

JONWAI

The New Concept of Universal Machines

SE series



Flexible , Reliable & Universal in Application

JONWAI

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SE Series

Flexible , Reliable & Universal in Application



Houseware



Cosmetics Package



Medical Parts



Closure & Caps



Precise Engineering Parts

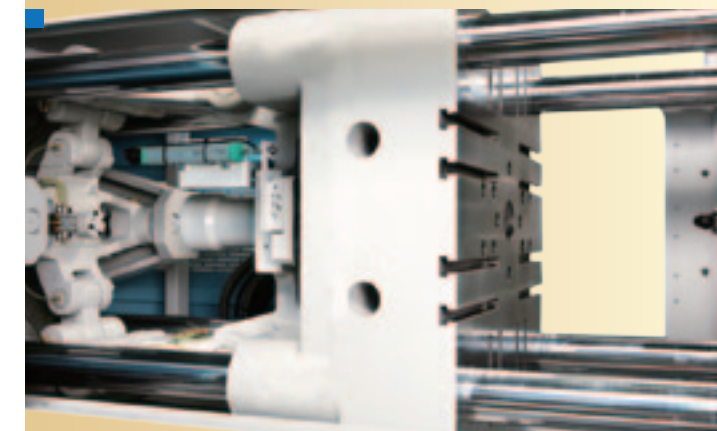
SE Series

The New Concept of Universal Machines

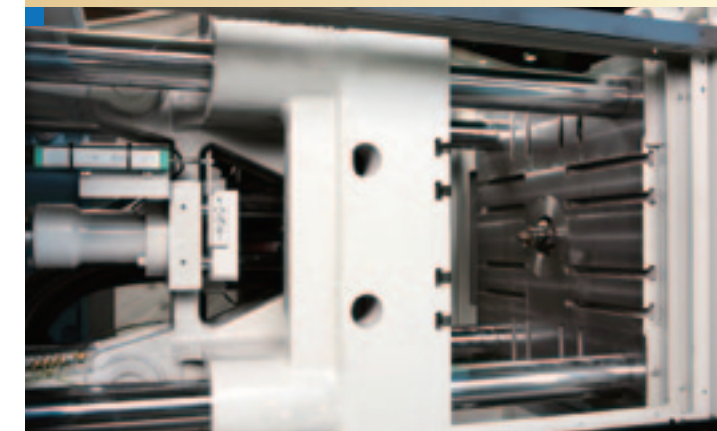
Jonwai successfully established a classic model –SD series for general purpose molding in 2001. SD unique combination of flexible, reliable & universal in application already set a perfect paradigm in molding machine industry.

Over the years the global molding industry condition have changed, precise speed & lower illrate are highly demanded. Jonwai deeply recognized t these changes and now presenting the next generation of high performance universal application model--- SE Series.

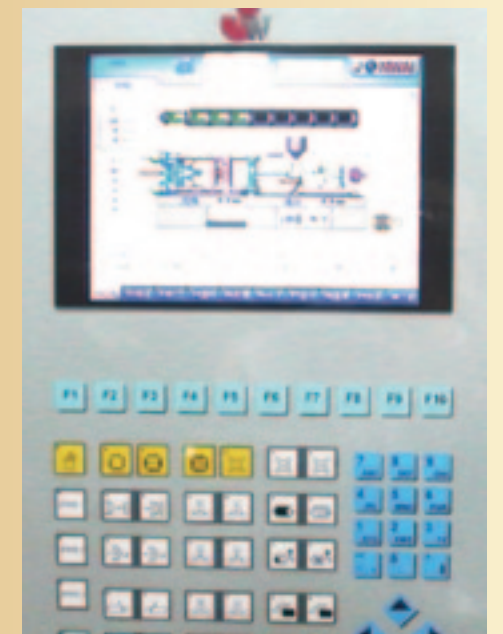
The update SE model inherited the advantage of SD model & further enhanced functions to make it more suitable for nowadays plastic moulding industry. The flexible design of SE series make it easier toexpand to SE2 model & SE3 model to meet customers' precise and complicated molding requirements.



Fast Movement & Short Dry Cycle
Fast Movement due to 5-Point internal clamping system.



Solid Mould Closing Unit
Solid Box-Like structure mould closing unit ,
rigidity & strength improved with F.E Analysis.



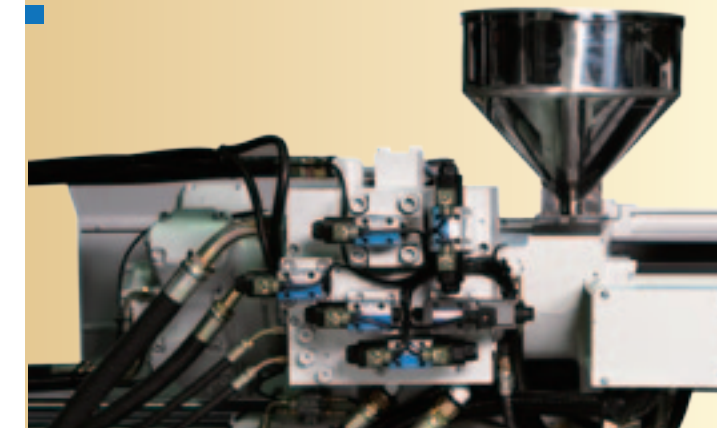
User Friendly Control
Window based operation panel with clear overview
monitoring page & integrated sequence display

Speed

- Fast Movement due to the 5-Point internal clamping system
- High injection speed and capacity
- High response of computer & hydraulic
- Fast Material Charging

Precision & User Friendly

- High Repeatability Sequences
- Unique & Intelligent control of process
- Window Based simple operation panel
- Easy Programming & Clear Overview



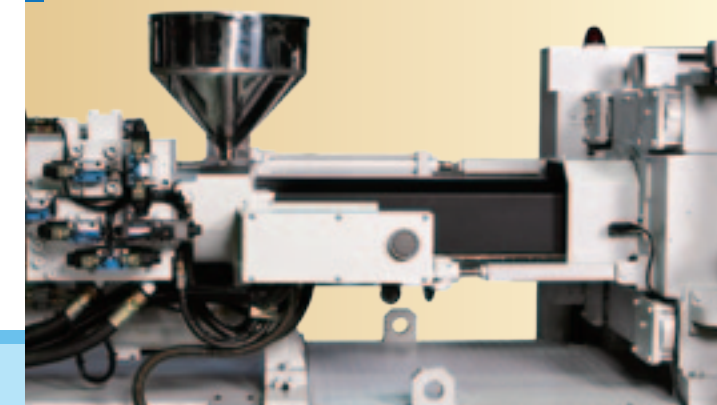
Quick Response Hydraulic System

Quick response hydraulic system coordinate with Jonwai unique servo power unit, response time only at 50 ms.



High Plasticizing & Capacities Injection Unit

4 Cylinders design injection system allow high-pressure/low-speed or low-pressure/high-speed Injection choice.



Nozzle Center on Line & Linear injection movement

2 cylinders sliding guide bar ensure nozzle center on line. Injection position with twin-end support enhance the linear Injection movement.

Flexible & High Expandability

The flexible design of SE series make it easier to expand to SE2 model & SE3 model to meet customers' precise and complicated molding requirements.

Reliability

Reinforce Machine Base
Stable Mechanical Sequence
Solid IQC system before machine assembly and delivery

SES Series :with AC Synchronous Servo Power System

AC Synchronous Servo Power System

Unlike other companies outsourcing the servo system then equipped to machine, Jonwai integrate the entire system in house.

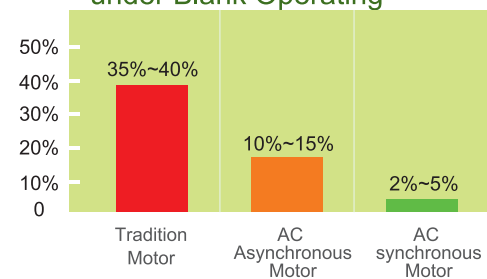
We fully grasp the key technologies of the servo power system & perfectly matching the mechanical, hydraulic system, PLC system & servo power system.

Advantages

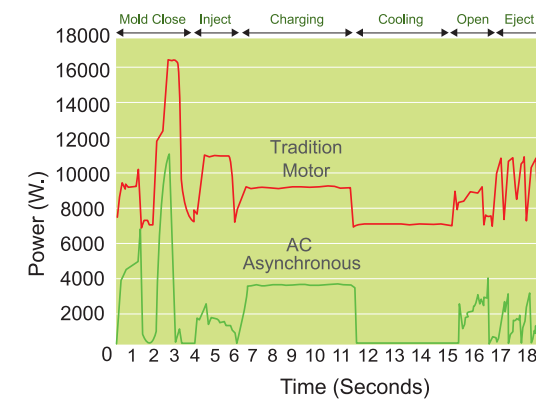
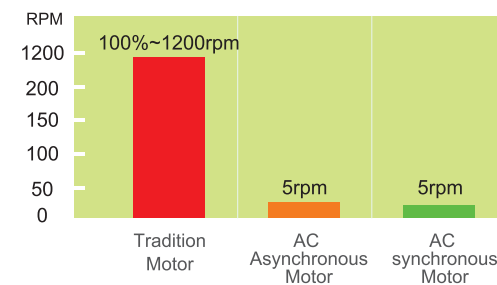
- **Water Saving** - The servo system only delivers hydraulic oil as it is needed. This prevents unnecessary generation of heat and substantially minimises oil cooling requirements. Under normal operating conditions, compared with conventional motor machines, machine cooling water savings 85% can be achieved.

- **Electricity savings** - Under normal operating conditions, compared with conventional motor machines, energy savings from 60%-85% can be achieved.
- **Hydraulic Oil Saving** - The servo system only delivers hydraulic oil as it is needed. This prevents unnecessary oil operation. Under normal operating conditions, compared with conventional motor machines, Hydraulic Oil savings 30% can be achieved.
- **Quick response** - Featuring a dynamic servo motor with a response time of only 50ms.
- **Moulding stability** - Due to the quick response of the servo motor and the closed-loop control. Compared with conventional motor machines, repeatability is greatly improved
- **Quiet operation** - The machine runs at much lower noise levels, particularly in low speed applications.
- **Reliable holding pressure** - Compared with traditional motor machine the holding pressure is more stable.
- **Unique Motor Control Design** - More Precise to command the motor pause & continue.
- **Flow Speed transmitted by Resolver** - PID logic and push-pull signal ,The close loop corresponding flow and pressure adjustment ensures the highest quality and precision of the plastic parts produced.

1.Motor Current Consumption under Blank Operating



2.Motor Stand-by RPM

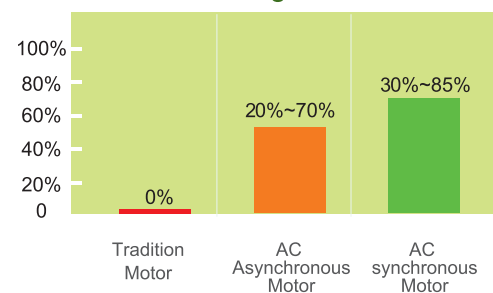


Test Product
Total Cycle time: 18 sec.
Cooling time: 5 sec.
Chargin time: 5.3 sec.

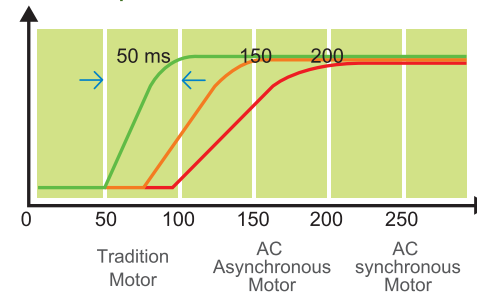
The power consumption of AC Asynchronous Motor is 78% less than traditional motor.

In Case of thick wall products or longer holding time or longer time products, power consumption could reach 80%~85%.

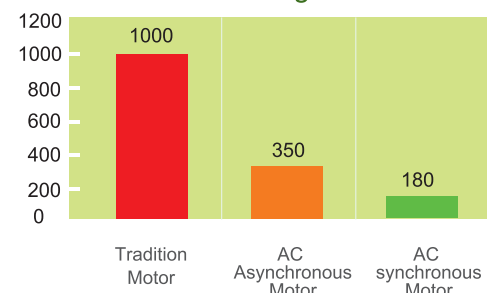
3. Power Saving



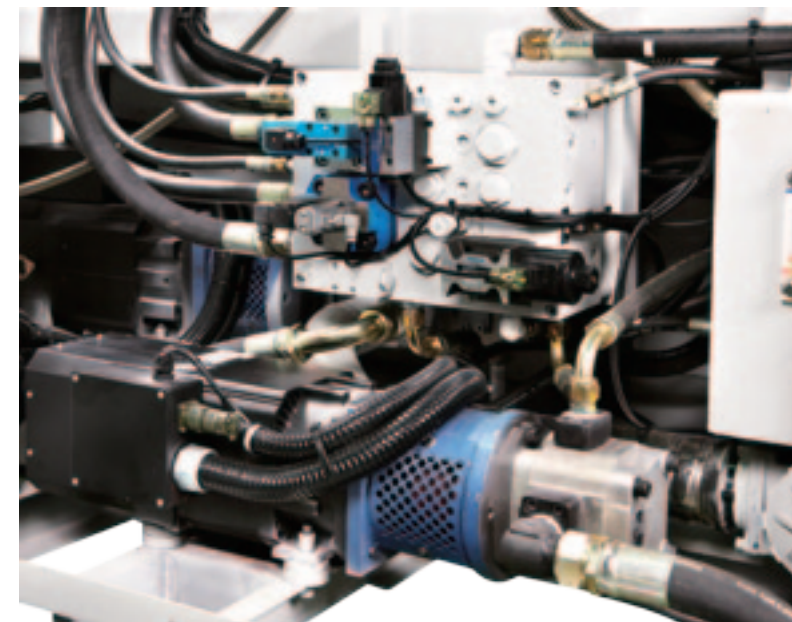
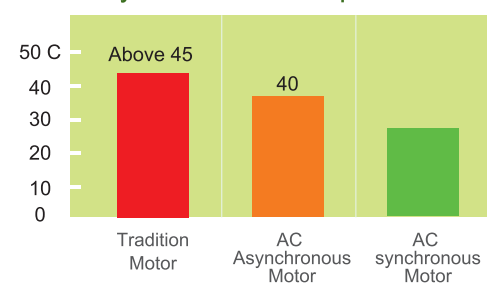
4.Response Time



5. Machine Cooling Water Consumption



6. Hydraulic Oil Temp Level



SE & SES Specification

MODELS		JW-60SE JW-60SES			JW-100SE JW-100SES			JW-120SE JW-120SES			JW-150SE JW-150SES				JW-180SE JW-180SES			JW-220SE JW-220SES			JW-250SE JW-250SES			JW-300SE JW-300SES			JW-400SE JW-400SES			JW-500SE JW-500SES					
		i6e			i10e			i12e			i15e				i18e			i22e			i25e			i30e			i40e			i50e					
SCREW DIAMETER	mm	32	35	38	35	38	42	38	42	45	42	45	50		50	55	60	55	60	65	60	65	70	65	70	75	70	75	80	75	85	95			
INJECTION CAPACITY	cm3	120	144	170	153	181	221	192	235	270	277	318	392		471	570	678	617	735	862	791	929	1077	1028	1193	1369	1385	1590	1809	1811	2326	2906			
SHOT SIZE(PS)	gr	106	127	150	136	160	195	170	208	238	244	281	347		416	503	599	546	649	730	699	821	952	908	1054	1210	1224	1405	1599	1601	2056	2569			
PLASTICIZING CAPACITY	kg/hr	36	47	58	55	68	91	62	83	104	67	84	111		111	131	150	131	150	196	126	157	190	157	190	222	190	222	255	196	263	338			
INJECTION RATE	cm3/sec	67	80	95	95	112	137	112	137	157	144	166	204		185	223	266	223	265	311	237	278	323	311	361	415	307	353	402	357	459	573			
INJECTION PRESSURE(MAX)	kg/cm2	2490	2082	1766	2280	1935	1584	2402	1966	1713	2318	2019	1635		2394	1978	1662	2428	2040	1738	2288	1949	1681	2173	1873	1632	2213	1928	1695	2321	1807	1447			
SCREW SPEED RANGE	rpm	0~236			0~253			0~237			0~196				0~195			0~192			0~153			0~160			0~160			0~140					
SCREW TORQUE	kg-m	55			66			89			133				178			222			278			334			334			467					
NOZZLE STROKE	mm	275			305			325			345				365			395			425			485			525			575					
NOZZLE CONTACT FORCE	tons	3.5			3.5			4.6			4.6				5.9			5.9			8			8			8			8					
CLAMPING UNIT																																			
CLAMPING FORCE	ton	60			100			120			150				180			220			250			300			400			500					
CLAMP STROKE(MAX)	mm	270			310			360			400				450			500			550			600			700			800					
MOLD HEIGHT(MIN-MAX)	mm	100~320			150~350			150~400			150~450				150~550			150~550			220~650			220~700			280~760			300~900					
OPEN DAYLIGHT	mm	370~590			460~660			510~760			550~850				600~1000			650~1050			770~1200			820~1300			980~1460			1100~1700					
PLATEN SIZE(H*V)	mm	470×470			560×560			610×610			650×650				720×720			780×780			860×860			940×940			1060×1060			1190×1190					
DISTANCE BETWEEN TIE-RODS	mm	310×310			370×370			410×410			430×430				480×480			520×520			580×580			630×630			720×720			820×820					
HYDRAULIC EJECTOR FORCE	ton	3.3			3.3			3.9			4.6				5.3			5.3			7			7			11			11					
HYDRAULIC EJECTOR STROKE	mm	75			90			100			110				130			150			160			180			210			210					
HYDRAULICS																																			
OIL RESERVOIR CAPACITY	us.gal	45			57.5			75			92.5				127.5			135			167.5			165			185			222					
ELECTRICS																																			
POWER SUPPLY(STANDARD)	volt	220			220			220			220				220			220			220			220			220			220			220		
MOTOR RATED	HP	15			20			25			30				40			50			50			60			60			75			75		
NUMBER OF HEAT CONTROL ZONES	set	4			4			4			4				4			5			5			5			5			6			6		
HEATING WATTAGE	kw	5.67			6.61			8.29			9.68				14.59			16.42			18.02			20.8			24.1			31			31		
GENERAL																																			
WATER REQUIREMENTS(MAX)	gpm	11.2			11.2			11.2			16.2				18.7			18.7			18.7			21.2			21.2			26.2			26.2		
MACHINE DIMENSIONS(L*W*H)	M	3.95* 1.13* 1.6			4.22*1.23*1.67			4.62*1.28*1.73			5.08*1.32*1.79				5.67*1.42*1.86			6.07*1.5*1.93			6.57*1.58*2.06			7.48*2.1*2.1			8.24*2.12*2.3			9.17*2.21*2.5			9.17*2.21*2.5		
MACHINE WEIGHT	kg	3000			3800			4500			5600				6700			7600			11000			12000			16500			21000			21000		
HOPPER CAPACITY	kg	25			25			50			50				50			50			100			100			100			100			100		