

MODULAR JIGS AND FIXTURE

**mcs**

**/ Metal Cutting Systems**

CNC MACHINE TOOLS

SAWING SOLUTIONS

DRILLING,  
FLEX & TURN-MILL

STORAGE  
SOLUTIONS

METAL  
CUTTING FLUID

OIL  
CONSERVATION  
SYSTEMS

MACHINE TOOLS ACCESSORIES

WORK CENTRE SOLUTIONS

CLAMPING

ANTI VIBRATION MOUNTS

# INNOVATIVE SOLUTIONS FOR HIGH PRODUCTIVITY





# WELCOME TO METAL CUTTING SYSTEMS' NEW ENDEAVOUR!!!

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Every thing begins with an idea, and necessity carries that idea until it becomes manifest. This brochure is born out of the need for sharing information, for better communication, the need for stronger presentation, the need for the clear understanding, the need for deeper retention, and need to show we care.

We at Metal Cutting Systems have come forward to satisfy these needs. We at MCS have always strived to innovate and introduce newer concepts to work towards enhanced benefits to our customers in particular and user of Cutting tools/Machine tools by and large.

In consonance with aim, we are proposing a series of informative updates on emerging technologies, modern machining practices, and evolving change in machine design relation to its effect on industries.

We shall try to present on whole gamout of vital information gathered and compiled from renowned Machine & Cutting Tool Technology Magazine devoid of jargon for easy understanding and practical applicability.

**Our mission goes beyond selling and servicing cutting/machine tools. Our Commitment is to assist our customers to succeed in their business.**

**It's the Foundation upon which  
"METAL CUTTING SYSTEMS" is built.**

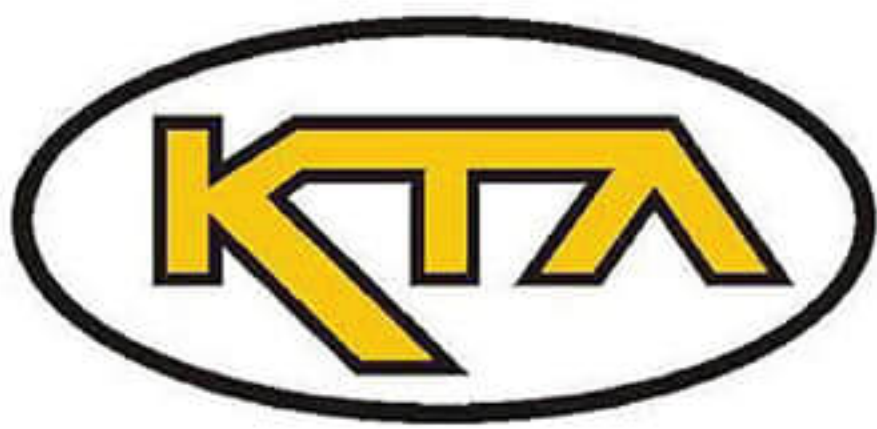
The corner stones of the MCS foundation are Quality, Superior Performance, Productive and Reliable products. Our principles also believe in our philosophy and help us by products and services so clearly outstanding in terms of innovation, quality, delivery and value that we are consistently the supplier of choice.



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## AUTHORISED DEALERS

**Blaser.**  
SWISSLUBE



*Oilmax*



**Innovation**  
Filters Systems

**HAHN+KOLB**  
GROUP



**MEBA**  
sawing solutions.

**nicon**<sup>®</sup>  
PRECISION VICES

**SPHOORTI**  
*Precision Assured*



**GROZ**





When liquid becomes a liquid tool.

## Metalworking Fluids | Cutting Oils



Blasocut | Vasco |  
B-Cool | Grindex



Vascomill | Blasomill

## Grinding



Blasogrind

## MQL



### Industries:

Medical | Electronics | Automotive | Watchmaking | Aerospace | General Machining | Oil & Gas | Fasteners

### Component Materials:

Stainless Steel | Alloy Steel | Titanium | Brass | Inconel

### Tool Material:

Coated Carbide | CBN | PCD | Through Coolant

### Types of Tools:

Drills | End Mills | Taps | Micro-Drills | Indexable Inserts

### Approved MTB



### Sliding Head Stock Type Machine



### Tool Grinding Machine



## Equipment & Cleaners



Jetmix Drum Mounted



Air Skimmer



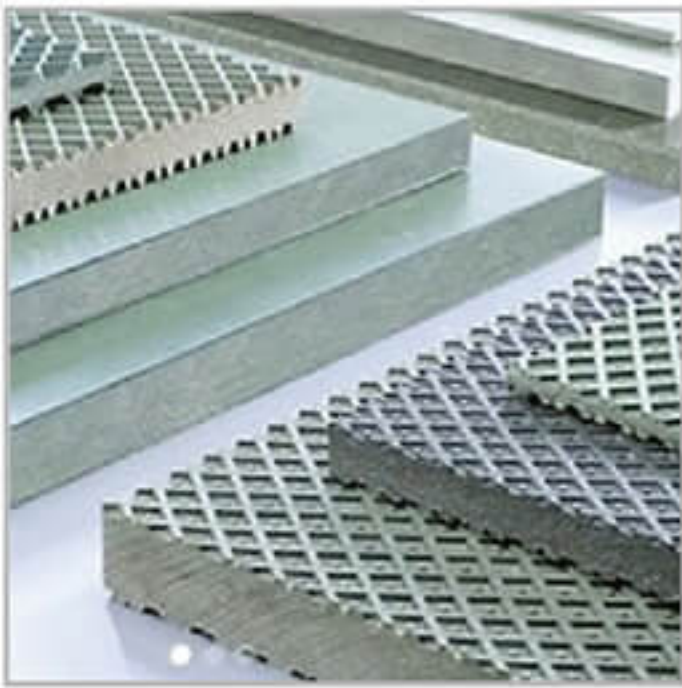
Refractometer





# VIBRATION TECHNOLOGY

Experience the difference with German Technology, Antivibration Solutions



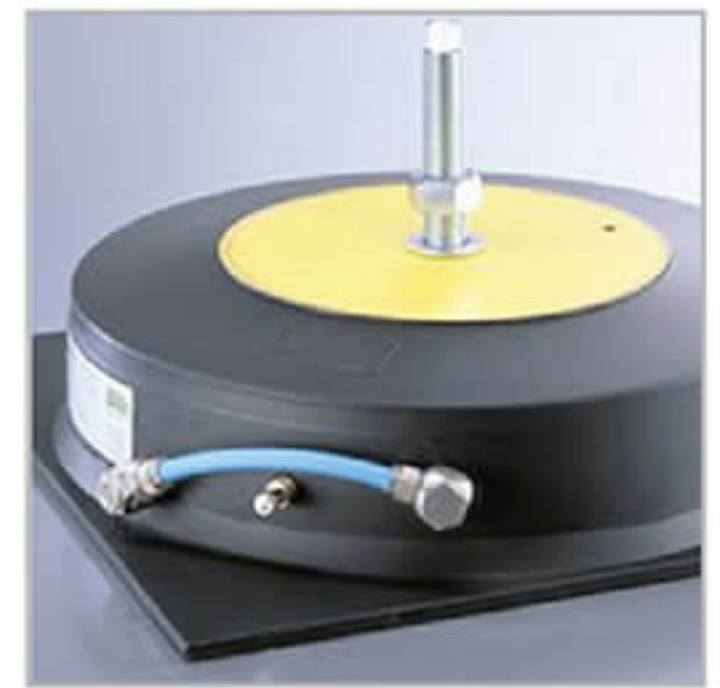
Insulating Plates



Leveling Elements



Precision Leveling Wedges



FAEBI - Rubber Air Springs



BiAir - Membrane Air Springs



AIS - Active Isolation System



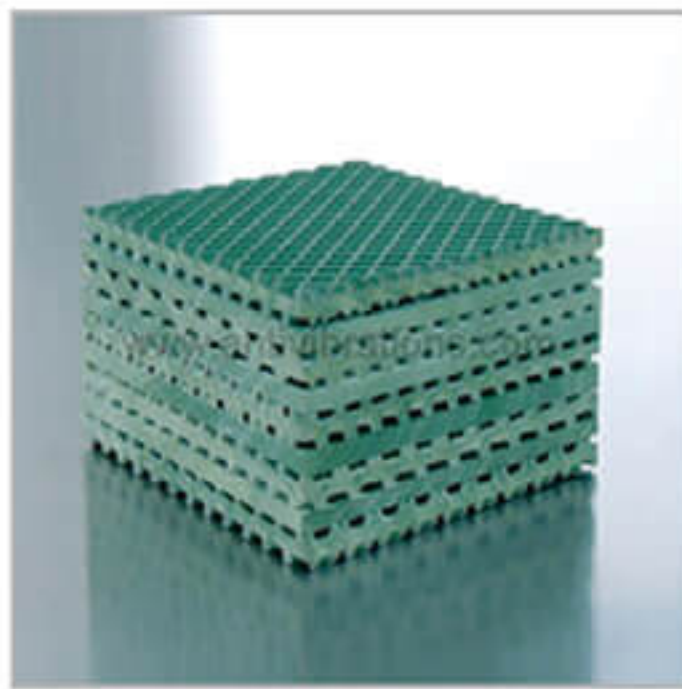
VITAP® - Vibration isolated TableTop Platforms



Vibration Insulated Tables



Isolated Systems for Test Stands



Isolated Machine Foundations



Vibration Measurement and Analysis



Machine Fixator



Neoprene Mounts



Cushy Foot Mounts



Machine Mounts

Anti Vibration Solutions for Press Machines, Milling and Drilling Machines, CNC Turning and Machining Centers, Surface and Cylindrical Grinders, Injection Moulding Machines, High Speed Power Press, Forging Hammers, CMM Machines, Microscopes, Surface and Roundness Testers, Printing and Packing Machines, etc.





COMPREHENSIVE TOOL HOLDING AND TAPPING SOLUTIONS  
FOR CNC AND NON CNC MACHINES.

## Features for KTA Adaptors

- Conertricity Within 0.005 mm
- External Taper AT3 Class
- Core Strength 800 N/mm2
- Surface Hardness 58 / 62 HRC
- Balanced to 6.3 G 15000 RPM

### Tapers

BT MAS 403 | KBT MAS 403 | ISO DIN 2080 | SK (DIN 69871) | HSK-A DIN | HSK-F DIN | CAT ANSI B



Er Collet Chuck

Range ER16, ER20, ER25, ER32, ER40 & ER50 in 70, 100 & 150 GP.



Face Mill Holders

Range Ø16, Ø22, Ø27, Ø32, Ø40.



BT/MAS 403

Capacity - M3 to M12, M8 to M20, M14 to M33, M22 to M48.



Cylindrical Dia. Tapping Chuck

Capacity - M3 to M12, M8 to M20, M14 to M33, M22 to M48.



Quick Change Drilling, Tapping Chuck

Range Ø16, Ø22, Ø27, Ø32, Ø40.



Precision Die & Mould Chuck (DMC)

Anti Vibration  
Extra Long Face  
Mill Adaptors



### Hydraulic Chucks



### Shrink Fit Holder







Slotted Tool Disc & Tool Holders



VDI Tool Discs & Tool Holders



Double Serration Through Coolant VDI Tool Holders



VTP Tool Holders



BMT Tool Holders

Compatible With:

- Diplomatic
- Doosan
- Hardinge
- Hwacheon
- Hyundai Wia
- Samsung
- Victor
- DMG Mori
- Hass

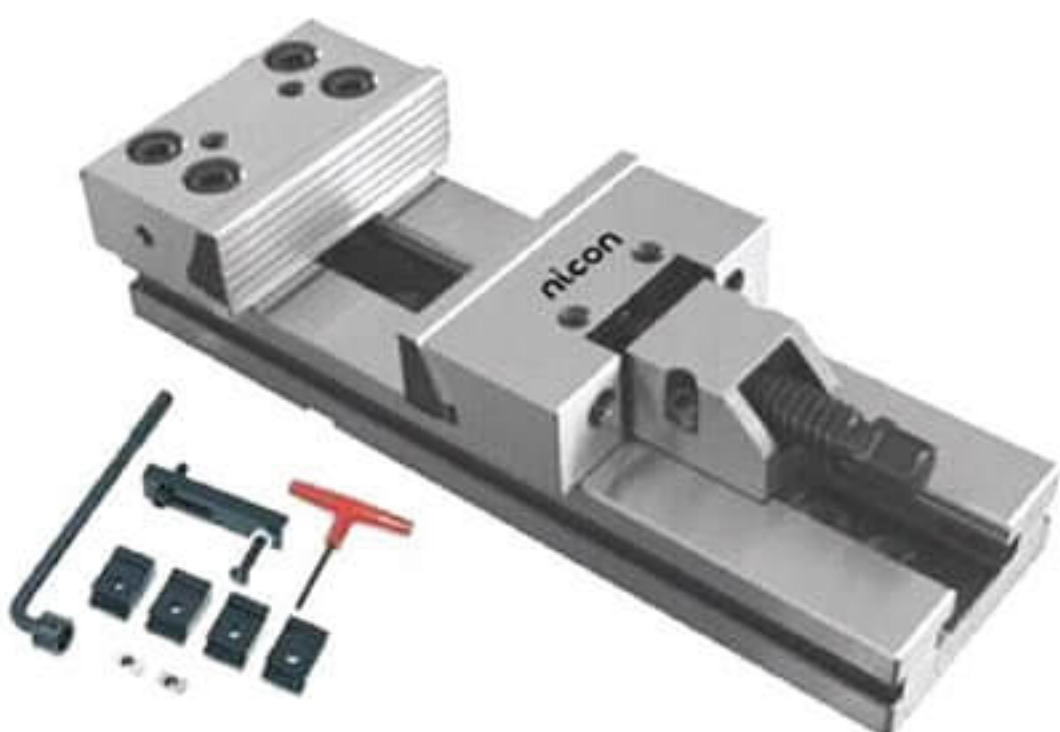
High Pressure Hydraulic Machine Vice



Lock Down Jaw Machine Vice



Precision Modular Vice



Precision Compact Lock Down Jaw Machine Vice







**TISA**  
The Clamping Professionals.



Strap Clamp



U Clamp



Slotted Clamp



Serrated Clamp



Goose Neck Clamp



Flange Hex Nut



Hex Nut



Plain Washer



Spherical Washer



C Washer



T Nut



Rombus T Nut



Clamping Stud



T Bolt

Support Height Plates



Universal Serrated Block



Smooth Sliding Block



Leveling Jacks - Heavy Duty & Light Duty



Clamping Kit for CNC & CMM M/c.



## Clamps



Self Aligning Pad



Pressing Tool/Milling Clamp  
T1-PTMC



Mould Clamp with Heavy  
Support Bolt  
T1-MCH



Quick Clamp  
T1-QC



Down Hold Milling Clamp



Lever Clamp



Screw Jack - Screw jack  
with steel body



Taper Clamp



Type : CES - SJLN



Type : CES - 50 SF



Type : CES - 50 DF



Type : CES - SCL



Type : CES - 70 DF



Type : CES - 90 DF

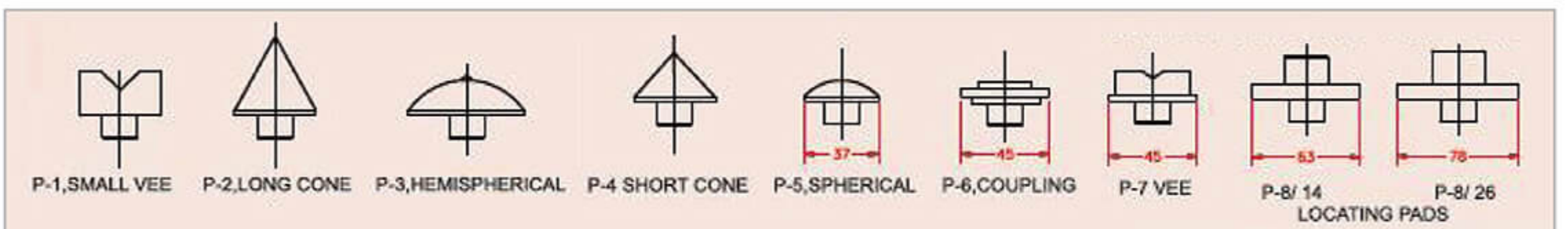


Type : CES - BBLN



Type : CES - STSB

## Pads for Screw Jacks







T-Slot Covers  
made of anodised  
aluminium, upto 2000 mm



3-D Edge Finder  
With light display and  
spring probe ball



3-D Edge Finder  
With dial gauge



Dividing Heads



Absorbent Mats



Torque Wrenches



Hydraulic Jacks



Revolving Center



Dead Center



Keyless Drill Chunk



## Spindle Drawbar Force Gages

- Protect your spindles
- Avoid unscheduled downtime
- Increase Cutter Life
- Accuracy Tracable to NIST





Your Productivity Solution Provider

## Angular Mill Heads



### Universal Angle Mill Head

- Ideal for machining at different angles
- High transmission torque
- Standard Collet Output
- Speed -4000 rpm
- Gear Ration - 1:1

### Dual Output Angle Mill Head

- Performs two machining operations in opposite direction.
- Different tool size can be used
- Flexible Gauge Plane Length
- Maximum Torque: 150 Nm
- Standard Collet Output
- Speed: 4000 rpm
- Gear Ratio: 1:1

## Zero Point Clamping Systems

### Salient Features

- Easily suitable for manual and automatic loading/unloading of machines.
- Upto 90% saving on machine setup time.
- Very versatile. Can be used for an innumerable range of applications on a wide range of machines.
- Reduction of rejection from better control of the loading process.
- Suitable for controlling multiple machines.
- Tremendous saving in trained and costly manpower.
- Big saving in machine cycle time due to reduced till changes.
- High repeatability <math><0.005</math>.



## Steady Rests - Turning Steadies

- Automatic centering to reduce cycle time and increased productivity.
- High centering accuracy.
- Replaceable sealing strips and provision for compressed air connection prevents the entry of coolant and dirt to the body of steady rests.
- All standard steady rests have provision for centralized lubrication systems.



## Bar Feeders







# GROZ

Tools to Trust

## Air Blow Guns



## Bottle Jack



## Grease Bucket



## Grease Gun



## Rotary Barrel Pump



Drum Faucet / Tap



Drum Cradle





# SOLUTIONS FOR OPERATIONAL EXCELLENCE

Reduce Fatigue, Ensure 5s, Optimize Flow, Maximize Productivity

## Work Center Storage



Multipurpose Industrial Cabinet



Modular Shelving



Die and Mould Storage



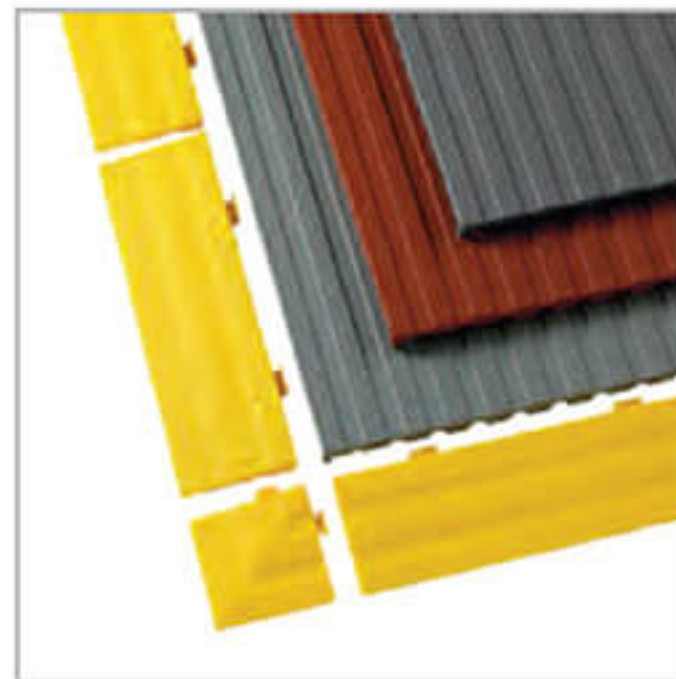
Tool Storage Cabinets



Nc Systems



Pipe & Joint Systems



Non-Slip Matting



NC Tool Trolley

## Work Surfaces



Wooden Workstations



Steel Workstations



Modular Workstations



Anti-static Workstations

## Work Center Logistics

### Paint Process:

All steel parts shall be pre-treated in 7 tanks. Pre-treatment plant giving a Zinc Phosphate coating. After pre-treatment of steel, items shall be coated with Epoxy powder coating of minimum 40 micron thickness, powder coating shall be backed at 180 Degree Celsius.

### Material Specification:

Raw material used for manufacture shall be of prime quality.

CRCA steel and the gauges of CRCA steel sheets are mentioned below:

- Toll Cabinet: 18 Gauges
- Box Unit (Top, Bottom and Sides)
- Front and Rear Support Frame: 14 Gauge
- Drawer Front (DF): 14 Gauge
- Drawer Body: Body & Back: 18 Gauge
- Fix Channel and Railing: 10 Gauge
- Locking Dogs: 14 Gauge
- Sliding Channels: 10 Gauge
- Handles MS formed section





## Sump Sucker

Sump Sucker System gives you a complete solution for all your dirty sludge deposition problems without taking shutdowns.

Surface floating debris, bottom fine chips, bottom sediments and other can quickly processed and recycled.

- No downtime
- Non Consumable System
- Online Tank Cleaning
- Robust and Portable

## Coalescer- Oil Skimmer

Coalescer oil-skimmer lead the Indian market in removing free oils and grease from water or water-based solutions.

### Advantages

- Oil removal - Down to 10 ppm
- Portable (trolley mounted)
- Zero consumables required
- Suitable for removing all types of floating oil/grease
- No operator required



### Applications

For removing floating oil from:

- Component washing machine
- De-grease, pre-degrease solutions in surface coating
- Water based coolants used in machine tool
- Effluent treatment plants
- Waste water treatment plants
- Acid baths



Before



After



Micropure



Magnetic Separators



Crystal Filter



Paper Band Filter



## Tube Skimmer

### Applications

- Degreasing bath
- Coolant
- Cooling Water
- Waste Water
- Rain Water



### Advantages

- Quick ROI owing to extend operational life of emulsions & degreasing baths.
- Low maintenance due to stainless steel build & abrasive resistant ceramic.
- Easy installation for all situations.
- System adjust to the variations of liquid level.

**MEBA**  
sawing solutions.

## Bandsaw Blades



Saw Blades

## Circular Saws



Circular Saws

## Special Solutions



Bandsaw CNC- automatic



Mini Bandsaw





# Oil Conservation Systems

One Time Installation, Life Long Savings

## Product Range

- Centrifugal Oil Cleaner
- Oil Recovery Centrifuge
- Coolant/Sump Cleaner
- Oil Mist Extractor
- Vacuum Dehydration System
- Magnetic/Paper Band Filter
- Filter Cart

## Features

- No Filter Element
- No Replacement Cost
- Improved Product Finish
- Reduced Oil Consumption
- Extended Oil Change Period
- Reduced Machine Downtime
- Reduced Oil Disposal Cost



Centrifugal Oil Cleaner



Coolant Sump Cleaner



Hydraulic Oil Cleaning System



Centrifugal Oil Cleaner (with Chiller)

## Applications

Wire Drawing, Quenching, Cold Forming, Thread Rolling, Bright Bar Mfg., Grinding, Honing, Cutting Oil, Hydraulic Oil, Thermic Fluid, Furnace Oil, Engine Oil.



Oil Recovery Centrifuge (Automatic)



Hydraulic Oil Filter Unit



Filter Cart



Scrap Compactor



Tramp Oil Separator



# WE ARE ALSO DEALING IN BELOW LISTED PRODUCTS.

## Modular Jigs & Fixture, Tooling & Work Holding Components



Square Tooling Column



M/c. Angle Plate



Index Table



Rotary Table



Z-Axes Setter



Parrales



OK Vises



Soft Jaws & Hard Jaws



Super Thin Chunks



Tool Clamping Fixtures





A Name with Magnetic Fame

## MAGNETIC PRODUCTS

Magnetic 'V' Block



Magnetic Carbide 'V' Block



Hardened & Ground 'V' Blocks



Electroperm Magnetic Chucks



Universal Magnetic Base



Magnetic Lifter



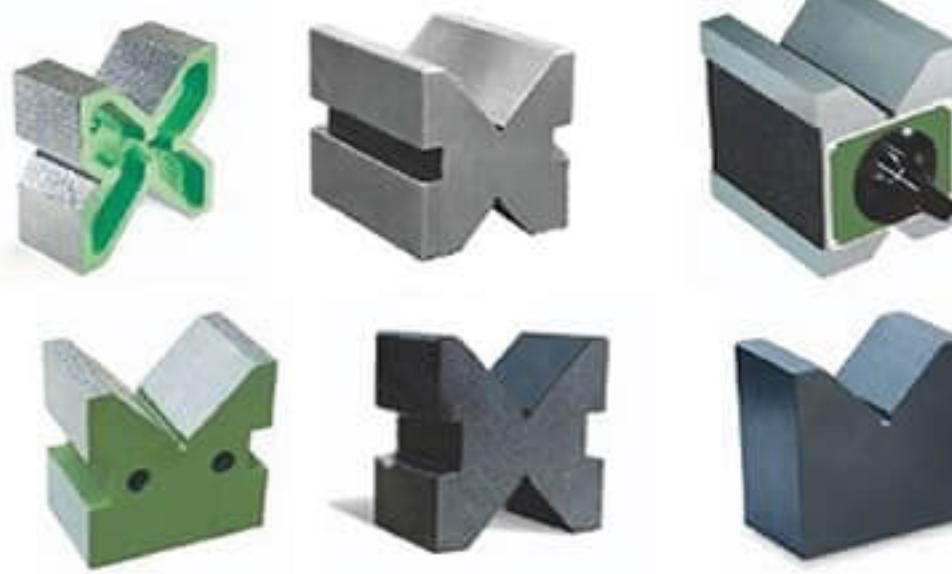


# INSPECTION EQUIPMENTS

Granite Surface Plate



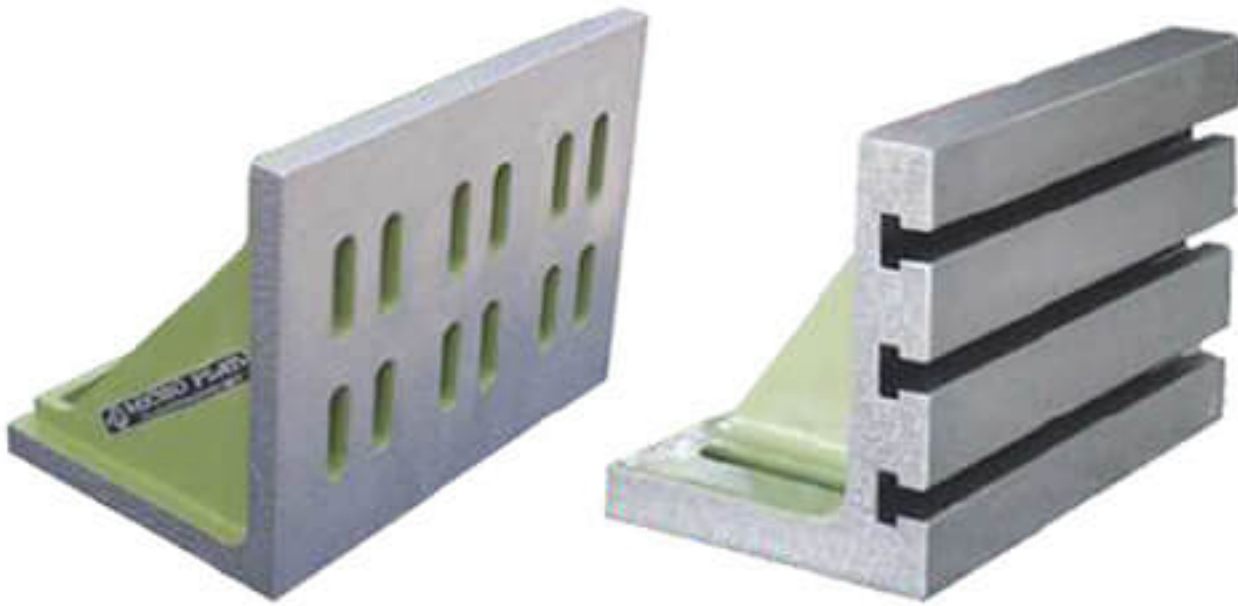
V Blocks Hardened



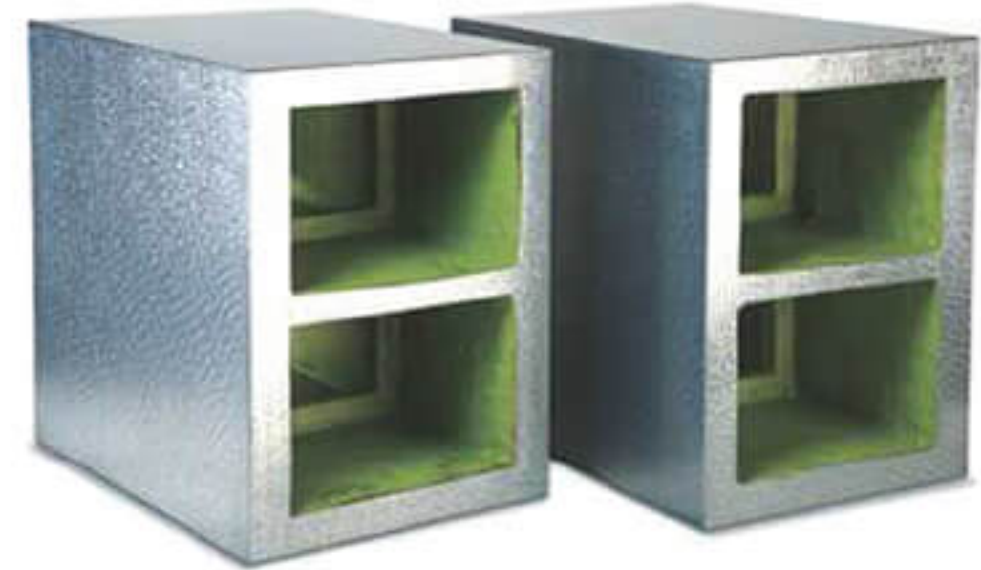
Test Mandrell



Angle Plates (upto 3 mtr height)



Box Parallel



Straight Edge



Bench Center



# MATERIAL HANDLING

Cage Pallets



Pallet Trolley



Drum Trolley





To be a world class solution provider by providing informative updates on emerging technologies.

## Metal Cutting Systems

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TRADITION - SOLUTION - RELIABILITY

MCS

Metal Cutting Systems