

PET CATALOGUE

Advanced DHARTI SERIES

Stronger | Heavier | Durable

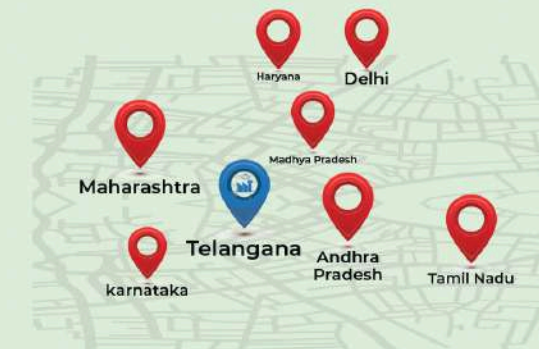
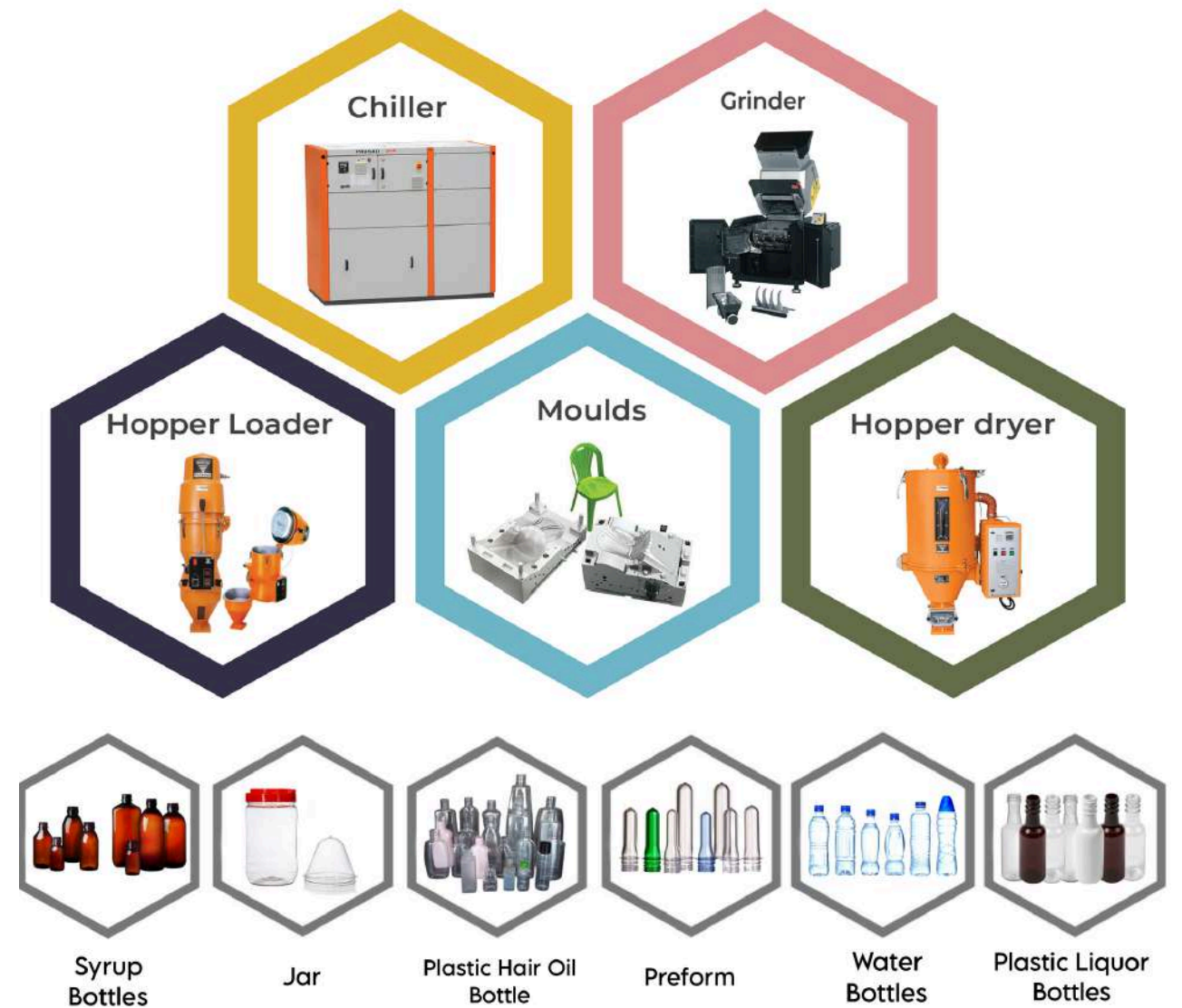
98 Ton to 530 Ton



Mfg. of
**Plastic Injection
Moulding Machines**

SPECIALIST IN PLASTIC STARTUP PROJECTS

AUXILIARY EQUIPMENT



FACTORY & REGD OFFICE

ABOUT US:

Founded in 1994, **SOS Group** is a distinguished name in the Indian market. **SOS Machinery**, a part of SOS Group, specializes in advanced plastic injection moulding machines. We share the same steadfast commitment to engineering excellence, enabling us to provide solutions that consistently surpass industry expectations.

OUR PURPOSE:

To equip our clients with world-class injection moulding solutions that fuel their growth and success.

OUR VISION:

To become the most trusted and preferred partner in the Indian plastic injection moulding industry.

OUR CORE VALUES:

Precision: We deliver flawless products and services through meticulous attention to detail.

Innovation: We advance progress with innovative technology and solutions.

Customer Focus: We prioritize our customers' needs, consistently exceeding their expectations.

Integrity: We uphold the highest ethical standards in all our actions.

Excellence: We strive for perfection in everything we do.

Service-Centric: We are dedicated to providing unparalleled service, ensuring that our clients receive continuous support and that their operations run smoothly.

Our machines are engineered with precision and cutting-edge technology, designed to optimize production efficiency, minimize downtime, and consistently deliver high-quality products.

At SOS Machinery, we are not just manufacturers; we are your strategic partners in achieving manufacturing excellence. Our dedicated service team is always ready to support your operations, ensuring optimal machine performance and productivity.

SOS machine features

Clamping unit

- Tie rods are made of high strength and high tension steel, and it has been modulated and forged. The surface is plated with hard chromium and has good wear resistance
- The safety door is equipped with electrical and mechanical safety lock protection device to ensure the safety of operators.

Hydraulic system

- The hydraulic components used are imported brand products to ensure the quality and performance
- The oil tank is equipped with oil level display, thermometer and filtering device for easy usage.
- All oil lines are centrally installed on the valve plate to eliminate oil leakage and pressure losses.

Injection unit

- **Bridge support**, improve injection stability, high repeatability.
- Longer length diameter ratio screw design to improve plasticizing effect and gives more shot weight.
- **Double seal** structure ensures no leakage of oil cylinder.
- Screw and cylinder components are made of imported high-quality nitriding steel.

Machine aesthetic

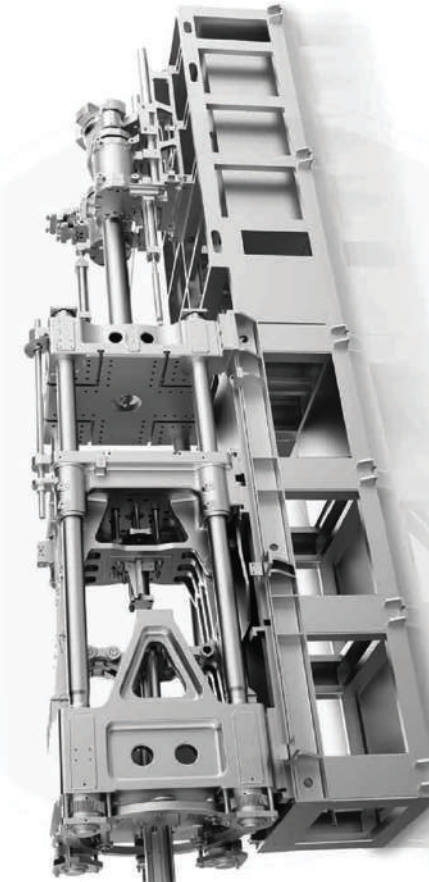
- We use advanced CNC bending machine, CNC shears, laser cutting machine, high precision processing, to meet world class quality and design.

Controller & electrical

- All the electrical parts used are imported brand products to ensure the quality and performance.
- The controller is user friendly and in built with all the modern features such as production data, power consumption data and dual mode operation (touch screen and buttons).
- Upto 70% energy saving is achieved with servo technology and very less heat losses.

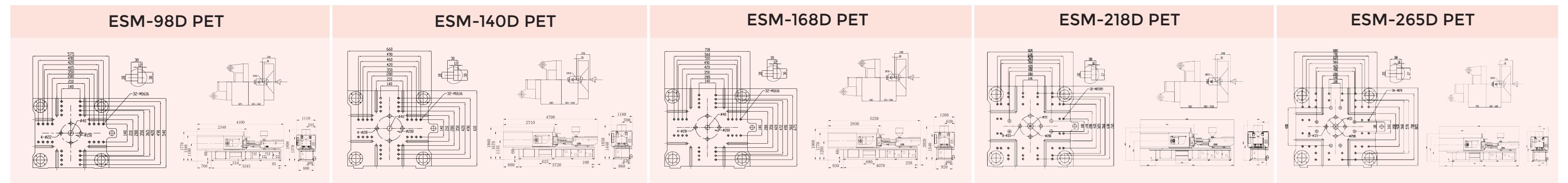
General

- The inner distance of coring column (tie rod) is large, which can accommodate large mold.
- The whole machine is stronger, heavier and durable.
- Through CAD (Computer Aided Design), CAE (Computer Aided Engineering) we have developed the mechanical structure design of the whole new **Dharti** series in which the hinge can open and close the mold quickly and smoothly, and the machine has a longest service life.
- All machines are standard Servo to save power costs upto 70%.
- The average length diameter ratio of screw is more than 22, which enhances the plasticizing effect of screw.



SPECIFICATIONS	UNITS	ESM-98D PET		ESM-140D PET		ESM-168D PET		ESM-218D PET		ESM-265D PET	
INJECTION UNIT											
SCREW TYPE		A	B	A	B	A	B	A	B	A	B
SCREW DIAMETER	mm	35	38	40	45	45	48	50	55	60	65
SCREW L/D RATIO	L/D	24	24	24	24	24	24	24	24	24	24
THEORETICAL SHOT VOLUME	cm ³	160	189	238	301.2	397.4	451.7	569	688	780	915.4
INJECTION PRESSURE	MPa	194	164.6	180	142.2	151	132.7	184.3	152.3	155	132.1
THEORETICAL SHOT WEIGHT (PET)	g	216	255	321	406	534	608	780	943	1069	1254
SCREW SPEED	rpm	210		200		208		180		190	
CLAMPING UNIT											
CLAMPING FORCE	KN	980		1400		1680		2180		2650	
TOGGLE STROKE	mm	325		385		430		520		590	
SPACE BETWEEN TIE BARS	mm	405 x 365		460 x 425		510 x 472		565 x 525		620 x 570	
MAX MOULD HEIGHT	mm	360		440		500		530		600	
MIN MOULD HEIGHT	mm	120		140		170		200		200	
EJECTOR STROKE	mm	100		115		130		150		150	
EJECTOR FORCE	KN	38		38		38		70		70	
EJECTOR NUMBER		4+1		4+1		4+1		8+1		12+1	
DIE HOLE DIAMETER	mm	125		125		160		160		160	
OTHER											
SYSTEM PRESSURE	MPa	16		16		16		16		16	
MOTOR POWER	KW	16		16		25		25		30	
HEATER POWER	KW	10		12.7		13.2		18		28	
OIL TANK CAPACITY	L	125		170		210		230		300	
MACHINE WEIGHT	Ton	2.8		3.9		5		7		9	
MACHINE DIMENSIONS	M	4.3 X 1.11 X 1.8		4.9 X 1.18 X 1.85		5.5 X 1.26 X 2.02		6.16 X 1.36 X 2.2		6.69 X 1.44 X 2.4	

****Note:** The technical specifications can be changed without prior notice.



SPECIFICATIONS	UNITS	ESM-368D PET			ESM-400D PET			ESM-438D PET			ESM-530D PET		
INJECTION UNIT													
SCREW TYPE		A	B	C	A	B	C	A	B	C	A	B	C
SCREW DIAMETER	mm	70	75	80	75	80	85	80	85	90	90	95	100
SCREW L/D RATIO	L/D	24	24	24	24	24	24	24	24	24	24	24	24
THEORETICAL SHOT VOLUME	cm3	1366	1568.1	1783.5	1661	1889.8	2126.9	1965	2218.3	2486	2486	2770	3069.4
INJECTION PRESSURE	MPa	156.7	136.5	120	156	137.1	122	137	122	109	132.7	120	108
THEORETICAL SHOT WEIGHT (PET)	g	1871	2148	2443	2276	2589	2914	2692	3039	3406	3406	3795	4205
SCREW SPEED	rpm	144			144			194			152		
CLAMPING UNIT													
CLAMPING FORCE	KN	3680			4000			4380			5330		
TOGGLE STROKE	mm	660			710			780			840		
SPACE BETWEEN TIE BARS	mm	705 x 590			760 x 690			785 x 695			840 x 805		
MAX MOULD HEIGHT	mm	660			675			780			800		
MIN MOULD HEIGHT	mm	210			280			280			290		
EJECTOR STROKE	mm	170			170			170			225		
EJECTOR FORCE	KN	90			90			90			152		
EJECTOR NUMBER		12+1			12+1			12+1			12+1		
DIE HOLE DIAMETER	mm	160			200			200			200		
OTHER													
SYSTEM PRESSURE	MPa	16			16			16			16		
MOTOR POWER	KW	47			47			30+47			30+47		
HEATER POWER	KW	31			36.5			38			42		
OIL TANK CAPACITY	L	600			700			750			900		
MACHINE WEIGHT	Ton	13			16			18			20		
MACHINE DIMENSIONS	M	7.8 X 1.9 X 2.46			8 X 1.95 X 2.53			8.7 X 2 X 2.53			9 X 2.05 X 3		

****Note:** The technical specifications can be changed without prior notice.

