

## OUR BRANDS

**DAIKI-EMD**  
*Electric Dynamaster*

HYBRID ELECTRIC INJECTION MOLDING MACHINE  
EMD SERIES



**JWM**®

PLASTIC INJECTION  
BLOW MOLDING MACHINE



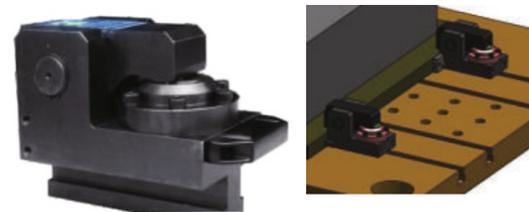
**TECO SMART**  
ROBOT

PICK AND PLACE  
SERVO ROBOTS



**TECHNO- HQMC**

HYDRAULIC QUICK MOLD  
CHANGE SYSTEM



**TECHNO-MEPEP**™



SMD-Series MAKE IN INDIA

**Dynamaster** Servo Energy-Saving

*High Precision Plastic Injection molding machine*

**TECHNOVATION**  
International Machines Limited

WORKS : PLOT NO 734, SECTOR 69, IMT FARIDABAD, HARYANA  
M. : +91-9910178880  
Web : [www.technovation.co.in](http://www.technovation.co.in) | [www.TechnoMeper.com](http://www.TechnoMeper.com),  
E-mail : [kamal.agarwal@technovation.co.in](mailto:kamal.agarwal@technovation.co.in)  
GST : 06AALCT0252H1ZG. CIN : U28299HR2024PLC121928

Sales Partner :

Regional Offices  
\* Ahmedabad \* Bengaluru \* Pune



For constant improvement upon reach, our company reserves the right to change the design parameters and configurations. No notice will be given for any change

PRECISION MACHINERY MANUFACTURER

[www.technovation.co.in](http://www.technovation.co.in) | [www.technomeper.com](http://www.technomeper.com)

## ABOUT US

TECHNOVATION INTERNATIONAL WAS ESTABLISHED IN THE YEAR 2015 AT FARIDABAD (HARYANA, INDIA), WE ARE ENGAGED IN MANUFACTURING & IMPORTING A WIDE RANGE OF SERVO PLASTIC INJECTION MOLDING MACHINE, QUICK MOULD CHANGE SYSTEM (HYDRAULIC/MAGNETIC), BI METAL SCREW BARREL, SERVO SYSTEMS, SERVO ROBOTS AND ALL TYPES OF AUXILIARIES. OUR MISSION IS TO PROVIDE WORLD CLASS PRODUCT WITH EFFICIENT AFTER SALES SERVICE NETWORK. THE COMPANY WAS FOUNDED BY MR. KAMAL AGARWAL (B.TECH., MBA MKTG.) AND MRS. PRIYANKA AGARWAL (MBA HR) IN 2015 KEEPING IN MIND TO PROVIDE ONE STOP SOLUTION FOR ALL PLASTIC MOLDERS IN THE FIELD OF PLASTIC PROCESSING MACHINE.

IN YEAR 2025, TECHNOVATION INTERNATIONAL MERGED INTO TECHNOVATION INTERNATIONAL MACHINES LIMITED (TIML) AND THEREAFTER TIML TOOK OVER ALL BUSINESS ACTIVITIES AND BRANDS OF GROUP TECHNOVATION.

WE ARE FASTEST GROWING COMPANY IN NORTH INDIA AND LARGEST COMPANY IN FARIDABAD IN THE FIELD OF PLASTIC PROCESSING MACHINERIES.

OUR MACHINES EQUIPPED WITH AUTOMATIC ROBOTIC ARMS GIVE US A CUTTING EDGE ADVANTAGE TO COMPETE WITH OVERSEAS COMPETITION

TIML USP IS SUCH THAT IT DESIGNS CUSTOMISED PRODUCTS TO FIT INDIAN CONDITIONS AND CONDITIONS OF POWER FLUCTUATIONS. TIML USES HIGH QUALITY RAW MATERIAL, GIVING OUTPUT OF MORE PRODUCTION IN LESS EXPENSE, ALSO GIFTING THE PRODUCTS WITH HIGH FUNCTIONALITY AND A LONG LIFE SPAN. THE MACHINES ARE FUTURISTIC DESIGNS KEEPING IN MIND OF ROBOTIC AUTOMATIONS IN ORDER TO INCREASE PRODUCTIVITY, ARE THE GREAT BENEFITS TO MSME COMPANIES WHO REPLY ON MARKET JOB WORK.. THE COMPANY GIVES MUCH EMPHASIS TO CUSTOMER FEEDBACKS IN ORDER TO WORK ON WEAKNESSES AND IMPROVE ON THE PRODUCTS. IT DEPLOYS FAIR BUSINESS POLICIES.





## FROM THE DIRECTOR DESK

### OUR VISION

MANUFACTURE 1,000 MACHINES ANNUALLY  
EMPLOY MORE THAN 500 SKILLED PROFESSIONALS  
ACHIEVE AN ANNUAL TURNOVER OF 300 CRORE

### OUR MISSION

UTILISE THE LATEST AI TECHNOLOGIES TO ENHANCE  
MACHINE EFFICIENCY AND PERFORMANCE.  
INTEGRATE ADVANCED ROBOTIC ARMS TO ENSURE  
HUMAN SAFETY AND MAXIMIZE PRODUCTIVITY IN OUR  
MACHINES.

### OUR BELIEVE

WE STRONGLY BELIEVES THAT “INDIA WILL BE THE  
LEADING HUB FOR TECHNOLOGICAL INNOVATION AND  
ECONOMIC DEVELOPMENT OVER THE NEXT DECADE.”  
THUS IT IS A GREAT TIME TO PROSPER. RECEIVED  
AWARDS FROM ABP NEWS MAKE IN INDIA CONCLAVE,  
DAINIK JAGRAN FOR BEST MSME, APPRECIATION FROM  
RAJASTHAN PLASTIC MOULDING ASSOCIATION, ALL  
INDIA PLASTIC MOULDING ASSOCIATION, ETC.



**TM-MD**

Product Advantage

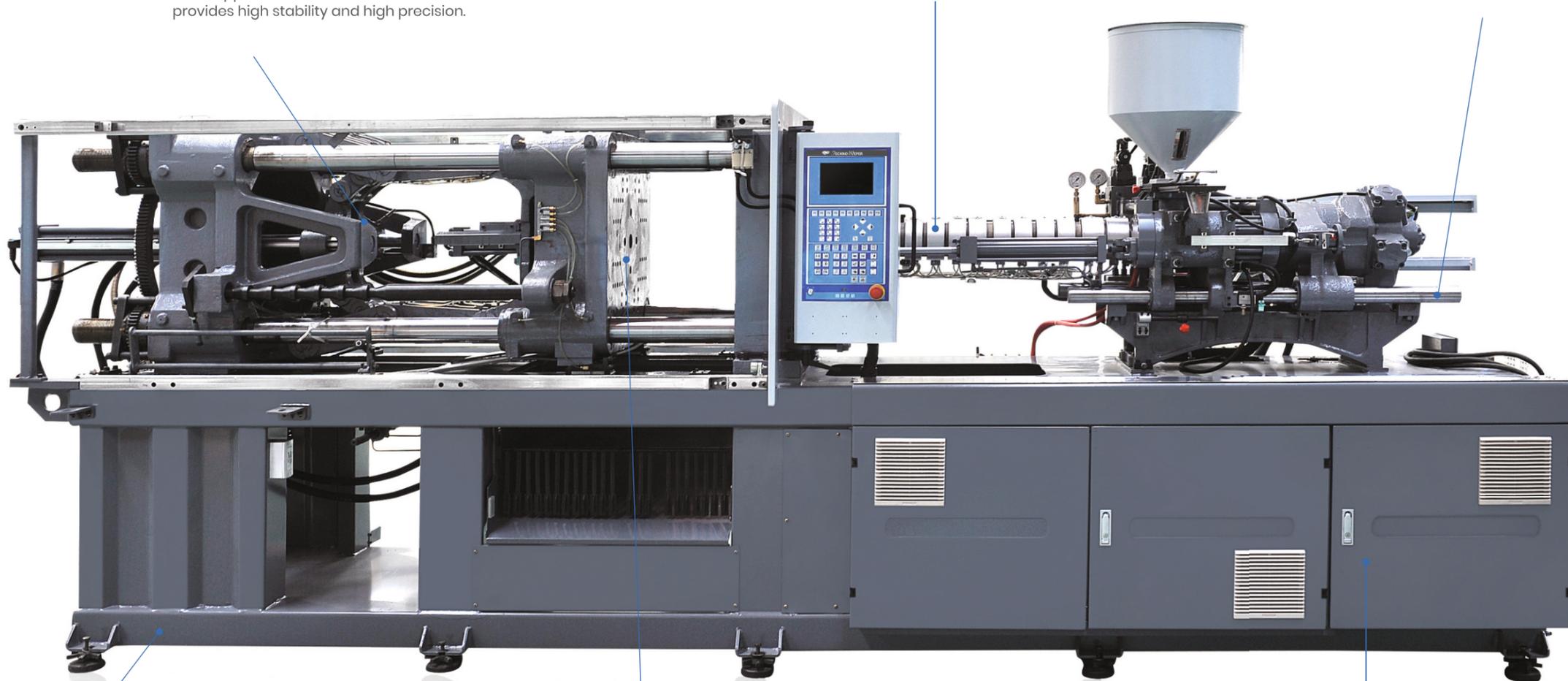
SERVO INJECTION MOLDING MACHINE

**TECHNO-MEPEP**

Five-support crankshaft structure provides high stability and high precision.

Closed-loop temperature control system ensures fast and accurate temperature control.

Two pillar guider design makes the injection fast, stable and precise.



High rigidity base and integrated pipeline design enhance machine stability.

Big tie bar space and clamping stroke.

Embedded electric-box design saves precious space.



# M-Series

*Servo Energy-Saving High Precision Plastic Injection molding machine*



## TM-MD Machine features



**1 High energy saving**  
In an ideal working state, compared with conventional injection molding machines, their energy saving can reach 20%-80%.

**2 Better molding stability**  
Compared with conventional injection molding machines, repeatability is greatly improved due to servo motor close-loop control.

**3 Quick response**  
Sensitive servo motor, the response time only 0.05 second.

**4 Quiet & low noise**  
The machine runs with low noise, and will be much quieter in a low speed.

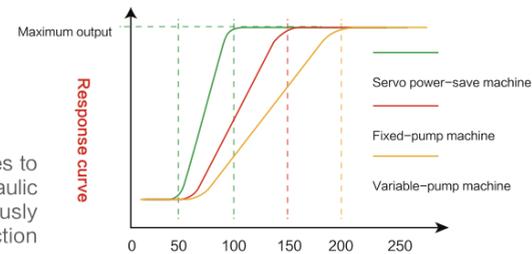
**5 Reliable holding pressure**  
Comparing with all electric injection molding machine, the time for pressure holding will be much longer and steady.

**6 Oil temperature rise slowly**  
Servo motor proportionally deliver hydraulic oil base on our needs, it's can prevent unnecessary heat being generated, even in some cases does not require cooling.

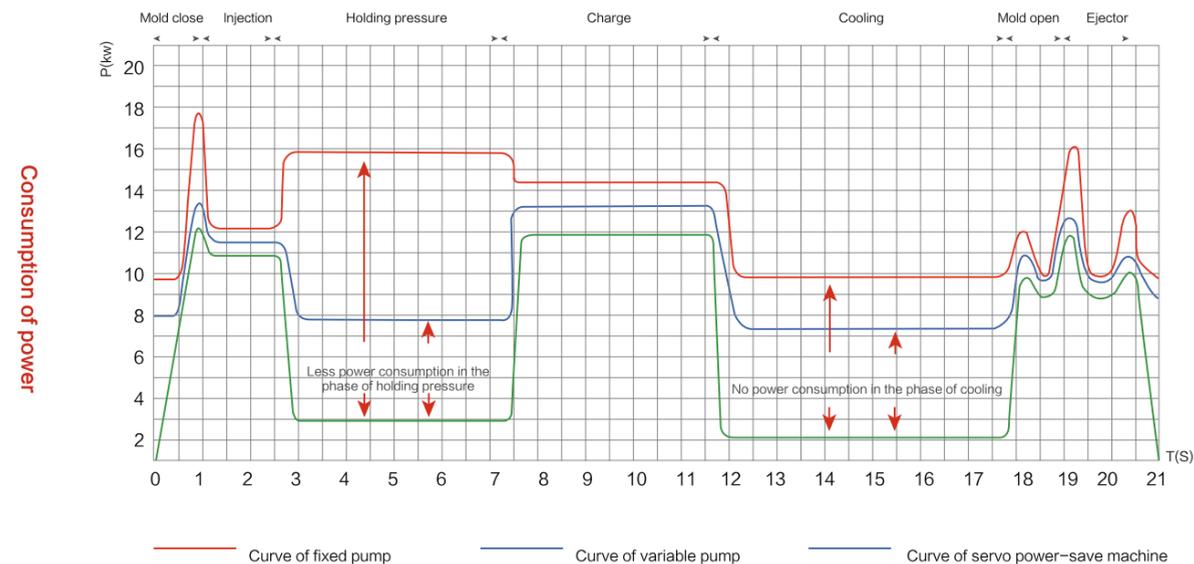
**7 MZ-MD excellent characteristics inheritance**  
Outstanding machine stability, being safety and dependability, strong mechanical parts, complete functional human-oriented operation system and long service life.

### Quick response of servo motor

It costs only 0.05s for servo energy saving injection molding machines to achieve the maximum output, in comparison with conventional hydraulic injection molding machines, their response speed have been obviously quickened and cycle time effectively shortened, improving production efficiency.



### Ultimate energy efficiency of servo power-save injection molding machines



[ SERVO INJECTION MOLDING MACHINES ]

**TECHNO-MEPEP**  
Product advantage

**Techno-Meper Servo Injection Molding Machines.**

**Five-support crankshaft structure provides high stability and high precision Five point Toggle Design**

**High rigid base and integrated pipeline design to enhance machine stability**

**It adopts imported plastic injection computer, with large screen high definition crystal display and human-computer interface in both Chinese and English. Through CPU independent control and treatment, it has raised the running speed of the control system and alarming of ultra-high oil temperature, this improving the operational efficiency**

**Clamping, ejection, injection with imported electronic scale control, more accurate.**

**Servo pump pressure controller is specially optimized for the work characteristics of injection molding machine, which is used for rapidly and accurately follow the action curve of system pressure derivative. Meanwhile, the digitalized pressure controller integrated to actuator can optimize the controller properties.**

**Closed-loop temperature control system ensures fast and accurate temperature control.**

**Two pillar guider design makes the injection fast, stable and precise**

**Electrical**  
CHNT China  
FE Japan  
Schneider Electric France

**tec sis** GERMANY  
intefhot ITALY

**GEFRAN** BEYOND TECHNOLOGY

**TECHNO-MEPEP** TAIWAN

[ SERVO INJECTION MOLDING MACHINES ]

**TECHNO-MEPEP**  
Product advantage

**Techno-Meper Servo Injection Molding Machines.**

**It adopts the imported to quality hydraulic components and the cart ridge valve**

**Most Advanced Servo motor with Low inertia, wide power range, high speed and compact structure can guarantee the high dynamic requirements of system**

**It is specially designed for servo system, which adjust seal clearance compensation and can maintain high efficiency ever under the conditions of low speed rotation and low viscosity oil.**

**Oil motor drive the adjustment of gear mold, with good synchronisation. The die can be adjusted automatically in accordance with the set pressure, which is both convenient and reliable.**

**Travel switch**

**Big tie-bar space and clamping stroke.**

**Screw & barrel**

**Sealing**  
YALOUA Japan

**hydraulic tubing**  
Continental Germany

**With double hydraulic core pulling device**

**The mechanical, hydraulic and electrical protections have ensured the human safety.**

**INOVANCE**

**EATON VICKERS** USA  
**HNC** Taiwan

**SUMITOMO** Japan

**VICKERS** USA

**Taiwan**

# SERVO ENERGY SAVING PLASTIC INJECTION MACHINES

## CONTROL PART

It adopts imported plastic injection computer, with large screen high definition crystal display and human-computer interface in both Chinese and English, through CPU independent control and treatment, it has raised the running speed of the control system and alarming of ultra-high oil temperature, thus improving the operating speed of the machine.



## INJECTION PART

The injection cylinder is parallel or balance to both sides of the barrel, so as to ensure the non-deviation of the nozzle, good sealing and non-leakage of rubber. It is equipped with double guide pillar supporting system, which can inject under multipressure and at various speeds. It also uses one stop hydraulic motor pre-injection device



## HYDRAULIC PART

It adopts the imported top quality hydraulic components and the car ridge valve.



## MOLD ADJUSTMENT PART

Oil motor drives the adjustment of gear mold, with good synchronization. The die can be adjusted automatically in accordance with the set pressure, which is both convenient and reliable.



## FIVE POINT TOGGLE SYSTEM

Five-support crankshaft structure. The mold and the supports all use the portal structure, with good rigidity and high precision. Adopting the computer optimized design, the mold employs definite analysis less system. With double core pulling device, it boasts super sensitive low pressure protection functions. The mechanical, hydraulic and electrical protections have ensured the human safety. The dismantlable fill-out hopper can be installed conveniently and automatically. The moveable platen is running in roll, with little friction and balanced and dependable moving.



## SERVO DRIVE

Servo pump pressure controller is specially optimized for the work characteristics of injection molding machine, which is used for rapidly and accurately follow the action curve of the system pressure controller integrated to actuator can optimize the controller properties.

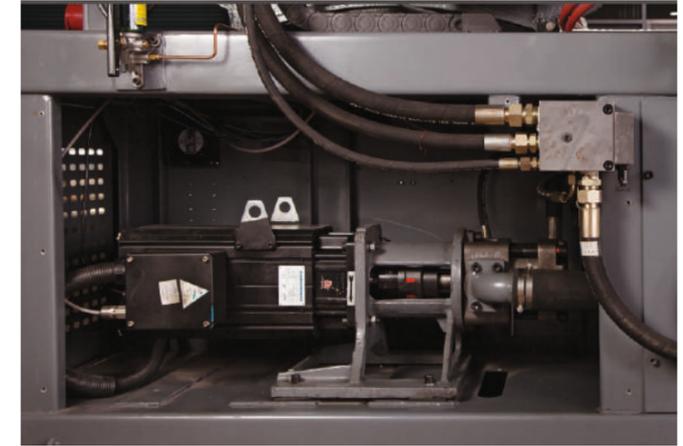


## SERVO MOTOR

Servo motor with low inertia, wide power range, high speed and compact structure can guarantee the high dynamic requirements of the system.

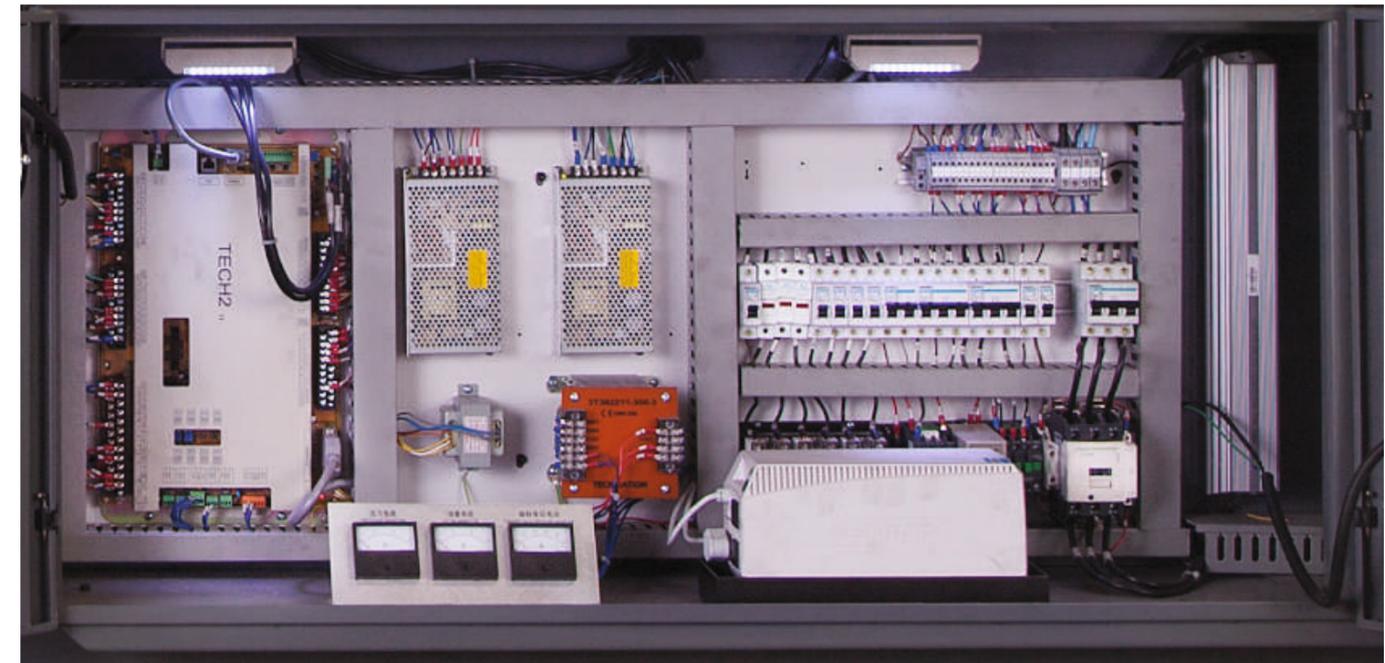
## INTERNAL GEAR PUMP

It is specially designed for servo system, which adopts seal clearance compensation and can maintain high efficiency even under the conditions of low speed rotation and low viscosity oil.



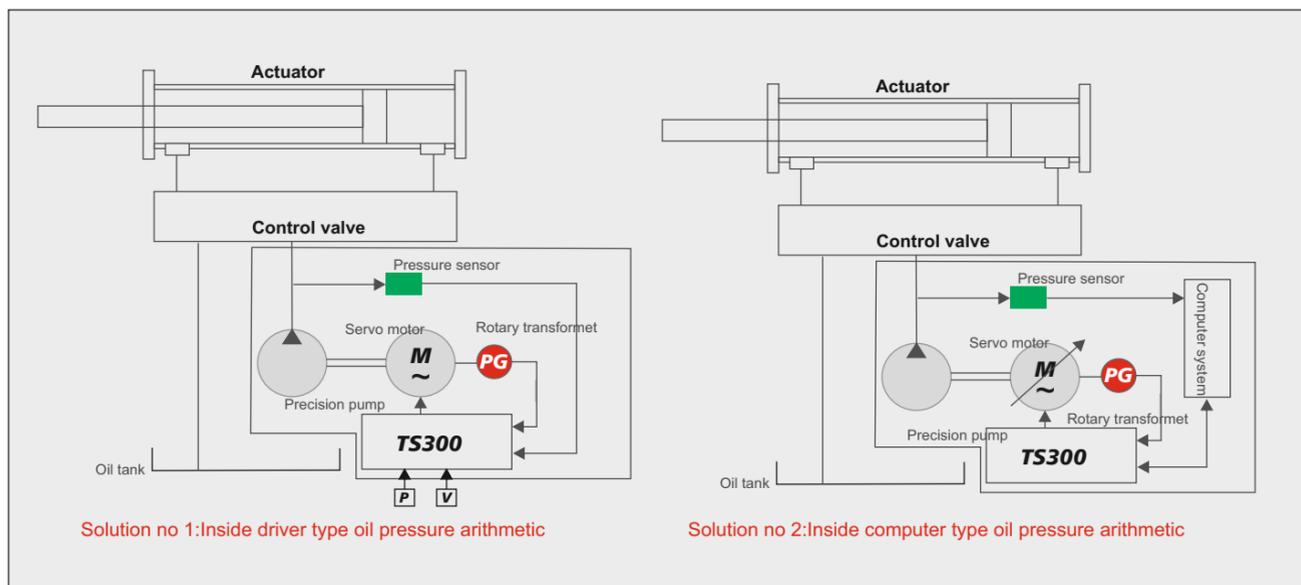
## ELECTICAL CABINET PART

Systematic/Ergonomic design and placing of each electric component/wire improves overall functionality and performance. Bigger fans ensure right ventilation which is must for smooth functioning. In built UPS (for PLC) and Energy meter are standard in our panels It uses closed-loop temperature control system to ensure the accuracy and the reliability of the barrel temperature. It is also equipped with the functions of cold-proof start, alarming and parameter memory for the modeling, with password protection. The injection and switch are controlled by imported location ruler.



## SERVO ENERGY SAVING PLASTIC INJECTION MACHINES

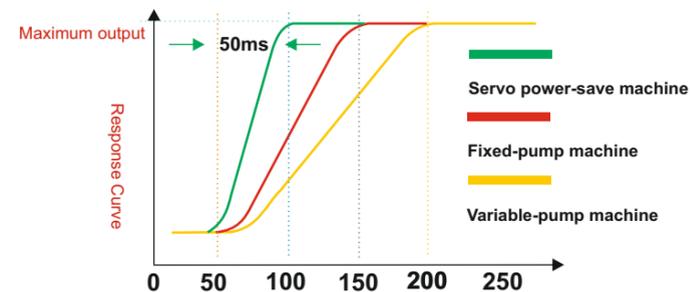
### SERVO SYSTEM PRINCIPLE



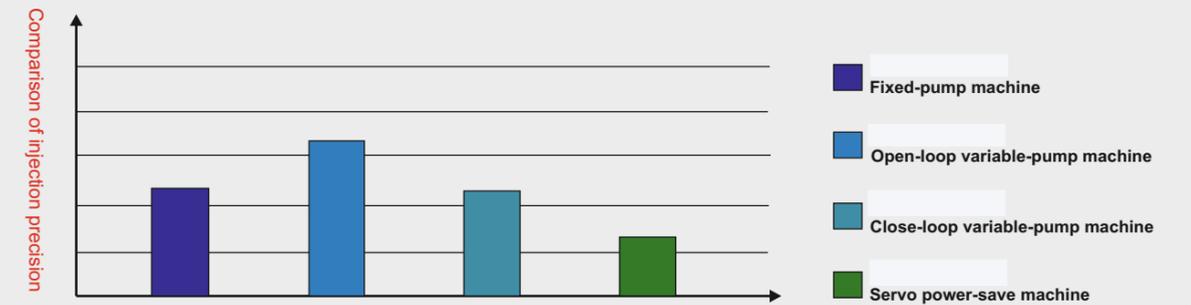
Servo energy-saving machines are equipped with rotary encoder and pressure sensor and both of them had feedback of flow and pressure. Through changing the speed and torque, high quality synchronous servo motor makes corresponding flow and pressure adjustments to reach the effects of close-loop precision control and energy saving.

### QUICK RESPONSE SERVO MOTOR

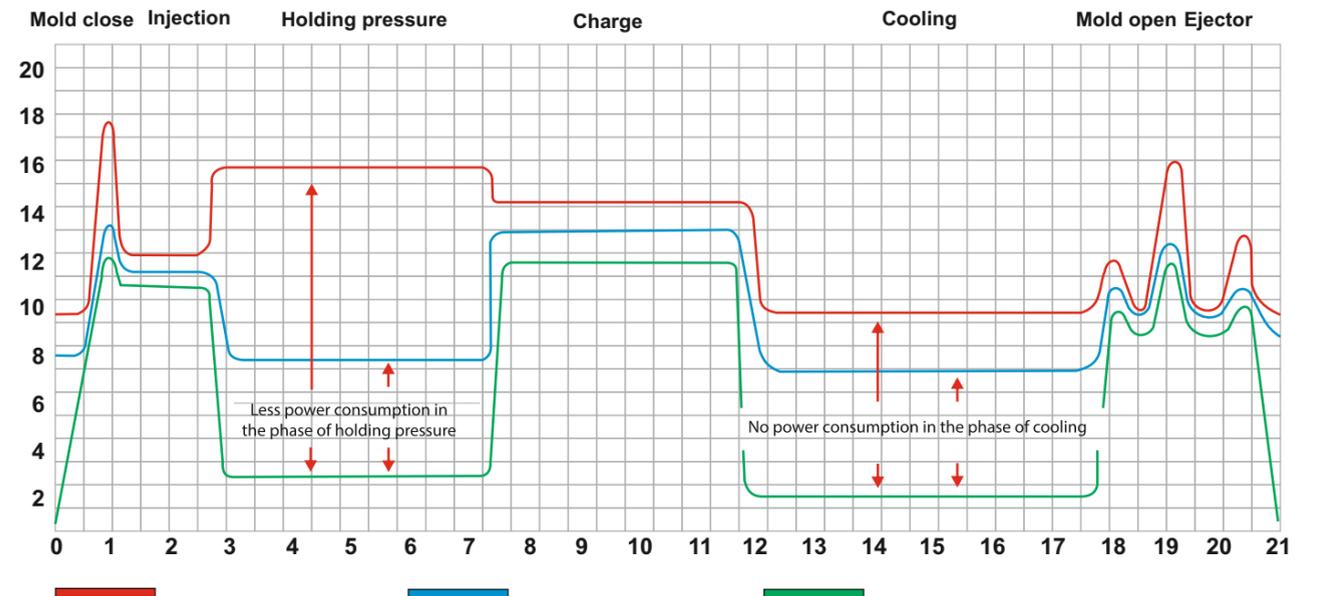
It Costs only 0.5s for servo energy saving injection machines to achieve the maximum output in comparison with conventional hydraulic injection molding machines, the response time is shorter.



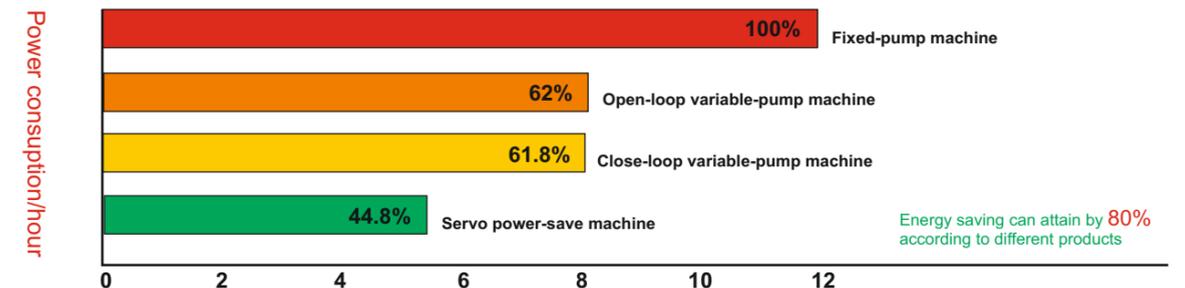
Comparison table of practical measured injection precision of hydraulic injection molding machines (For wall-thin products)



Ultimate energy efficiency of servo power-save injection molding machines



Servo energy-saving injection molding machines : there is no extra energy consumption due to output volume changes according to load alteration. In the phase of holding pressure, servo motor lowers rotate speed and consumes a little of energies. In the phase of cooling, motor doesn't work and consumes no energy. According to different products, servo energy-saving injection molding machines will save 20%-80% energy and bring you prominent economic benefit.



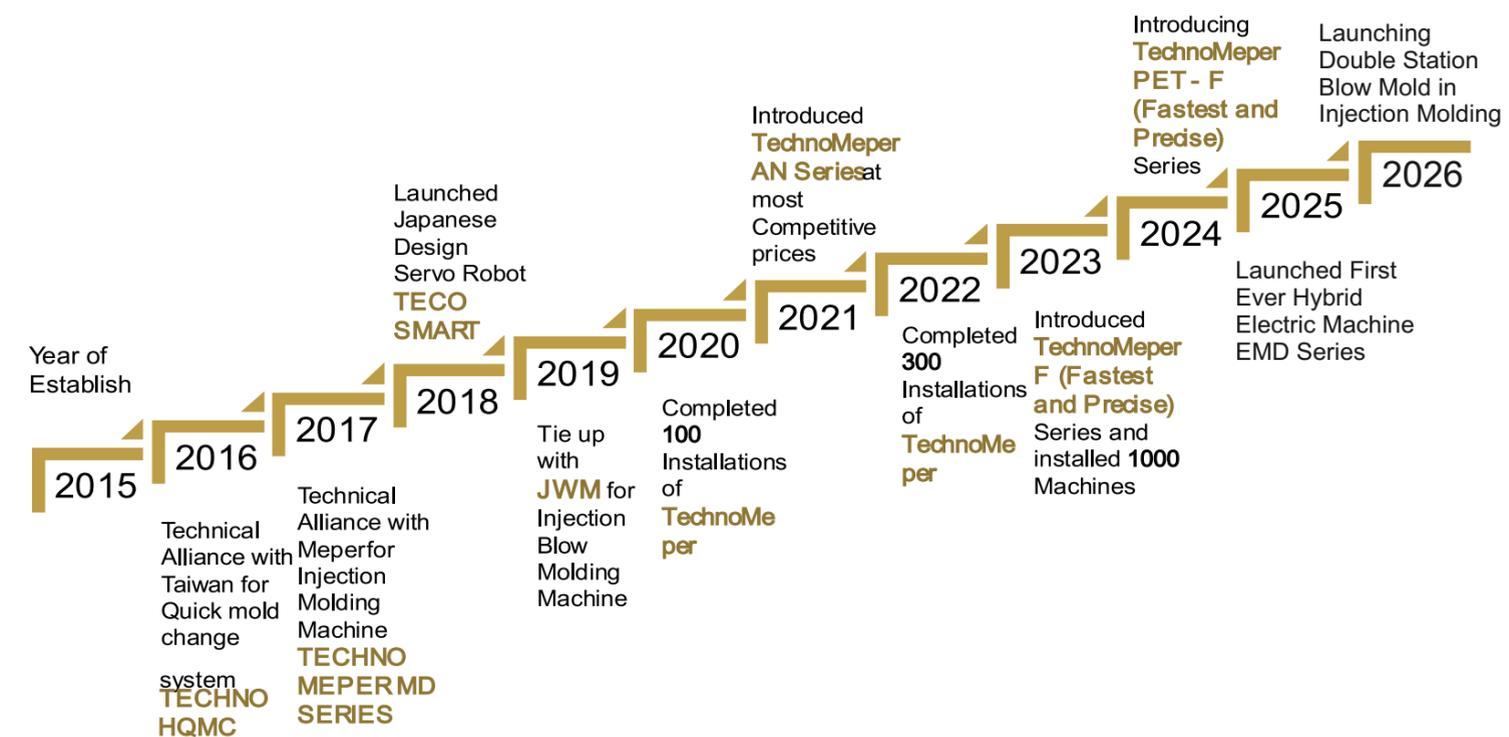
Energy saving can attain by 80% according to different products

# OUR TIML TEAM & INFRASTRUCTURE



HIGHLY EXPERIENCED AND TRAINED TEAM OF ENGINEERS FOR MANUFACTURING ASSEMBLY, QUALITY CONTROL & AFTER SALES MAINTNEANCE.

## TIML GROWTH STORY

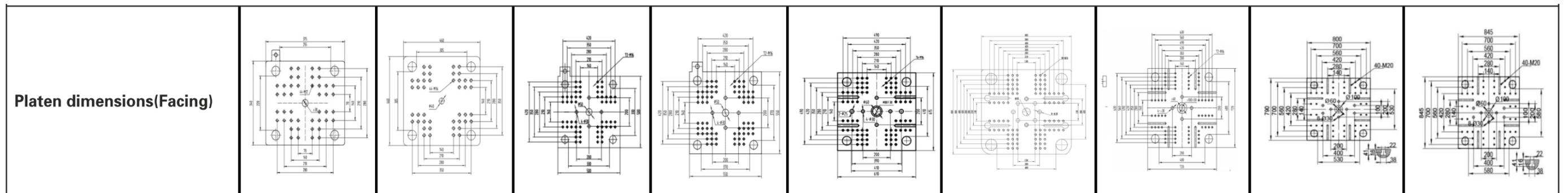


# SMD Series

## SMD Series Technical Specification



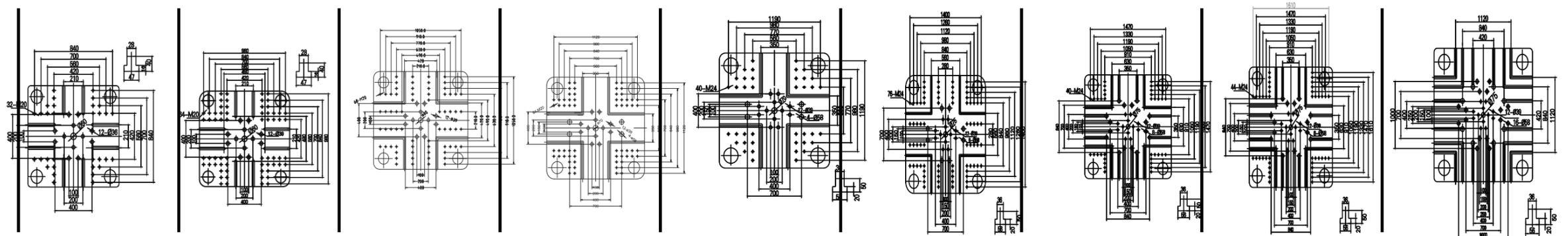
PARTS	MODEL	TM40SMD			TM60SMD			TM80SMD			TM100SMD			TM120SMD			TM160SMD			TM180SMD			TM220SMD			TM280SMD		
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
		<b>INJECTION UNIT</b>												<b>INJECTION UNIT</b>														
Screw Diameter	mm	19	22	25	25	28	32	32	34	36	32	35	38	35	38	42	42	45	50	42	45	50	45	50	55	55	60	64
Screw L/D Ratio	L/D	20.5	17.7	15.5	22.6	20.2	17.7	22.3	21	19.8	24.8	22	20	23.8	22	19.9	23	21.5	19.4	23.6	22	19.8	23.4	21	19.1	22.8	21	19.7
Shot Volume Theoretical	cm <sup>3</sup>	22.6	30	38	56	70	92	113	127	142	117	139	164	192	227	287	311	357	441	311	357	441	397	490	593	641	763	868
Injetion Weight (PS)	g	20.6	27	34	51	64	83	103	116	130	106	127	150	175	206	252	283	325	402	283	325	402	362	446	540	583	694	790
Injection Rate	g/sec	30	40	50	59	74	96	89	115	129	84	100	118	111	130	159	138	160	196	138	160	196	190	235	280	251	299	340
Injection Pressure	Mpa	280	209	162	265	211	162	203	180	160	232	194	165	219	186	152	216	188	152	216	188	152	207	168	139	193	162	143
Screw Speed	rpm	0.200			0.200			0.200			0.200			0.-200			0.-200			0.-200			0.-200			0.-200		
Plasticizing Capacity (PS)	g/sec	2	2.6	3.3	5.6	6.9	8.8	10.5	11.6	13	10.4	11.6	13	12	17	23	20	27	34	20	27	34	27	34	40	40	52	64
		<b>CLAMPING UNIT</b>												<b>CLAMPING UNIT</b>														
Clamping Force	KN	400			600			800			1000			1200			1600			1800			2200			2800		
Open Stroke	mm	155			270			300			330			350			415			435			485			553		
Space between tie-bars (WxH)	mm	255x220			305x305			330x330			370x370			410x410			460x430			480x480			530x530			580x580		
Mold Platen	mm	375x340			460x460			500x500			550x550			615x610			684x650			720x720			800x790			845x845		
Max. Mold thickness	mm	260			340			360			400			450			510			535			550			580		
Min. Mold Thickness	mm	80			100			130			150			150			160			180			200			220		
Ejector Stroke	mm	40			70			85			100			130			130			145			142			150		
Ejector Force	KN	13			25			31			31			45			45			53			70			70		
Ejector number	PC	1			1			5			5			5			5			5			9			9		
Dia of Mould location hole	mm	55			80			100			125			125			125			125			160			160		
		<b>POWER</b>												<b>POWER</b>														
Max pump pressure	Mpa	14			16			16			16			16			16			16			16			16		
Servo motor power	KW	5.5			7.9			13.4			13.4			16.4			20.5			20.5			26.7			31.4		
Heating Power	KW	2.6			4.7			6			7.2			8.5			12			12.3			14.8			16.8		
Machine dimension("WxH")	m	2.85x0.88x1.6			3.3x1.1x1.6			3.9x1.2x1.65			4.2X1.2X1.65			4.4x1.28x1.9			4.7x1.4x2.0			5.13x1.45x2.12			5.6x1.5x2.2			5.9x1.6x2.2		
Oil tank capacity	L	85			115			130			150			230			250			300			320			360		
Machine weight	T	1.1			1.9			2.5			2.8			3.6			4.9			5.3			6.9			7.9		



We reserve the right to make any product improvement or change machine specifications without prior notice

ITEM	SPECIFICATION	TM320MD			TM400MD			TM500MD			TM600MD			TM700MD			TM900MD			TM1050MD			TM1200MD			TM1400MD					
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C			
		<b>INJECTION UNIT</b>												<b>INJECTION UNIT</b>																	
Screw Diameter	mm	60	65	70	65	70	75	75	80	85	80	85	90	85	90	100	90	100	110	100	110	120	110	120	130	120	130	140			
Screw L/D Ratio	L/D	23.8	22	20.4	23.7	22	20.5	23.5	22	20.7	23.4	22	20.8	23.3	22	19.8	24.4	22	20	24.5	22.3	20.4	24.2	22.2	20.5	23.8	22	20.4			
Shot Volume Theoretical	cm <sup>3</sup>	792	929	1078	1261	1462	1679	1811	2061	2327	2287	2582	2895	2667	2990	3691	3117	3848	4657	4163	5037	5994	5037	5994	7035	6786	7964	9236			
Injetion Weight PS	g	728	855	991	1160	1345	1544	1666	1896	2140	2104	2375	2663	2454	2751	3396	2868	3541	4284	3830	4634	5515	4634	5515	6472	6243	7327	8497			
Injection Pressure	Mpa	198	169	145	194	168	146	191	168	148	188	167	148	198	177	143	227	184	152	212	175	147	181	152	129	184	156	135			
Injection Rate	g/sec	247	290	337	252	292	335	360	410	463	410	463	519	437	490	605	518	640	774	640	774	921	750	892	1047	800	939	1089			
Motor Displacement	ml/r	894			1234			1648			1815			2553			3218			4153			4968			6540					
Screw Speed	rpm	230			165			175			180			140			150			130			110			95					
Platisizing Capacity (ps)	g/ses	54.7	64.1	74.4	53	61.6	70.8	74.4	84.7	95.5	86.3	97.5	109	77.5	86.9	107	99.7	123	149	129	156	186	130	155	182	141	165	191			
		<b>CLAMPING UNIT</b>												<b>CLAMPING UNIT</b>																	
Clamp Tonnage	KN	3200			4000			5000			6000			7000			9000			10500			12000			14000					
Toggle Stroke	mm	640			700			780			860			970			1100			1200			1250			1350					
Min.Mold Height	mm	250			280			300			350			400			430			440			450			600					
Max.Mold Height	mm	680			780			820			900			950			1100			1150			1200			1400					
Space Between Tie Bars	mm	680 x 620			750x710			830 x 780			880 x 830			960 x 960			1060 x 1060			1160 x 1160			1220 x 1220			1350 x 1350					
Platen dimensions	mm	905 x 855			980x920			1205 x 1155			1290 x 1240			1400 x 1400			1510 x 1510			1570 x 1570			1690 x 1690			1770 x 1770					
Tie-bar diameter	mm	Ø105			Ø110			Ø135			Ø150			Ø160			Ø170			Ø190			Ø190			Ø200					
Ejector Tonnage	KN	70			100			120			150			170			200			240			240			280					
Ejector Stroke	mm	185			200			230			260			280			320			340			350			400					
Ejector Number	PC				17			13			17			17			21			21			21			29					
<b>OTHERS</b>		<b>POWER</b>												<b>POWER</b>																	
Max.Pump Pressure	Mpa	16			16			16			16			16			16			16			16			16			16		
Hwater Power	KW	18.5			23.5			32			43			47			52			65			71.35			84					
Servo Motor Power	KW	33			33			33+13			33+18			33+20			33+33+13			33+33+20			33+33+20			33+33+33					
Oil Tank Cubage	L	550			630			700			900			1200			1500			2000			2000			2300					
Machine Dimension LxWxH)	M	6.9x1.6x2.3			7.5x1.65x2.35			8.15x1.95x2.5			9.3x2.2x2.71			9.8x2.4x2.7			11.5x2.56x2.82			12x2.58x3.7			12.3x2.6x3.7			15x2.75x4.2					
Machine Weight	T	10.5			13.2			17.5			24			31			49			55			60			85					

Platen dimensions(Facing)



## TRADE FAIR



## AWARDS FROM GOVT. OF INDIA



AWARDED BY:  
HONORABLE CABINET MINISTER SH. JITAN RAM MANJHI & MEMBER OF PARLIAMENT SH. MANOJ TIWARI JI  
BEST MSME IN INJECTION MOLDING MACHINE CATEGORY (VOCAL FOR LOCAL)



AWARDED BY:  
HONORABLE CABINET MINISTER SH. CHIRAG PASWAN  
(MAKE IN INDIA CONCLAVE BY ABP NEWS)

## FEW OF OUR PRESTIGIOUS CLIENTS

