CRUSHERS
PULVERIZERS

BICO
braun international
Since 1888

MANUFACTURERS OF
MINING AND GEOLOGICAL
LABORATORY TEST
EQUIPMENT

3116 VALHALLA DRIVE • BURBANK, CALIFORNIA 91505 • U.S.A.
PHONE (818) 842-7179 • FAX (818) 842-7976
www.bico-inc.com • sales@bico-inc.com
The UA PULVERIZER will reduce a 6.35MM (1/4") quartz sample to 150-200 mesh at an approximate rate of 1#/min. The unit provides you with an easy, efficient design for cleaning between samples, in addition to being durable and easy to maintain. Replacement grinding plates are available in a variety of materials, including ceramic for contamination free sample preparation.

**VIBRATORY PULVERIZER**
For efficient grinding of production samples. The VIBRATORY PULVERIZER (Ring Mill) uses 2 rings and a puck inside a 250 ML (8" diameter) grinding bowl. A specially designed motor, directly coupled to a rotating eccentric, swings the bowl and components at a precise speed and distance for maximum grinding efficiency, thus rapidly reducing a wet or dry sample of minerals, ore, rock, soil or similar material to a final 400+ mesh.

**STANDARD FEATURES:**
- 1HP, 3PH 50/60HZ, 208/220/440V MOTOR - (900 RPM)
- 250 ML Grinding Bowl/Lid and Components
- Starting Switch & Timer
- Insulated Cabinet for reduced operating noise
- DIM: 24" x 24" x 43" WT: 630 Lbs.
- Single Phase 220v 60Hz now available.

**DUST COLLECTOR**
This unit has been specially designed to work with the BICO Pulverizers and Crushers to control nuisance dust in the workplace. This unit is a down draft bench designed for controlling heavy dust jobs. No special electrical or duct work is required for this self-contained, portable, cost effective unit.

**STANDARD FEATURES:**
- 500-700 FPM Tabletop Air Velocity
- Dust Removal Drawer
- Blower Exhaust Silencer
- Fluorescent Lighting
- Enclosed Top / Hinged View Panel
- Replaceable 220 sq. ft. Filter Cartridge
- Inside Dim: (W) 50-1/4" x (H) 35" x (D) 36"
- Overall Dim: (W) 57" x (H) 60" x (D) 37"

**PLATE ALIGNER**
UA-1000
Designed to assist in plate alignment

**8" GRINDING PLATES**
FOR UA & UD PULVERIZERS
- Plates vary in hardness and composition.
- Two plates required for a set, one stationary (with hole) & one revolving

**UA-51/52**  IRON ALLOY
**UA-94/95**  SUPER IRON ALLOY
**UA-85/86**  HARDENED IRON
**UA-81/82**  LP CARBON STEEL
**UA-2000R/S**  CHROME ALLOY STEEL
**UA-83/84**  MANGANESE STEEL
**UA-92/93XX**  CERAMIC
**LD-03/04**  SEMI-STEEL PLATES (Sets Only)

**REPLACEMENT GRINDING BOWL & COMPONENTS**
Available in wear resistant chrome alloy steel and tungsten carbide.

**VP-45/50**  250 ML  Chrome Alloy Grinding Set
**VP-45/50TC**  100 GM  Tungsten Carbide Grinding Set
**VP-45/50CA**  100 GM  Chrome Alloy Grinding Set
BICO HAS DESIGNED its equipment for laboratory, sample prep and pilot plant use. The JAW CRUSHERS will efficiently reduce any dry friable material. All units are easy to clean with easy access to all crushing surfaces. BICO equipment will increase productivity and ease your operation. With over a century of experience behind us, BICO offers you the best in low maintenance, heavy-duty, durable, compact laboratory equipment.

The Bico Chipmunk Jaw Crusher offers effective reduction of friable material, ore, mineral and chemical samples.

- **RUGGEDLY DESIGNED TO ABSORB THE SHOCK AND IMPACT OF CONSTANT USE**
- **EASY ACCESS TO ALL PARTS FOR RAPID CLEANING AND MAINTENANCE**
- **NEW SPACE SAVING MOTOR MOUNTING DESIGN**
- **FEED HOPPER & SAFETY GUARDS STANDARD WITH UNITS SUPPLIED WITH A MOTOR**
- **MANGANESE STEEL PLATES AVAILABLE**

**WD CHIPMUNK JAW CRUSHER**
(Shown with Safety Guards & Feed Hopper)

### BICO BRAUN CHIPMUNK & BADGER CRUSHERS

<table>
<thead>
<tr>
<th>TYPE</th>
<th>CAPACITY</th>
<th>RPM</th>
<th>HORSE POWER</th>
<th>JAW CAPACITY</th>
<th>REDUCTION SIZE</th>
<th>TYPE OF DRIVE</th>
<th>CATALOG NUMBER</th>
<th>GROSS WEIGHT LBS/KG</th>
</tr>
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<tbody>
<tr>
<td>BICO BADGER</td>
<td>APPROX. DIM: 32&quot; x 24&quot; x 20&quot;</td>
<td>1300 LBS PER HOUR</td>
<td>400</td>
<td>5</td>
<td>5&quot; x 7&quot;</td>
<td>1/8&quot;</td>
<td>3/4&quot;</td>
<td>V-BELT, 3 PHASE</td>
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<td>V-BELT, 1 PHASE</td>
<td>241-38X55</td>
<td>800/364</td>
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<tr>
<td>WD HEAVY DUTY</td>
<td>APPROX. DIM: 28&quot; x 19&quot; x 32&quot;</td>
<td>800 LBS PER HOUR</td>
<td>400</td>
<td>3</td>
<td>23/8&quot; x 4&quot;</td>
<td>1/16&quot;</td>
<td>5/8&quot;</td>
<td>V-BELT, 3 PHASE</td>
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<td>V-BELT, 1 PHASE</td>
<td>241-36X3S</td>
<td>580/260</td>
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<td>V-BELT, WITHOUT MOTOR</td>
<td>241-37</td>
<td>460/210</td>
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<tr>
<td>VD STANDARD</td>
<td>APPROX. DIM: 25&quot; x 19&quot; x 30&quot;</td>
<td>400 LBS PER HOUR</td>
<td>400</td>
<td>2</td>
<td>2 1/4&quot; x 3&quot;</td>
<td>1/16&quot;</td>
<td>3/8&quot;</td>
<td>V-BELT, 3 PHASE</td>
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<td>V-BELT, 1 PHASE</td>
<td>241-34S</td>
<td>395/180</td>
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<td>V-BELT, WITHOUT MOTOR</td>
<td>241-36</td>
<td>285/130</td>
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**BADGER JAW CRUSHER**
Exceptional Crushing capacity with minimum power consumption is obtained by the unique movable jaw motion. This insures maximum production in the lab and field.

**GENERAL FEATURES:**
- Heavy-Duty fabricated Steel Main Frame
- Double End Shaft Motor applies power evenly to the machine
- Dust Collection Base with Ore Pan available
- Heavy-Duty Sealed Spherical Roller Bearings
- All units complete with 5HP/3PH, DES TEF Motor, Safety Guards and Feed Hopper
- Easy Jaw Adjustment

**BALL MILL**
Designed by F.C. Bond for use by cement companies and quality control laboratories. Meets the F.C. Bond Grindability Test criterion.

**FEATURES:**
- 12" cast iron drum
- 44.5 lb iron balls
- Digital counter for auto shut-off
- Receiving pan, hand screen pan & table
- Chrome balls available
ELECTRIC ASSAY FURNACE
The Electric Assay Furnace has a capacity of 6-30 gram crucibles or 16 to 24 cupels, 2300 Degrees F. 115 or 200 volt. Unit complete with vent hood.

FEATURES
- Temperature Control
- Direct Indicating Pyrometer
- Convenient 115V 15amp, or 220V 8amp operation
- Inside Dimensions: 9" x 10" x 6.5"

ALL COMPLETE UNITS SOLD WITH PYROMETER, TEMP CONTROL, HEARTH PLATE, AND VENT HOOD

HERMAN INQUARTS
Herman Inquarts (Gold Free) are little pellets of lead bullion, each containing a definite amount of silver. Just add one to the crucible before fusing or tap it into the cleaned lead button before cupellation and you can be sure of complete and accurate parting. No preliminary weighing of the added silver. No "punch and guess" results when you use these inquarts.

Herman Inquarts are uniform in silver content, easy to handle, save time and insure results. The exact silver content is marked on each package. Stock packages average 2mg of silver.

High Form
Mortar & Pestle (1 Quart)