

Kameyo Systems Pvt. Ltd.

(An ISO-9001:2015 Certified Company)



KAMEYO
Kameyo Systems Pvt. Ltd.

Product Catalogue

Focus on basics...



Delivering classics...



**XRF/XRD & Spectrographic Specimen Preparation System
& Customized Solutions**

About Us ...

Kameyo Systems Private Limited (Formerly Majesty Home Industries) started its journey with a humble beginning in 1998. During the last 26 years it has become a trusted name in providing high-quality solutions for diverse industrial applications. We design, develop, innovate and build superior quality Sample Preparation Systems for QA Laboratories in Metallurgical, Mining, Cement, Steel, Refractory, Ceramic, Glass and Pharmaceutical Industries.

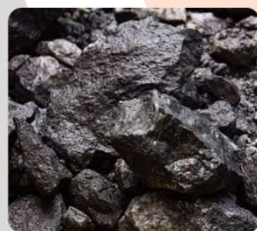
Why Kameyo ...

- **Technical Expertise:** Vast technical expertise of the founder of the company has been a guiding force. Our experienced engineering team has been instrumental in increasing the machine manufacturing capabilities to an elaborate range.
- **Innovation:** The knowledge and skills of our design and manufacturing team is continuously upgraded and encouraged to innovate.
- **Quality Assurance:** Our conscious approach towards the quality and workmanship of the machines has helped us gain confidence and trust of all our esteemed customers.
- **Customized Solutions:** We also provide optimum solutions and design services to build special purpose or customized system to suit specific industry applications.
- **Customer Centric Approach:** The focus has been to determine the nature of our client's needs and to understand their requirements – sometimes related to very specific application.
- **Timely Deliveries:** We value time and are committed to timely deliveries.
- **After Sales Service:** After sales technical service is provided to ensure smooth running and enhanced performance of equipment including AMC and spare parts.

Material Processed ...



Lime Stone



Iron ore



Dolomite



Clinker



Coal



Sponge Iron



Graphite



Boron Carbide

Mission, Vision and Values

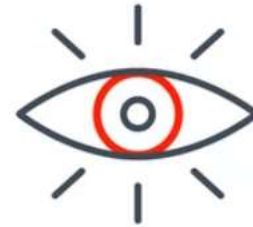


Mission

To innovate and provide high quality special purpose machines to various industries, while being responsible towards society at large.

Vision

To become the foremost Indian company by virtue of providing high quality products and services in QC Laboratory Automation.



Values

Equality, Accountability, Transparency, Trust and Mutual Respect along with Professionalism.

Manufacturing & Quality

- We design and manufacture user friendly machines with aesthetic looks.
- Our machines are warranted for workmanship and manufacturing defects, if any, for a period of minimum one year from date of installation.
- The knowledge and skills of our design and manufacturing team is continuously upgraded to improve quality of machines and services.

Technical Service & Annual Maintenance Contract

Kameyo Systems Pvt. Ltd. provides pre-sales and after sales technical services to ensure smooth running and enhanced performance of it's equipment -

Pre-Sales Technical Services:

- Project design and planning
- Customized solutions

After Sales Technical Services:

- Installation and training to user staff
- Handing over of SOPs
- Technical support thru phone / video call
- Preventive maintenance
- Breakdown maintenance
- Troubleshooting

AMC / CAMC

- Annual maintenance contract
- Comprehensive annual maintenance contract

Hydraulic Pellet Press 40 Tons, Automatic

Product Description

Hydraulic Pellet Press for compaction of homogeneous powder into a firm pellet specimen for elemental analysis. For ease of use the equipment is automatic and fully programmable, making it ideal for repetitive run of pellets to be analyzed on XRF/XRD.



Model: PPF-1040



Technical Specifications

- Application** : preparation of pellets for spectro analysis.
- Working Principle** : Pressure, force
- Maximum Input Size** : Pulverized samples, up-to 45 microns
- Output** : Compacted Pellets
- Feed Material** : Iron ore, Slag, Silicate, Bauxite, Cement Clinker, Limestone, Gypsum, Minerals.
- Force Range** : 5 Tons to 40 Tons - Digitally controlled
- Hydraulic Pump Feed Rate** : 3.2 mm / Sec (During Forward / Compression Stroke)
5.5 mm / Sec (During Return Stroke)
- Hydraulic Pump Capacity** : 4LPM @ 250 Bar
- Hydraulic Pressure** : 250 Bar Max. (Designed Capacity)
- Operating Pressure** : 200 Bar (Digital display of set load and actual load)
- Time of One Compaction Cycle** : 50 Sec. approx. (Programmable)
- Pellet Type** : A, B & C Type
- Power of Hydraulic Pump** : 3HP; Three-way plunger type
- Motor** : 3HP, 3-Phase, 1440 rpm (Standard make)
- Electrical Requirement (to be provided by end user)** : 4 Pole 16A MCB (3 Phase + Neutral with Earth) 415 V A C
- Oil Tank Capacity** : 25 Litres (approx.)
- Hydraulic Oil** : Grade 68 or equivalent

Design Features

- Highly User Friendly, Digital control from Touch Screen HMI, All Parameters are visible on the Screen.
- Automatic: Digital setting of Compression Force – 5 Tons To 40 Tons,
- Digital Setting Of Hold Time – 0 to 300 Seconds
- Digital Setting of Intervals of decompression & return back to Off Position
- Swing-Out cross head; enabling quick loading/unloading of die-sets and fast operation.
- Easy and fast loading and unloading of samples.
- Auto Cycles for each type of pelleting (Aluminium Cup, Ring & Bare Pellet) is provided.
- Separate die set shall be required for Type - A, B & C Pellets.
- Automatic compression, ejection and relief.
- Safety interlock and automatic pump Shut-off safety valve is provided for safe operation
- Operation in manual mode for all types of pelletizing is also possible.
- Floor mounting with solid and heavy base. No need of foundation.

Note: Actual equipment may vary from the image(s) shown here.

Hydraulic Pellet Press 15 & 25 Tons, Automatic

Product Description

Hydraulic Pellet Press for compaction of homogeneous powder into a firm pellet specimen for elemental analysis. For ease of use the equipment is automatic and fully programmable, making it ideal for repetitive run of pellets to be analyzed on XRF/XRD.

Model: PPF-1015

Technical Specifications

- | | |
|---|---|
| 1 Force Range | : 5 Tons to 15 Tons (Digitally Controlled) |
| 2 Hydraulic Ram Speed | : 3.2 mm / Sec (During Forward / Compression Stroke)
5.5 mm / Sec (During Return Stroke) |
| 3 Hydraulic Pump Capacity | : 4LPM @ 250 Bar |
| 4 Hydraulic Pressure | : 250 Bar Max. (Designed capacity) |
| 5 Safe Operating Pressure | : 200 Bar (Digital display of set load & Actual Load) |
| 6 Time of One Cycle | : 50 Sec (approx.) |
| 7 Power of Hydraulic Pump | : 2HP/3HP; Three-way plunger type |
| 8 Power Requirement
(to be provided by end user) | : 4 Pole, 16 A MCB (3-Phase + Neutral with Earthing) |
| 9 Motor | : 415 V, AC Motor, 2HP/3HP, 1440 rpm (Crompton / ABB) |
| 10 Hydraulic Oil | : Grade 68 or Equivalent |

Model: PPF-1025

Technical Specifications

- | | |
|--|---|
| 1 Force Range | : 5 Ton to 25 Tons (Digitally Controlled) |
| 2 Hydraulic Ram Speed | : 3.2 mm / Sec (During Forward / Compression Stroke)
5.5 mm / Sec (During Return Stroke) |
| 3 Hydraulic Pump Capacity | : 4LPM @ 250 Bar |
| 4 Hydraulic Pressure | : 250 Bar Max. (Designed capacity) |
| 5 Safe Operating Pressure | : 200 Bar (Digital display of set load & Actual Load) |
| 6 Time of One Cycle | : 50 Sec (approx.) |
| 7 Motor | : 415 V, AC Motor, 2 HP, 1440 rpm (Crompton / ABB) |
| 8 Power Required
(to be provided by end user) | : 4 Pole, 16 A MCB (3-Phase + Neutral with Earthing) |
| 9 Hydraulic Oil | : Grade 68 or Equivalent |

Design Features

- Highly User Friendly, Digital control from Touch Screen HMI, All Parameters are visible on the Screen.
- Automatic: Digital setting of Compression Force – 5 Tons to 15 Tons / 5 Tons to 25 Tons
- Digital Setting Of Hold Time – 0 to 300 Seconds
- Digital Setting of Intervals of decompression & return back to Off Position
- Swing-Out cross head; enabling quick loading/unloading of die-sets and fast operation.
- Easy and quick loading and unloading of samples.
- Auto Cycles for each type of pelleting (Aluminium Cup, Ring & Bare Pellet) is provided.
- Separate die set shall be required for Type - A, B & C Pellets.
- Automatic compression, ejection and relief.
- Safety interlock and automatic pump Shut-off safety valve is provided for safe operation
- Operation in manual mode for all types of pelletizing is also possible.
- Floor mounting with solid and heavy base. No need of foundation.

Note: Actual equipment may vary from the image(s) shown here.

Hydraulic Pellet Press 40 Tons, Semi-Automatic

Product Description

Hydraulic Pellet Press for compaction of homogeneous powder into a firm pellet specimen for elemental analysis. For ease of use the equipment is automatic and fully programmable, making it ideal for repetitive run of pellets to be analyzed on XRF/XRD.

Model: PPS-1040



Technical Specifications

- | | |
|---------------------------|---|
| 1 Force Range | : 5 Tons to 40 Tons (Motorised with Joystick) |
| 2 Display | : Analogue |
| 3 Hydraulic Ram Speed | : 3.2 mm / Sec (During Forward / Compression Stroke)
5.5 mm / Sec (During Return Stroke) |
| 4 Hydraulic Pump Capacity | : 4LPM @ 250 Bar |
| 5 Hydraulic Pressure | : 250 Bar Max. (Designed Capacity) |
| 6 Safe Operating Pressure | : 200 Bar (Analogue display of set load and actual load) |
| 7 Power Requirement | : 415V, 4 Pole, 16 A MCB (3-Phase + Neutral with Earthing) |
| 8 Motor | : 415 V, AC, 50 Hz, 3-Phase, 3HP, 1440 rpm (Crompton / Siemens) |
| 9 Hydraulic Oil | : Grade 68 or Equivalent |

Design Features

- 1 Highly user friendly, Joystick controlled.
- 2 Analogue display of pressure
- 3 Swing-Out Cross-Head enabling quick loading/unloading of die-set and fast operation.
- 4 Easy and fast loading and un-loading of samples.
- 5 Provision to load dies for all types of pelleting is provided
- 6 Compression, ejection and relief is controlled by joystick only.
- 7 Safety interlock and automatic pump shut-off safety valve is provided for safe operation.
- 8 Floor mounting with solid and heavy base. No need of foundation.

Note: Actual equipment may vary from the image(s) shown here.

Hydraulic Pellet Press (Screw Type) 40 Tons

Product Description

Hydraulic Pellet Press for compaction of homogeneous powder into a firm pellet specimen for elemental analysis. For ease of use the equipment is automatic and fully programmable, making it ideal for repetitive run of pellets to be analyzed on XRF/XRD.



Model: PPH-1040



Technical Specifications

- | | |
|-------------------------------------|---|
| 1 Force Range | : 5 Ton to 40 Tons (Digitally Controlled) |
| 2 Hydraulic Pump Feed Rate | : 3.2 mm / Sec (During Forward / Compression Stroke)
5.5 mm / Sec (During Return Stroke) |
| 3 Hydraulic Pump Capacity | : 4LPM @ 250 Bar |
| 4 Hydraulic Pressure | : 250 Bar Max. (Designed capacity) |
| 5 Safe Operating Pressure | : 200 Bar |
| 6 Operating Force Load | : 40 Tons with a Digital Display of Set Load & Actual Load. |
| 7 Cycle Time through PLC per Pellet | : Max. 5 minutes |
| 8 Power | : AC, 415 V, 3 Phase, 50 Hz |
| 9 Hydraulic Oil | : Grade 68 or Equivalent |

Design Features

- 1 Highly User Friendly, Digital control from Touch Screen HMI, All Parameters are visible on the Screen.
- 2 Automatic: Digital setting of Compression Force – 5 Tons To 40 Tons,
 - Digital Setting Of Hold Time – 0 to 300 Seconds
 - Digital Setting of Intervals of decompression & return back to Off Position
- 3 Swing-Out cross head; Enabling quick loading/unloading of die-set and fast operation.
- 4 Easy and fast loading and unloading of samples.
- 5 Auto Cycles for each type of pelleting (Aluminium Cup, Ring & Bare Pellet) is provided.
- 6 Separate die set shall be required for Type - A, B & C Pellets.
- 7 Automatic compression, ejection and relief.
- 8 Safety interlock and automatic pump Shut-off safety valve is provided for safe operation
- 9 Operation in manual mode for all types of pelletizing is also possible.
- 10 Floor mounting with solid and heavy base. No need of foundation.

Note: Actual equipment may vary from the image(s) shown here.

Automatic Hydraulic Hot Press - 30 Ton

Product Description

A hydraulic hot press is a specialized machine that uses hydraulic pressure to apply heat and pressure onto various materials.

The machine utilizes the static pressure of a liquid, typically oil, to shape, deform, and configure these materials.

The materials to be pressed include fabrics, metals, plastics, rubber, and wood.

Model: PHF-1030



Technical Specifications

- | | |
|---|--|
| 1. Machine Design | : Vertical type |
| 2. Machine Capacity | : 30 Tons |
| 3. Hydraulic Cylinder Type | : Double acting |
| 4. Cylinder Size | : Bore 120 x Rod 80 x 250 mm Stroke |
| 5. No. of Moving Platen | : Single |
| 6. Machine Bed Die Area Size | : 350 mm x 350 mm |
| 7. Moving Platen Size | : 500 mm x 500 mm |
| 8. Hydraulic Pump Type | : Radial Piston Pump |
| 9. Moving Bed Stroke | : 250 mm |
| 10. Nos. of Heating Plates | : Two (Top and Bottom) |
| 11. Maximum Hydraulic Working Pressure | : 150 Bar |
| 12. Heater Type | : Aluminium Cast Heater |
| 13. Heater Wattage | : 700 Watts (each) |
| 14. Heat Control | : Through Thermo Couple |
| 15. Electric Motor | : 2.2 KW / 3.0 HP, 1500 RPM, AC 440 Vol. |
| 16. Control Type | : Automatic / Inching Mode |
| 17. Hydraulic Oil | : Grade 68 |

Note: Actual equipment may vary from the image(s) shown here.

Vibratory Cup Mill / Grinding Mill

(Fixed Speed & Manual Clamping)

Product Description

The vibratory cup mill is loaded with a Bowl set. Grinding is affected by heavy impact and friction. Sample is kept in the annular space between the bowl, the ring and the hammer after covering the top of the bowl. It is clamped on a vibratory platform, which imparts kinetic energy to the ring and the hammer.



Model: VCM-2065



Technical Specifications

Vibratory Cup Mill / Pulverizer

- Equipment** : Grinding Mill (Lab Use) for pulverizing the sample for XRF pellet preparation.
- Working Principal** : Friction and Impact.
- Feed size** : Fine to 8 mm
- Output size** : Up to 200 mesh (depending upon the physical properties of sample and time given for grinding)
- Display** : Digital display, To set time
Time Range: 0-256 minutes.
- Safety Features** : a) Auto locking facility is provided (door closing sensor)
b) Over Load Relay (OLR) for motor safety is provided.
- Motor** : 1.5 KW, 2 HP, 415 V, 50 Hz, 3 Phase Induction motor with 1440 rpm (Crompton/ABB).
- Required Power** : 3 Phase with neutral + earthing, 10 amps, 4 Pole MCB
(to be provided by enduser)
- Operation** : Frequent On/Off or continuously for one hour.
- Mounting** : The unit is floor mounting. Smooth and leveled floor. No foundation required.
- Clamping System** : Unique clamping system is robust and has a long life.

Grinding Bowl Set / Grinding Vessel

- Elements / Components** : 1 Bowl + 1 Hammer + 1 Lid + 1 O-Seal
- Capacity** : 150 ml
- Material of HS Bowl Set** : Hardened Steel / Tungsten Carbide Lined
- Leak Proof Grinding** : The container when clamped with lid becomes 100 % leak proof.



Note: Actual equipment may vary from the image(s) shown here.

Vibratory Cup Mill / Grinding Mill

(Automatic Clamping)

Model: VCM-2066/2068



Technical Specifications

Vibratory Cup Mill

- 1 Equipment : The equipment comes with Imported Pneumatic Bellow for Clamping, which automates clamping of bowl set with a push button.
- 2 Purpose : For grinding geological materials like Rocks, Minerals, Stream Sediments, Clinker and Raw mix, Tablets & Bulk Powder (Pharma), Iron Ore, Iron Oxide, Ferrite, Brittle Metal Alloys, Boron Carbide, Ferro Alloys, Graphite, Coal, Coke etc.
- 3 Working Principle : The vibratory cup mill loaded with a Bowl, a ring and hammer. Grinding is effected by heavy impact and friction. Sample is kept in the annular space between the bowl, the ring and the hammer after covering the top of the bowl. It is clamped with Pneumatic Balloon System on a vibratory platform, which imparts kinetic energy to the ring and the hammer.
- 4 Feed size : Fine to 8 mm
- 5 Output size : Up to 300 mesh, depending upon the time and physical properties of the sample
- 6 Grinding / Cycle Time : Few seconds to 30 Minutes depending upon the physical properties of sample. Our's is a unique design for effectively fast grinding. Low carbon Ferro alloys may take considerable time to obtain desired fineness.
- 7 Display : Digital display, To set time
Time Range: 0-256 minutes.
- 8 Safety Features : a) Door closing sensor is provided.
b) Over Load Relay (OLR) for motor safety is provided.
- 9 Safety Interlock : Provided
- 10 Motor Power : 1.5 kw, 2 HP, 415 V, 3 Phase Induction motor with 1440 RPM – standard make. (3 Phase with neutral + earthing)
- 11 Power Requirement : 3 Phase Neutral + Earthing through 10 amps 4 Pole MCB.
(to be provided by end user)
- 12 Operation : Frequent On/Off or continuously for one hour.
- 13 Mounting : Floor mounting, No foundation required.
- 14 Additional Requirement : Compressed air line with 6 bar Pneumatic pressure or one air compressor set will have to be arranged by user.

Design Features

- 1 100% Safe, Imported Balloon and Pneumatic Controls.
- 2 Fast loading and unloading of bowl set
- 3 Safety interlocking against clamping pressure, bowl set proximity, door closing etc,
- 4 Maintenance free innovative design
- 5 Grinding Bowl sets in Hardened Steel, Up to 400 ML are available.
- 6 Tungsten carbide lined bowls in capacities up to 200 ml are also available.

Note: Model VCM-2068 has additional feature of variable speed (600-1440 RPM, Step less).

Note: Actual equipment may vary from the image(s) shown here.

Kameyo Make Bowl Set



Vibratory Cup Mill / Grinding Mill

(Variable Speed & Manual Clamping)

Product Description

The Vibratory Cup Mill consists of a Bowl, a Hammer and a Ring. Grinding is effected by heavy impact and friction.

The machine is ideal for use in metallurgical, mining, cement, ceramic, glass and pharmaceutical industries / laboratories for grinding of samples for XRF analysis.

Model: VCM-2067



Technical Specifications

Vibratory Cup Mill

- 1 Purpose : Pulverizing for Laboratory use.
- 2 Pulverizing Material : Bauxite, Clinker and Raw mix, Coal, Coke, Concrete, Corundum, Geological ores, Glass, Granite, Graphite, Limestone, Iron ore, Quartz, Silicates, Slag, Ferro alloys.
- 3 Working Principal : Friction and Impact. The vibratory cup mill is loaded with a Bowl set. Grinding is affected by heavy impact and friction. Sample is kept in the annular space between the bowl, the ring and the hammer after covering the top of the bowl. It is clamped on a vibratory platform, which imparts kinetic energy to the ring and the hammer.
- 4 Feed size : Fine to 8 mm
- 5 Output size : Up to 300 mesh, depending upon the time given for crushing/milling.
- 6 Variable Speed : Step Less, Range: 600 rpm to 1440 rpm, just by rotating a knob
- 7 Display : Digital display, To set time, Time Range: 0-256 minutes.
- 8 Safety Features : a) Door closing sensor is provided.
b) Over Load Relay (OLR) for motor safety is provided.
- 9 Motor : 1.5 KW, 2 HP, 415 V, 50 Hz, 3 Phase Induction motor with 1440 rpm (Crompton/ABB).
- 10 Required Power : 3 Phase with neutral + earthing, 10 amps, 4 Pole MCB
(to be provided by end user)
- 11 Operation : Frequent On/Off or continuously for one hour.
- 12 Mounting : The unit is floor mounting on leveled floor. No foundation required.

Grinding Bowl Set

- 1 Elements / Components : 1 each Bowl, Ring, Hammer, Lid and O-Seal
- 2 Capacity : 50 ml, 100 ml, 150 ml, 200 ml, 250 ml and 400 ml, (ring not required in 50 ml bowl)
- 3 Material of Construction : Hardened Steel / Tungsten Carbide Lined
- 4 Clamping : Quick and easy, no chance of slippage of bowl during run.
- 5 Leak Proof Grinding : The container when clamped with lid becomes 100 % leak proof.

Note: Actual equipment may vary from the image(s) shown here.

Vibratory Cup Mill / Grinding Mill

3 Grinding Bowls (simultaneous) on one platform

Product Description

The Vibratory Cup Mill consists of a Bowl, a Hammer and a Ring. Grinding is effected by heavy impact and friction.

For samples that are sensitive to contamination in addition to various types of samples to be ground and analyzed simultaneously, we provide 2/3/4/5 bowl sets on one platform.

Model: M-VCM-3065



Technical Specifications

Vibratory Cup Mill

- 1 Purpose : Pulverising for Laboratory use.
- 2 Pulverising Material : Bauxite, Clinker and Raw mix, Coal, Coke, Concrete, Corundum, Geological ores, Glass, Granite, Graphite, Limestone, Iron ore, Quartz, Silicates, Slag, Ferro alloys.
- 3 Working Principal : Friction and Impact. The vibratory cup mill is loaded with a Bowl set. Grinding is affected by heavy impact and friction. Sample is kept in the annular space between the bowl, the ring and the hammer after covering the top of the bowl. It is clamped on a vibratory platform, which imparts kinetic energy to the ring and the hammer.
- 4 Feed size : Fine to 5 mm
- 5 Output size : Up to 300 mesh, depending upon the time given for crushing/milling.
- 6 Clamping : Manual, all bowls are clamped by one action, which is 100% safe.
- 7 Display : Digital display, To set time
Time Range: 0-256 minutes.
- 8 Safety Features : a) Door closing sensor is provided.
b) Over Load Relay (OLR) for motor safety is provided.
- 9 Motor : 1.5 KW, 2 HP, 415 V, 50 Hz, 3 Phase Induction motor with 1440 rpm (Crompton/ABB).
- 10 Required Power : 3 Phase with neutral + earthing, 10 amps, 4 Pole MCB
(to be provided by end user)
- 11 Operation : Frequent On/Off or continuously for one hour.
- 12 Mounting : The unit is floor mounting on leveled floor. No foundation required.

Grinding Bowl Set

- 1 Elements / Components : 1 each Bowl, Ring, Hammer, Lid and O-Seal
- 2 Capacity : 50 ml, 100 ml, 150 ml, 200 ml, 250 ml and 400 ml, (ring not required in 50 ml bowl)
- 3 Material of Construction : Hardened Steel / Tungsten Carbide Lined
- 4 Clamping : Quick and easy, no chance of slippage of bowl during run.
- 5 Leak Proof Grinding : The container when clamped with lid becomes 100 % leak proof.

Note: Supplied equipment may vary from the image(s) shown here.

Vibratory Cup Mill / Grinding Mill

4 Grinding Bowls (simultaneous) on one platform

Product Description

The Vibratory Cup Mill consists of a Bowl, a Hammer and a Ring. Grinding is effected by heavy impact and friction.

For samples that are sensitive to contamination in addition to various types of samples to be ground and analyzed simultaneously, we provide 2/3/4/5 bowl sets on one platform.

Model: M-VCM-4065

In this model 4 grinding bowls of 100 ml capacity can be loaded simultaneously.



Technical Specifications

Vibratory Cup Mill

- 1 Purpose : Pulverising for Laboratory use.
- 2 Pulverising Material : Bauxite, Clinker, Coal, Coke, Concrete, Corundum, Geological ores, Glass, Granite, Graphite, Limestone, Iron ore, Quartz, Silicates, Slag, Ferro alloys.
- 3 Working Principal : Friction and Impact. The vibratory cup mill is loaded with a Bowl set. Grinding is affected by heavy impact and friction. Sample is kept in the annular space between the bowl, the ring and the hammer after covering the top of the bowl. It is clamped on a vibratory platform, which imparts kinetic energy to the ring and the hammer.
- 4 Feed size : Fine to 5 mm
- 5 Output size : Up to 300 mesh, depending upon the time given for crushing/milling.
- 6 Clamping : Manual, all bowls are clamped by one action, which is 100% safe.
- 7 Variable Speed : Step Less, Range: 600 rpm to 1440 rpm, just by rotating a knob
- 8 Display : Digital display, To set time, Time Range: 0-256 minutes.
- 9 Safety Features : a) Door closing sensor is provided.
b) Over Load Relay (OLR) for motor safety is provided.
- 10 Motor : 1.5 KW, 2 HP, 415 V, 50 Hz, 3 Phase Induction motor with 1440 rpm (Crompton/ABB).
- 11 Required Power : 3 Phase with neutral + earthing, 10 amps, 4 Pole MCB
(to be provided by end user)
- 12 Operation : Frequent On/Off or continuously for one hour.
- 13 Mounting : The unit is floor mounting on leveled floor. No foundation required.

Grinding Bowl Set

- 1 Elements / Components : 1 each Bowl, Ring, Hammer, Lid and O-Seal
- 2 Capacity : 50 ml, 100 ml, 150 ml, 200 ml, 250 ml and 400 ml, (ring not required in 50 ml bowl)
- 3 Material of Construction : Hardened Steel / Tungsten Carbide Lined
- 4 Clamping : Quick and easy, no chance of slippage of bowl during run.
- 5 Leak Proof Grinding : The container when clamped with lid becomes 100 % leak proof.

Note: Supplied equipment may vary from the image(s) shown here.

Planetary Ball Mill

Model: PBM4-150

Product Description

A Planetary Ball Mill consists of at least one grinding vessel which is arranged eccentrically on a sun Wheel / Rotating table.

Working Principle

When the sun wheel rotates about its axis, the vessel follows planetary motion i.e. it rotates about its own axis as well as about the axis of sun wheel. The direction of rotation of vessel is opposite to that of the sun wheel, this imparts very high energy to the balls to collide with one another during high speed movements causing very fast grinding and mixing of material(s) in the vessels to a very high fineness up to 1 Micron depending upon the physical characteristics of material, number and size of balls, time and speed selection.



Bench-top Model



Technical Specifications

- | | |
|--|--|
| 1 Type of Ball Mill | : Planetary |
| 2 Purpose / Capacity | : The Planetary type ball mill is suitable for grinding substances including weakened fibers into powder form in both dry and wet conditions. It consists of 4 Jars of 150 ml capacity. |
| 3 Brief Description | : The Planetary Ball Mill shall be consisting of four Grinding Vessel which are arranged eccentrically on a sun Disc. When the Sun disc rotates about its axis, the vessel follows planetary motion about the center of sun disc, the direction of rotation of vessel is opposite to that of the sun wheel, this imparts very high energy to the balls to collide with one another during high speed moments causing very fast grinding and mixing of material(s) in the vessels to a very high fineness up to 01 Micron depending on the Physical Characteristics of material, number & Size of balls and the time and speed selection. |
| 4 Maximum Input Size | : Few microns to 5 mm |
| 5 Final fineness | : 0.5 micron |
| 6 No. of Bowl Set / Jar | : Four |
| 7 Bowl Set / Jar Capacity | : 150 ml |
| 8 Bowl Set / Jar & Lid Material | : Hardened Steel |
| 9 Ball Material | : Hardened Steel |
| 10 Ball Diameter | : 5mm, 10mm, 15 mm and 20 mm (user to specify) |
| 11 No. of Balls per Jar | : 5mm - 10 nos., 10mm - 5 nos., 15 mm - 4 nos., 20 mm - 3 nos. (user to specify) |
| 12 R.P.M. of Table | : Variable 150 - 500 |
| 13 Variability Control | : Microprocessor controlled , continuous |
| 14 Table Speed Indicator | : Digital |
| 15 Parameter's Display | : Digital, Touch screen |
| 16 Time Range | : 0-999 min |
| 17 Forward & Reverse Selection | : Yes |
| 18 Motor & Drive | : Standard Make-2HP, AC-3 Phase 415 V, 1415 r.p.m.; with Microprocessor based VFD. |

Note: Supplied equipment may vary from the image(s) shown here.

Planetary Ball Mill

Product Description

A Planetary Ball Mill consists of at least one grinding vessel which is arranged eccentrically on a sun Wheel / Rotating table.

Working Principle

When the sun wheel rotates about its axis, the vessel follows planetary motion i.e. it rotates about its own axis as well as about the axis of sun wheel. The direction of rotation of vessel is opposite to that of the sun wheel, this imparts very high energy to the balls to collide with one another during high speed movements causing very fast grinding and mixing of material(s) in the vessels to a very high fineness up to 1 Micron depending upon the physical characteristics of material, number and size of balls, time and speed selection.

Model: PBM4-500

Technical Specifications

- 1 **Type of Ball Mill** : Planetary
- 2 **Number of Jars & Capacity** : Planetary ball mill consisting of Four jar holders in 500 ml Capacity. It is possible to use different material jars and balls such as Tungsten Carbide, Zirconium oxide and Stainless Steel, Agate, Hardened Steel etc.
- 3 **Feed Material Size & Type** : Suitable for soft, hard, brittle, fibrous and rocky material either dry or wet with feed particle size less than 10 mm
- 4 **Brief Description** : The offered Planetary Ball Mill shall be consisting of four Grinding Vessel which are arranged eccentrically on a sun Disc. When the Sun disc rotates about its axis, the vessel follows planetary motion about the center of sun disc, the direction of rotation of vessel is opposite to that of the sun wheel, this imparts very high energy to the balls to collide with one another during high speed moments causing very fast grinding and mixing of material(s) in the vessels to a very high fineness up to 01 micron depending on the physical characteristics of material, number & size of balls and the time and speed selection.
- 5 **Final fineness** : Less than 1 μm for normal and for colloidal grinding < 0.1 μm
- 6 **Speed Ratio with reference to Main disc & Jar** : 1: -2.3
- 7 **Wheel Rotation Speed** : Having rotational speed of main disk from 50-400 rpm
- 8 **Jar Speed** : From 115 to 920 rpm
- 9 **Effective Diameter** : ≥ 240 mm
- 10 **Operating Centrifugal acceleration** : ≥ 30 g
- 11 **Setting Grinding Time** : Digital Type, 00:00:01 – 99:59:59 with interval and pause facility.
- 12 **Grinding Conditions** : Both dry and wet grinding facility available
- 13 **Operation Time** : Machine can run uninterruptedly for more than 100 hrs. with appropriate Offtime in periodic interval.
- 14 **Bowl Set / Jar & Lid Material** : Hardened Steel
- 15 **Ball Material** : Hardened Steel
- 16 **Variability Control** : Microprocessor controlled, continuous
- 17 **Table Speed Indicator** : Digital
- 18 **Parameter's Display** : Digital, Touch screen
- 19 **Forward & Reverse Selection** : Yes
- 20 **Motor & Drive** : Standard Make-2HP, AC-3 Phase 415 V, 1415 r.p.m.; with Microprocessor based VFD.
- 21 **Power Supply** : 440 V, 50 Hz
- 22 **Safety Features** : Door switch for machine. Current overload safety for motor protection.
- 23 **Type of Mounting** : Capable of operating on a platform (Floor mountable)

Note: Supplied equipment may vary from the image(s) shown here.

Laboratory Jaw Crusher - Automatic

Models: MJC-050 / 075 / 100 / 150 / 200

Product Description

An equipment that is used for Size Reduction or Crushing of the rocks or ores obtained through quarrying/explosion in the Mining and Construction sectors.

KAMEYO make Jaw Crushers are easy to use and have been designed to have a long life and trouble-free performance.



Technical Specifications

Purpose	: Crushing of raw & oxide material along with-draw true representative sample from the bulk sample (2% to 25%)
Capacity	: Laboratory and floor mounted
Crushing Material	: Iron ore, Lime Stone, Dolomite, Cole, Coke breeze & Ferro alloys etc.
Facility within System	: Primary Crushing, Multistage Sample Drawl System, Secondary & Tertiary Crushing, Discard Material handling System. Well established rinsing system to avoid material contamination, thru compressed air. (Sample distribution is synchronised with the Jaw Gap which helps in automatic sample distribution between the Bin & the Analytical sample collection tray.)
Material feed size	: 50/75/100/150/200 mm
Final Fineness	: In the range of 3 mm (Average Size)
Material of Crushing Tool	: Mn Steel or Tungsten Carbide Lined
Jaw Width	: 160 mm
Gap width setting	: 3 mm to 70 mm; Digitally adjustable Jaw blade gap
Lubrication	: Centralised / Sealed Moving Joints
Removal of jam material	: Digitalised, removal of jammed material without disturbing the ongoing process by pressing push button.
Safety	: Vibratory feed hopper, overload relays and all safety measures, easy exchange of liners and blades.
Controller	: Programmable controller

Note: Supplied equipment may vary from the image(s) shown here.

Laboratory Jaw Crusher – Manual Gap Adjustment

Product Description

An equipment that is used for Size Reduction or Crushing of the rocks or ores obtained through quarrying/explosion in the Mining and Construction sectors.

KAMEYO make Jaw Crushers are easy to use and have been designed to have a long life and trouble-free performance.

Models: MJC-050/075/100/150/200



Digital reading showing actual gap between jaws in millimeter

General Information

- Purpose** : To crush lumps of Rocks, Minerals, Iron ores, Iron Oxides, Ferrite, Boron Carbides, Bauxite, Concrete, Geological ores, Quartz, Glass, Silicate, Cement Clinkers, Limestone, Dolomite, Coal & Coke Manganese ore etc., having medium to substantially high hardness.
- Brief Description** : The Jaw Crusher consists of a moving and a fixed jaw. The motion of moving jaw is a combination of oscillatory and linear motion, which crushes the lumps into chips suitable for pulverizing in a pulveriser like Vibratory Cup Mill. The fixed jaw can be adjusted to obtain a desired gap up to 3 mm.
- Innovative Design** : Kameyo Jaw Crusher is very much different from those available in the market. This is our own unique design which is a result of our research-based efforts. Jamming of material is almost not possible in our Jaw Crusher.
- Sample Collection** : Further, we have incorporated a sealed Chute channel which guides the crushed material to the delivery point which is provided out side of the machine body, that prevents dust accumulation in internal parts of machine, thereby increasing life of machine's moving parts by reducing abrasive wear and tear of the joints.
- Digital Display** : The gap between jaws is displayed digitally.
- Reuse of Jaw Liner** : Thickness of Jaw Liner is kept slightly higher, which can be ground after considerable wear and tear, having grinding allowance. The jaw liner can be refreshed even after 1 year of usage.
- Robust Gap Adjustment** : The Jaw gap adjustment mechanism is also made robust. The adjusting screw is provided with a heavy thrust bearing and one ball bearing, which gives a trouble-free long life to the mechanism.
- Dynamically Sealed Chamber** : The Main shaft is provided with four Heavy Spherical Roller Bearings, which are dynamically sealed and the bearing chamber is filled with lubricating oil.
- Positive Crushing Impact** : Jaws are cast in single piece steel. Weight of moving jaw is approx. 32 Kg, which gives high inertia in combination of Double Fly wheels that imparts a fail-safe positive crushing impact without jamming of material.
- Long Life** : Our crusher is robustly crafted to have a long performance life of 10-15 years.

Design Features

- Feed Size** : ≤ 50/75/100/150/200 mm
- Output Size** : 3 mm to 15 mm
- Material of Crushing Liner** : Mn Steel (Hardened Steel - D2 Grade) or Tungsten Carbide
- Jaw Width** : 60/85/110/160/210 mm (Explained on previous page)
- Motor** : 5 HP, 3.73 KW, 1440 rpm, 3 Phase

Note: Supplied equipment may vary from the image(s) shown here.

Laboratory Jaw Crusher

Technical Specifications

Model: MJC-050

1 Feed Size	: Up to 50 mm
2 Final Fineness	: Average size 3 to 5 mm
3 Hopper Size	: 180 x 180 mm
4 Material Crushing Liner	: Manganese Steel (Tempered Steel, Grade: D2)
5 Rated Power	: 2.2 KW
6 Power Supply	: 440 Volts 50 Hz
7 Jaw Plate Width	: 60 mm
8 Mouth Opening	: 60 x 60 mm
9 Main Motor	: 415 V, 3 HP, 50 Hz, 1440 rpm, 3 Phase, Neutral + Earthing

Model: MJC-075

1 Feed Size	: ≤ 75 mm
2 Final Fineness	: Average size 3 to 5 mm
3 Hopper Size	: 180 x 180 mm
4 Material Crushing Liner	: Manganese Steel (Tempered Steel, Grade: D2)
5 Rated Power	: 2.2 KW
6 Power Supply	: 440 Volts 50 Hz
7 Jaw Plate Width	: 85 mm
8 Mouth Opening	: 85 x 85 mm
9 Main Motor	: 415 V, 3 HP, 50 Hz, 1440 rpm, 3 Phase, Neutral + Earthing

Model: MJC-100

1 Feed Size	: ≤ 100 mm
2 Final Fineness	: Average size 3 to 5 mm
3 Hopper Size	: 180 x 180 mm
4 Material Crushing Liner	: Manganese Steel (Tempered Steel, Grade: D2)
5 Rated Power	: 2.2 KW
6 Power Supply	: 440 Volts 50 Hz
7 Jaw Plate Width	: 110 mm
8 Mouth Opening	: 110 x 110 mm
9 Main Motor	: 415 V, 3 HP, 50 Hz, 1440 rpm, 3 Phase, Neutral + Earthing

Model: MJC-150

1 Feed Size	: ≤ 150 mm
2 Final Fineness	: Average size 3 to 5 mm
3 Hopper Size	: 180 x 180 mm
4 Material Crushing Liner	: Manganese Steel (Tempered Steel, Grade: D2)
5 Rated Power	: 2.2 KW
6 Power Supply	: 440 Volts 50 Hz
7 Jaw Plate Width	: 160 mm
8 Mouth Opening	: 150 x 150 mm
9 Main Motor	: 415 V, 3 HP, 50 Hz, 1440 rpm, 3 Phase, Neutral + Earthing

Model: MJC-200

1 Feed Size	: ≤ 200 mm
2 Final Fineness	: Average size 3 to 5 mm
3 Hopper Size	: 210 x 210 mm
4 Material Crushing Liner	: Manganese Steel (Tempered Steel, Grade: D2)
5 Rated Power	: 2.2 KW
6 Power Supply	: 440 Volts 50 Hz
7 Jaw Plate Width	: 210 mm
8 Mouth Opening	: 200 x 200 mm
9 Main Motor	: 415 V, 3 HP, 50 Hz, 1440 rpm, 3 Phase, Neutral + Earthing

Note: Supplied equipment may vary from the image(s) shown here.

Spectrographic Sample Cut-off Machine

Product Description

A spectrographic sample cut-off machine is an equipment used to cut precise samples from materials like metals, glass, and concrete to create samples with specific shapes and dimensions for testing, inspection, and analysis.

Brief Description

- 1 In this Kameyo Make model the sample (standard conical shaped sample) is clamped into a tapered rotating chuck via an adopter instead of direct insertion. This ensures obstruction free ejection of the cut sample. Use of adopter facilitates different sizes of samples to be cut down with the same chuck.
- 2 The clamping is done pneumatically. A revolving cut-off wheel is horizontally fed against the rotating sample very conveniently through a swing-and-spin mechanism. An air nozzle is provided near the cutting zone which effectively cools the sample while cutting. A dust collector is also provided for extracting dust.
- 3 The cut sample falls into the coolant tank through a chute and collected for analysis from there.

Model: SCS-0545 Semi-Automatic



Technical Specifications

- | | |
|-----------------------------|--|
| 1 Purpose | : For rapid cutting off spectroscopic Moulded samples (Conical Shape $\Phi 50\text{mm}$ x $\Phi 40\text{mm}$ x 75mm height) Standard Size, without affecting the metallurgical properties. |
| 2 Sample Size | : $\Phi 50\text{mm}$ x $\Phi 40\text{mm}$ x 75mm height (Conical Shape) (User may specify) |
| 3 RPM Of Cutting Wheel | : 2880 rpm (approx.) |
| 4 Cutter Size | : 400mm (OD) x 3mm (Thk) x 25.4mm (Bore) |
| 5 Motors
(Standard make) | : - Cutter Motor : 2880 rpm, 15 HP
- Blower Motor: 2880 rpm, 2 HP
- Chuck Motor (Geared) : 2 HP |
| 6 Cooling | : Air Cooling through high speed nozzle, thereby no water contamination. |
| 7 Dust Suction System | : To provide dust extraction system to eliminate dust deposition inside the machine cabinet. |
| 8 Isolation of Cutting Zone | : The cutting zone is isolated from rest of the machine to avoid dust from accumulating to the internal machine parts. |
| 9 Safety | : To ensure the safety of operator, all motors and cutting zone are covered. |
| 10 Indicator | : Light indicator is also provided for safety of operation. |
| 11 Clamping | : Automatic Clamping and Ejection |
| 12 Operation | : Can be operated with frequent on-off or continuously with overload protection. |
| 13 Mounting | : The unit is floor mounted and free from vibration. |

Note: Supplied equipment may vary from the image(s) shown here.

Spectrographic Sample Polishing Machine

Single-Disc

Model: SPM-1015 / 1016

Product Description

This Vibration Free Machine is developed to get flat and parallel finish on the samples for high precision Spectro-Analysis.

The blower casing and the dust collector are made integral with the main body which makes the machine compact and vibration resistant. The body of the Machine is made in a Single thick sheet, avoiding use of steel sections, which further reduces the vibration. The base of machine is made heavy, which eliminates the need for foundation.

The rotating disc is dynamically balanced and mounted directly on the motor shaft instead of using belt, this ensures uniform and noise-less operation.

The rotating disc, which is perforated, holds the polishing paper by air suction on the disc plate which rotates at a specific speed. The air suction not only holds the paper evenly throughout the surface but also keeps it cool and collects dust from the polishing area.



Technical Specifications

- Diameter of disc** : 350 mm (Standard size)
- Bore Diameter of disc** : 40 mm
- Speed of disc** : 2880 RPM (Standard)
- Polish Paper Disk Size** : Dia 350 x Bore 40 mm (standard size)
- Main Motor** : 2 HP/415V/50Hz/3Φ/2880 RPM, AC Supply, T.E.F.C. Type, Standard make
- Air Suction Motor** : 1 HP/415V/50Hz/3Φ/2880 RPM, AC Supply, T.E.F.C. Type, Standard make
- Starter & Emergency Switch** : Push Button type with overload preventer, of standard make.
- Disc Plate** : Made of Steel with Air gripping arrangement of polishing paper and locking system, to keep the polishing paper in position. (Dia- 350 mm; Bore: 40mm)
- Disc Cover** : Fully covered with a space open for polishing the sample. The Gap between Polishing Disc and sample support is kept 2 mm. This arrangement makes the air suction more efficient and also checks the sample from entering the suction system. However the suction pipe is provided with a grid to hold any thin sample from hitting the rotating impeller.
- Built-in Brake System** : Disc is provided with a built-in brake system to rapidly stop the machine. Dust Collection tank is also provided.
- Polishing Paper Holder** : Allows quick polishing paper change (single bolt type)
- Support for Polishing** : The support for polishing is provided in the disc cover against which the sample is held while polishing.
- Machine Body Structure & Finish** : The machine body is integral, made of thick MS sheet to absorb vibrations and is aesthetically powder coated with rust proof paint.

Note: Supplied equipment may vary from the image(s) shown here.

Spectrographic Sample Polishing Machine

Double-Disc

Product Description

This Vibration Free Machine is developed to get flat and parallel finish on the samples for high precision Spectro-Analysis.

The blower casing and the dust collector are made integral with the main body which makes the machine compact and vibration resistant. The body of the Machine is made in a Single thick sheet, avoiding use of steel sections, which further reduces the vibration. The base of machine is made solid, which eliminates the need of its foundation.

The rotating disc is dynamically balanced and mounted directly on the motor shaft instead of using belt, this ensures uniform and noise-less operation.

The rotating disc, which is perforated, holds the polishing paper by air suction on the disc plate which rotates at a specific speed. The air suction not only holds the paper evenly throughout the surface but also keeps it cool and collects dust from the polishing area.

Disc is provided with a built-in brake system to rapidly stop the machine. Dust Collection tank is also provided.

Model: SPM-1017



Technical Specifications

- 1 Diameter of both discs : 350 mm (Standard size)
- 2 Bore Diameter of both discs : 40 mm
- 3 Speed of both discs : 2880 RMP (Standard)
- 4 Polish Paper Disk Size : Dia 350 x Bore 40 mm
- 5 Disk Drive Motors : 2HP, 3Phase, 440V, 50Hz (Each disc having individual motors)
- 6 Suction Blower Motors : 1HP, 3Phase, 440V, 50Hz (Each disc having individual suction blower)
- 7 Rating of Disk Drive Motors : 2HP/415V/50Hz/3Φ/1440 rpm, AC Supply, T.E.F.C. Type, ABB / Crompton 02 Motors - Separate motor for each Disc
- 8 Rating of Suction Blower Motors : 1 HP/415V/50Hz/3Φ/2880 rpm, AC Supply, T.E.F.C. Type, ABB / Crompton 02 Motors - Separate motor for both Suction Systems.
- 9 Starters : Push Button type with overload preventer, of standard make.
- 10 Disc Plates : Made of Steel with Air gripping arrangement of polishing paper and locking system, to keep the polishing paper in position.
- 11 Disc Cover : Fully covered with a space open for polishing the sample.
The Gap between Polishing Disc and sample support is kept 2 mm. This arrangement makes the air suction more efficient and also checks the sample from entering the suction system. However the suction pipe is provided with a grid to hold any thin sample from hitting the rotating impeller.
- 12 Support for Polishing : The support for polishing is provided in the disc cover against which the sample is held while polishing.

Note: Supplied equipment may vary from the image(s) shown here.

Rotary Sample Divider

Model: KSD8-0860

Product Description

An automatic rotary sample divider is a laboratory device that divides bulk samples into equal, representative samples. It's commonly used in powder analysis applications, especially with particle size analyzers.

A perfect and comparable analysis is closely related to the correct sampling. Based on that, rotary sample divider is designed for sampling, dustless separation and reduction of large quantities of powder or granular bulk materials.

This machine is used in various areas such as Portland cement clinker, chemicals, construction materials, fertilizers, fillers, flours, grains, metal powders, minerals, nut, sand, seeds, soil, dust washing etc. in areas of engineering, electronic, environment, recycling, food, geology, metallurgy, coal, glass, ceramic, agriculture, biology, chemical, plastic, building materials.

General Information

- Purpose** : A perfect and comparable analysis is closely related to the correct sampling. Based on that, rotary sample divider is designed for sampling, dustless separation and reduction of large quantities of powder or granular bulk materials.
- Applications** : This machine is used in areas of geology, metallurgy, glass, ceramic, cement chemical, engineering, electronic, environment, recycling, food, plastic, building materials etc.
- Principle** : The added material is divided equally into the buckets which rotate in a circular motion. Feeding speed and quantity are adjustable steplessly with the help of vibration system.
- Material of Construction** : Sample buckets are made in SS 304 with a sheet thickness of 2 ± 0.1 mm and are made up of 8 divisions. Depending on requirement, buckets can be made in different volume and numbers.
Sample buckets have handles for easy and safe handling.
The hopper, feeder, tray, handles and waste container are made of SS 304, and the other parts are made of steel having electrostatic powder paint.
- Easy Controls** : Rotary table control and vibration control panel is easy to use.
- Option of Wheels** : Rotary Sample Divider can be manufactured with wheels as optional. These models have a stabilizer safety system on the wheels.

Design Features

- Rotary Table** : Specially designed funnel type rotary table to guide waste material towards the collection tray.
- Dust Free Environment (Ideal for Lab)** : Exit point of waste material is very close to the waste material tray, enabling dust free environment.
- Additional Features** :
 - Robust and Heavy duty design
 - Fully covered structure
 - Digital display of hopper opening
 - Vibratory chute
 - Waste material collection system
 - Wheeled tray / trolley for collection of waste material and easy handling
 - All important parts coming in contact of sample are made in SS 403.

Technical Specifications

- Item Description** : Rotary Sample Divider
- Type** : Rotary Sample
- Sample Feed Size** : Up to 30 mm maximum
- Application** : Coal and Coke Sampling
- Sample Buckets / Volume** : 8 Divisions of 6 Ltr. each
- Hopper Feed Capacity** : 60 Kg
- Standard** : IS 436 (Part I / Sec 2) – 1976
- Rotation Speed** : 0 - 60 RPM (user may specify)
- Power Required** : 440 Volt; 1 KW, 3 Phase
- Finish** : Aesthetically painted



Note: Supplied equipment may vary from the image(s) shown here.

Laboratory Lathe Machine

Product Description

For preparation of Non-Ferrous samples for spectrographic analysis.

The facing is done during rotation by a single point tool suitably clamped in a tool holding device, which is very conveniently fed with the help of a hand wheel.

Model: LLM-0100



Working Principle

Lathe removes undesired material from a rotating work piece in the form of chips with a tool which is traversed across the sample face with a suitable depth and can be fed along the face surface to obtain a finished flat surface suitable for spectrographic analysis.

The sample is held in a revolving chuck, which is mounted on the projected end of the Machine Spindle.

The cutting tool / Insert is rigidly held and supported in a tool post and is fed against the revolving sample, the uneven material is then removed in the form of chips, and a smooth and perfectly flat surface suitable for spectrographic analysis is obtained.

Technical Specifications

- 1 **Maximum Size of sample** : 3 x 3 inch
- 2 **Feed** : Automatic; to obtain a uniform and smooth finish.
- 3 **Carriage** : Lockable at any position to suit length and diameter of the sample.
- 4 **Smooth Facing** : No residual center mark after completion of facing.
- 5 **Holding Chuck** : Self-centering 3-Jaw Chuck.
- 6 **Insert Tool** : Insert tool holder is provided.
- 7 **Spindle Break System** : Spindle break system is provided for quick stoppage of chuck after facing.
- 8 **Emergency Stop** : Switch for emergency stoppage is provided.
- 9 **Coolant Circulation System** : Coolant circulation system with a tank capacity of 20 ltr with a suitable filter is provided.
- 10 **Power** : 440V AC, 4 pole, 6 Amps MCB (3 phase with neutral + earthing)
(to be provided by end user)
- 11 **Frequency** : 50-60 Hz
- 12 **Motor** : 2 HP, 3 Phase 415 V, 2880 rpm.

Note: Supplied equipment may vary from the image(s) shown here.

Laboratory High Speed Mill

For Milling of Non-Ferrous Spectrographic Samples

Product Description

A laboratory high speed mill, also known as a laboratory mill or laboratory mill grinder, is a machine that uses mechanical force to break down a batch of non-homogeneous samples into smaller, more uniform samples. These mills are used for analytical and quality control testing.

KAMEYO HSM-1000 is an automatic milling machine for fast milling of non-ferrous metal samples for emission and X-ray spectrometer analysis.

Automatic fine surface milling guarantees the highest level of reproducibility through automatic processing of the specimen. KAMEYO High Speed Mill has a robust and reliable design with low noise.

Model: HSM-1000



General Specifications

- 1 **Purpose** : For flat surface preparation of Non-Ferrous Metals for spectrography.
- 2 **Brief Description** : The sample is firmly clamped on a stationary chuck, which is fed linearly against a rotating multi-point milling cutter @2880 rpm. Which cleans the surface of the sample to required level of smoothness.

Design Features

- 1 Compact machine with fully covered working zone.
- 2 Chip collection tray is provided.
- 3 Chamber with transparent door for visibility of operation.
- 4 Automatic sample feeding, speed adjustable, manual depth setting
- 5 Fast operation, 400 to 2880 rpm
- 6 Max cutting Depth: 01 mm
- 7 Cutter Dia : 63 mm
- 8 Max Round: 80 mm, or Max Edge: 50 x 80 mm, Max thickness: 60 mm, Min thickness: 10 mm
- 9 Power : 440V AC, 4 pole, 6 Amps MCB (3 Phase with Neutral + Earthing)
- 10 Motor : 3 HP, 3 Phase 415 V, 2880 rpm.

Note: Supplied equipment may vary from the image(s) shown here.

Argon Gas Purifier

Product Description

An argon gas purifier is a device that removes impurities from argon gas to produce high-purity gas. Argon gas purifiers are used in a variety of industries, including electronics, metallurgy, and chemical manufacturing. They can also be used in scientific research and special analysis.

The Kameyo make Argon Gas Purifier is standalone unit for the purification of Argon or any other other Rare Gases: Like Helium, Neon, Xenon and Crypton. It offers a compact system for delivery of purified gas directly to the point of use.

Principle of Operation:

It removes Oxygen and moisture from the inert Gas by passing it through the heated chamber containing Magnesium Metal Chips which is maintained at 430 Degree Celsius, the Gas is than passed through a Drying Chamber containing Molecular Sieves, for complete removal of moisture from the Gas.

Application:

Rare gases are commonly used to create an inert chemical environment for applications where prohibition of the formation of undesirable molecular species (eg. Oxides, Carbides etc.) in critical applications such as Arc/Spark Optical Emission Spectroscopy for Metal Analysis.

These inert gasses are very often stored in compressed or liquified form in metal containers which are subject to contamination. Gas will then be dispensed through regulator which is also subjected to contamination over time. This can greatly affect the validity of test results especially where identification of trace elements is required in rigorous applications. Installing Majesty / Kameyo make Argon Gas Purifier in-line between gas supply and instrument offers the reassurance of reducing total contamination levels to 1 vpm or less.

In this model the heating chamber has been separated from the main body to maximize heat dissipation and the span of reactive Getter tube has been extended to enhance the exposure of the Gas with process of purification.

Salient Features

- 1 Fail Safe Design : Offering long term optimum performance and reliability
- 2 Temperature Control System : Automatic Thermocouple temperature control system.
- 4 Heater : Band Heater facility incorporated, allowing in-setu regeneration of the molecular sieve drier tube.
- 5 Long Term Operation : No high cost thermal fuse, simplifying operation and reducing long term operation cost.
- 6 Getter Tube : Mg filled Stainless steel getter tube.

Technical Specifications

- 1 Equipment : Argon Gas Purifier; Model: AGP-1025 (KAMEYO Make)
- 2 Purification system comprising of : i) Mg filled tube
ii) Molecular sieves tube
- 3 Equiped with : i) Automatic thermocouple temperature control system with a safety interlock.
ii) Band Heater facility incorporated
iii) Cu tubing (upto 3 mtr.) and brass fittings are included.
- 4 Power Required (to be provided by user) : 220 Volt; 1KW
- 5 Finish : Powder Coated, Complete in all respect.

Model: AGP-1025



Roller Crusher

Product Description

A roll crusher is a machine that reduces the size of materials by compressing them between two or more rotating rollers.

A roll crusher is a type of crushing equipment used to reduce the size of materials. Size reduction is accomplished by compressing feed material between two cylindrical rollers that rotate in opposite directions. Before crushing, the material feeds into the gap between the rollers.

KAMEYO Roller Crushers are typically used in laboratory or pilot plant applications after primary reduction of the in-feed material.

Roller crushers operate with minimum of dust generation and produce material with a tight size envelope containing a minimum of fines.

Designed for rapid, controlled size reduction of ore, mineral or rock prior to metallurgical testing or further milling or grinding.

Powered contra-rotating rollers, so the nipping process produces an ideal crushing environment for a wide variety of materials.

Product sizing is controlled by adjustable gap setting between the 2 rollers.

One roller is heavy duty spring mounted as protection against uncrushable material attempting to pass between the rollers.

Technical Specifications

- Application** : Roller Crusher shall be used for secondary crushing of samples of iron ore, limestone, quartzite, manganese ore, etc.
- Brief Description** : The hard and brittle Geological Samples are trapped and crushed between two rotating rollers and get disintegrated by squashing between them.
- Gap Setting** : Screw type gap setting arrangement between the rolls
- Feed Size** : <20 mm
- Output Size** : <3 mm
- Roller Size** : Dia 200 mm x Length 100 mm (Two Rollers)
Rollers are in hardened steel, high carbon steel
- Motor** : Standard make - 3 HP, AC- 3 Phase 415 V
(2 Nos. of motors, separate for each roller.) With over load protection.
- Power Requirement (to be provided by user)** : 440V AC, 4 pole, 16 Amps- MCB with proper earthing.
- Hopper Size** : 150 x 150 mm
- Mounting Type** : The unit is floor mounted.

Features

- Rugged, minimum maintenance design
- Heavy duty spherical roller bearings
- Heavy fabricated steel crusher frame and support base
- Compact design with drive motors installed below the crushing chamber
- Fabricated feed hopper and dust extraction outlet
- Fast, easy adjustment of product sizing
- Product drawer
- Full drive guarding
- Electric pre-wiring with an IP55 enclosed push button & motor protection station

Model: KRC-0200



Note: Supplied equipment may vary from the image(s) shown here.

Raymond Mill / Disc Mill

Product Description

Raymond mill is also called Raymond roller mill. It is a new type of high-fineness grinding mill with high efficiency and closed circulation, which can completely replace the cement ball mill. This kind of machine is commonly used in cement plants for raw materials fine grinding, such as limestone, coal, gypsum, etc.

For Laboratories, this mill is best for fast and efficient primary grinding of samples of brittle materials like Iron and Manganese ores, Quartz, Glass, Granite, Silicates and various minerals for conventional chemical and physical analysis.

Principle of Operation

The Sample is fed through the hopper, which enters the grinding zone centrally. Grinding zone consists of a rotating Disc and a Fixed disc both having grooves. The rotating disc pushes the material against the fixed disc causing heavy friction which causes the material to shear off into fine particle. The ground material comes out due to gravity and Centrifugal force and collected into a tray.

The adjustable small gap between the discs determines the fineness of the ground material.

Model: KDM-250



Technical Specifications

- | | |
|--|---|
| 1 Application | : For preliminary and fine grinding |
| 2 Feed Material Type | : Medium-hard, substantially hard, brittle |
| 3 Size Reduction Principle | : Pressure + friction |
| 4 Disc Diameter | : 200 / 250 / 300 mm |
| 5 Material Feed Size | : (-) 6 mm |
| 6 Discharge Product Size | : (-) 72 mesh |
| 7 Material of grinding tools | : 30-50 kg/hr |
| 8 Gap Width Setting | : 250 gm / min |
| 9 Motor | : 1.5 KW, 3HP, 3 Phase, Standard Make Motor |
| 10 Power Requirement
(to be arranged by user) | : 440 Volts, (earthing + neutral) |
| 11 Mounting Type | : The unit is floor mounted. |

Note: Supplied equipment may vary from the image(s) shown here.

Sample Cutting Machine for Irregular Samples

Product Description

Specimen cutting machine is used to cut precise samples from raw materials like metals, ceramics, alloys, composites, and polymers. These samples are used for testing, inspection, and analysis.

The KAMEYO make Sample Cutting Machine is a result of continual design improvement based on the feedback acquired in more than 15 years.

This is ideal for metallurgical laboratories where irregular and over-sized samples come for analysis, especially in production environment.

Samples having irregular shapes which are very difficult to hold in a vice can easily be clamped in the T-slots provided in the rigid platform which is constrained to slide in XY-direction (on mutually perpendicular guides with respect to the cutter) very conveniently with the help of feeding hand wheels. A vice is also provided with this machine to clamp small and regular shaped samples.

The rotating cutter is fed intermittently by means of a very specially designed Swing-&Spin mechanism which provides a positive and constant cutting pressure throughout the span of cutting course.

Salient Features

- **Sample Size:** Edged Samples; 10"x10"x1", Round Sample: Dia 40 mm x 12"
- T-Slotted Platform for holding Edged / Irregular Samples,
- XY-Motion of Clamping Platform,
- Coolant Circulation System provided,
- Fully covered Cutting Chamber with visible operation, for safety,



Model: SCM-1044



Solid column facilitates in minimizing vibrations

Technical Specifications

- 1 **Solid Base** : Concrete Filled Base and Column to earth the vibrations.
- 2 **Clamping** : T-slotted clamping table with vice.
- 3 **Sample Size** : Maximum Sample Dia 40mm / Cross Section 40x40 mm. (Meant for spectrographic samples only.)
- 4 **Motor** : 5 HP, 3 Phase, 50 Hz, AC, Crompton / ABB.
- 5 **Abrasive Cutter Size** : OD: 14", ID: 40mm, Thickness: 3 mm.

Note: Supplied equipment may vary from the image(s) shown here.

Wire Feeder / Wire Injector

Product Description

A wire feeder or wire injector is a machine or system that feeds wire into a liquid or molten metal, or connects a welding power source to a welding torch.

Wire Feeding Machines for Ladle Refining Furnace are developed to inject cored wires like CaSi, Carbon, Sulphur, Boron and Aluminium for following purpose:

For controlling the shape of inclusion,

- To improve fluidity, cast ability, and cleanliness,
- To improve cold ductility specially required for wire drawing,
- To control blow holes and improve machinability,
- Desulphurization in steel casting,
- Also wire injection leads to the best Aluminium recovery and less nitrogen.

Capacity

- | | |
|---------------------------------|--|
| 1 Solid Wire | : 5mm Min 21mm Max (Heavy Model) |
| 2 Cored Wire | : 5mm Min 21mm Max |
| 3 Shape of Wire | : Round / Square / Rectangular / Polygonal |
| 4 Speed Range | : 0 – 300 mtr /Min |
| 5 Technique of Feed | : Flipping Coil (Cage) |
| 6 Accuracy of Feed | : $\pm 1\%$ |
| 7 Method of Setting Feed Length | : Digital, in Meters |
| 8 Method of Setting Feed Rate | : Digital, in Meter / Minute |
| 9 Range of Speed | : 50 to 300 Meters / Minute |

Model: WFA2-D100

2-Strand, Feed Rate: Up to 200 Meter / Minute; For cored wire, with Horizontal Flipping. Wire dia. up to 21 mm, Suitable for injection of cored wire in 2 strands simultaneously at a speed range of 50 to 200 Meter / Min. The machine is also suitable for feeding only one wire.

Features:

1. Motor: AC, 9 kW, 1440 rpm, Make: Standard,
2. Motor Control through Variable Frequency Drive (VFD); Make: Standard
3. Further Reduction Through Gear Box.
4. Metering Of Injection Through Encoder; instead of Proxy, For Better Measurement of injected wire.

Model: WFA2-D125

2-Strand, Feed Rate: Up to 300 Meter / Minute; For cored & Solid wire , with Horizontal /Vertical Flipping. Wire dia up to 21 mm, Suitable for injection of cored wire / Solid Wire in 2 strands simultaneously at a speed range of 50 to 300 Meter / Min. The machine is also suitable for feeding only one wire.

Features:

1. Motor: AC, 14 kW, 1440 rpm, Make: Standard,
2. Motor Control through Variable Frequency Drive (VFD); Make: Standard
3. Further Reduction Through Gear Box.
4. Metering Of Injection Through Encoder; instead of Proxy, For Better Measurement of injected wire.

Model: WFA4-D125

4-Strand, Feed Rate: Upto 300 Meter / Minute; For cored & Solid wire, with Horizontal /Vertical Flipping. Wire dia upto 21 mm, Suitable for injection of cored wire / Solid Wire in 2 strands simultaneously at a speed range of 50 to 300 Meter / Min. The machine is also suitable for feeding only one wire.

Features:

1. Motor: AC, 18 kW, 1440 rpm, Make: Standard,
2. Motor Control through Variable Frequency Drive (VFD); Make: Standard
3. Further Reduction Through Gear Box.
4. Metering Of Injection Through Encoder; instead of Proxy, For Better Measurement of injected wire.

Note: Supplied equipment may vary from the image(s) shown here.



Tumbler Index Machine

Product Description

A tumbler index machine is a device used to determine the mechanical strength of materials like briquettes and iron ore by measuring their resistance to breakage or degradation from impact.

General Information

1. **Name of Machine** : Tumbler Index Test Apparatus / Machine
2. **Purpose** : Determination of resistance of iron ore pellets to breakage or degradation by impact and abrasion.
3. **Test Material** : Iron oxide lump cores, Sinters, and Pellets etc.
4. **Working Principle** : This machine consists of a cylindrical drum rolled from mild steel plate. The two circular sides of the drum have two stub axles attached through two circular flanges. The axles are held in two double-row self-aligning ball bearings with the common axis of the axles located in a horizontal plane. The drum is rotated about its axis at the specified speed with the help of an electric motor, worm reduction gearbox, and V-belt pulley arrangement. A pre-set type digital counter is provided to record the number of rotations of the drum and to automatically stop the motor after a set number of rotations. The bearings on which the drum is pivoted are supported on a heavy-duty fabricated metal frame made from mild steel sections. The motor and worm reduction gearbox are also mounted on the same frame to give a single composite unit. A sheet metal tray is provided below the drum to collect the material coming out when the drum is rotated with the door removed.

Technical Specifications

1. **Internal Dimensions of Drum** : W 500 mm x L 1000 mm
2. **Thickness of Drum Sheet** : 5 to 6 mm
3. **Dimensions of Lifters** : 50 x 50 x 5 mm (Angles)
4. **Speed of Rotation of Drum** : 25 +/- 1 RPM
5. **Counter** : 6 Digit Electronic counter
6. **Motor off System** : Digital (8 Minutes / 200 Cycles)
7. **Motor** : 3HP, 1440 rpm, 50Hz, 440 Volt, 3 Phase, standard make
8. **Gear Box** : 1:60 Ratio
9. **Shaft Material** : Alloy steel D2 Grade
10. **Ref. Design Standard** : As per Bureau of Indian Standard No.: IS:6495 1994

Model: KTI-6495



Note: Supplied equipment may vary from the image(s) shown here.

Hydraulic Core Splitter

Product Description

A hydraulic core splitter is a machine that uses hydraulic force to split geological core samples in half for analysis by mineral exploration and geotechnical companies, mining, material science and geology.

Technical Specifications

- 1 **Purpose** : The Hydraulic Core splitter is designed to split core in industrial laboratory environments. Core splitters are used to split cores lengthwise for study and analysis.
- 2 **Working Principal** : The hydraulic splitter is a device that uses the common physical tipping principle and the hydraulic transmission principle to change the axial hydraulic thrust into the lateral splitting force.
- 3 **Core Diameter** : NX, BX, AX series & NQ, BQ, AQ series
- 4 **Feed Core Diameter** : 30 to 100 mm
- 5 **Core Length** : Approx 200 mm
- 6 **Type of Cutting / Splitting** : High speed, high force edge impact with immediate withdrawal of splitting edge
- 7 **Maximum Pressure** : Up to 250 Bar
- 8 **Core Mounting** : "V" Block Type
- 9 **Power Source** : Hydraulic
- 10 **Power Supply** : 4 Pole, 20 Amps MCB, (3 phase + Neutral with Earthing) . AC, 415 V- 2.2 Kw (3 hp),
(to be provided by end user) 1415 rpm
- 11 **Safety Features** : The machine is provided with interlocking through Proximity sensors and it works only when the door is closed. This prevents falling out of split cores and accident to the operator.
- 12 **Maximum applied splitting Force** : Up to 12 Tons (High Speed Impact)
- 13 **Construction** : Heavy duty steel frame with safety door and enclosure
- 14 **Pressure Display** : Analog Type
- 15 **Timer** : 0-60 Seconds to set the impact tool time

Model: HCS-0200



Note: Supplied equipment may vary from the image(s) shown here.

Lolly-Pop Mould

Product Description

For making Lollipop samples for spectrography.

Features:

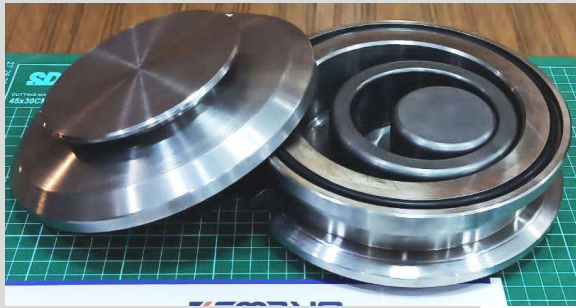
- 1 **Material of Cavity** : Cavity is made in Copper.
- 2 **Good Casting** : Neat and clean casting of sample.
- 3 **No Chance of Damage** : No chance of damage to mating surfaces by spillage of molten metal.
- 4 **Perfect Matching** : Perfect matching of both halves, ensuring dimensional quality of sample.
- 5 **Easy handling** : The mould is easy to handle.

Model: KLM-035



Lolly-pop Mould

Grinding Bowls / Vessels for Vibratory Cup Mill



Tungsten Carbide Lined Bowl Set
Working Capacity 150 ml
Bowl, Ring, Hammer, Lid, O-Seal



Hardened Steel Bowl Set
Working Capacity 150 ml
Bowl, Ring, Hammer, Lid, O-Seal



Tungsten Carbide Lined Bowl Set
Working Capacity 50 ml
Bowl, Hammer, Lid, O-Seal



Hardened Steel Bowl Set
Working Capacity 50 ml
Bowl, Hammer, Lid, O-Seal

Tungsten carbide is the grinding head of choice for many laboratories where elemental contamination is limited to just two principal contaminants: tungsten and cobalt. With the KAMEYO grinding bowl all surfaces in contact with the sample (bowl, ring, puck and lid) are machined from tungsten carbide. The bowl chamber and inner lid layer are encased in stainless steel to increase overall strength and to reduce material cost.

The bowl and lid incorporate ergonomically-designed lifting flanges to enable easier handling when processing samples.



Innovative Anti-skid Bowl Seating Design



Spring



Clamping Module Assembly

Accessories For Hydraulic Pellet Press



Die Set & Cap For Aluminium Cup Pellets



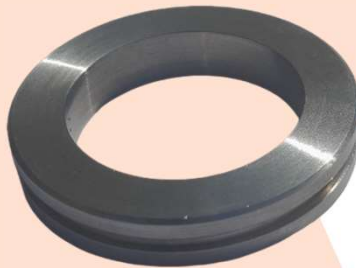
Die Set & Cap For Ring Pellets



Tungsten Carbide Lined Cap for Contamination Sensitive Material



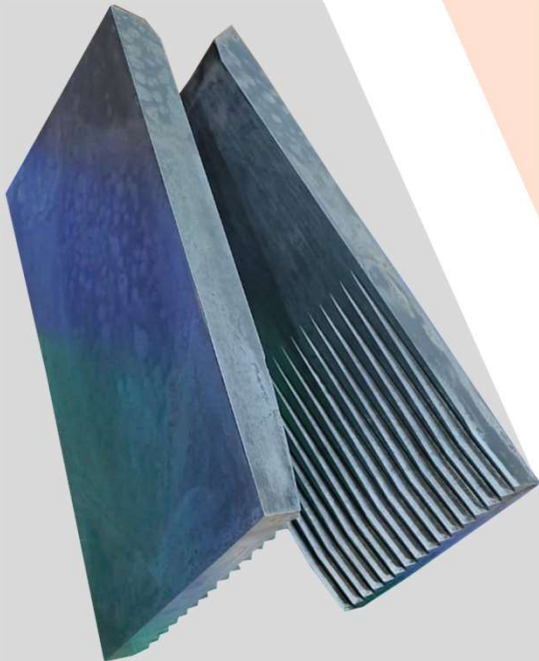
Steel Ring Type-B



Steel Ring Type-C



Aluminium Cup



Jaw Blade Set



Pellet Breaking / Cleaning Device (Geared)



Pellet Breaking / Cleaning Device

Note: Design of above accessories may change without prior notice subject to improvement..

Few of our esteemed clients...

Steel & Mines



Cement



Few of our esteemed clients...

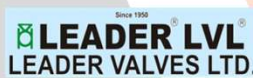
Glass & Ceramic



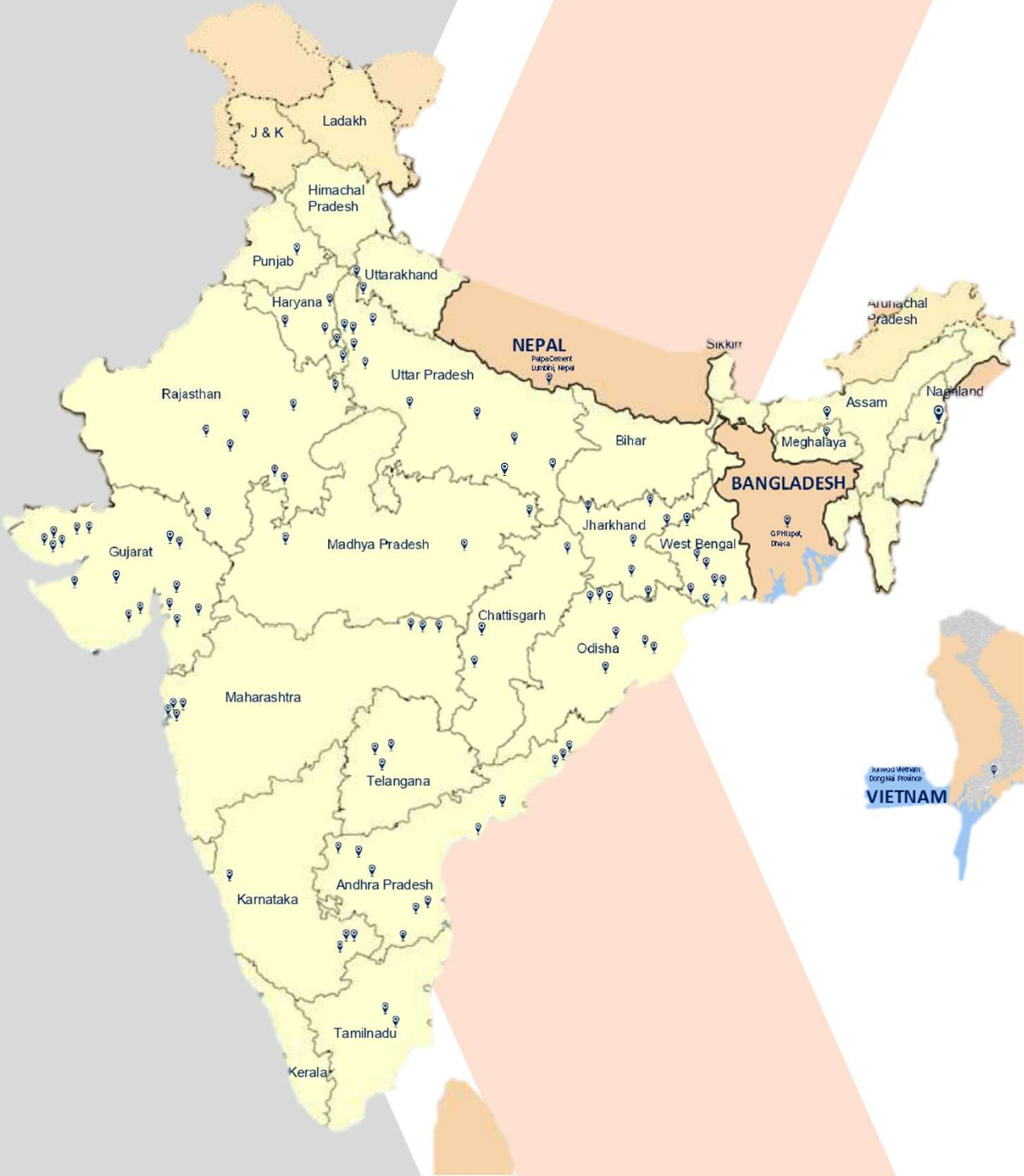
Government & Institutions



Few More Clients



Our Presence



Customized solutions and special purpose machines are built to suit specific industry applications.



Vibratory Cup Mill



Hydraulic Pellet Press



Jaw Crusher



Roller Crusher



Micro-finish Sample Polisher



Spectrographic Sample Cut-off Machine Semi-Automatic



Rotary Sample Divider



Argon Gas Purifier



Wire Feeder for LRF

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