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Printed in Japan HO,AH,AJ,BJ,C

JADS™ SERIES

Electric Servo Drive Injection Molding Machine



Model

J30ADS | J50ADS | J80ADS | J100ADS | J130ADS | J180ADS

Made in HIROSHIMA

JSW



JQA-QMA13993
JQA-EM6416 (Hiroshima Plant)

The perfect fusion of our experience and new technologies

~ Bringing you Ultimate Satisfaction ~

JADS™ SERIES
Electric Servo Drive Injection Molding Machine

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

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.

Solution

Satisfaction **S**mart **S**trong **S**table

~ Solving Problems for All Our Customers ~

Satisfaction

Satisfy all your Requirements

Energy Savings • Preventative Maintenance
• Customized I/O Function • Molding Support

Smart

Smart New Control System SYSCOM5000i

Operation Process Display (Visualization)
• Multi-Touch Operation Lever • NET100 Sytem (optional)

Strong

Strong High rigidity Clamping Unit
• Clamping Control

Increased loading size molds • High accuracy of
molds protection Flat Platen Press

Stable

Stable High Accuracy Injection •
Recovery control and flexibility

Wide selections of injection modules • Variations of
Screws Various Holding Pressure



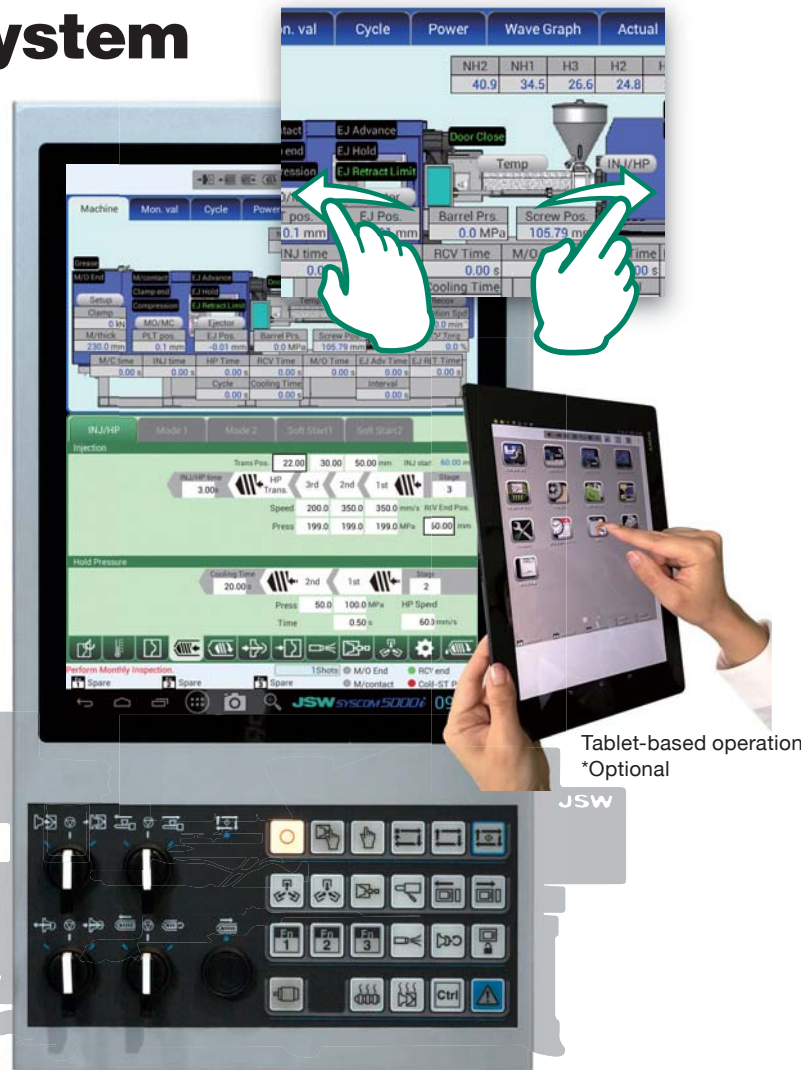
Complies with safety regulations
Japan Society of Industrial Machinery Manufacturers Regulation (JIMS K-1001)

New controller SYSCOM5000i

Functions Fully Realized through Simple Navigation System NEW

Main characteristics of SYSCOM5000i

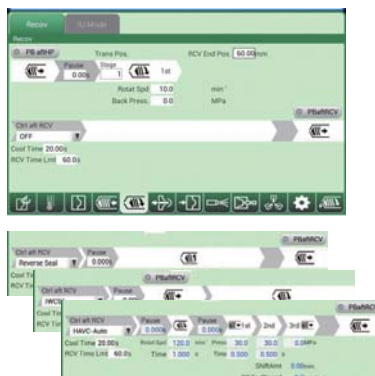
- Casual multi-touch operation
- Simple lever operation
- User-manual display function
- On screen instruction manual
- Large 15" display with utilized energy saving LED technology



User-friendly screen configuration

Operation process display

Visual or list display for every molding process



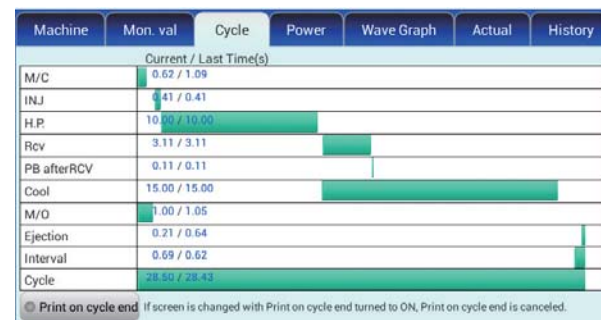
Collective setting display

Molding conditions can be set without navigating numerous pages.



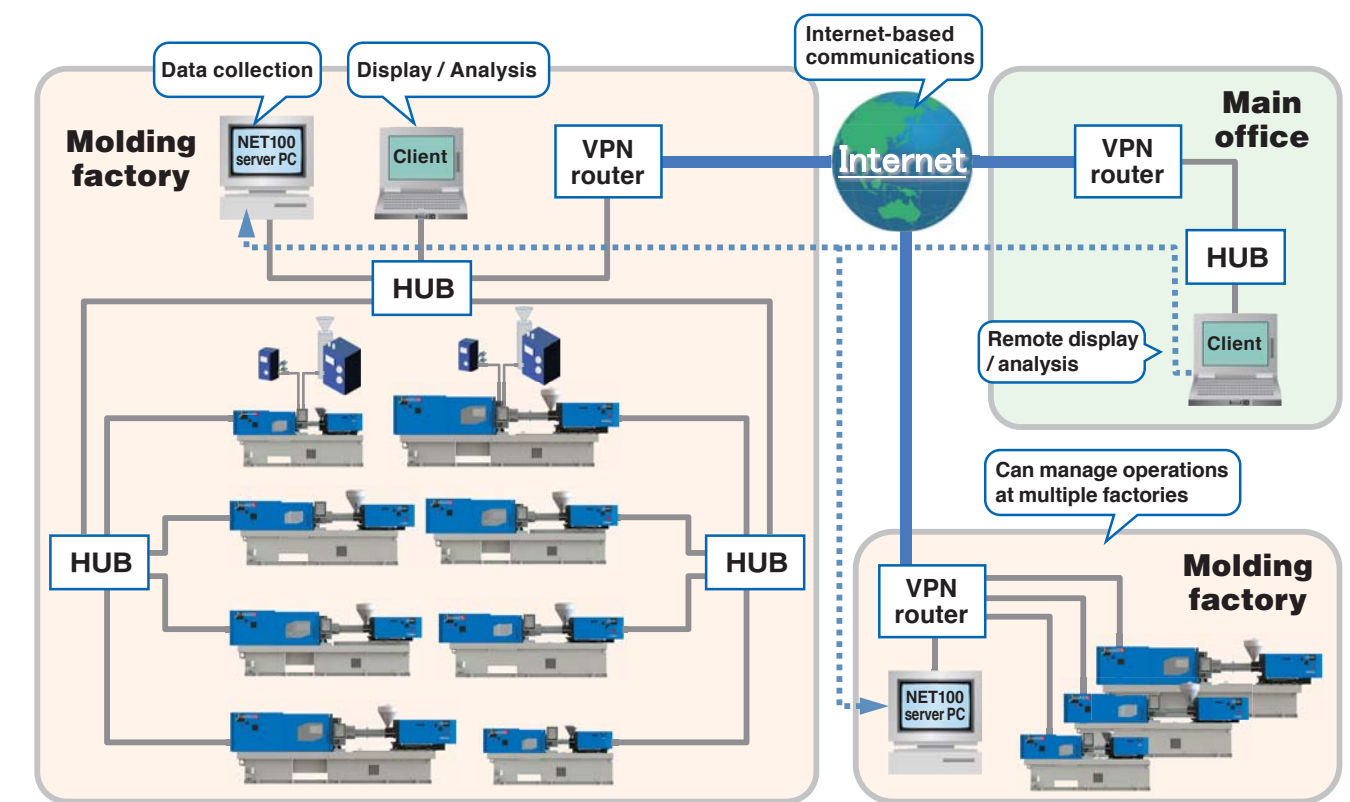
Cycle monitor

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



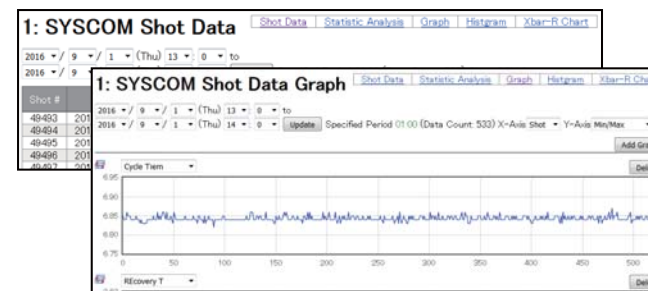
Observation of operation status

CAMOT NET100 Machine List									
Current Operation Status									
No.	Name	Molding Condition	Status	Shot Count	Cycle Time (s)	Shot Data	Operation Log	Print	Edit
1	SYSCOM5000	TEST1	Production	260	13.55	Shot Data	Operation Log	Print	Edit
2	SYSCOM5000	TEST2	Production	86458	10.23	Shot Data	Operation Log	Print	Edit

Display and operation of the controller screen

CAMOT NET100 Machine List									
Current Operation Status									
No.	Name	Molding Condition	Status	Shot Count	Cycle Time (s)	Shot Data	Operation Log	Print	Edit
1	SYSCOM5000	TEST1	Production	260	13.55	Shot Data	Operation Log	Print	Edit
2	SYSCOM5000	TEST2	Production	86458	10.23	Shot Data	Operation Log	Print	Edit

Analysis of measured values



Display and management of molding conditions

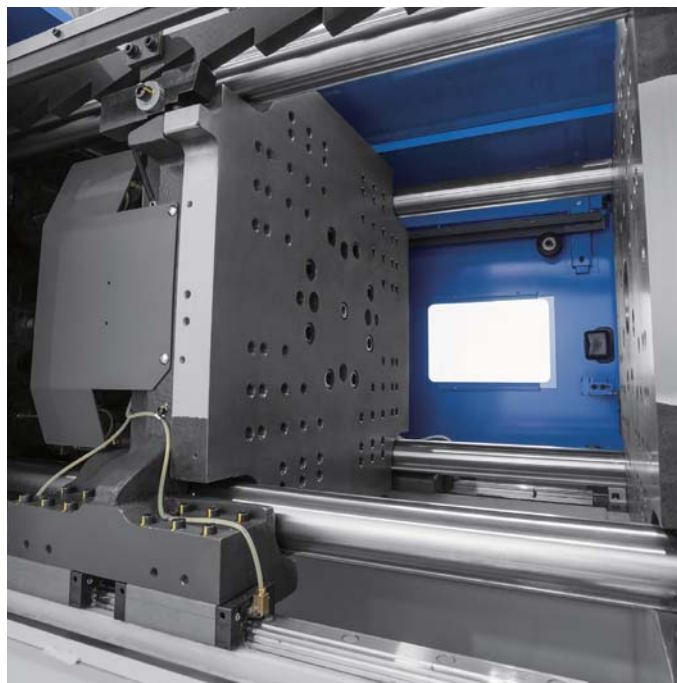
1: SYSCOM Molding Conditions									
SYSCOM									
No.	Temp. Test/PS/PE	Pressure	Time	Shot Count	Shot Data	Operation Log	Print	Edit	
1	Temp. Test/PS/PE	20100904	16:21:08	16:21:08	16:21:08	16:21:08	16:21:08	16:21:08	16:21:08
2	Temp. Test/PS/PE	20100904	16:21:08	16:21:08	16:21:08	16:21:08	16:21:08	16:21:08	16:21:08
3	Gate Seal/PS/PE	20100904	16:21:08	16:21:08	16:21:08	16:21:08	16:21:08	16:21:08	16:21:08
4	Weight var/PS	20100904	16:21:08	16:21:08	16:21:08	16:21:08	16:21:08	16:21:08	16:21:08
5	0.3LGP Special	20091206	19:34:52	20091206	19:34:52	20091206	19:34:52	20091206	19:34:52
6	0.4LGP Special	20091206	19:34:52	20091206	19:34:52	20091206	19:34:52	20091206	19:34:52
7	Spiral flow/PS	20100407	20:57:14	20100407	20:57:14	20100407	20:57:14	20100407	20:57:14
8	Spiral flow/PS	20100407	20:57:14	20100407	20:57:14	20100407	20:57:14	20100407	20:57:14
9	Deco. Plate/PS/PE	20100407	20:57:14	20100407	20:57:14	20100407	20:57:14	20100407	20:57:14

Innovated High rigidity clamping unit • Clamping control

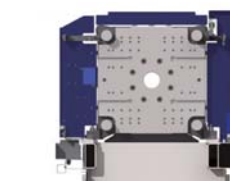
Clamping unit for variety of molds

NEW

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



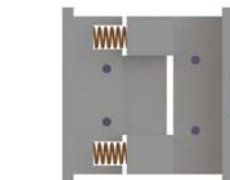
Uses a high-precision linear guide with low friction which contributes to energy saving and high cycles



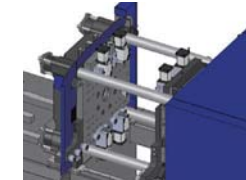
Platens are compatible with flexible processing (E.g.: T-groove)



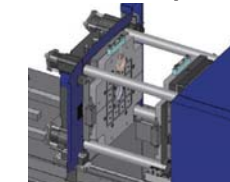
Ejector rod link



Mold with spring mechanism [Standard equipment for the brake mechanism] NEW!



Large molds can be automatically changed (Horizontal setup)



Easily installable and controllable magnet clamp



Compatible with JSW exclusive DSI molding technology

*Images include optional components.

Expanded mountable mold thickness and width

NEW

Expanded platen size and daylight in order to mount larger molds

*Upper row: ADS Lower row: Conventional machine

	J30ADS	J50ADS	J80ADS	J100ADS	J130ADS	J180ADS
Mold thickness	120~430	150~470	150~510	150~550	150~550	200~600
Min. - Max. (mm)	150~330	160~370	180~410	200~450	200~450	200~500
Distance between tie bars	310×310	360×360	410×410	460×460	530×510	590×560
W × H (mm)	310×290	360×310	410×360	460×410	530×460	590×530

New mold protection function

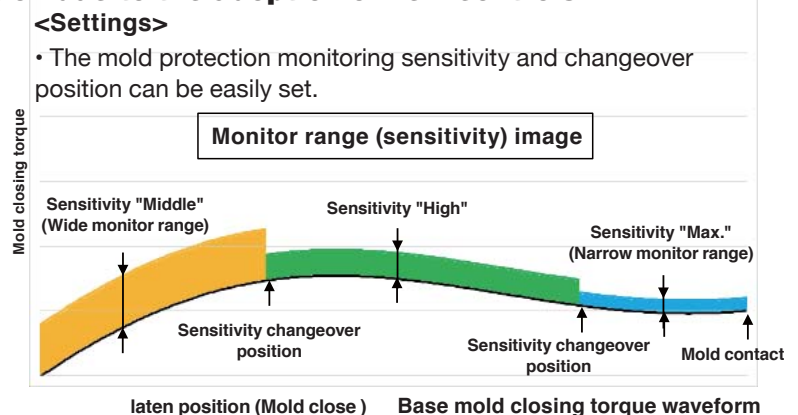
NEW

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



Before testing ADS Conventional machine



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]

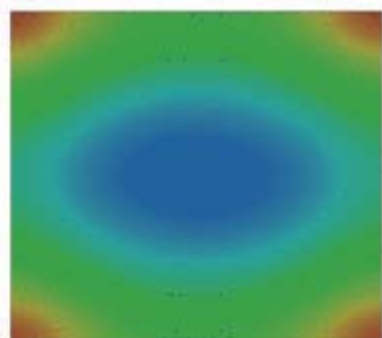
[Mold: Extension of mold life cycle, mold design • Improved degrees of freedom for equipment]

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.



With burr



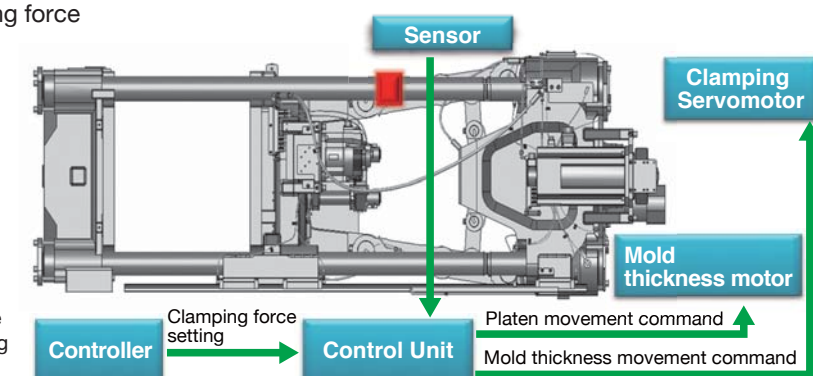
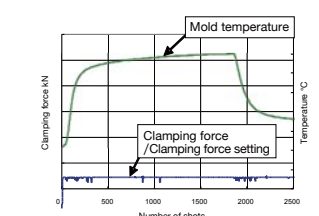
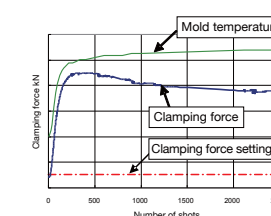
Without burr

The uniform surface pressure inhibits burrs and deviations in thickness.

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



Original High Accuracy Injection / Recovery Control and Flexibility

JSW's Original High Accuracy Volume Control

Reverse Seal Control

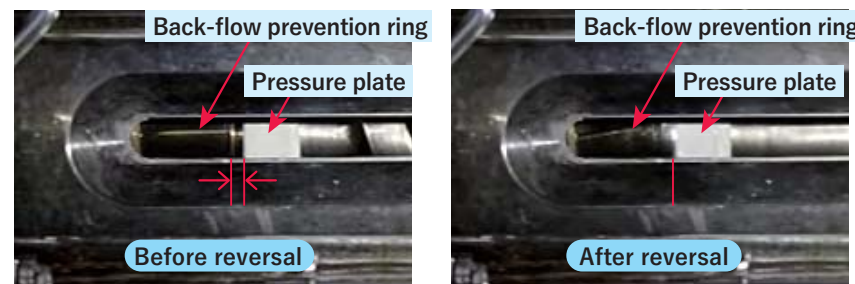
The screw is reversed after recovery ends to help the back-flow prevention ring close and to inhibit drooling.

Injection Weight and Cushion Stability

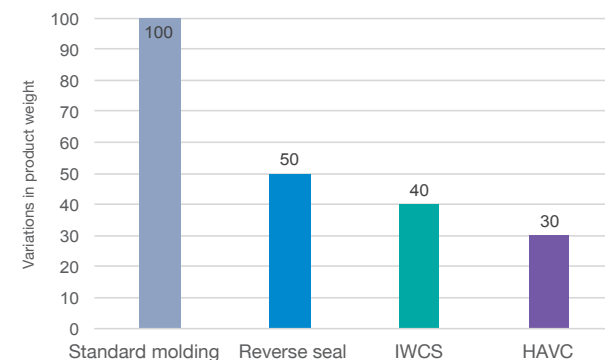
In order to stabilize product weight, the density of molten resin is controlled after recovery.

High Accuracy Volume Control

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



Eliminates the gap between the back-flow prevention ring and the pressure plate after reversal



Rich injection unit

*JSW original LSP-2 screw (excludes 300U) and N2000F barrel

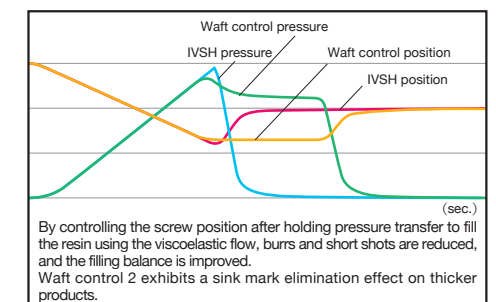
NEW

Clamping	Injection unit type	Screw diameter (mm)	Max. injection pressure (MPa)	Standard unit Max. injection speed (mm/s)	High-speed unit (HS) Max. injection speed (mm/s)	Extended pressure holding unit (EH) Max. injection speed (mm/s)
J30ADS	15U	16	276	350	500	250
		18	218			
		20	177			
J50ADS	30U	20	270	350	500	250
		22	223			
		25	172			
J80ADS	60U	25	270	350	500	250
		28	215			
		32	165			
J100ADS	110U	25	320	350	500	250
		28	300			
		32	270			
		35	225			
J130ADS	180U	40	172	350	500	200
		35	260			
		40	199			
J180ADS	300U	45	157	240	330	160
		40	250			
		46	189			
		51	154			

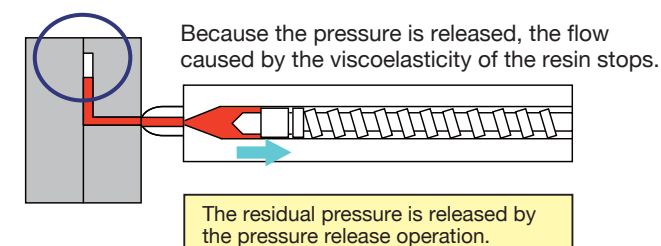
*Please contact us in regards to EH pressure holding times.

Various Holding Pressure Settings

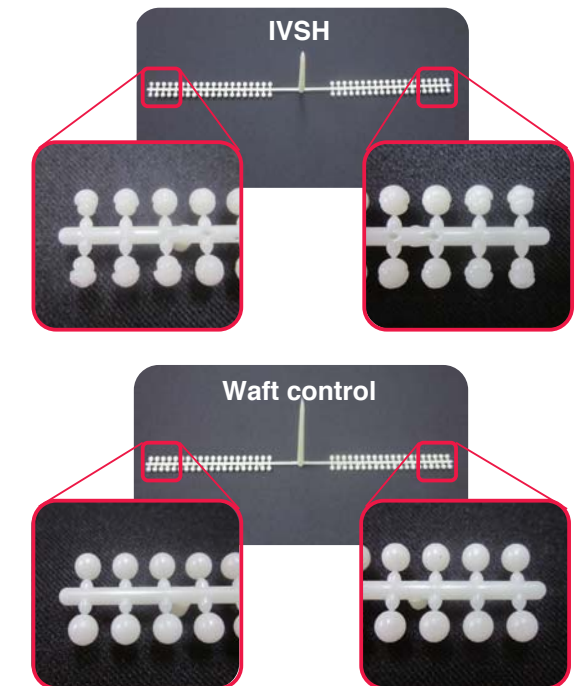
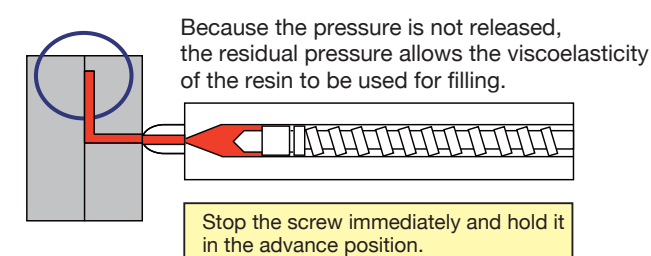
Select mode	Control	Improvements
IVSH	Position changeover	-
IVSL	Speed transfer	Less variation when filling
IPS	Pressure transfer	Less variation when filling
EXT	External signal selection	Pressure within the mold can be controlled (selected) by the user
Waft control 1	Constant control of the cushion position	Flow extension, improvements in filling balance, pressure reduction in the mold, etc.
Waft 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.



IVSH



Waft control



By stopping the screw immediately before filling, it is possible to extend the distance of the flow and improve the filling balance.

Variation of screws

JSW original screws correspond to diverse resins and products.

Name	Shape	Purpose
GP21	Single flight	JSW standard screws for use with all general-purpose resins
M7	Double flight	Compatible with both high-cycle molding and high kneading
M2K	Double flight	Used with optical resin (PC, PMMA), polyvinyl chloride resin (H-PVC) molding
HP	Double flight + mixing piece	Reduces color unevenness when using highly concentrated dry colors or master batches
CL	Specially shaped flight	Resin burn reduction
VP	Specially shaped flight	Prevents resin burns, contamination, and gas caused by excessive shearing



Additionally, various other types of screws are available.