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The series PCHT are Servo-hybrid automatic powder compacting presses for producing parts using metal oxidized powder of various kinds, such as Iron, Copper, Ferrite, Ceramic, Tungsten, Carbide, Teflon, Meramin, Emc, ect. into the desired shapes.

The series PCHF are hydraulic automatic powder compacting presses for producing parts using metal oxidized powder of various kinds, such as Iron, Copper, Ferrite, Ceramic, Tungsten, Carbide, Teflon, Meramin, Emc, ect. into the desired shapes.

We have a full line of compacting presses ranging from 30 tons to 500 tons in PCHF series.
Servo-Hybrid Powder Compacting Press
for Large Target of ITO, ATO, AL2O3, Zirconia ect.
/ PCHU - Series

The series PCHU are servo-hybrid automatic powder compacting presses for producing large Taget parts using ITO, ATO, AL2O3, Zirconia powder ect.
We can supply the press in sizes of 1200(tons), 2200(ton), 3000(ton), 5000(ton) in the PCHS series.

Hydraulic Auto Powder Compacting Press
for producing powdered metal blocks of Tungsten, Carbon, Titanium, ect.
/ PCHS - Series

We can supply the press in sizes of 400(tons), 1000(tons), 1500(tons) in PCHS series.
The series PCHM are Servo-hybrid automatic powder compacting presses for producing parts using metal oxidized powder of various kinds such as Iron, Copper, Ferrite, Ceramic, Tungsten, Carbide, Teflon, Meramin, Emc, ect. into the desired shapes.

We have a full line of compacting press ranging from 100 tons to 1000 tons in the PCHM series.

The series HSPC are HOT automatic powder compacting hydraulic presses with mold heating systems to produce parts using metal oxidized powder of various kinds such as Iron, Copper, Ferrite, Ceramic, Tungsten, Carbide, Teflon, Meramin, Emc, ect. into the desired shapes. The maximum mold heating temperature is 400°C.

We have a full line of compacting press ranging from 30 tons to 2000 tons in the HSPC series.
Diamond Array Compacting Presses
/ DACS - Series

✓ **Feature**
  - Maximum Precision
  - Cost-savings within operating process
  - Low noise
  - No oil chiller needed

✓ **Function**
  - Floating withdraw die for both pressing functions
  - Hold down function
  - Under/Over fill function
  - Layer filling step function
  - Sandwich (high/low/high) filling function
  - Pressurization time function
  - Pressure removal function
  - Unloading High speed drive function
  - Drive mode selection function
  - Data Input, Memory, Display, Calculation functions
  - Product quality verification function
  - Machine fault alarm lamp, record, buzzer function

✓ **Diamond array Tool and Powder fill equipment**

1. **Diamond array tool**
   - Number of segments can be 1, 2 or 3
   - Max. number of Diamond layers is 8

2. **Powder fill equipment**
   - Standard dual (high/low/high) fill equipment
   - Rotary sandwich (high/low/high) & dual fill equipment
   - Rotary dual fill equipment
High Temperature Vacuum Powder Compacting Press
/ PCHV - Series

This press is a vacuum high temperature powder press that provides a powder pressing solution to produce sintered compacts for ceramic hydro fuel cell sheet, carbon fuel cell sheet, magnesium metal, and aluminum at a maximum of 2500°C. This machine is available in different sizes from 5 tons to 300 tons.

Rotary-Hydraulic Auto Powder Compacting Press
for water soluble soft core parts
/ PCHU - Series

This press is a vacuum high temperature powder press that provides a powder pressing solution to produce sintered compacts for ceramic hydro fuel cell sheet, carbon fuel cell sheet, magnesium metal, and aluminum at a maximum of 2500°C. This machine is available in different sizes from 5 tons to 300 tons.
The series PCMF are mechanical automatic powder compacting presses for producing parts using metal oxidized powder of various kinds, such as Iron, Copper, Ferrite, Ceramic, Tungsten, Carbide, Teflon, Meramin, Emc, etc. into the desired shapes.

The automatic dry presses of the series PCMF are mechanical presses for producing parts of intricate shape which are technically difficult to produce.

We have a full line of compacting press ranging from 6 tons to 100 tons in the PCMF series.

The series PCMF are developed to provide solutions to a number of technical difficulties and provide energy savings. With their superior efficiency, precision and durability they are widely approved by many industrial fields.

◈ The Main Characteristics
  ▪ Extremely rigid and compact design.
  ▪ Crank motion operates at a high stroke rate [spm], which ensures economically efficient production.
  ▪ Compaction by the withdrawal method using a positively controlled die.
  ▪ Continuously adjustable top pressing ensures maximum uniformity of density.
  ▪ High withdrawal force by Floating Die Cam guarantees perfect compacting even for compacts with high friction along the wall.
  ▪ Compact can be subjected to load during die withdrawal (preload) by Floating Die Cam to prevent friction damage.
  ▪ Die plate can support high loads in pressing position
  ▪ Can be produced with Two Die Step compacts with a strong ejection stopper.
  ▪ Faster tool change due to die-set (mold adapter) change or changing of the tooling in the die-set via quick change system
  ▪ Standard die-sets (mold adapter) removal from the rear or from the front.
  ▪ Continuously variable drive by means of frequency converter with pneumatic brake and clutch combination unit.

◈ The Characteristics of press control system
  ▪ Press driving controlled with a P.L.C sequence system.
  ▪ Display and control of the press driving position with Digital Angle Sequence.
  ▪ Display and indication of the pressing force with pressure transmeter and digital indicator.
  ▪ Process inspection device - compacts high and pressing force.
  ▪ (option)Device that auto selects dividing on three conditions: Under standard, at standard or over standard.
The Characteristics of adjustment system

- Upper Punch top pressing position is adjusted precisely by a motor driving and worm gear with easy to operate compacts data with a digital indicator.
- Filling amount and ejection amount is adjusted with handling system.
- Floating adjustment is not needed to adjust part because of worm gear with ejection adjustment.
- Specifically designed for using multiplatens adapters with proportional valve technology.
- These presses operate according to the die withdrawal method with purely mechanically controlled main movements.
- Pressure indicator combined with hydro-electric overload protection.
- Motor assisted adjustment and digital display of pressing travel, withdrawal travel, top pressing travel, top punch position and stroke rate.
- Under fill / Over fill device.
- Holding down device.
- Pressing more than SMI-100(SA)-PCMF applies to special specifications below.
  - High die return force, hydraulically controlled.
  - High supporting force for die in pressing position by a special crown system.
  - The hydraulic core rod can be controlled irrespectively of the die movement.
  - High hydraulic support of die plate in filling position.

TECHNICAL DATA

<table>
<thead>
<tr>
<th>PCMF</th>
<th>6-PCMF</th>
<th>10-PCMF</th>
<th>20-PCMF</th>
<th>40-PCMF</th>
<th>60-PCMF</th>
<th>100-PCKF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. pressing force</td>
<td>TON</td>
<td>6</td>
<td>10</td>
<td>20</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>Max. filling height</td>
<td>mm</td>
<td>60</td>
<td>80</td>
<td>100</td>
<td>120</td>
<td>140</td>
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<tr>
<td>Stroke rate [SPM]</td>
<td>standard</td>
<td>15 ~ 60</td>
<td>12 ~ 48</td>
<td>10 ~ 40</td>
<td>8 ~ 32</td>
<td>6 ~ 24</td>
</tr>
<tr>
<td></td>
<td>special</td>
<td>8 ~ 24</td>
<td>8 ~ 24</td>
<td>6 ~ 18</td>
<td>6 ~ 18</td>
<td>6 ~ 18</td>
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</tbody>
</table>
The series PCMK are mechanical automatic powder compacting presses for production of carbon brushes. These presses work according to the traditional withdrawal method. In the field of carbon brushes this press type is the standard machine which has set the standard in the production of grinding contacts with its integrated cable scissors.

◆ The Main Characteristics
  - Extremely rigid and compact design.
  - Compaction by the withdrawal method by a positively controlled die.
  - Continuously adjustable top pressing ensures maximum uniformity of density.
  - Low training times and fast comprehension of various set-up possibilities of the die movement.
  - Short tool changing and set-up times through adapter technology.
  - Operational dependability through clear design, application of tested components, by renowned manufactures and proven construction.
  - Continuously variable drive by means of frequency converter with pneumatic brake and clutch combination unit.
  - Stroke rate is controlled with motor inverter system.

◆ The Characteristics of the press control system
  - Press driving controlled with P.L.C sequence system.
  - Display and control of the press driving position with Digital Angle Sequence.
  - Display and indication of the pressing force with pressure transmitter and digital indicator.
  - Process inspection device - compacts high and pressing force.
  - Device that auto selects dividing on three conditions: Under, over or OK of parts height and pressing force.

◆ The Characteristics of adjust system
  - Upper Punch top pressing position is adjusted precisely by a motor driving and worm gear with easy to operate compacts data with a digital indicator.
  - Filling amount is adjusted with handling system and motor drive.
  - Pressure indicator combined with hydro-electric overload protection.
  - Under fill device.

◆ TECHNICAL DATA

<table>
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<tr>
<th>PCMK</th>
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<th>25/30-PCMK</th>
<th>50-SF</th>
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<tbody>
<tr>
<td>Max pressing force</td>
<td>TON</td>
<td>150</td>
<td>25/30</td>
</tr>
<tr>
<td>Max filling height</td>
<td>mm</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Stroke rate</td>
<td>SPM</td>
<td>8 ~ 2</td>
<td>8 ~ 20</td>
</tr>
</tbody>
</table>
The series PCHK are servo-hybrid automatic powder compacting presses for production of carbon brushes.
HOT & COLD Press

for PE & PA production

/ UTM - Series

The hot and cold press comes in different sizes from 30 tons, 50 tons and 100 tons. The heating and freezing temperature speed can be automatically adjusted with the precise temperature controller.

Transfer Molding Press

for production of EMC, Melamin, Silicone etc.

/ TM - Series

This is press to produce semi-conductor and electronic component to use EMC, and is used to raw material quality test. Applicable maximum temperature is 250°C. This machine is available in different sizes from 30 tons to 300 tons.