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Printed in Japan HO,AE,JD,BJ,C

**JADS SERIES**  
 All Electric Servo Drive Injection Molding Machine



Model  
**J220ADS | J280ADS | J350ADS | J450ADS**



JQA-QMA13993  
 JQA-EM6416

# The results of four generations of accomplishments and new technologies - J-ADS

Providing the maximum safety to all of our customers

## AD Strong

**Clamping Unit** Lightweight high rigidity, low vibrations  
Longer mold life  
Reduced grease use for cleaner machine  
Clamping force feedback  
Reduction in mold maintenance costs

## AD Stable

**Injection Unit** New designed energy saving barrel  
New proposals for screw technologies  
Stabilization of molded parts  
JSW original recovery functions  
Wide selection of injection unit to customer needs

## AD Smart

**Controller** Function enrichment with simple operation  
Simple display of process parameters  
Molding condition memo  
I/O customized function

## AD Support

**Energy-saving/maintenance** Energy-saving function  
Power consumption monitor  
Supporting reduction in power consumption  
Both predictive and preventive maintenance



\* Hydraulic unit is optional



Complying with safety regulations Industrial machinery  
Industry safety rules (JIMS K1001)

–Premier quality in the industry

# ADStrong

## Clamping Device

**Rigid clamping device manufactured utilizing JSW's expertise in materials technologies. Produced from raw materials, is effective in assuring stable production.**

### Clamping Device

- Lightweight high rigidity, low vibrations
- Longer mold life
- Reduced grease usage for cleaner operation
- Promoting proprietary manufacturing
- Flat press platen Chapter 2

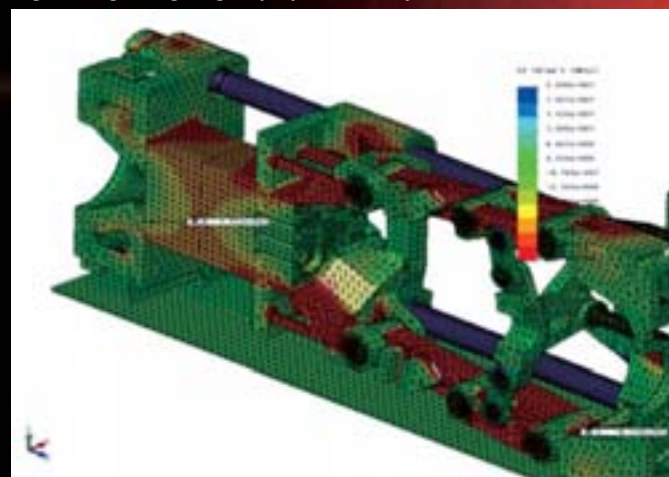
Bushingless movable platen by adoption of linear guides



### Friendly to Molds

- Clamping force monitoring
- Clamping force feedback
- Reduction of mold maintenance costs
- Monitoring both mold open and close, and ejection process

Light-weight/high rigidity by FEM analysis



### Mold Protection

- Simple auto setting
- Adjusts with mold temperature variations
- Molding-open monitoring, ejector monitoring

**Mountable for Large-sized Mold**

	J220ADS	J280ADS	J350ADS	J450ADS
Mold Height Min. - Max.	230~680	250~720	300~770	350~900
Tie Bar Distance (H x V)	650×590	730×630	810×730	900×810

(Unit: mm)

—JSW proprietary development

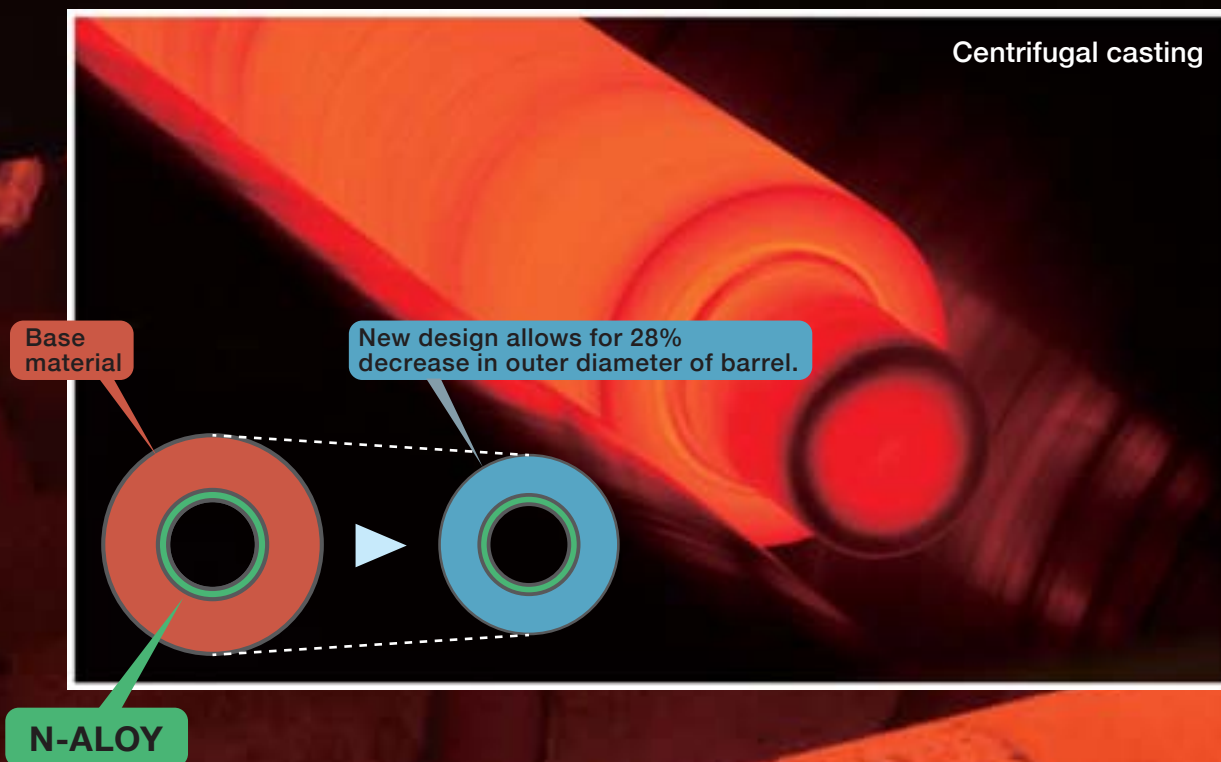
# ADStable

## Injection Unit

The high precision measuring control and the screw variation response to every molding

### New designed energy saving barrel

Reduced running cost, Shorter heat-up time



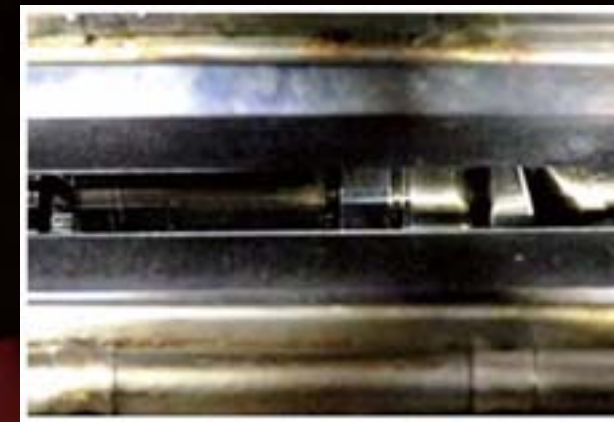
### New proposal for the screw technologies

- Design • Manufacturing
- Materials • Research and development (R&D)

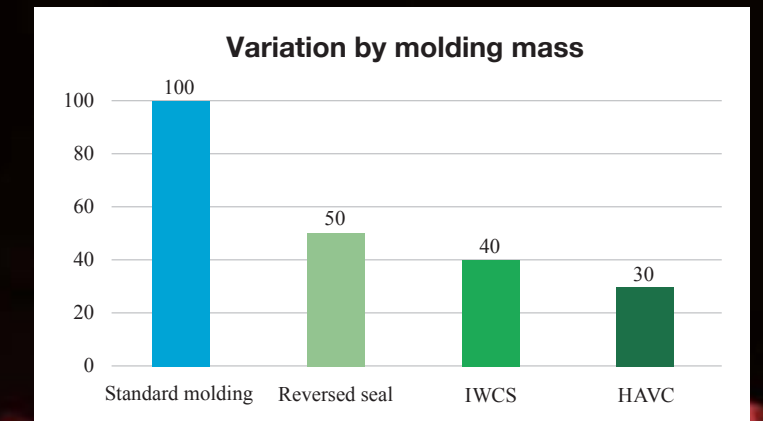


### Stabilization of molding component Original measuring technology

Actual cut away view of barrel



Recovery stabilization control  
(HAVC > IWCS > Reverse seal)



### Wide module selection in response to the needs

	Injection unit	Screw diameter (mm)	Injection pressure (MPa)	Standard unit Max. injection speed (mm/s)	High speed unit Max. injection speed (mm/s)	Extended hold time Max. injection speed (mm/s)
J220ADS	300H	40	250	240	330	160
		46	189			
		51	154			
J280ADS	460H	46	234	160	300	160
		53	177			
		58	147			
J350ADS	890H	58	229	160	270	120
		66	177			
		72	149			
J450ADS	1400H	66	241	160	300	160
		76	182			
		84	149			
	2300H	84	190	160		160
		92	158			

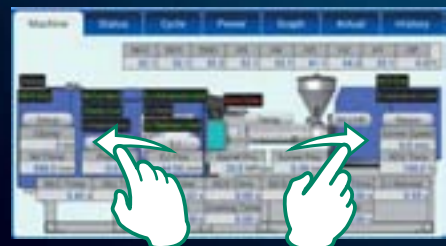
– Improvement for operability/ visibility

# ADSmart Controller

## Function enrichment by a simple operation

### Main characteristics of SYSCOM5000i

- Large 15" display utilizing energy savings LED technology
- Improvement for visibility by expanding the setting screen
- Agile multi-touch operation
- Simple operation lever switch
- On screen instruction manual



## Enriched advanced function-mounted new controller SYSCOM 5000i

## Easy to understand operation process display

Screen layout shows process sequence in each operation on mode.

Display switching according to the operation mode

The move is to be easy to understand utilizing pictograms

## With further convenient functions



### Molding condition memo

Together with the molding conditions, the caution memo in molding and setting of the peripheral systems, and the image of molding components are able to be saved.

### Maintenance memo

The history of the molding machine maintenance is able to record on the controller. The periodical inspection items and the execution history can be checked on the controller.



### I/O customized function

I/O signals can be designed on screen.

- (1) Mold opening completed
- (2) Take-out instruction to the ejector
- (3) Take-out from the ejector, and receives the completed pulse signal
- (4) Clamping start  
3-sec. operation of the belt conveyor

Enriched support

# ADSupport

## Energy-saving/maintenance

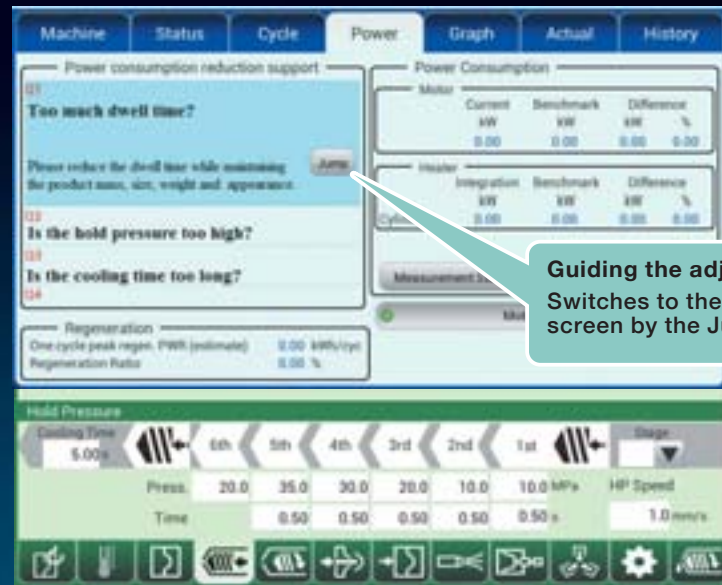
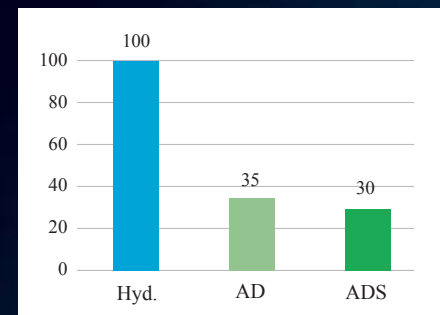
### Energy-saving performance

Reduction support for power consumption

Assistance for molding condition change to reduce power consumption

Comparison of the power consumption amount

※Hydraulic machine: 100 standards



Guiding the adjustment points  
Switches to the relevant setting screen by the Jump button

### Support for maintenance

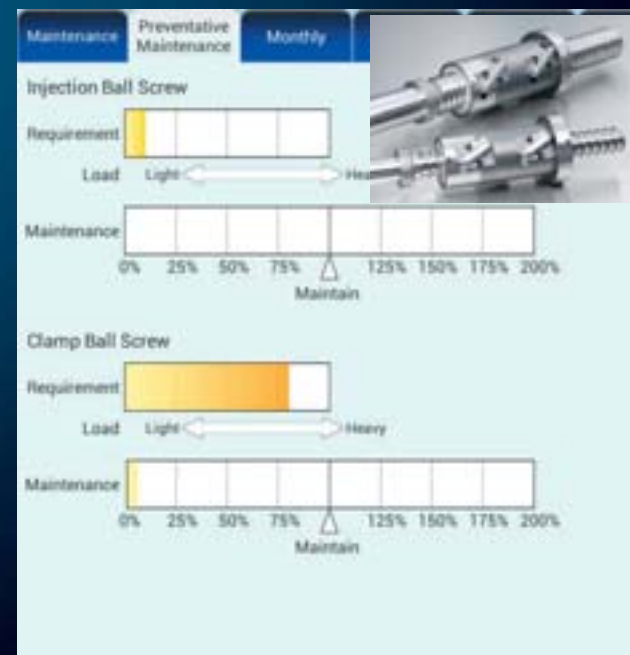
Periodical inspection

The periodical inspection items and the execution history can be checked on the controller.

Item No.	Item	Period	Status
Q-1	Ball screws	2014/12/15	Completed
Q-2	Automatic grease lubrication apparatus	2014/12/15	Completed
Q-3	Motor cooling fan	2014/12/15	Completed
Q-4	Control panel cooling fan	2014/12/15	Completed
Q-5	Mold thickness adjusting device		
Q-6	Water based mounting balls		
Q-7	Thermocouples		
Q-8	Grease hoses, lines		
Q-9	Linear guides		
Q-10	Hydraulic pressure hoses		
Q-11	Hydraulic cylinder		

Prediction maintenance

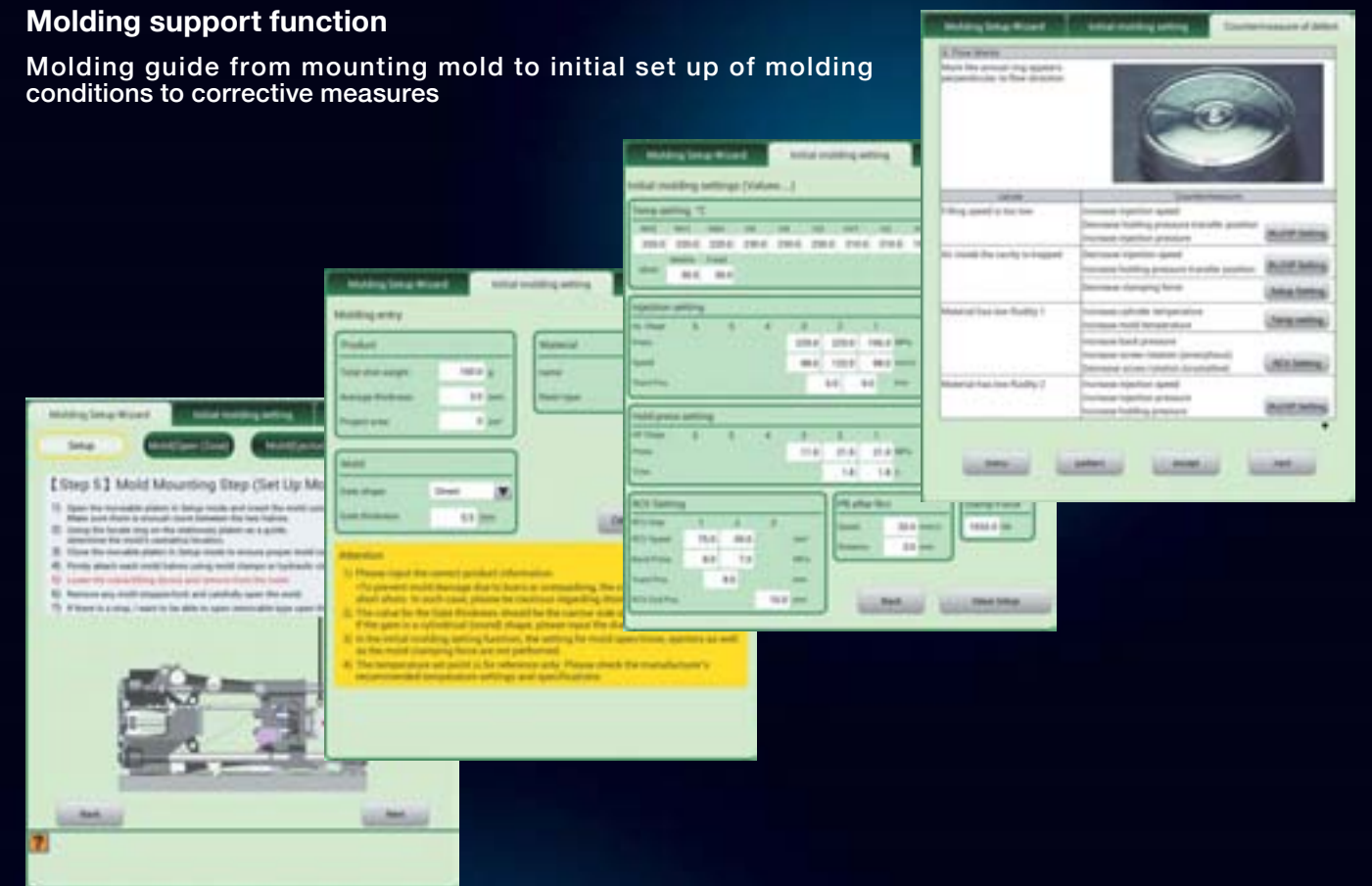
Condition monitor of ball screws based on the operating load.



### Molding support

Molding support function

Molding guide from mounting mold to initial set up of molding conditions to corrective measures



### Enriched Hiroshima injection R&D center

Injection school

In preparation for a training lecture by JSW experienced staff. Multiple levels of training are available.

Hiroshima injection R&D center

Injection R&D center has newest machines to support customer's trial test of molds, material, molding process and etc.

