## UB-iV Series Main Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Units</th>
<th>UB1250V-J</th>
<th>UB1250V-W</th>
<th>UB1650V-J</th>
<th>UB1650V-W</th>
<th>UB2250V-J</th>
<th>UB2250V-W</th>
<th>UB2800V-J</th>
<th>UB3500V-J</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamping</td>
<td></td>
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</tr>
<tr>
<td>Clamping force</td>
<td>kN</td>
<td>12,500</td>
<td>12,500</td>
<td>16,900</td>
<td>22,500</td>
<td>22,500</td>
<td>25,000</td>
<td>28,000</td>
<td>30,500</td>
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<tr>
<td>Dimension of die plate (L x W)</td>
<td>mm</td>
<td>1,930 x 1,600</td>
<td>2,330 x 2,330</td>
<td>2,690 x 2,690</td>
<td>2,370 x 2,330</td>
<td>2,490 x 2,500</td>
<td>2,150 x 2,500</td>
<td>2,640 x 2,590</td>
<td>2,800 x 2,750</td>
</tr>
<tr>
<td>Feed between tie bars (L x W)</td>
<td>mm</td>
<td>1,250 x 1,120</td>
<td>1,250 x 1,525</td>
<td>1,500 x 1,320</td>
<td>1,500 x 1,400</td>
<td>1,500 x 1,550</td>
<td>1,700 x 1,600</td>
<td>1,700 x 1,600</td>
<td>1,700 x 1,700</td>
</tr>
<tr>
<td>Die stroke</td>
<td>mm</td>
<td>900</td>
<td>900</td>
<td>1,000</td>
<td>1,180</td>
<td>1,180</td>
<td>1,300</td>
<td>1,300</td>
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<tr>
<td>Die thickness (min. to max.)</td>
<td>mm</td>
<td>750~1,500</td>
<td>750~1,500</td>
<td>800~1,600</td>
<td>850~1,700</td>
<td>850~1,700</td>
<td>850~1,700</td>
<td>850~1,700</td>
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<tr>
<td>Die height adjustment speed</td>
<td>mm/sec</td>
<td>50~150</td>
<td>50~150</td>
<td>50~150</td>
<td>50~150</td>
<td>50~150</td>
<td>50~150</td>
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<tr>
<td>Injection</td>
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<tr>
<td>Injection force max. (Nominal)</td>
<td>kN</td>
<td>1,044</td>
<td>1,044</td>
<td>1,295</td>
<td>1,458</td>
<td>1,458</td>
<td>1,458</td>
<td>1,691</td>
<td>1,941</td>
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<tr>
<td>L</td>
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<td>1,205</td>
<td>1,295</td>
<td>1,458</td>
<td>1,691</td>
<td>1,691</td>
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<td>2,493</td>
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<tr>
<td>Plunger stroke</td>
<td>mm</td>
<td>950</td>
<td>950</td>
<td>1,000</td>
<td>1,120</td>
<td>1,120</td>
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<tr>
<td>Tip projection stroke</td>
<td>mm</td>
<td>375</td>
<td>375</td>
<td>402</td>
<td>450</td>
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<td>Injection speed</td>
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<td>Ejection</td>
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<tr>
<td>Ejector force</td>
<td>kN</td>
<td>588</td>
<td>588</td>
<td>657</td>
<td>764</td>
<td>784</td>
<td>833</td>
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<td>880</td>
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<tr>
<td>Ejector stroke</td>
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<td>Motor for hydraulic pump</td>
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<td>50 x 1</td>
<td>50 x 1</td>
<td>75 x 1</td>
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<td>50 x 2</td>
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<td>General</td>
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<tr>
<td>Capacity</td>
<td>kg</td>
<td>8, 10, 12, 15, 20, 25</td>
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<tr>
<td>Capacity</td>
<td>kg</td>
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<td>Capacity</td>
<td>kg</td>
<td>25, 30, 40, 50</td>
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</tbody>
</table>

Note: Appearance, Specifications, Numerical Data of die casting machine may change for improvement without notice

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### Medium/Large Size die casting machine Lineup

#### Hydraulic die casting machine : UB-i3 Series
(530, 670, 850, 1100, 1300)

#### Two platen hybrid die casting machine : UB Series
(1250, 1650, 2250, 2500)

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Large Size Die Casting Machine

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UB-e Series

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UB-IV Series

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UBE MACHINERY CORPORATION LTD.

Main web site: [http://www.ubemachinery.co.jp](http://www.ubemachinery.co.jp)

2016.10.17
Global Standard Die Casting Machine

**UB-iV Series**

Adoption of technology for UB-iV series

- Center Press Platen
- Stabilized D Frame
- Flashless Casting Control (Option)
- Electric Servo Valve
- Energy Saving Servo Pump
- New Human Machine Interface

New Human Machine Interface

- CastNavi
  - Adoption of large 12.1 inch color touch panel on operation panel of human machine interface.
  - Simplified operation panel reducing hard switches which are shifted to screen panel.
  - Achieved visibility and operability by using graphic symbols, being independent from language.
  - Identifiable background color by category.
  - Friendly and memorable design of screen.
  - Touch panel displays operating condition of each unit on the same layout on the screen as actual valves location. That enable operator to see screen display easy and find machine troubles early.
  - 8 step easy-setting of casting condition on newly developed interactive setting mode.

Central Press Platen

- With center press technology, an equal clamping force is distributed through out the die. It reduces flash, exert an effect on low pressure casting & reducing clamping force.
- High level CAE analysis and optimum shape design reduce the deflection and achieve high rigidity.

Stabilized D Frame

- MUSCLE Design platen structure
- Minimized deflection angle

Energy Saving Servo Pump

- First in its class! Servo motor for the main pump with “Idling stop” & “Rotational Speed Control” is equipped as standard and it achieves tremendous energy saving!
- Cut unnecessary consumed power by stopping motor during unloading of pump. This feature is more effective for the product which requires longer cycle time by more cooling and spray time.
- Contributes reduction of cycle time by the maximum rotation=2,000rpm.

Flashless Casting Control (Option)

- The first in its class! Flashless casting technology as an option.
- It enables to maintain flashless and good quality by controlling impact pressure without changing speed.
- It controls gas pressure by changing degree of opening of valve which is newly set between accumulator and gas bottle and is remote controlled.
- To achieve further flashless casting incorporated with Center Press Platen.

Electric Servo Valve

- HS-DDV High Speed Direct Drive Valve
- Adoption of Servo motor driven valve which is die casting environment proof. Tremendous improvement of contamination resistance.
- All digitalized New control logic.
- Outstanding stability of Low Speed.
- Achievement of energy saving by elimination of hydraulic pilot line.

Stabilized D Frame

- Modeling clamp unit and shot unit. Through high level CAE (ADVC), movement of shot unit is quantitatively-analyzed.
- Optimally-designed injection D shape frame brings longer life of tip & sleeve.

Mechanism of Impact Control

- Sample picture by high level analysis
- HS-DDV

Operating Monitor

- Setting the Operating Conditions
- Each Individual Operation

Utility

- CastNavi

Setting the Operating Conditions

- Regular Shot (CCS Special)
- Impact Control Shot

Impact Control Valve

- Control of optimal gas pressure
- Same as conventional injection characteristics
- Flashless shot control

Cut unnecessary consumed power by stopping motor during unloading of pump. This feature is more effective for the product which requires longer cycle time by more cooling and spray time.