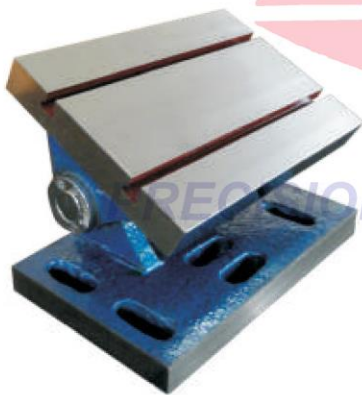
As Per IS : 4241 - 1967



## **GRANITE PARALLELS**

## **SWIVEL ANGLE PLATES**

(Tilting Angle 0°-90°)



## **MAGNETIC V BLOCKS** (Hardened)



## **RADIAL DRILL BOX TABLES**



## **MAGNETIC V-BLOCKS** (Unhardened)



*Other Sizes on Request*

**BOX ANGLE PLATES**

As Per IS : 6232 - 1971

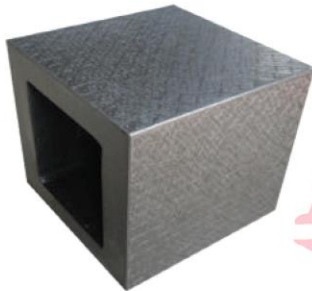


**SLOTTED ANGLE PLATES**

As Per IS : 2554 - 1991

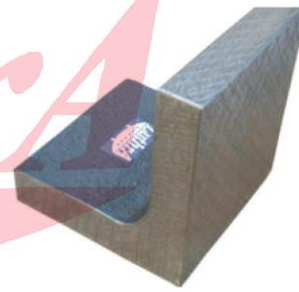


**CAST IRON CUBES**

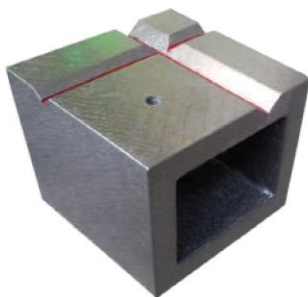


**PLAIN ANGLE PLATES**

As Per IS : 2554 - 1991

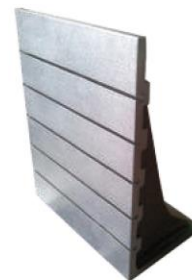


**CAST IRON CUBES WITH 90° VEE-GROOVE**



**T-SLOTTED ANGLE PLATES**

As per IS : 2554 - 1991



**GRANITE CUBES WITH 90° VEE-GROOVE**



**C.I. RIGHT ANGLE**



Other Sizes on Request



**C.I CLAMPING PALLETS**  
(Sub Tables)  
**FOR CNC MACHINES**

As Per IS : 2285-2003



**ID - OD TESTER**



**DIGITAL DISPLAY UNIT**



**FLATNESS TESTER (Digital)**

WITH LVDT PROBE

**PRECISION INSPECTION EQUIPMENTS**



**TEST MANDRELS**

(Hard Chrome Finish)

As Per IS : 2063 - 1962



**MASTER CYLINDERS**

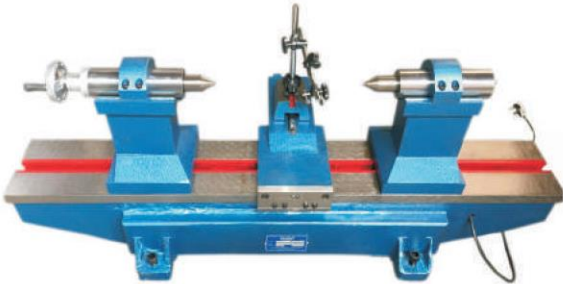
(Cylindrical Square)

(Hard Chrome Finish)

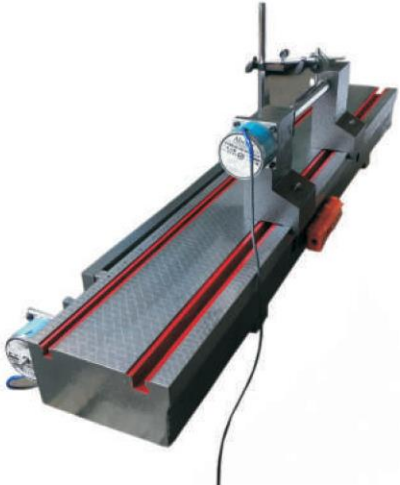
As Per IS : 6952 - 1990

*Other Sizes on Request*

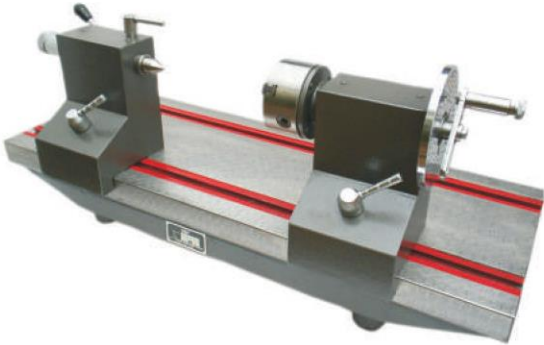
# SPECIAL TYPE BENCH CENTRES



**MOTORIZED STRAIGHTNESS AND MANUAL PERPENDICULARITY CHECKING ATTACHMENT**



**MOTORIZED STRAIGHTNESS AND RUNOUT CHECKING ATTACHMENT**



**BENCH CENTRE WITH CHUCK**



**MANUAL STRAIGHTNESS AND RUNOUT CHECKING ATTACHMENT**



**GRANITE SURFACE PLATE WITH T-SLOTS**



**CAST IRON BED PLATE**



## **V-MACH INTERNATIONAL**

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