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Made in HIROSHIMA

Model
J30ADS | J50ADS | J80ADS | J100ADS | J130ADS | J180ADS
Printed in Japan HO,AF,AA,BJ,B

JDS Sales & Service
~Reliable Sales and Service Network~
JSW’s small-size ADS has improved upon the AD series, and is a new series with improved dexterity. Our machines will give you further satisfaction, stability, and productivity while saving energy through our advanced high-performance controller and improvements to the new clamping unit and screw cylinder.

The perfect fusion of our experience and new technologies

~ Bringing you Ultimate Satisfaction ~

Our "ADS series" Electric Servo Drive Injection Molding Machine has evolved to a new level in injection molding.

Satisfaction  Smart  Strong  Stable

~ Solving Problems for All Our Customers ~

Satisfaction  Satisfy all your Requirements
- Energy Savings  •  Preventative Maintenance
- Customized I/O Function  •  Molding Support

Smart  New Control System SYSCOM5000
- Operation Process Display (Visualization)
- Multi-Touch Operation Lever  •  NET100 System (optional)

Strong  High rigidity Clamping Unit
- Clamping Control
- Increased loading size molds  •  High accuracy of molds protection Flat Platen Press

Stable  High Accuracy Injection  •  Recovery control and flexibility
- Wide selections of injection modules  •  Variations of Scews Various Holding Pressure

Complies with safety regulations
Japan Society of Industrial Machinery Manufacturers Regulation (JIMS K-1021)
Fulfill All Your Requirements

Management
Energy-saving “Eco-Friendly” mode reduces power consumption and overall operating costs.

Energy Savings
ADS will suggest injection molding conditions in order to save energy.

Eco mode
Reduces power consumption in addition to insuring efficient molding conditions.

Manufacturing
Reduces operator work load to create higher added value.

Memo of molding conditions
Multimedia storage capabilities such as molding conditions, memos, settings of peripheral devices, and photos of products.

Screen shots · Hand written memos
You can write and edit information directly on top of screenshots.

Molding support
The dialog wizard covers processes from mounting the mold, setting initial conditions, to defect countermeasures.

Maintenance
Preventative maintenance · Predictive maintenance function to reduce downtime

Preventative maintenance
Automatically notifies you when to perform regular inspections

Predictive maintenance
The inspection timing of the ball screws can be checked while taking the molding load into account.

Production Engineering
Manufacturing
Enables the construction of a manufacturing system through connection with peripheral equipment.

I/O Customized function
Simple sequences can be user generated.
New controller SYSCOM5000i

Functions Fully Realized through **NEW** Simple Navigation System

Main characteristics of SYSCOM5000i:
- Casual multi-touch operation
- Simple lever operation
- User-manual display function
- On screen instruction manual
- Large 15” display with utilized energy saving LED technology

User-friendly screen configuration

- **Operation process display**
  Visual or list display for every molding process
- **Collective setting display**
  Molding conditions can be set without navigating numerous pages.
- **Cycle monitor**
  Allows task conditions in the molding machine to be visually checked in real-time

NET100 System (Optional)
Moving towards the next frontier of IoT with JSW Injection Molding Machine

- Data collection
- Display / Analysis
- Internet-based communications
- Can manage operations at multiple factories

Observation of operation status

Display and operation of the controller screen

Analysis of measured values

Display and management of molding conditions

Tablet-based operation *(Optional)*
Innovated High rigidity clamping unit • Clamping control

Clamping unit for variety of molds

*NEW*

Twin brake for the mold opening/closing mechanism and the ejector mechanism

- Expanded mountable mold thickness and width

- Expanded platen size and daylight in order to mount larger molds

- New mold protection function

Increased functionality of mold protection due to the adoption of new controls

- Mold protection multi-stage settings (compatible with various mold structures)
- A high degree of safety through simple settings
- Ability to track mold temperature changes

Uniformity of the clamping force

"Flat press platen"

- Realized further uniformity of mold surface distribution through High rigidity clamping unit
- [Product: Improved dimensional precision. Fin suppression]
- [Mold: Extension of mold life cycle, mold design • Improved degrees of freedom for equipment]

Excellent accuracy of platen surface, uniform mold parting surface pressure

100 t class conventional machines

J100ADS

- 55% improvement of surface pressure variation
- Increased surface pressure of central section. Ability to reduce clamping force.

Clamping Force Feedback Control

*Recommended option*

- “Visualization” of actual clamping force through toggle type machine
- Clamping force fluctuations reduced based on temperature changes in the mold
- Improvement of product quality* due to the stability of outgassing
- Load reduction of mold maintenance
- "Long life cycle" of the mold by the optimum clamping force

<table>
<thead>
<tr>
<th>Mold thickness</th>
<th>J30ADS</th>
<th>J50ADS</th>
<th>J80ADS</th>
<th>J100ADS</th>
<th>J130ADS</th>
<th>J180ADS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. - Max. (mm)</td>
<td>120~430</td>
<td>150~470</td>
<td>150~510</td>
<td>150~550</td>
<td>150~550</td>
<td>200~600</td>
</tr>
<tr>
<td>Distance between tie bars W x H (mm)</td>
<td>310×310</td>
<td>360×360</td>
<td>410×410</td>
<td>460×460</td>
<td>530×510</td>
<td>590×560</td>
</tr>
</tbody>
</table>

*Upper row: ADS Lower row: Conventional machine

Clamping Force Increases as mold temperature increases

Clamping Force remains stable without influence from the rising mold temperature

Before testing

ADS

Conventional machine

The uniform surface pressure inhibits burrs and deviations in thickness.
Satisfaction with evolution of applications

Original High Accuracy Injection / Recovery Control and Flexibility

JSW's Original High Accuracy Volume Control

Reverse Seal Control
The screw is reversed after recovery ends to help the back-flow prevention ring close and to inhibit drooling.

Injection Weight and Cushion Stability
In order to stabilize product weight, the density of molten resin is controlled after recovery.

High Accuracy Volume Control
In order to stabilize product weight, the reverse seal and injection stroke after repressurization are constantly controlled.

Rich injection unit
*JSW original LSP-Z screw (excludes 300U) and N2000F barrel

Various Holding Pressure Settings

Select mode | Control | Improvements
---|---|---
IVSH | Position changeover | -
IVSL | Speed transfer | Less variation when filling.
IPS | Pressure transfer | Less variation when filling.
EXT | External signal selection | Pressure within the mold can be controlled (selected) by the user.
Walt control 1 | Contact control of the forward position | Flow extension, improvements in filling balance, pressure reduction in the mold, etc.
Walt control 2 | Contact control of the forward position + Pressure holding | Flow extension, improvements in filling balance, pressure reduction in the mold, controlling sink make, etc.

By stopping the screw immediately before filling,
the flow caused by the viscoelasticity of the resin stops.

Because the pressure is not released,
the residual pressure allows the viscoelasticity of the resin to be used for filling.

By controlling the screw position after holding pressure transfer to fill
the residual pressure is released and the viscoelasticity is improved.
Walt control 2 exhibits a sink mark elimination effect on thicker products.

Variation of screws
JSW original screws correspond to diverse resins and products.

Additionally, various other types of screws are available.

<table>
<thead>
<tr>
<th>Name</th>
<th>Shape</th>
<th>Purpose</th>
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<tbody>
<tr>
<td>GP01</td>
<td>Single flight</td>
<td>JSW standard screws suitable for general-purpose resins.</td>
</tr>
<tr>
<td>MT</td>
<td>Double flight</td>
<td>Compatible with high-cycle molding and high-temperature conditions.</td>
</tr>
<tr>
<td>SDN</td>
<td>Double flight</td>
<td>Used for optical resin (PC, PMMA) molding.</td>
</tr>
<tr>
<td>HP</td>
<td>Double flight + mixing piece</td>
<td>Reduces color unevenness when using highly concentrated dry colors or master batches.</td>
</tr>
<tr>
<td>CL</td>
<td>Specially shaped flight</td>
<td>Resin burn reduction.</td>
</tr>
<tr>
<td>VP</td>
<td>Specially shaped flight</td>
<td>Prevents resin burn, contamination, and gas caused by excessive mixing.</td>
</tr>
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</table>

*Please contact us in regards to EH pressure holding times.

Injection unit type

<table>
<thead>
<tr>
<th>Clamping</th>
<th>Injection unit type</th>
<th>Screw diameter</th>
<th>Max. Variation pressure (MPa)</th>
<th>Std. unit holding pressure (MPa)</th>
<th>Max. unit holding pressure (MPa)</th>
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<tbody>
<tr>
<td>J50ADS</td>
<td>15U</td>
<td>16</td>
<td>270</td>
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<tr>
<td>J50ADS</td>
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