

All Electric Servo Drive Injection Molding Machine

J550ADS J1000ADS J650ADS J1300ADS J850ADS J1400ADS J850ADSW

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Made in HIROSHIMA



JQA-QMA13993 JQA-EM6416 (Hiroshima Plant)



# Fusion of Experience and New Technology —Bringing

# Electric servo drive injection molding machine that has evolved to a higher standard than ever before



JSW, a specialist in toggle type mold clamping unit design, proudly presents the JADS series of electric servo drive injection molding machines. As a world's top-class supplier we have achieved "faster cycle times", a stronger, "long life design" and "precise & stable molding" based on our extensive experience. In addition, the new controller, which is based on ergonomics

and is extremely easy to use,

provides advanced intelligence to meet the diverse needs of various molding factories and contributes to increased productivity.



# **4** Solutions for High Productivity



- Ultrahigh-speed open/close toggle mechanism
- High-speed & high-acceleration ejector
- High speed servo type mold height adjustment device
- High response & high output injection unit



#### Intelligence

- Applications for a variety of needs
- New controller "SYSCOM 5000*i*"
- Convenient screen layout
- IoT solutions "J-WiSe"



#### Flat press wide platen Advanced high-performance screw

Longer Life Design

3900H

High-rigidity mold clamping unit

TRONG

## Stable Molding

Clamping force feedback control High-accuracy recovery control Energy saving



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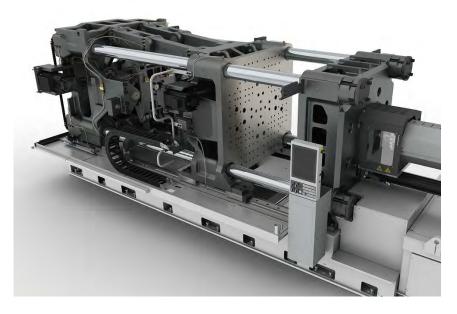


## Exceptional dry cycle capability

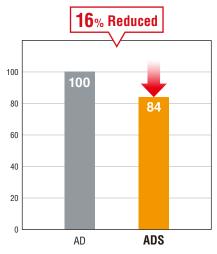
#### Ultra high-speed toggle mechanism

JSW's original toggle clamp design has evolved to achieve top-level dry cycle times.

- Mold open/close speed is increased by approximately 15%
- High-speed, high-acceleration ejector device significantly reduces product removal time
- The servo drive mold thickness adjustment mechanism greatly reduces the time for the mold thickness adjustment
- and improves the linearity of clamping force between the set value and actual value







## Improved stability of injection and plasticizing

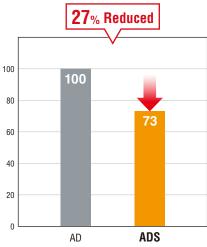
#### Highly responsive & high-power injection unit

JSW's original high-precision, highly stable injection unit has been made more compact with reduced inertia allowing for consistent injection and plasticizing.

- Injection acceleration time has been increased by 27% to enable molding of thin-walled products
- The three-plate structure of the injection unit achieves high rigidity and high durability
- Large-capacity servo motors are installed to support a wide range of molding applications such as high speed and high load processes



■ Injection start-up time (3900H)





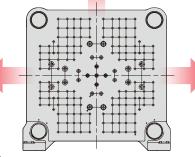


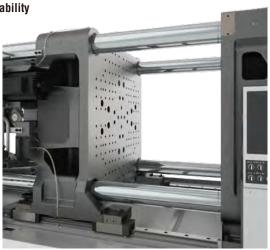
## Mold clamping unit with a proven track record and high reputation

#### High-rigidity mold clamping unit

Further evolution of the proven highly rigid mold clamping unit to achieve more stable molding.

- ullet High-rigidity mold clamping unit that pursues precise, stable molding and high-durability
- Maintenance-free, linear-guided mold support system with high running accuracy \* 1000T and above are large diameter and wide tires
- Flat press platens ensure uniform surface pressure distribution and prevent burr and uneven wall thickness in molded products
- The mold open/close motor is equipped with a brake as standard to protect the mold in case of power failure or other unforeseen circumstances





## Wide platens with high rigidity

By increasing the distance between tie bars while maintaining the rigidity of the mold platen, larger molds can be mounted.

| Item                         | es Model | J550       | J650        | J850        | J850W       | J1000       | J1300       | J1400        |
|------------------------------|----------|------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Distance between<br>Tie-bars | AD       | 960 × 900  | 1060 × 960  | 1060 × 1060 | 1320 × 1320 | 1320 × 1320 | 1400 × 1400 | 1700 × 1400* |
| H×V (mm)                     | ADS      | 1020 × 970 | 1120 × 1070 | 1120 × 1070 | 1370 × 1320 | 1370 × 1320 | 1520 × 1470 | 1720 × 1470  |

\* J1350ADW

### Advanced high-performance screw \*Standard screw for 1400H and smaller is the GP screw

#### M3-CL screw

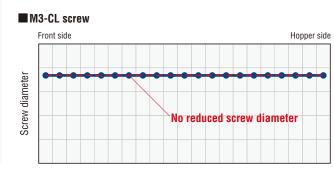
Faster cycle times and a stable molding process is achieved utilizing a longer life screw with both high plasticizing capacity and high kneading performance.

- Achieves faster cycle molding with
- the industry's top-class plasticization capacity
- New screw design reduces wear and material burn
- JSW's original screw design provides both high plasticizing capacity and improved kneading performance









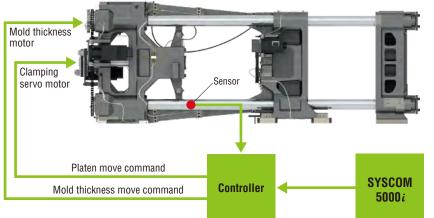


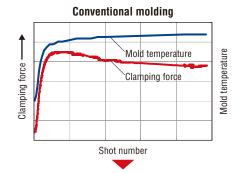
# Highly precise and stable control

#### Original high precision mold clamping control

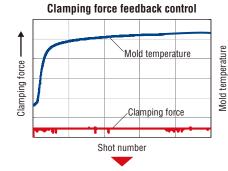
Prevents changes in mold clamping force due to changes in temperature to achieve stable molding.

- "Visualization" of the actual clamping force in toggle machine
- Reduced clamping force fluctuations based on temperature changes in the mold
- "Reduction of mold maintenance" by stabilizing gas venting
- "Longer mold life" with optimum clamping force

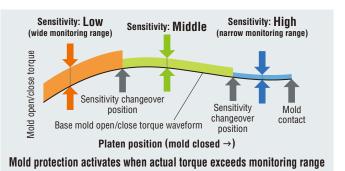




#### Mold clamping force changes as mold temperature rises



# Mold clamping force remains constant even if the mold temperature changes



## New mold protection function

In addition to conventional mold protection, the use of the new control further improves mold protection performance.

- High safety performance with easy setup
- Compatible with various molds
- Follows changes in mold temperature
- Abnormality detection at all stages of mold open/close



## High-precision original injection control

#### Various holding pressure settings

By selecting the proper holding pressure mode, the quality of the molded products can be improved and stabilized.

| Select mode    | Control   | Improvements  |
|----------------|---|---|
| IVSH           | Changeover by Position                                      | —   |
| IVSL           | Changeover by Speed   | Less variation when filling   |
| IPS            | Changeover by Pressure                                      | Less variation when filling   |
| EXT            | Changeover by External signal                               | Pressure within the mold can be controlled (selected) by user   |
| Wait control 1 | Constant control of the Cushion position                    | Flow extension, improvements in filling balance, pressure reduction in the mold, etc.                         |
| Wait control 2 | Constant control of the Cushion position + Pressure holding | Flow extension, improvements in filling balance, pressure reduction in the mold, controlling sink marks, etc. |



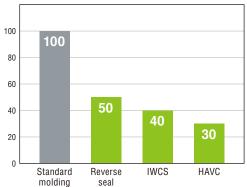
## High-accuracy recovery control

#### JSW's original high accuracy volume control

JSW's unique High Accuracy volume Technology enables further stabilization of molding.



#### Product weight variation

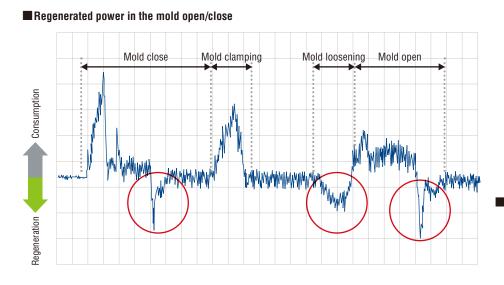


Promotes closure of the back-flow prevention ring after reversal

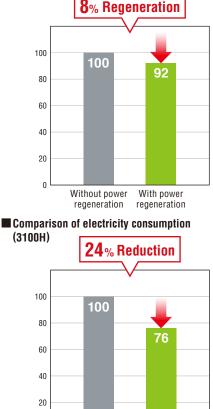
## Various energy saving solutions

#### **Original Power Regeneration**

In the entire process of servo motor drive, such as injection and mold open/close, the energy generated at the time of deceleration is recovered as regenerative power to reduce power consumption.



# Regenerated power in the mold open/close



#### **Barrel insulation cover** (optional)

Prevents heat dissipation from the barrel heater and improves the thermal efficiency of the heater
 Reduces power consumption by about 24% when the barrel temperature rises

#### Synchro heat up control

Reduces power consumption by synchronizing the temperature rise speed of the nozzle and barrel

Prevents resin burn and contamination at the nozzle when the barrel temperature rises

\*Power consumption when the barrel temperature is increased from 150°C to 250°C

Standard

Cover

Heat insulation

cover

0

# MART Fulfill All Your Requirements

Management

Promotes energy savings and improves productivity with production management system

## Energy savings [J-Support]

SYSCOM 5000*i* will suggest injection molding conditions in order to save energy

| Machine                          | Mon. val                              | Cycle         | Powe | er Wa     | ave Graph            | Actual           | History                       |
|----------------------------------|---------------------------------------|---------------|------|-----------|----------------------|------------------|-------------------------------|
|                                  | onsumption redu                       | iction suppor | t —  | Ave       | rage powe            | r                |                               |
|                                  | pressure time too<br>tolding pressure |               | Jump | Regenerat | Mon. v<br>kW<br>0.00 | kW<br>0.00       | impd val<br>kW %<br>0.00 0.00 |
| paying attentio<br>appearance, e | on to the product                     |               | Junp | Hee       | Mon. v<br>kW<br>0.00 | kW               | kW %                          |
| Q3                               | pressure too high<br>time too long?   | 17            |      | Measur    | ement Start          | Bench            | hmark Update                  |
|                                  |                                       |               |      | 0         | -                    | Motor load check |                               |

| Production Ma                    | inagemen          | t 👘  | Quality Con                                  | trol                             | Temp N            | tanagement   |
|----------------------------------|-------------------|--|--|----------------------------------|-------------------|--|
|                                  |                   |  | (uH1<br>32.2                                 |                                  | G H2<br>32.2 32.2 | H1 HP<br>32.3 0.0 °C   |
| Gamp<br>3439 kN MC<br>M/thick PD | end E             | Elicitat                                     | Barrel Prs                                   | Screw                            |                   | Recov<br>Recov<br>Recov<br>Rotation Solt<br>0,0 min<br>ROV Toro<br>100 0 % |
| M/Ctime<br>3.50 a                | 0.50 s            | HP Time<br>0.50 s<br>Cycle<br>9.66 s         | ECV Time<br>2.02 s<br>Ceoling Time<br>2.65 c | 1.70                             |                   |  |
| Had Maxitor                      | •                 | Production E                                 | b  |                                  |                   |  |
| Tetting Mode Shot                |                   |  | Set (time)                                   |                                  |                   | e) Prod Qty (pos.)   |
| DycktTim                         | 9.66s<br>7h 15min | Prod end Qty<br>End Notice 1<br>End Notice 2 | 2500   | Accept<br>Reject<br>Total        | 72                |  |
|                                  | DUNT              | Stop time<br>DFF mode tin                    |  | nin MAN m<br>nin Autom<br>Hour m | iode time d       | The 45min<br>The 15min<br>Hour Meter Cleve                                 |
| Iser Counter                     | Naimi             |  | Set (tim                                     | e) Shot                          | darrand A         | Uarm   |
| O USERI COUNT                    | Shot              |  |  | 32                               | 0 S1              | op V CLEAR   |
| O LINEZCOLINT                    | Shot              |  |  | 16                               | 0 00              | F V CLAR   |
| D LINESCOUNT                     | Shot              | -  | 1  | 8                                | 0.0               |  |

Production management system

Collecting of shot data and statistical data, setting of upper and lower limit alarms can be controlled easily.

#### Manufacturing

## Reduces operator work load to create higher added value

### Molding assist [J-Assist]

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



#### Memo of molding conditions

Storage capabilities such as molding conditions, memos, setting of peripheral devices and photos of products.



### Screen shots · Hand written memos

You can write and edit information directly on top of screenshots.





Maintenance

# Preventive maintenance reduces machine downtime

#### Preventative maintenance [J-Support]

Maintenance items can be checked in collective display

| MainSpec Inspection        | Board<br>Status        | Senio<br>Status                 | UQ<br>Eheck   | Calibration   | ServeControl<br>Monitor |
|----------------------------|------------------------|---------------------------------|---------------|---------------|-------------------------|
| Maintenance Preventive     | Monthly                | quarterly                       | Seniamus      | Annual        | History                 |
| Operation Time             | Qishet<br>Qib F        | HT Pwr Voltag<br>Iower Prequenc | r 0.0 Hz      | -             | intee STD               |
| Grease lub.<br>Grease lub. |                        |                                 |               | ntep 1        | Startup 2               |
| Fath                       | _                      | Back-Bow                        | Prevention ra | a.            |                         |
| O CNTL PANEL Fan with      | o'sting time<br>Bh     |                                 | eur<br>retion |               |                         |
| O INJ UNIT                 |                        | Key Switz                       | h             | _             |                         |
| · MOTOR                    |                        | Keys                            | Switch        |               |                         |
| Discharge Mode             | -                      |                                 | _             | -             |                         |
| ·                          |                        | Change Voltage<br>0.0V          |               |               |                         |
| Screw Replace              |                        |                                 |               |               |                         |
|                            | na Manazin<br>C OVININ |                                 |               |               |                         |
| Battery Replacement        |                        |                                 |               | Capacitor     |                         |
| Display CPU battery Cor    | NTOI CHE BACH          | ry Battery                      |               | Cepace or     |                         |
| Biqued Edays Europ         | ant Ddays              | Toport 0                        | days          | Elupsed Odays |                         |
| Time to replace: 3Year Tim | te to replace 3        | Year Time to)                   | eplace: 2Year | Time to repla | ice: 5Yea/              |

| Main Spec |                           | E Inspection Status          |           | Send<br>Statua  | UD<br>Dheck   | Calibration | ServeSontro<br>Monster |  |
|-----------|---------------------------|------------------------------|-----------|-----------------|---|-------------|------------------------|--|
| Variani   | -                         | Revention     Monthly        |           | Quarterly       | Quarterly Scelifing   |             | History                |  |
| -         |                           |                              | iów.      | -               | Creat and   | -           | Unit-                  |  |
| 91        | De                        | 0 scores                     |           |                 | I condition: Che<br>lieks and sexrim  |             | + Hetery               |  |
| 02        | Se                        | rignicitir ciplin            | g faire   | Cheick it in    | Chelok it the fana any right durty,   |             |                        |  |
| 0.5       | Control Parel Couling Res |                              |           | Chick if the    | Check if the function rest dirty  |             |                        |  |
| 44        |                           | pection of Mold<br>(settment | Thickenia | thidinest       | Impedien a regured if the same<br>mold has been used and the mold<br>thickness value has not been<br>changed for long period. |             |                        |  |
| Q.5       | 0.0                       | land heater                  |           | Check for bolts | Check for looseness of the fitsing  |             |                        |  |
| 96        | TR                        | érmécousie                   |           | Check lit c     | ondition of them  | nocouples   | -                      |  |

Automatically notifies you when to

perform regular inspections. Inspection record can be stored in the controller.

#### Quarterly Up to past 3

| Smbl | ChkPoint                                   |            |
|------|--|------------|
| Q-1  | Ball screw                                 | 2020/08/25 |
| Q-2  | Servomotor cooling fan                     | 2020/08/25 |
| Q-3  | Control Panel Cooling Fan                  | 2020/08/25 |
| Q-4  | Inspection of Mold Thickness<br>Adjustment | 2020/08/25 |
| Q-5  | Band heater                                | 2020/08/25 |
| Q-6  | Thermocouple                               | 2020/08/25 |

| MainSpac     | Inspection                 | Board<br>Status | Seno<br>Statua | U0<br>Dheck | Calibration | Servic Control<br>Monitor |
|--------------|----------------------------|-----------------|----------------|-------------|-------------|---------------------------|
| Manneninie   | Preventive<br>Maintenarrog | Monthly         | Quarterly      | Seniamus    | Annual      | History<br>memo-          |
| INJ Ball Sch | TV4                        |                 |                |             |             |                           |
| Requirement  | 1-1                        |                 |                |             |             |                           |
| Lond         | they<                      |                 | Hard           |             | Warning     | Reset                     |
| Wape meter   | 1.1                        |                 |                |             |             |                           |
|              | 26% 503                    | Mareta          |                | 175% 200%   |             |                           |
| CLP Ball Scr | ew.                        |                 |                |             |             |                           |
| Requirement  |                            |                 |                |             |             |                           |
| Lond         | ting-                      |                 | tiat           |             |             |                           |
| inspic meter | 15                         |                 | 2.0            |             | TOP         |                           |
|              | 76 25% 50%                 | 71%             |                | 178% 200%   | 16          | i totom                   |

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

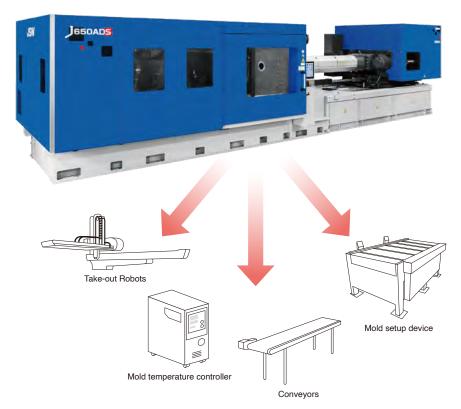
| TUP              | States and a state of the local division of |   |
|------------------|---|---|
| List             | Alarm Notification  | , |
|                  | Fishermony Firme 1, 2006/07   |   |
| Roard            | 11 20% #21 60% M <sup>th</sup> A 120%   |   |
|                  | Freisrenweit Filme - 2024 - 01  |   |
| Relay            | 95 20% 40% 60% 00% ATECK  |   |
|                  | Princerent Time 2005/0  |   |
| Servis Amplifier | 0% 31% 45% 63% 50% A 120%   |   |
|                  | Teplacement Time : (2027) 64  |   |
| Cooling for      | es zes 40s 60s 80t A 120s<br>Replectment  |   |
|                  | Feclacement Time : 2002 / 10  | , |
| Democraph        | 0% 20% 40% 60% 80% A 120%   | 1 |

#### Production engineering

# Enables the construction of a manufacturing system through connection with peripheral equipment.

#### I/O customization

Simple sequences can be user generated.



|      | Matrix  | Matrix2   | Matrix3  | Matrix4                           | Matrixs                           |
|------|---|---|--|-----------------------------------|-----------------------------------|
|      | Address   | Input signal  | 1234   | 5 Input Setting                   | a contact                         |
| 1    | ¥174  | Full-Auto Mode  | 14.000   |                                   | Bisinghold                        |
| 2    | YL26  | Mold open end   |  |                                   | 2 Falling hold                    |
| 3    | YCMCL   | Mold closing  | 17000  | Output Setting                    | 文 Established<br>宮 Not establishe |
| 4    | CN01  | Counter output signal 01  |  | Execute                           | Stop                              |
| 6    | CNUT  | Counter output signal of  |  | Canod                             | File                              |
| 7    |   |   |  | Matrix clear                      | Country down                      |
| 8    |   |   |  | Compare clear                     | Tab name edi                      |
| 9    | -   |   |  | O Executing                       | Loting                            |
| 10   | Address   |   |  |                                   |                                   |
| 1    | CSAXO   | Comput signal<br>Conv action  |  |                                   | W2 Set(s)                         |
| 2    | Canto   | Com action  |  | OFF                               |                                   |
| 3    | CSRLVO  | Prod int. count   | 12000  | DN SU                             | rtus                              |
|      | CSRLYT  | Counter reset   |  |                                   | delay 2.5                         |
| 5    |   | N=  |  | OFF                               |                                   |
| CN   | CO. IL CO. OF   | W0 Prod int. count  | CSRLY1   | Counter reset                     | 4 0                               |
| CN   | 01 CSRL   | V0 Prod int. count  |  | Reset Signal Counter reset        | 4 0                               |
| CN   |   | -   |  |                                   | 0                                 |
|      |   |   |  |                                   | 0                                 |
| CN   |   |   |  |                                   | 1                                 |
| CN   | Q4  | 1   |  |                                   | 0                                 |
| 1000 | 04<br>05  | )   |  | +                                 | 0                                 |
| CN   | Q4  | r) Countera   |  | mpare1                            |                                   |
| CN   | 04<br>05  | e1 Counter2   |  | mpare)                            | 0                                 |
| CN   | 04<br>05  | K1 Counter2   |  | mparet 1                          | 0                                 |
| CN   | 04<br>05  | K1 Counter2   |  | mpare1                            | 0                                 |
| CN   | 04<br>05<br>Counte  |   |  | mpare)                            | 0                                 |
| CN   | 04<br>05  |   |  | mpane)                            | 0                                 |
| CN   | 04<br>05<br>Counte  |   |  | nparet                            | 0                                 |
| CN   | Course<br>Course  |   | ×<br>×   | mpare)                            | 0                                 |
| CN   | Course<br>Course  |   | ×<br>×   | ngaret                            | 0                                 |
|      | course<br>tion  | Aold is ope   | <b>k</b><br>ned                                |                                   | 0<br>Compare?                     |
|      | course<br>course<br>1 N<br>2 T  | Aold is ope<br>The internal   | ned<br>produc                                  |                                   | 0<br>Compare?                     |
|      | course<br>course<br>1 N<br>2 T  | Aold is ope   | ned<br>produc                                  |                                   | 0<br>Compare?                     |
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|      | counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counter<br>counte | Aold is ope<br>he internal<br>ncreased by<br>Vhen the in<br>ounter read | ned<br>  produc<br>y 1.<br>ternal p<br>ches 4, | tion cou<br>productio<br>the conv | comparez                          |
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MART Stable Production by Advanced Intelligence

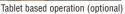
# New controller SYSCOM5000i

# Function fully realized through 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.



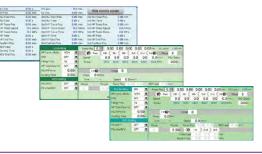
#### Cycle monitor

Allows task conditions in the molding machine to be visually checked in real time.



#### Multiple injection (option)

Multiple injection unit control can be integrated.



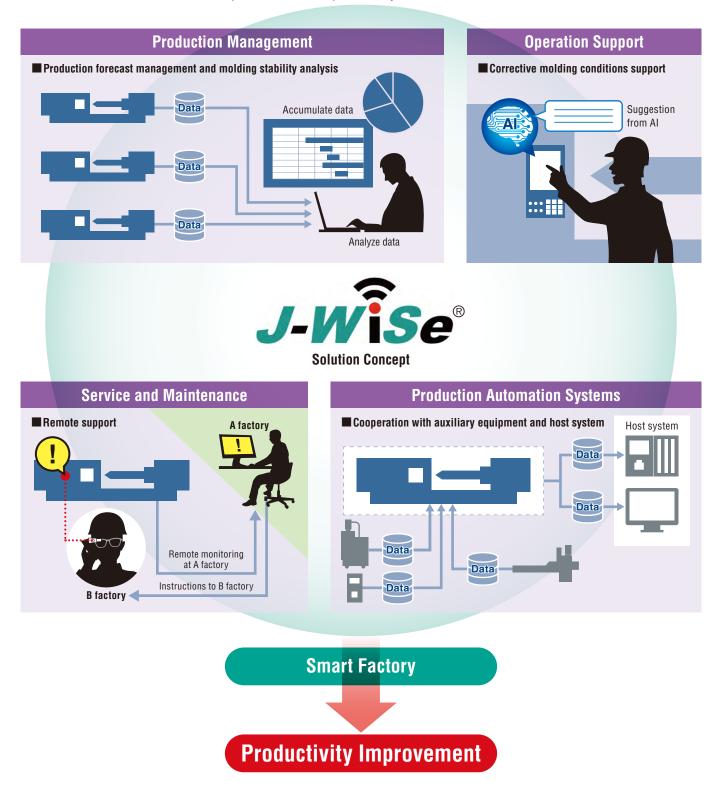




J-WiSe® : JSW Worldwide IoT Solutions of Enhancement

"J-WiSe<sup>®</sup>" is a general term for the IoT solutions that JSW aims to provide. By providing systems and services in the four categories of "Production Management," "Operation Support,"

"Service and Maintenance," and "Production Automation Systems," our goal is to make our customers' molding factories smart factories and contribute to the improvement of their productivity.

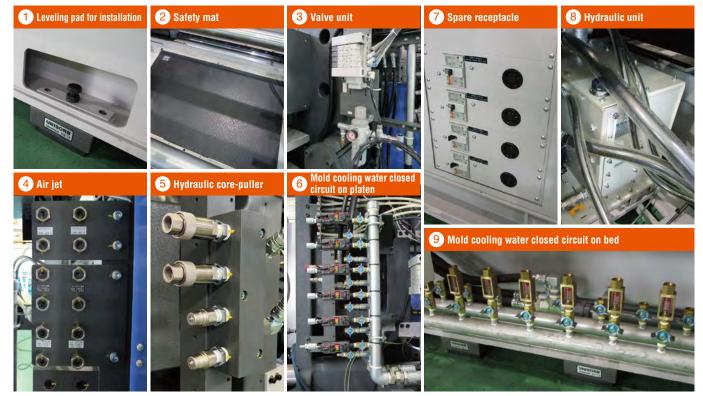


# **Various Equipment**

A full range of equipment to meet a wide range of requirements.





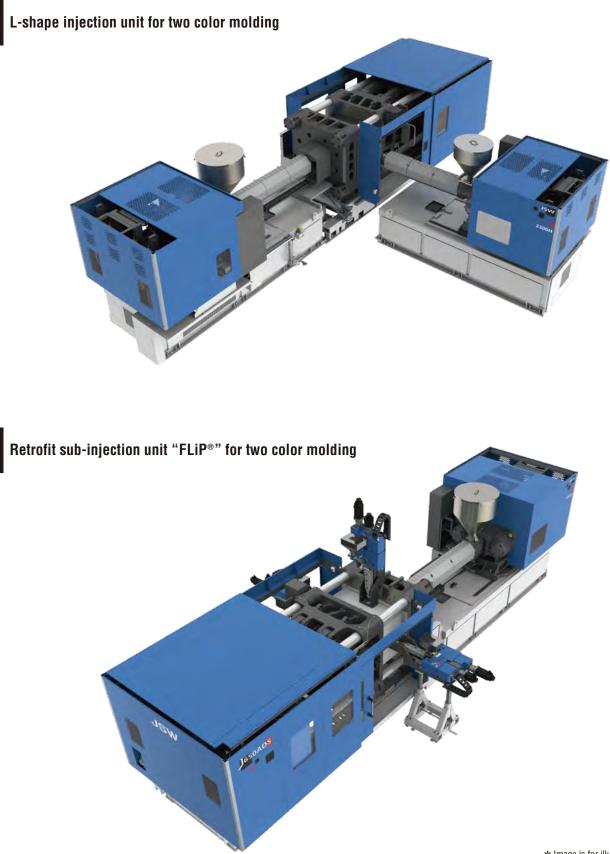


\*These are sample pictures of options and may differ from the pictures depending on the customer's specifications.

# Customization



Flexibly respond to custom specifications.



# **Standard Equipment List**

|                                 | ŀ   | tem                                    |     |            | Item   |        |
|---------------------------------|---|--|-----|------------|--|--------|
|                                 | Open nozzle                                       | Not                                    | e 1 |            | Touch panel 15" TFT color LCD controller               |        |
|                                 | N2000F barrel                                     |  |     |            | 300 mold condition storage (internal memory)           | Note 5 |
|                                 | Chrome plated screw                               | Not                                    | e 2 |            | Soft start molding                                     |        |
|                                 | Screw pull-back                                   |  |     |            | Self diagnostics function                              |        |
|                                 | Purge cover (with limit switch)                   |  |     |            | I/O customize function                                 |        |
|                                 | Injection Unit Swiveling device (v                | vith limit switch) Not                 | e 3 |            | Molding operation assist [J-Assist]                    |        |
|                                 | Screw cold start prevention                       |  |     |            | Help function  |        |
| ij                              | Molding/Purging/Pause temperat                    | ture select                            |     |            | Pop up display   |        |
| 1<br>L                          | Auto purging circuit                              |  |     | er         | Manual browsing function                               |        |
| Injection and Plasticizing Unit | Nozzle retract select                             |  |     | Controller | Start up safety notice                                 |        |
| tici                            |   | /Holding pressure: 1~6 steps (variable |     | ont        | Molding condition memo                                 |        |
| las                             |   | /Back pressure: 1~3 steps (variable)   |     | S          | Clock function   |        |
| ЪГ                              | Holding pressure transfer select                  |  |     |            | Multi language select (English, Chinese, Japanese)     |        |
| n ar                            | Holding pressure control select                   |  |     |            | USB port × 2   | Note 6 |
| tio                             | Pull-back select                                  |  |     |            | Overall setting screen                                 |        |
| njec                            | Barrel temperature control (PID/S                 | ,                                      |     |            | Preheat timer  |        |
| =                               | Nozzle temperature control (PID/                  |  |     |            | Product takeout robot circuit                          |        |
|                                 | Synchrounous temperature rise of                  |  |     |            | Attended/Unattended operation select                   |        |
|                                 | Hopper flange temperature contr                   | ol                                     |     |            | Emergency stop button                                  |        |
|                                 | Soft pack servo control                           |  |     |            | Safety key   |        |
|                                 | HAVC (high accuracy volume cor                    | ,                                      |     |            | Actual value display                                   |        |
|                                 | IWCS (injection and cushion stat                  | oility) control                        |     |            | Mold temperature display                               | Note 7 |
|                                 | Reverse seal control                              |  |     |            | Injection/Metering waveform monitor                    |        |
|                                 | Auto grease iubrication                           |  |     |            | Oscilloscope waveform monitor                          |        |
|                                 | High performance platen support                   | I                                      |     |            | Energy consumption and regeneration monitor            |        |
|                                 | Low vibration mold open/close                     |  |     |            | Injection/Metering waveform storage                    |        |
|                                 | Wide platen                                       | tienen ( cide /menuelle cide)          |     |            | Barrel temperature monitor                             |        |
|                                 | Flat press platen mechanism (sta                  | Mold open/close: 4 steps (fixed)       |     |            | Injection pressure monitor (IPM)                       |        |
|                                 | Mold open/close and<br>Ejector programmed control | Ejector: 1~3 steps (variable)          |     |            | Statistical graph<br>Production monitor                |        |
|                                 | Mold protection function                          | Ejector. 1~3 steps (variable)          |     | _          | Cumlative operating hour display                       |        |
|                                 | Ejector servo motor with brake                    |  |     | lito       | Cycle monitor  |        |
|                                 | Mold open/close servo motor with                  | th braka                               |     | Monitor    | Molding condition upper/lower limit monitor            | Note 8 |
| nit                             | Auto mold thickness adjusting de                  |  |     | _          | Inspection and maintenance guide [J-Support]           | Note 9 |
| Clamping Unit                   | Auto clamp force setting                          | 5000                                   |     |            | Heater system alarm                                    | Note 5 |
| pin                             | Clamp force display                               |  |     |            | Injection pressure overshoot alarm                     |        |
| am                              | Clamping force feedback control                   |  |     |            | Grease lubrication alarm                               |        |
| Ö                               | Ejector plate return confirmation                 | circuit                                |     |            | Servo fault alarm                                      |        |
|                                 | Electrical clamping unit safety de                |  |     |            | Unreleased clamp alarm                                 |        |
|                                 | Robot mounting holes                              |  |     |            | Position calibration request                           |        |
|                                 | i i obot i i oddining i oroo                      | Screw rotation during mold open/clos   | e   |            | Fault alarm buzz                                       |        |
|                                 | Compound action                                   | Eject during mold open                 |     |            | Alarm history  |        |
|                                 |   | Injection during clamp up              |     |            | Set value history                                      |        |
|                                 | Safety mat (under mold area) J8                   |  | e 4 | s          | Safety compliance (ISO20430, ISO60204-1)               |        |
|                                 | Grease free toggle bushing                        |  |     | Others     | Cooling water closed circuit for feed throat           |        |
|                                 | Auto grease lubrication                           |  |     | ot         | Accessories (maintenance tools and ejector rods, etc.) |        |
|                                 |   |  |     |            |  |        |

- 1400H and below are chip types. 2300H and above are MIII-CL screws. Note 1
- Note 2
- 1400H and below are GP-21 screws. 1400H and below are manual. Note 3
- Note 4
- J850ADSW and above are standard equipment. (models with tie-bar spacing larger than 1200 mm) J550ADS to J850ADS are optional. (tie-bar interval smaller than 1200 mm) The safety mat on the top of the steps is optional.
- Note 5 Commercial USB flash drives can also store molding conditions.
- Note 6 You can save the controller screen in PNG format and measured values in CSV format.
- Note 7 Temperature sensor and wiring not included.
- Note 8 You can select up to 18 display items and alarms from the list below.

(1) Cycle time (2) Injection time (3) Metering time (4) Maximum injection pressure (5) Cushion position (6) Holding pressure end position (7) Holding pressure transfer pressure (8) Back pressure (9) Metering end position (10) Injection start position (11) Holding pressure transfer position (12) Metering torque (13) Holding pressure transfer speed (14) Mold close time (15) Mold open time (16) Clamp force (17) Shift amount (HAVC) (18) End speed (HAVC)

Note 9 Notifies you of component inspection times based on molding conditions

# **Options List**



|                                 | lt  | em   |                  |  |  |  |  |  |  |
|---------------------------------|---|--|------------------|--|--|--|--|--|--|
|                                 | Long nozzle<br>Shut off nozzle (pneumatic type a<br>Mixing nozzle | nd hydroulic type)                                     |                  |  |  |  |  |  |  |
|                                 | KC nozzle (support up to 3100H φ 92)                              |  |                  |  |  |  |  |  |  |
| Jnit                            | LSP-2 screw (abrasion resistant type)                             |  |                  |  |  |  |  |  |  |
| Injection and Plasticizing Unit | Special design screw  | MIIK screw for optical ap<br>HP screw for high dispers |                  |  |  |  |  |  |  |
| asti                            | Wide selection of screws & barre                                  | ls   | Note 1           |  |  |  |  |  |  |
| I Pla                           | Barrel insulation cover   |  |                  |  |  |  |  |  |  |
| anc                             | Barrel blower cooling unit (with in                               | isulation or no insulation)                            |                  |  |  |  |  |  |  |
| tion                            | Hopper  |  |                  |  |  |  |  |  |  |
| ijec.                           | Hopper slide device<br>High speed injection spec.                 |  |                  |  |  |  |  |  |  |
| -                               | Extended holding pressure time s                                  | nec  | Note 2           |  |  |  |  |  |  |
|                                 | Long time plasticizing spec.                                      |  | Note 3           |  |  |  |  |  |  |
|                                 | Electric motor driven injection un                                | it advance/retract                                     |                  |  |  |  |  |  |  |
|                                 | Purge shutter   |  |                  |  |  |  |  |  |  |
|                                 | Daylight extension  |  |                  |  |  |  |  |  |  |
|                                 | Mold platen heat insulation boed                                  | (5 or 10 mm)   | Note 4           |  |  |  |  |  |  |
|                                 | Locating ring   |  |                  |  |  |  |  |  |  |
|                                 | Air jet   |  |                  |  |  |  |  |  |  |
|                                 | Core pull devices (pneumatic type                                 | Note 5   |                  |  |  |  |  |  |  |
|                                 | Valve gate devices (pneumatic typ                                 | ,  | Note 5           |  |  |  |  |  |  |
|                                 | Coupler joint (hydraulic, pneumat<br>Hydraulic power pack         | .IC)   |                  |  |  |  |  |  |  |
|                                 | Ejector gate cutting circuit                                      |  |                  |  |  |  |  |  |  |
| ÷                               | Ejector (one touch type)  |  |                  |  |  |  |  |  |  |
| Un                              | Unscrewing motor circuit  |  |                  |  |  |  |  |  |  |
| ing                             | Auto safety gate open (operation                                  | side)  |                  |  |  |  |  |  |  |
| Clamping Unit                   | Auto safety gate open/close (oper                                 | ation side/non operation si                            | de/both sides)   |  |  |  |  |  |  |
| ö                               | Safety mat (under mold area) J5                                   | 50ADS to J850ADS                                       | Note 6           |  |  |  |  |  |  |
|                                 | Safety mat (top of the steps)                                     |  |                  |  |  |  |  |  |  |
|                                 | Safety footplate  |  |                  |  |  |  |  |  |  |
|                                 | T slot platen   |  |                  |  |  |  |  |  |  |
|                                 | Mold clamper device (pneumatic,                                   | hydraulic, magnet type)                                | Note 4           |  |  |  |  |  |  |
|                                 | Easy mold clamper   | 6 N  | Amada            |  |  |  |  |  |  |
|                                 | Toggle type injection compression<br>1~6 steps (variable)         | n function compression:                                | A mode<br>B mode |  |  |  |  |  |  |
|                                 | Forming mold control  |  | DIHOUE           |  |  |  |  |  |  |
|                                 | Mechanical clamping unit safety of                                | levice   |                  |  |  |  |  |  |  |
|                                 | moonamour oramping unit safety (                                  |  |                  |  |  |  |  |  |  |

|  | Item  |         |
|--|---|---------|
| Electrical instrumentation and control | Multi language select (1 language additional)                     | Note 7  |
|  | J-WiSe <sup>®</sup> system  |         |
|  | Mold temp display (with mold temp upper/lower limit alarm)        |         |
|  | Mold temp control device (with mold temp upper/lower limit alarm) |         |
|  | Hot runner control circuit  |         |
|  | Receptacle  | Note 8  |
|  | Family mold control   |         |
|  | Flow mold control   |         |
|  | Speae output signal circuit                                       |         |
|  | Motion/no-motion select   |         |
| Others                                 | Hopper stage  |         |
|  | Mold cooling water closed circuit (platen/bed)                    |         |
|  | Cooling water failure warning                                     |         |
|  | Air pressure alarm  |         |
|  | Leveling pad for installation                                     |         |
|  | Movement prevent anchor bolts                                     |         |
|  | Rotary warning light  |         |
|  | Export specification  | Note 9  |
|  | Designated color  | Note 10 |

- Note 1 Please contact us for detailed specifications.
- Note 2  $\quad$  High pressure holding capacity for a long time.
- Injection speed may be slow.
- Note 3 Can be plasticized with high torque.
- Plasticizing capacity may be reduced.
- Note 4 When an insulated plate or magnetic clamper is mounted, the nozzle plunge amount must take these thicknesses into account. Specification values for mold thicknesses have also been changed.
- Note 5 The hydraulic system requires an increase in the capacity of the hydraulic unit.
- Note 6 J850ADSW and above are standard equipment. (models with tie-bar spacing larger than 1200 mm) J550ADS to J850ADS are optional. (tie-bar interval smaller than 1200 mm)
- Note 7 Japanese, English and Chinese are standard equipment.
- Note 8 Please specify the power supply voltage and the number of outlets required for ancillary equipment.
- Note 9 Export specifications must be discussed depending on the destination.
- Note 10 Designate colors, referring to color samples or muncell codes.





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