

**LKIMM**

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## POTENZA-II SERIES

### ENERGY SAVING AND HIGH PRECISION SERVO INJECTION MOLDING MACHINE

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LK INJECTION MOLDING MACHINE

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## POTENZA-II SERIES

### Energy Saving and High Precision Servo Injection Molding Machine

LK Potenza-II energy saving servo injection molding machine adopts the most advanced energy-saving control technology, which equips this injection molding machine series with numerous advantages such as ultra-low energy consumption, quick response, high accuracy and stability. The world-class technology plays an important role in promoting industrial upgrading and transformation.



European linear transducer control for mold-clamping, injection and ejector action; stroke control capable of achieving up to 0.1mm accuracy.



The centralized automatic toggle lubrication system ensures fixed amount of lubricant to be delivered to each moving joint with adjustable cycle time, which increases the lifetime and reduces maintenance.



Gear type mold height adjustment mechanism motor imported from Europe and USA.



Servo system with closed-loop control, which adjusts the torque output depending on load requirements. The system is capable of running at low pressure with high torque, faster acceleration/deceleration time, stable speed control and designated stop function.



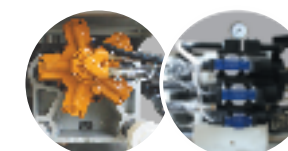
Lightweight and small size precision oil filter driven by mechanical power, equipped with special flow regulator which ensures stability and precision. It has the advantage of easy installation, operation and maintenance.



Equipped with advanced computer system and user-friendly interface, which enhances the mold data memory system and capable of showing SPC production parameters. Closed loop control can be chosen which integrates high performance and easy operation features.



The compact injection unit is driven by the hydraulic system which is user-friendly and easy to maintain.



Imported hydraulic valves and hydraulic motor from Europe and Japan are applied to the hydraulic unit with advanced seals to reduce piping and prevent leakage.

# SPECIFICATIONS

Item	Unit	PT80		PT130			PT160			PT200			PT250			
		Optional	Standard	Optional	Optional	Standard	Optional	Optional	Standard	Optional	Optional	Standard	Optional	Optional	Standard	Optional
<b>Injection Unit</b>																
Injection Weight(PS)	g	103	140	183	175	228	289	236	299	369	318	393	475	468	566	673
	oz	3.6	4.9	6.5	6.2	8.1	10.2	8.3	10.6	13	11.2	13.9	16.8	16.5	20	23.8
Screw Diameter	mm	30	35	40	35	40	45	40	45	50	45	50	55	50	55	60
Injection Volume	cc	113	154	201	192	251	318	260	329	406	350	432	522	514	622	740
Injection Pressure	MPa	236	174	133	228	174	138	228	180	146	230	186	154	219	181	152
Injection Rate	cc/s	79	107	141	103	134	169	128	162	200	163	201	243	214	258	307
Screw L/D Ratio		23	20	18	25	22	20	25	22	20	25	22	20	22	20	18
Screw Stroke	mm	160		200			207			220			262			
Screw Speed	rpm	252		235			221			215			198			
Plasticizing Capacity (PS)	kg/h	38	50	63	47	60	81	63	83	104	91	115	141	112	138	163
Nozzle Stroke	mm	230		280			300			320			360			
Hopper Capacity	L	45		50			50			60			60			
<b>Clamping Unit</b>																
Clamping Force	kN	800		1300			1600			2000			2500			
Mold Thickness (min.-max.)	mm	150-350		175-400			200-450			200-520			200-550			
Max. Daylight Between Platen	mm	630		750			850			980			1060			
Opening Stroke	mm	280		350			400			460			510			
Space Between Tie Bars (HxV)	mm	357X357		409X409			459X459			510X510			570X570			
Platen Size (HxV)	mm	530X533		614X614			672X672			746X746			860X860			
Ejector Stroke	mm	85		100			100			120			120			
Ejector Force	kN	34		42			42			67			77			
<b>Others</b>																
Pump Motor Power	kW	14.1		16			17.3			22			31			
System Pressure	Mpa	17.5		17.5			17.5			17.5			17.5			
oil Tank Capacity	L	150		180			260			280			330			
Heating Capacity	kW	5.13		7.53			8.23			11.54			12.84			
Temp. Control Zones		3+N		3+N			3+N			3+N			4+N			
Machine Dimension (LxWxH)	mm	3815x1022x1715		4522x1110x1846			4824x1170x1846			5405x1218x1973			5844x1344x2048			
Approx. Lifting Weight	kg	2700		3800			4300			5500			7500			

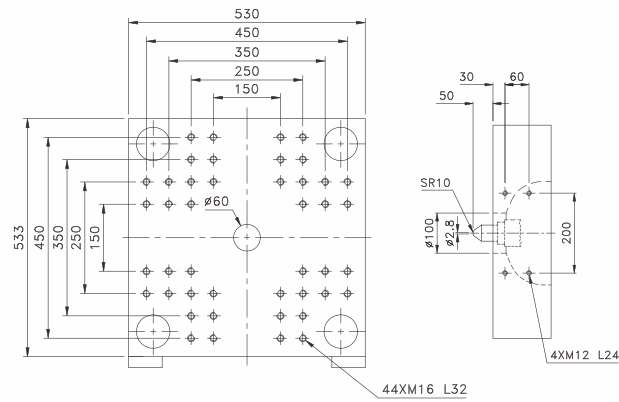
Remarks: Plasticizing capacity = Theoretical plasticizing capacity x 0.80  
CAT.MO.:C20-06-09

PT320		PT400		PT480		PT560		PT650		PT850		PT1000		
Optional	Standard	Optional	Optional	Optional	Standard	Optional	Optional	Optional	Standard	Optional	Optional	Optional	Optional	
849	996	1155	1326	1086	1260	1447	1646	1436	1648	1847	2372	1708	2194	
2194	2459	3036	2057	2604	3214	3889	2748	3393	4106	4886	3929	4754	5657	
6639	30	35	41	47	38	44	51	58	51	58	66	84	60	
78	87	107	73	92	114	137	97	120	145	173	139	168	200	
234	60	65	70	75	65	70	75	80	70	75	80	90	75	
85	90	100	80	90	100	110	90	100	110	120	100	110	120	
130	932	1094	1269	1457	1194	1385	1590	1809	1576	1810	2059	2607	1877	
2410	2702	3336	2261	2861	3532	4274	3020	3729	4512	5369	4317	5224	6217	
7296	217	185	159	139	213	184	160	141	212	185	162	128	209	
163	145	118	225	178	114	119	218	176	146	122	214	177	149	
127	336	394	457	525	342	397	456	518	396	454	517	654	527	
677	759	938	531	672	830	1004	670	827	1001	1191	899	1087	1294	
1519	22	20	19	18	22	20	19	18	22	20	19	17	22	
20	19	17	23	21	19	18	23	21	19	18	23	21	19	
18	330		360		410		425		450		475		550	
203		177		175		155		153		140		137		
165	184	209	250	170	195	220	245	203	245	268	333	218	274	
311	380	265	337	414	488	333	410	486	567	428	514	595	686	
630		660		740		760		885		950		1100		
100		100		100		120		120		150		210		
3200		4000		4800		5600		6500		8500		10000		
220-680		250-750		300-820		350-850		350-920		400-1100		450-1210		
1320		1450		1620		1700		1820		2205		2410		
640		700		800		850		900		1105		1200		
664x660		725 x720		820 x820		861x860		911x911		1080 x1020		1121x1121		
964x960		1035x1030		1150x1150		1180x1180		1260x1260		1540 x1480		1641x1641		
180		180		200		240		270		300		300		
110		110		110		166		215		270		270		
49		49		22+33		22+49		33+49		49x2		49x2+33		
17.5		17.5		17.5		17.5		17.5		17.5		17.5		
360		400		680		900		900		1100		1500		
19.83		23.14		24.7		31.3		33.27		39.75		49.75		
4+N		4+N		5+N		5+N		5+N		5+N		6+N		
6570x1717x2137		7257x1905x2140		7933x1940x2171		8920x2200x2200		9388x2363x2236		10741x2494x2382		11858x2570x2683		
10500		12500		15000		22000		25000		33000		41000		

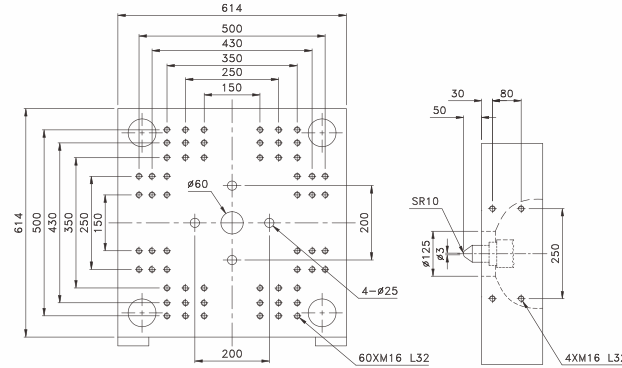
Please contact us if you got any special requirements for injection molding products with the engineering material: PVC, PC, ABS (fireproof), PMMA, POM or others. We reserve the right to make any technical improvements without further notice.

# PLATEN DIMENSIONS

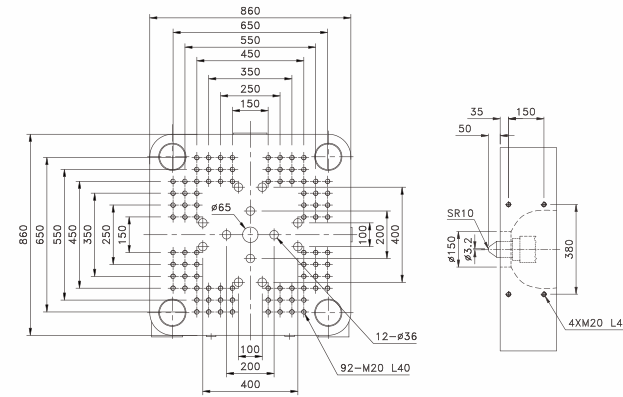
PT80



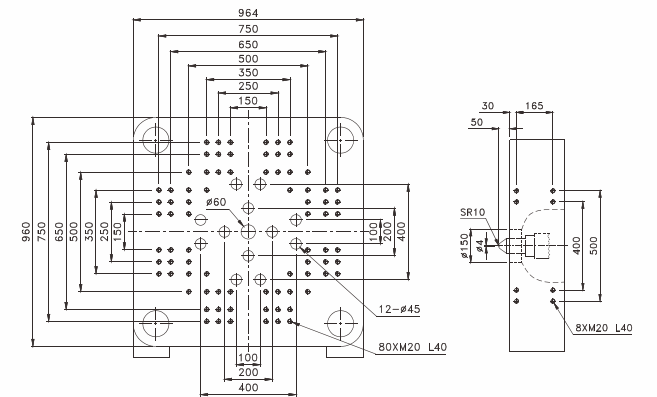
PT130



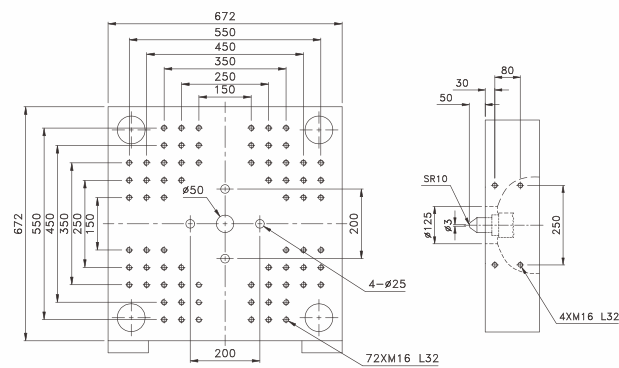
PT250



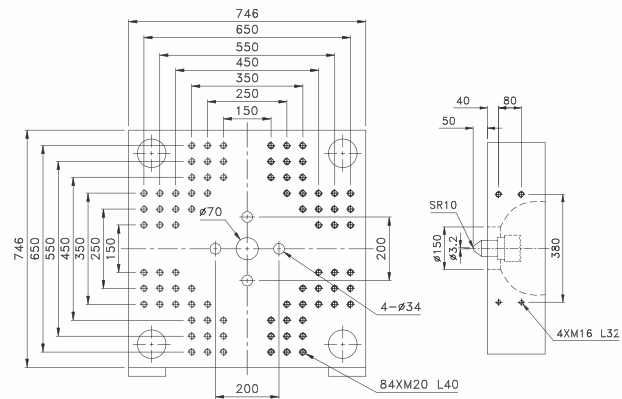
PT320



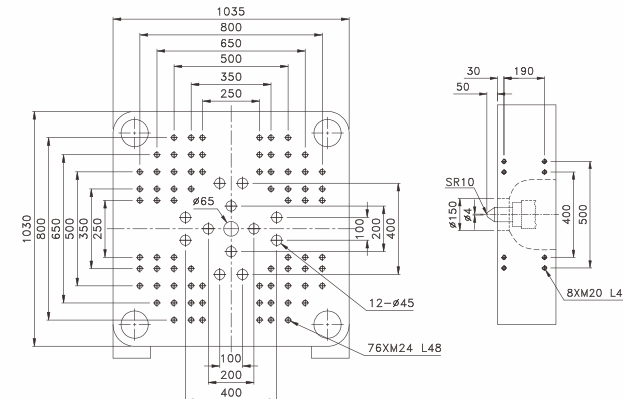
PT160



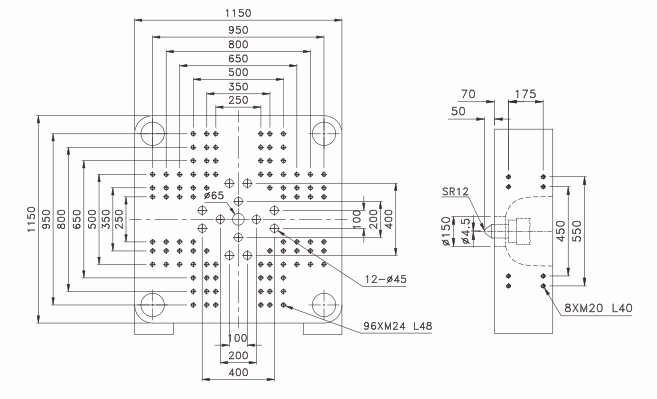
PT200



PT400

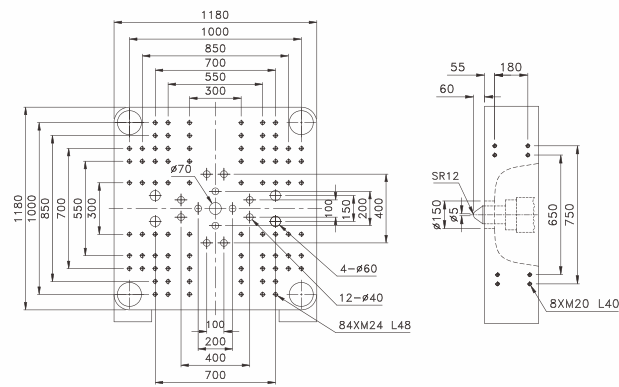


PT480

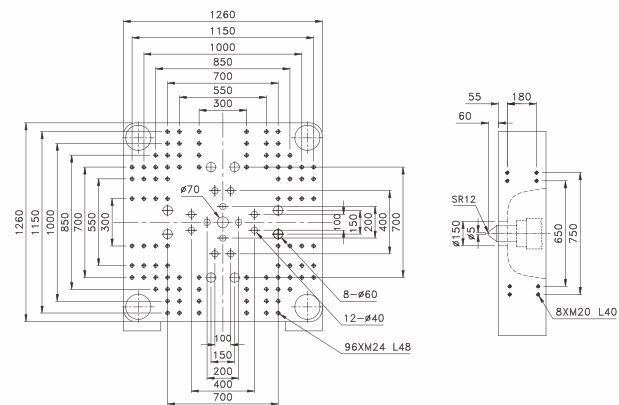


# PLATEN DIMENSIONS

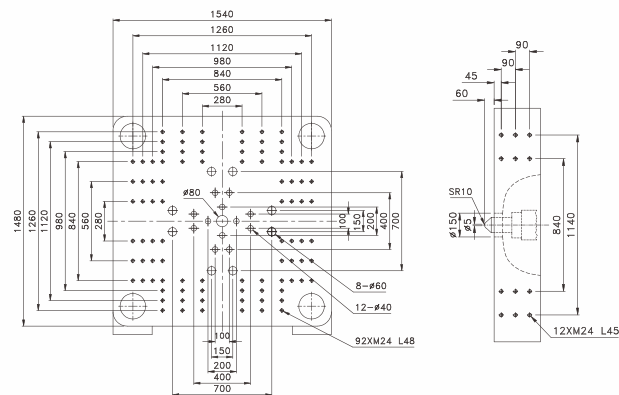
PT560



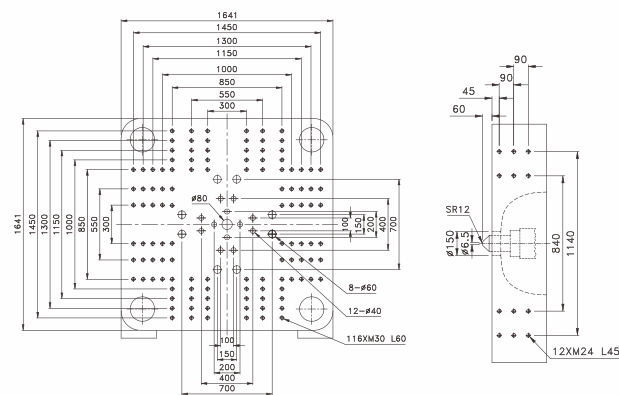
PT650



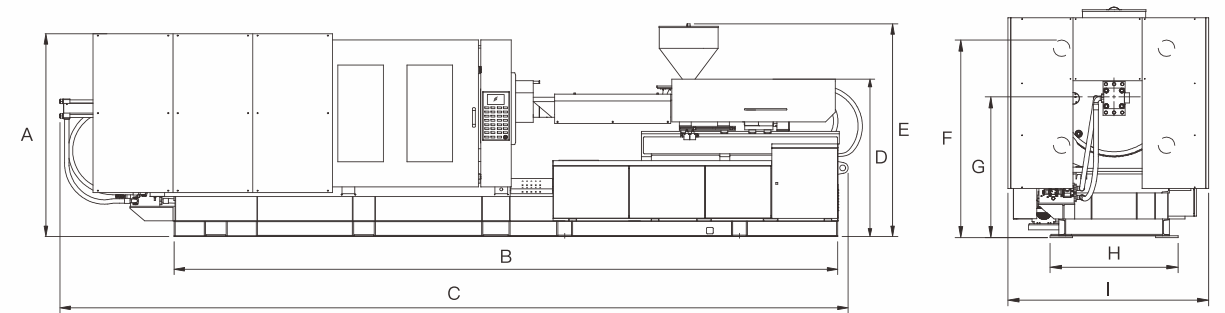
PT850



PT1000



# MACHINE DIMENSIONS



Model	A	B	C	D	E	F	G	H	I
PT80	1545	3294	3815	1285	1715	1327	1084	680	1022
PT130	1674	3789	4522	1390	1846	1450	1170	790	1110
PT160	1704	4180	4824	1390	1846	1480	1170	865	1170
PT200	1794	4480	5405	1455	1973	1570	1224	905	1218
PT250	1894	4905	5844	1530	2048	1674	1288	1050	1344
PT320	1823	5401	6570	1585	2137	1705	1265	870	1717
PT400	1858	5861	7257	1553	2140	1745	1265	940	1905
PT480	1954	6774	7933	1590	2171	1845	1305	1050	1940
PT560	1982	8350	8920	1590	2200	1834	1264	1256	2200
PT650	2135	8814	9388	1655	2236	1945	1329	1286	2363
PT850	2215	9993	10741	1700	2382	2063	1373	1466	2494
PT1000	2389	11393	11858	1974	2683	2225	1474	1531	2570



## STANDARD FEATURES

### Injection unit

- Nitride treatment screw assembly
- Injection unit equipped with linear transducer
- Double hydraulic injection cylinders for space saving
- Sliding hopper base (PT80-850 only)
- Double carriage cylinder (PT320-1000 only)
- Injection pressure sensor (PT320-1000 only)
- Digital back pressure control for melting (PT320-1000 only)
- Adjustable back pressure control for melting (PT80-250 only)
- Nozzle safety cover
- Material measuring device (PT320-1000 only)

### Clamping unit

- Toggle clamping structure
- Mold height adjustment driven by strong and stable gear system
- Linear transducer for clamping/ejector stroke control with 0.1mm accuracy
- Computer controlled central lubrication system
- Ejector speed and pressure control with digital setting
- Screw thread mounting hole platen
- Grease lubrication system (PT560-1000 only)
- Electrical and hydraulic safety interlock

### Control unit

- Voltage and frequency: 380V/50HZ
- Mushroom emergency stop button
- PID temperature control
- Maintenance alarm
- Suck back function
- Auto-purge function
- Production monitor function
- Working schedule display function
- Three-color alarm lamp
- Cold starting protection to prevent injection screw from damage

### Hydraulic unit

- Automatic hydraulic oil cleaning system
- Hydraulic oil cooled by water cooler
- Oil temperature and oil level indicator
- High speed clamping function
- Core pulling device (PT320-1000 only)
- Mold open with back pressure control (PT200-1000)
- High reaction closed loop control
- Hydraulic pump station allocation function (Pt480-1000 only)

### Others

- Servo safety door (PT1000 only)
- Tool with tool box
- Mold mounting clamp

## OPTIONAL FEATURES

### Injection unit

- Barrel thermal cover
- Extended nozzle
- Enlarge hydraulic motor
- Material measuring device (PT80-250 only)
- Protective cover for injection unit (PT80-250 only)
- Injection pressure sensor (PT80-250 only)
- Ceramic heater band (PT80-250 only)
- Induction heating system
- Infrared Nano Heater
- Digital back pressure control for melting (PT80-250 only)

### Clamping unit

- Air blast device
- Unscrewing device
- Extra core pulling
- Mold cooling water distributor
- Special mold flange (position ring)
- T-slot platen design
- Extended mold thickness
- Mechanical safety lock
- Mold open with back pressure control (PT80-160 only)
- Special mounting holes dimension on stationary platen

### Control unit

- Voltage stabilizer
- LK net
- Extra waterproof power socket
- KEBA PLC
- Solid state relay heating control

### Hydraulic unit

- Oil level protection alarm
- Enlarge oil cooler
- Oil cooling water control function
- Oil temperature over-heat alarm
- Enlarge hydraulic motor & oil pump
- Water drain

### Others

- Hopper dryer
- Color mixture machine
- Conveyor
- Mold temperature controller
- Suction Machine
- Material crusher
- Chiller
- Mold hoisting frame (PT80-200 only)
- Material loading machine (PT560-1000)
- Servo safety door (PT320-850)