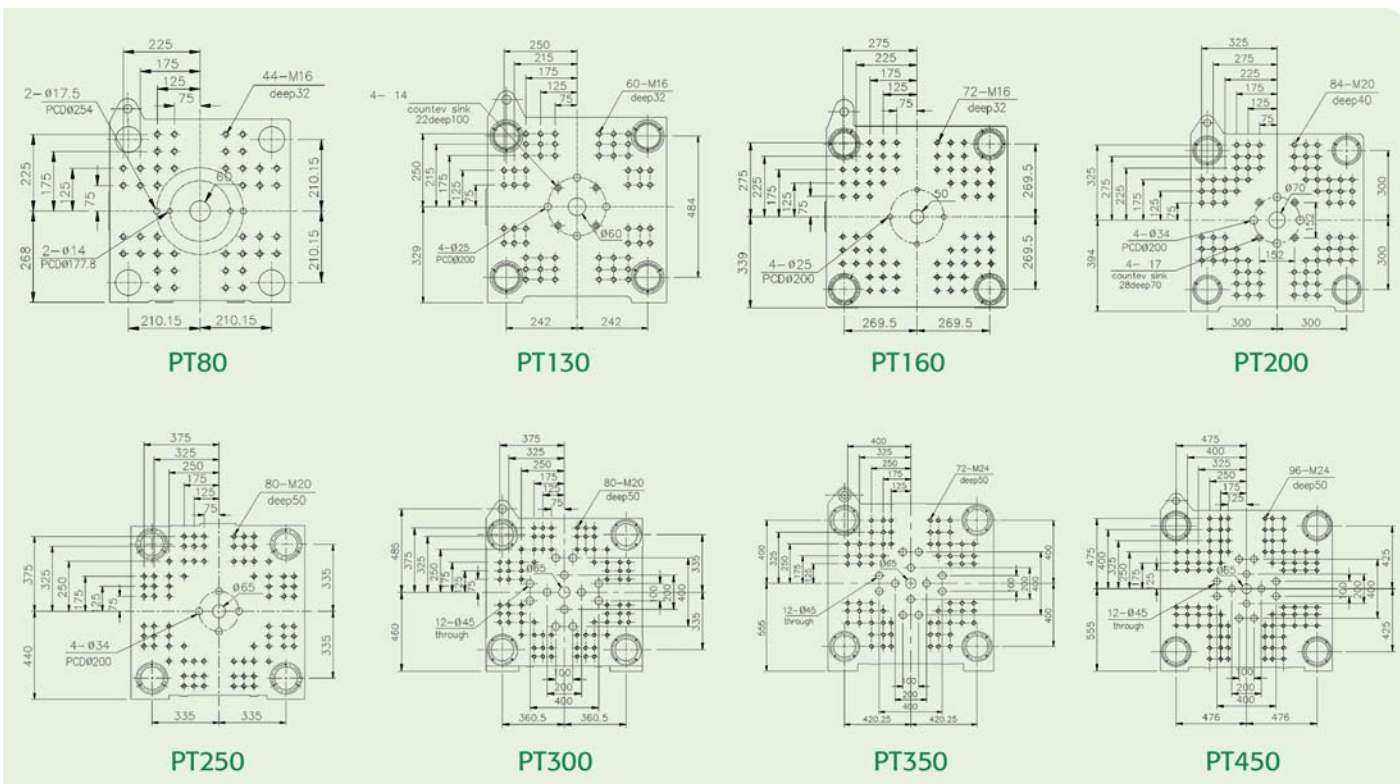
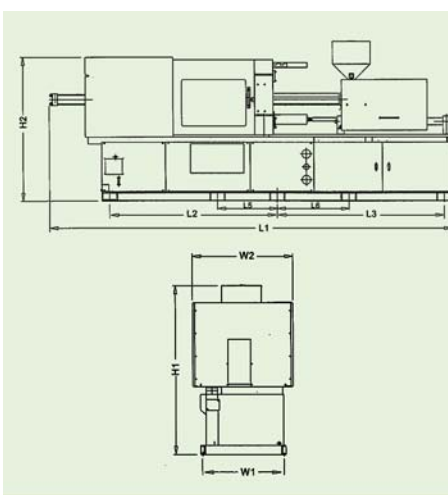


POTENZA SERIES PLATEN SIZE



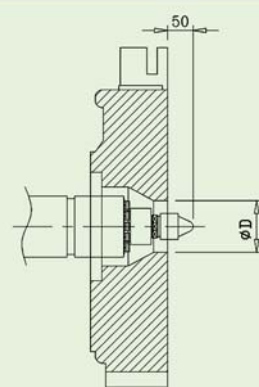
DIMENSION



POTENZA SERIES	L1	L2	L3	L5	L6	W1	W2	H1	H2
PT80	3720	1484	1484	-	-	739	1030	1710	1510
PT130	4650	1805	1805	-	-	842	1150	1800	1610
PT160	4700	1950	2050	-	-	852	1150	1830	1670
PT200	5300	2240	2240	-	-	947	1200	2100	1797
PT250	6270	2475	2475	825	825	1027	1330	2150	1920
PT300	6450	2730	2417	-	525	960:735	1470	2190	1850
PT350	7300	3200	3147	1600	735	1145:875	1660	2330	2050
PT450	8140	3570	3496	1785	778	1240:970:990	1870	2420	2080

(Unit:mm)

NOZZLE POSITION



POTENZA SERIES	PT80	PT130	PT160	PT200	PT250	PT300	PT350	PT450
ØD	100	125	125	150	150	150	150	150

(Unit:mm)

POTENZA SERIES SPECIFICATION

MACHINE MODEL	UNIT	PT80	PT130	PT160	PT200	PT250	PT300	PT350	PT450								
Shot Weight (PS)	g	103	140	229	290	288	356	393	476	572	681	798	936	1011	1241	1370	1693
	oz	3.6	4.9	8.1	10.2	10.2	12.6	14	16.8	20	24	28	33	36	44	48	60
Screw Diameter	mm	30	35	40	45	45	50	50	55	55	60	60	65	65	72	72	80
Shot Volume	c.c.	113	154	251	318	318	393	432	523	630	749	877	1029	1111	1363	1506	1860
Injection Pressure	MPa	189	139	174.4	137.8	180.3	146	186.2	153.9	180.8	152	210.7	179.5	208.5	170	195	157.9
Injection Rate	c.c./sec	55	75	90	114	132.5	163	161	195	213	254	262	307	288	353	381	471
Screw L/D Ratio		23	20	22	20	22	20	22	20	22	20	22	20	22	20	22	20
Screw Stroke	mm	160	200	200	220	265	310	335	370								
Screw Speed	r.p.m	185	187	200	173	188	154	154	145								
Plasticizing Capacity	kg / hr	28.5	42	64	74.5	80	110	108	128	140	183	200	254	204	279	233	322
Nozzle Stroke	mm	230	280	300	350	360	360	420	460								
Hopper Capacity	L	45	50	50	60	60	100	100	150								
Locking Force	kN	800	1300	1600	2000	2500	3000	3500	4500								
Mold Height (min-max)	mm	150-350	175-400	200-450	200-500	200-550	250-600	250-720	300-840								
Max. Daylight	mm	630	750	850	960	1060	1160	1420	1590								
Opening Stroke	mm	280	350	400	460	510	560	700	750								
Space Between Tie Bar	mm	357x357	409x409	459x459	510x510	570x570	610x560	720x680	822x720								
Platen Size (HxV)	mm	530x533	614x636	672x672	744x744	870x850	910x860	1050x1015	1162x1060								
Ejector Stroke	mm	85	100	100	120	120	130	150	180								
Ejector Force	kN	27	49	49	64	77	82	99	150								
Pump Motor	kW	7.5	11	15	18.5	22	30	37	45								
Working Pressure	MPa	14	17.5	17.5	17.5	17.5	17.5	17.5	17.5								
Tank Capacity	L	230	300	320	420	420	500	500	700								
Heating Capacity	kW	5.23	6.83	8.23	13.5	13.74	16.5	17.4	17.65								
Heating Zones		3+N	3+N	3+N	3+N	4+N	4+N	4+N	5+N								
Machine Dimension	mm (LxWxH)	3720x1030x1710	4650x1150x1880	4700x1150x1830	5300x1200x2100	6270x1330x2150	6450x1470x2190	7300x1660x2330	8140x1870x2420								
Machine Weight	kg	2700	4200	4900	6800	8900	11600	17000	20000								
Dry Cycle Time	s	1.4	1.7	2.1	2.1	2.7	3	3.7	4.5								

option

\*Data are based on theoretical calculation under 50 Hz operation

\*We reserve the right to make any technical improvement without further notice.



ISO 9001:2000  
FM 37608

CAT. NO. E05/02/05

Sales Agent:



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POTENZA SERIES  
INJECTION  
MOLDING MACHINE



# POTENZA INJECTION MOLDING MACHINE

# POTENZA SERIES



Simple and reliable pulse-counting mechanism is installed for mold height adjustment.



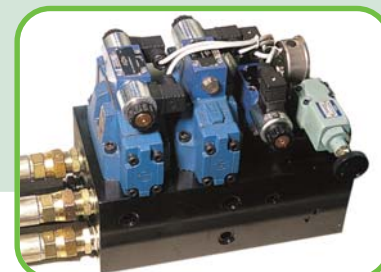
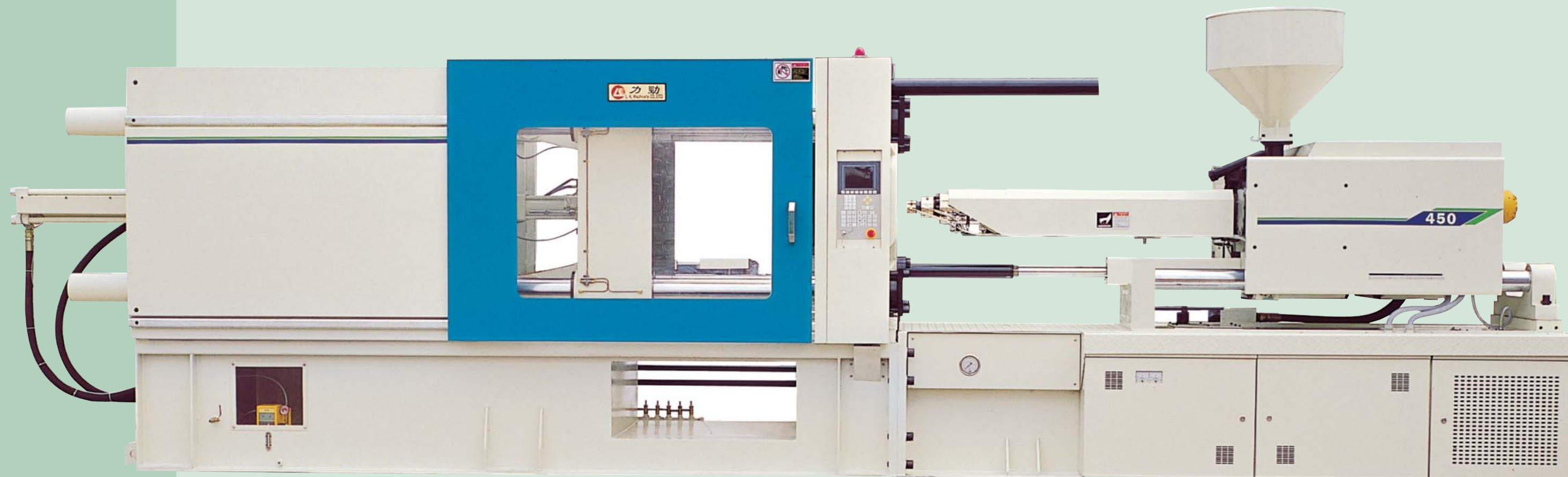
Specially designed toggle system provides maximum clamping force and opening stroke. Platen and toggle stand are cast into one piece for extra strength and durability.



Precise gear type mold height adjustment system.



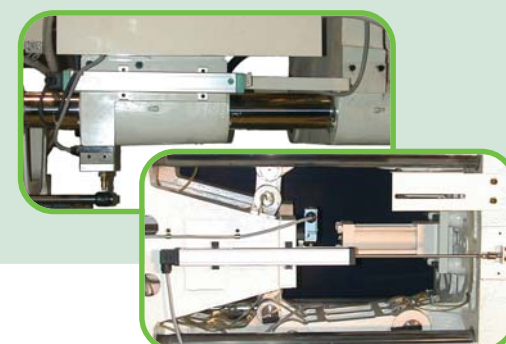
Melt recovery is directly powered by high torque, high power Italian made hydraulic motor.



High quality hydraulic valves are centralized on manifolds for simple and efficient piping. High grade seals eliminate any leakages.



Hydraulic motor powers the Mold Height Adjustment System.



Reliable and precise liner transducers measure clamping and injection stroke accurately up to 0.1mm.



Automatic lubrication maintains a stable, non-wearing condition for longer toggle service life. Lub oil is re-circulated to minimize oil wastage.

## POTENZA STANDARD FEATURES

### CLAMPING UNIT

- Linear transducer for clamping stroke control with 0.1mm accuracy.
- High tensile steel tie bars with wear resistant chromium plated.
- Multiple-stage speed and pressure control for mold closing and opening.
- Quick clamping capability (with high-speed mold close).
- Initial and final stage of mold clamping action can be programmed to reduce speed.
- Maximum and minimum mold thickness detection.
- Efficient central lubrication system is computer controlled.
- Mold clamping action can be set easily on the LCD display.
- Ejector speed and pressure control with digital setting.
- Adjustable high-speed multiple-shaking ejector function.
- Ejector with timer control.
- Variable ejector's forward and backward stroke control with inductive proximity switches.
- Safety doors with double electric interlock and mechanical ratchet-bar protection.
- Mold height adjustment driven by strong and stable gear system.

### CONTROL UNIT

- Standard A62 system is a user-friendly, multiple-function computer with a LCD display and selectable Chinese or English language.
- All temperature control and operating data are shown and programmable on the LCD screen.
- Max.4/5 zones of P.I.D. control for barrel temperature.
- Production control and injection shot counters.
- Self-diagnostic and error history display.
- The main control-boards equipped with LED indicator for easy trouble shooting.
- Machine status display function, such as input or output signal.
- The system has 4 stage injection, 3-stage holding pressure and 2-stage metering.
- Internal memory storage up to 20 sets of the mold data.
- Data lock and two level passwords to prevent improper adjustment.
- Robot supporting interface built in.
- Selectable manual or automatic oil lubrication timing control.

### INJECTION UNIT

- Injection screw with large L/D ratio as 20:1.
- The surfaces of screw and barrel are ion-nitrated to form a hard (up to Hv800-900) and wear resistant layer.
- Double hydraulic injection cylinders for space saving.
- Manual barrel swivel device makes injection screw repairing simple.
- Each injection stage has a ramp or delay for advance or retracts adjustment.
- Injection unit equipped with linear transducer of 0.1mm accuracy.
- Melt decompression device.
- High-torque hydraulic motor with variable speed control.
- Adjustable "Back-pressure" control with pressure gauge.
- Injection process control has 4-speeds, 4-pressures and 3-holding pressures.
- Cold starting protection to prevent injection screw from damaging.
- Adjustable speed, position and pressure for injection and metering motion are set on the LCD display.
- Automatic purging circuit (device for quick material change).
- Melt decompression and metering start under computer's timer control.
- Injection and pressure holding control are monitored in several stages to ensure a precise and consistent pressure holding switching function.
- Effect of holding pressure under timing or position limitation.
- Programmable and multiple-choice melt decompression control. (Start at pre-metering or after metering finished.)
- Programmable nozzle suct back control. (Start at pre-metering or after metering finished)
- PID temperature control with 4 zones.
- High quality and durable hydraulic seals for a longer life and reliable service of cylinders.
- Injection time monitoring and alarm signal.
- Metering time monitoring and alarm signal.
- Adjustable nozzle centering device of the injection unit, suitable for different mold design.

### HYDRAULIC UNIT

- Hydraulic components are well known manufacturer.
- The newly developed proportional valves and circuit provides low energy consumption and excellent repeatability.
- Low-noise electric motor and hydraulic pump are equipped.
- All valves are operated with 24 DC solenoids to ensure safety.

## OPTIONAL FEATURES

- Product chute at discharge area with detective photoelectric sensor.
- Special requirement of mounting for robot's installation.
- Ejector stroke non-return device.
- Automatic mold height adjustment system driven by gear and high-speed hydraulic motor.
- Special mold flange design of mounting holes dimension of stationary platen.
- Programmable core-pull device. (Hydraulic or air, Max. 2 sets)
- Programmable unscrewing device. (Hydraulic or electric motor)
- Programmable air-blow device.
- Mold cooling water distributor or regulator. (Flow indicator attached)
- Manual hoisting framework.
- Sensitive low-pressure mold protection device.
- Automatic mold height adjustment program with locking pressure and locking position monitoring function.
- Programmable core-pull sequence. (Max. 2 sets)
- Programmable unscrewing sequence.
- Programmable air-blow sequence.
- Special robot interface.
- Hydraulic oil temperature over-heat alarm.
- Screw tachometer with actual speed shown on LCD panel.
- Selectable warning lamp and alarm buzzer.
- Emergency stop button at non-operation side.
- Power supply stabilizer.
- Hydraulic pump and electric motor stop immediately as rear safety door opened.
- Separated spare plug socket for auxiliary equipment. (13A-15A, single phase)
- Other voltage and safety standard.
- Spring loaded shut-off nozzle.
- Extended nozzle.
- Tachometer device of injection screw rotary speed.
- Nozzle safety shield with interlock.
- Barrel temperature keeping device for energy saving.
- Dust prevention device for guide rod.
- Full injection unit safety guard with interlock system.
- Special suction strainer or return line filter.
- Hydraulic fluid temperature detector with alarm.
- Automatic water regulating valve to stabilizer water temperature for cooling.
- Hydraulic safety interlock. (L. K. Standard or CE standard)
- Digital control for the "Back-pressure" with proportional pressure.