360°
Digital Showroom
https://show-lsinjection.com

LS injection molding machine for pallet

WIZ-PLT Series 1800~3200 Metric Ton



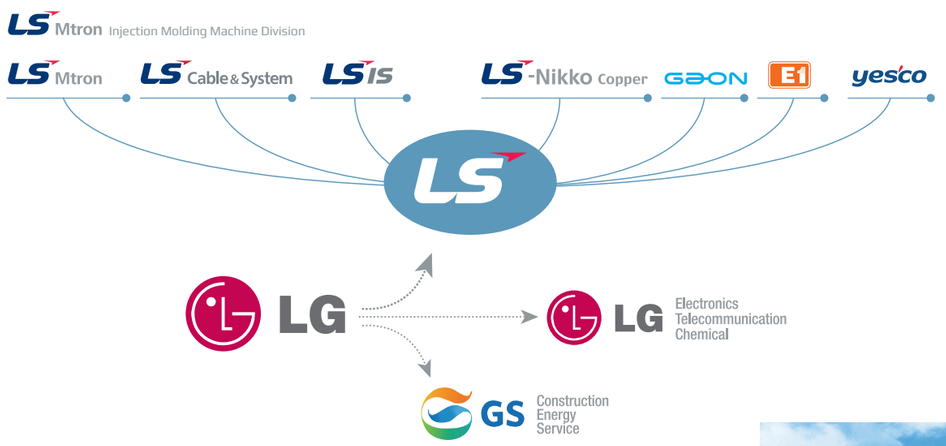
LS Mtron

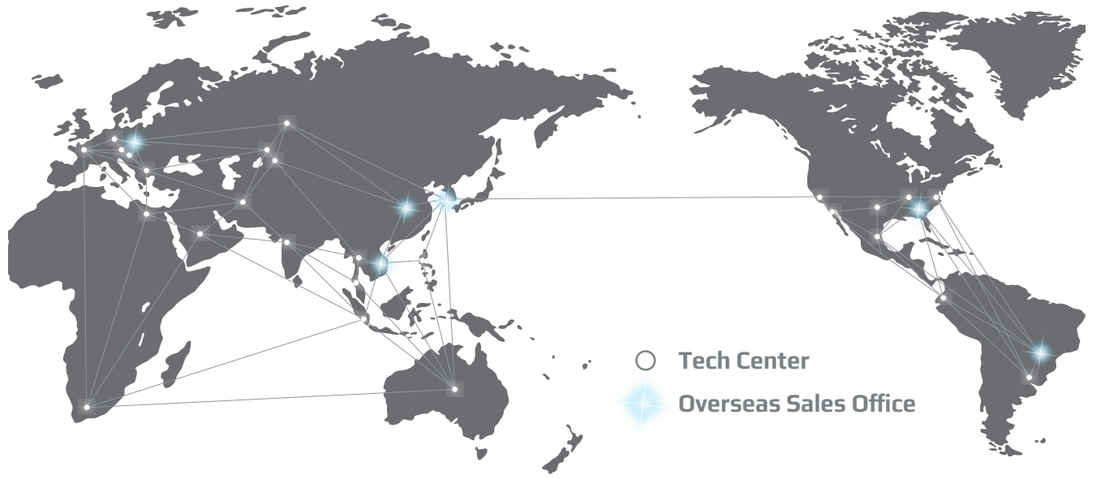
LS Mtron

Injection Molding Machine

About LS Mtron

The goal of LS injection molding machines is to meet and exceed the technology and quality requirements of all customers in the global market. We (in partnership with our customers) will expand entry into advanced markets with continuous technology and quality innovation that consistently creates value for our customers. This will lead to high and consistent earnings growth by anticipating and understanding market needs in advance and leveraging this knowledge and insight as an indicator to drive technology, leadership and innovation within the global market without ceasing. Beginning with the development of Korea's first direct compression injection molding machines, LS has always put the customer first. From customer focused and dedicated injection molding machine technology such as two-platen injection molding machines for molders of light guide plates and mobile phones to multi-color injection molding and ultimately to full-electric injection molding machines which are the fruit of the most advanced technology.





*Integrated **ONE Solution***
***Smart Machine** for Industry 4.0*
*Delivering **Value***

INNOVATIVE
TECHNOLOGY PARTNER





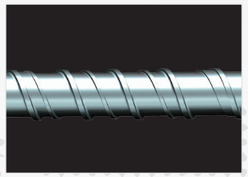






LS INJECTION MOLDING MACHINE FOR PALLET

WIZ-PLT SERIES



High plasticizing screw for pallet

- Application of exclusive screw design for pallet molding
- Compared to standard screw, plasticizing enhancment of 30%



Application of servo pump system

- Fast response through rotation control
- Efficient power transmission, energy saving 30~50%



Application of motor/pump for cores

- Application of pump for core, reduced core operating time
- Core action will not effect mold open and close



charging hybrid servo system

- Application of charging servo motor, maximized energy saving
- Allows simultaneous clamp and screw motions, reduced cycle times

Wide Platen

- High-Strength Platen Structure
- Available for heavy mold mounting(2% of clamping force)

Advanced open/close mold control

- Reduction of robot take-out error by precise positioning control
- Cycle time reduction

Half-Nut

- Reduction cycle time with up and down simultaneous motion
- Oil free working environment(Clean)

Ejector

- Ejector pin nut type about the machine

Safety Door

- Height standardize
- Aluminum profile
- Light weight

Wedge

- Sliding Bush (Less friction)

Level pad standardization

- Reduced machine installation time

Safety Foot board

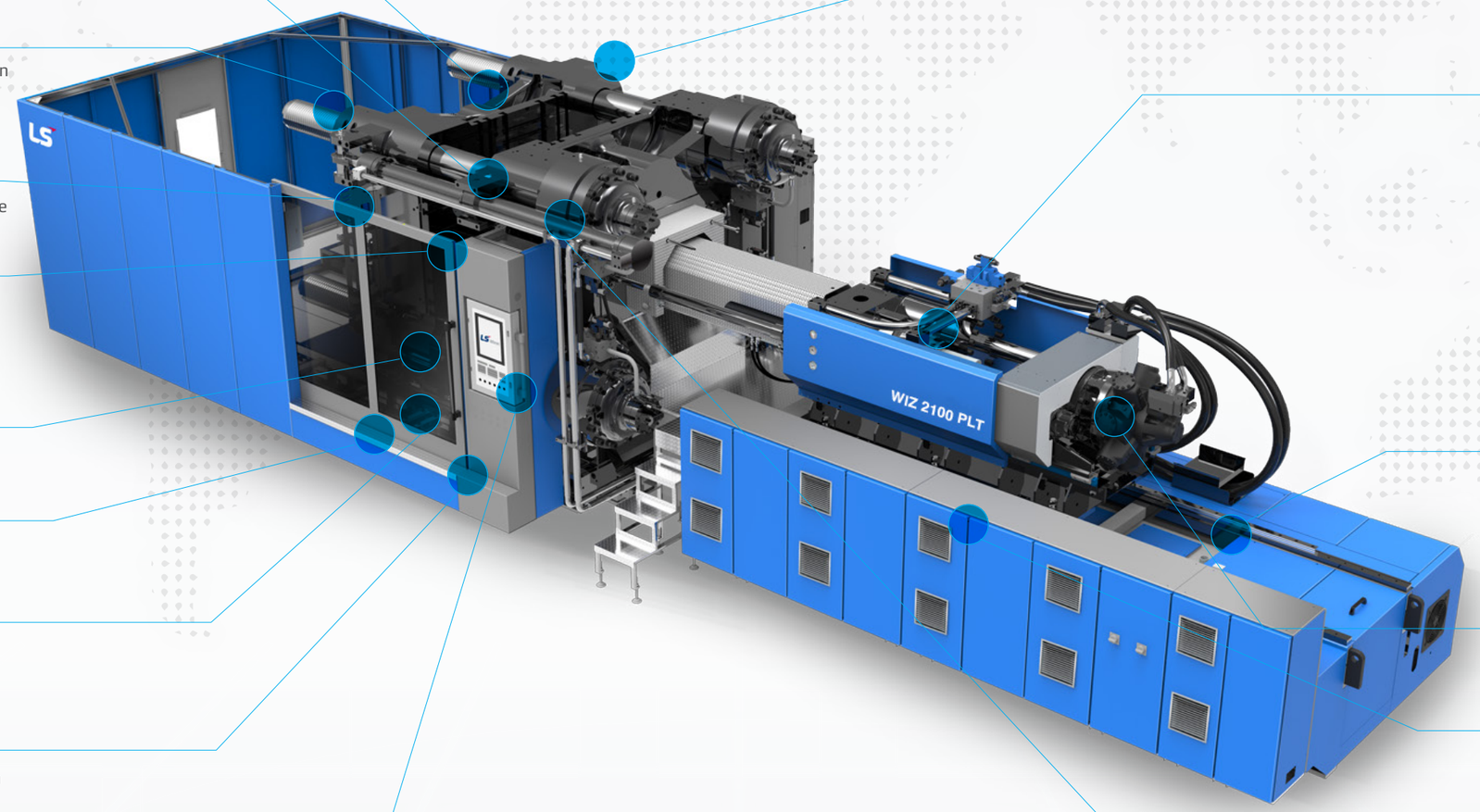
- Foot Board limit switch
- Height adjustment

Advanced Camping unit Frame

- Optimized structure for low deflection
- Extended Mold height allowance

KEBA Controller

- Precise control
- Improved user-friendly UI



Tie-Bar

- Improved shape of tie bar clamping threads
- Tie-bar puller option
- Prevent Tie-bar deflection machine
- Built-in digital sensor

Screw design for Pallet

- High Plasticizing capacity, Fast charging time

Barrelsupport structure

- Life extension of cylinder and Plasticizing

Zero Movement nozzle touch structure

- No movement by keeping parallelism to nozzle cylinder and barrel
- Improvement resin leak

Oil management

- Improvement Cleanliness(Independent suction and drainage structure and circulation filter)
- Separated cooling system for constant temperature

Charging Hybrid Option

- Low energy consumption/Reduced cycle time with multi (simultaneous)-motion

Control box

- Spacious parts arrangement and neat wiring for easy option attachment
- Internal charging hybrid drive

Booster Cylinder

- Prevent oil leakage
- T type wear ring

High plasticization

Energy saving

Eco-friendly



WIZ-PLT Series

Injection molding machine for pallet. Energy saving 50% by applying servo pump and improvement productivity 30% by applying newly designed high plasticizing screw

High plasticization

Energy saving

Eco-friendly



the ONE*-PLT Series Option

Premium Injection Molding Machine. Faster , More Accurate

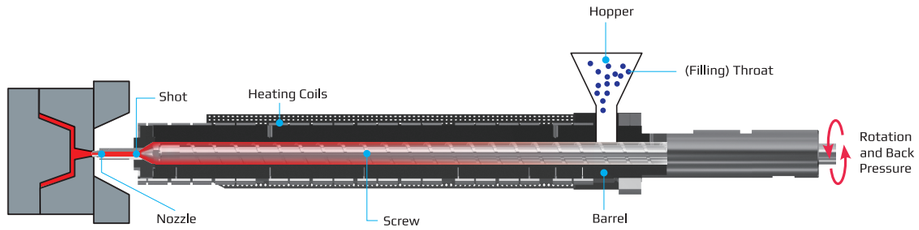
WIZ-PLT series realized energy saving and productivity increase

WIZ-PLT Series

High plasticization | Energy saving | Eco-friendly

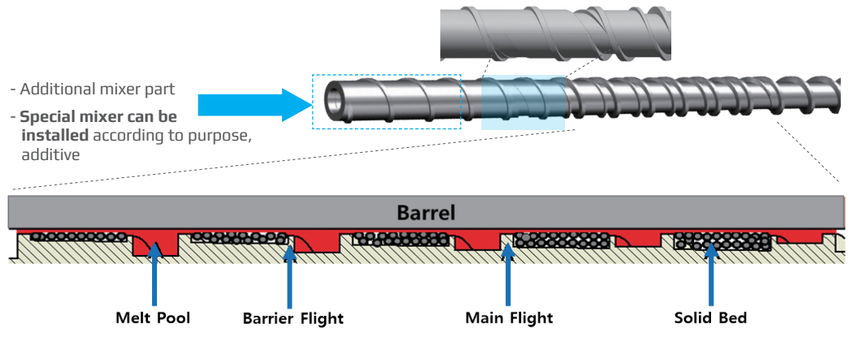
WIZ-PLT Series **Enhancement 30% Enhancement of plasticizing ability**

- Application of screw for PP, HDPE
- Compared to standard screw, 30% enhancement of plasticizing ability
  - Reduced cycle time by reduction of charging time
  - Increase energy saving rate by improvement of charging load
  - Zero cost for changing screw to increase palsticizing performance



WIZ-PLT Series **Dedicated Screw for pallet IMM**

- Developed screw for PP and HDPE
  - Extended screw life due to special blade design
  - Excellent resin mixability
  - Excellent gas discharge performance, reducing product defects



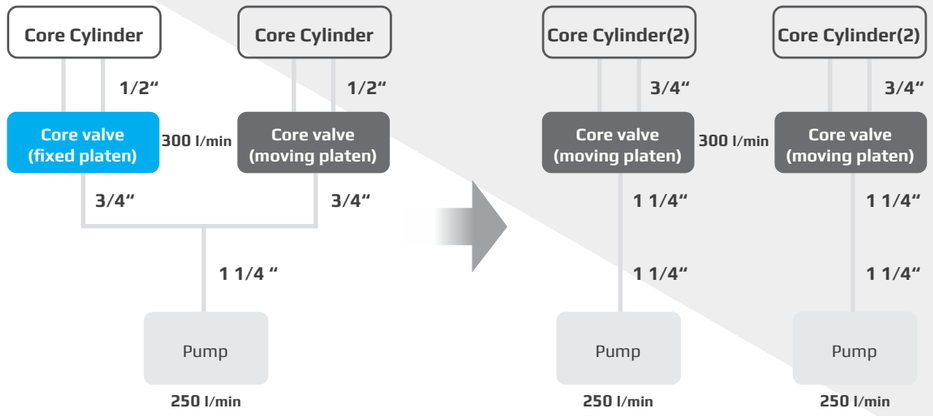
- Install a barrier in the compression section of the screw. Separates the melt pool and solid bed for resin melting
- Efficiently transfer the amount of heat required to melt the resin. High plasticizing performance (charging time reduced by more than 20%)
- Reduced energy consumption rate due to reduced charging load
- High melt quality plasticizing performance for difficult-to-melt resins such as crystalline resins

Pallet Automation (TSP)

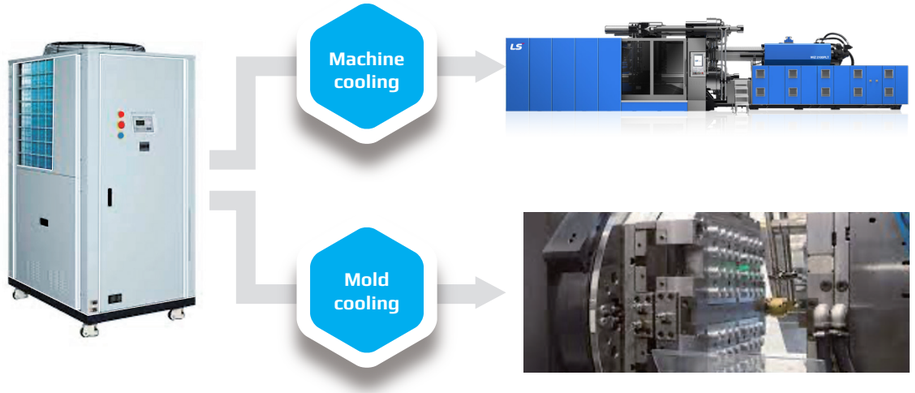
- Reduced cooling time -> Cycle time reduction -> High productivity
- Reduction of charging time
- Compound motion

WIZ-PLT Series **CORE speed up**

By Increasing the size of the core cylinders, and application of dedicated pumps for the fixed and moving platen cores, the core in/out speed is increased, reducing overall cycle time.



WIZ-PLT Series **Standard Chiller option for Pallet**



Improved productivity by reduced charging and cooling time

WIZ-PLT Series

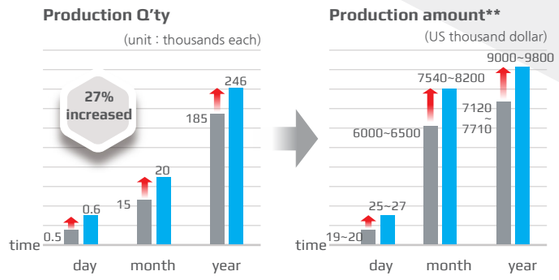
Economic analysis by cycle time reduction

Cycle time	Production (per year) (unit : thousands each)
Reduce by 10 sec	14
Reduce by 20 sec	31
Reduce by 30 sec	50

※ The above figures are reference data for profitability analysis.
There may be differences depending on production conditions.
Exchange rate : 1200KRW~1300KRW@US $
** Energy saving cost is gap between WIZ-PLT production amount and general IMM production amount

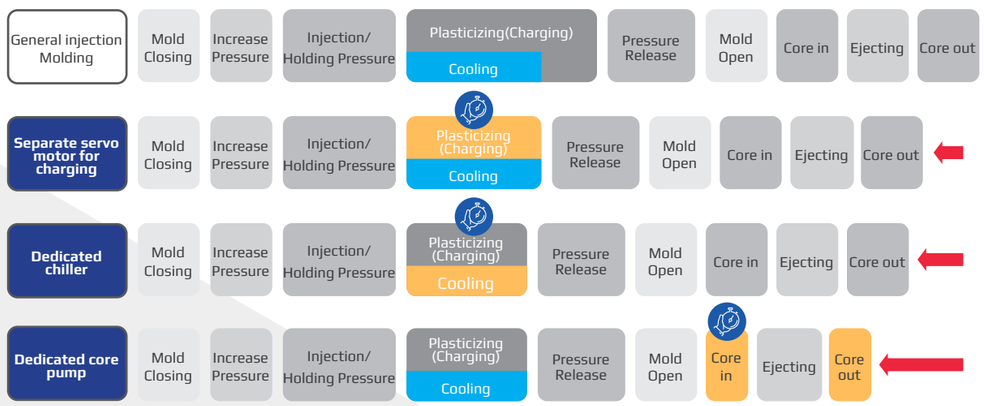


- **Reference data**
- 24Kg Pallet(price : US $ 40)
- 1day = 20hrs
- Marginal profit : 30%



Profit analysis

• Reduction of weighing time (plasticization technology) + reduction of cooling time (mold technology) + simultaneous multi-motion = "Cycle Time reduction"







LS injection molding machine for pallet
WIZ-PLT Series



Option

LS injection molding machine for pallet
the ONE*-PLT Series

Clamping and Injection unit matrix | WIZ-PLT



CLAMPING UNIT	Injection Unit Code	Screw Diameter	Injection pressure	Injection Capacity
(Tie Bar Distance)	Injection Unit (Injection Unit Code)	(mm)	MAX. (kg/cm²)	MAX. (80%) PS/PE (g)
WIZ-1800PLT (1870*1425)	1800 (i 151)	140	1,396	7,789 / 6,181
		160	1,069	10,174 / 8,073
WIZ-2100PLT (1920*1610)	2500 (i 220)	160	1,384	11,469 / 9,100
		180	1,094	14,515 / 11,517
WIZ2500PLT (2030x1610)	3200 (i 324)	160	1,834	13,022 / 10,333
		180	1,449	16,481 / 13,078
		200	1,174	20,347 / 16,145
WIZ-2800PLT (2190*1750)	3300 (i 630)	200	1,823	25,476 / 20,113
		230	1,379	33,692 / 26,598
WIZ-3200PLT (2270*1900)		250	1,169	39,806 / 31,426
	3300-SP (i 770)	250	1,169	48,853 / 38,568

Clamping and Injection unit matrix | the ONE*-PLT Option



CLAMPING UNIT	Injection Unit Code	Screw Diameter	Injection pressure	Injection Capacity
(Tie Bar Distance)	Injection Unit (Injection Unit Code)	(mm)	MAX. (kg/cm²)	MAX. (80%) PS/PE (g)
theONE*1800 PLT (1850x1610)	1800 (i 174)	140	1,640	7,830 / 6,182
		160	1,256	10,227 / 8,074
theONE*2300 PLT (2030x1610)	2300 (i 216)	160	1,394	11,413 / 9,010
		180	1,101	14,445 / 11,404
theONE*2700 PLT (2190x1750)	2700 (i 332)	160	1,874	13,044 / 10,298
		180	1,480	16,508 / 13,033
		200	1,199	20,381 / 16,090
theONE*3300 PLT (2270x1810)	3300 (i 630)	200	1,823	25,476 / 20,113
		230	1,379	33,692 / 26,598
theONE*4000 PLT (2400x2000)	3300-SP (i 770)	250	1,167	39,806 / 31,426
		250	1,167	48,853 / 38,568

LS injection molding machine for pallet

WIZ-PLT Series



Major Specification

Model			WIZ 1800 PLT							WIZ 2100 PLT						
Injection Unit Code			i151		i220		i324			i151		i220		i324		
Screw Type			B	C	B	C	A*	B	C	B	C	B	C	A*	B	C
Screw Diameter		mm	140	160	160	180	160	180	200	140	160	160	180	160	180	200
Injection Capacity Calculted		cm^3	10583	13823	15582	19721	17693	22393	27646	10583	13823	15582	19721	17693	22393	27646
Injection Capacity	PS	g	10054	12717	14803	18144	16808	21273	25434	10054	12717	14803	18144	16808	21273	25434
	PP/PE	g	7726	10091	11375	14397	12916	16347	20182	7726	10091	11375	14397	12916	16347	20182
Injection Pressure		kgf/cm^2	1396	1069	1384	1094	1834	1449	1174	1396	1069	1384	1094	1834	1449	1174
Injection Rate		cm^3/s	1238	1609	1749	2219	1834	2322	2888	1238	1609	1749	2219	1834	2322	2888
Injection Speed		mm/sec	80	80	87	87	91	91	91	80	80	87	87	91	91	91
Plasticizing Capacity(PS)		kg/h	654	930	930	1227	1260	1525	2130	654	930	930	1227	1260	1525	2130
		g/sec	182	258	258	341	350	424	592	182	258	258	341	350	424	592
Screw Speed		rpm	75	75	76	76	103	80	63	75	75	76	76	103	80	63
Clamping Force		ton(M)	1800							2100						
Mold Opening Force		ton(M)	126							147						
Tie Bar Distance		mm	1870 x 1425							1920x1610						
Die Plate Dimension: HxV		mm	2520 x 2135							2630x2380						
Opening stroke	Min	mm	1700							1800						
	Max	mm	2550							2700						
Daylight		mm	3300							3500						
Mold Thickness	Min	mm	750							800						
	Max	mm	1600							1700						
Min Mold Size	L	mm	1300							1340						
	W	mm	990							1120						
Clamping Speed Max.	High speed	m/min	51 (850)							51 (850)						
Open Mold Speed Max.	High speed	m/min	48 (800)							48 (800)						
Maximum Mold Weight		ton	36							42						
Ejector Force		ton(M)	36							36						
Ejector Stroke		mm	350							350						
DRY CYCLE (EUROMAP 6)		sec	6.1							6.4						
Oil		ℓ	1500		2000		3000			1500		2000		3000		
Capacity of servo motor	Main	kW	60.5+48.1+11=119.6		52.6x2+48.1+11=164.3		52.6*3+48.1+11=216.9			60.5+48.1+11=119.6		52.6x2+48.1+11=164.3		52.6*3+48.1+11=216.9		
	Charging	kW	310		310		310	358		310		310		310	358	
Heater		kW	81		93		145			81		93		145		
Machine Dimension(LxWxH)		m	12.6x4.0x3.2		13.8x4.0x3.2		14.6x4.0x3.2			12.9x4.0x3.5		14.2x4.0x3.5		14.9x4.0x3.5		
Machine Weight		ton	88		150					112						

LS injection molding machine for pallet

WIZ-PLT Series



Major Specification

Model			WIZ 2500 PLT								WIZ 2800 PLT								WIZ 3200 PLT						
Injection Unit Code			i220		i324						i220		i324			i630			i324			i630			i770
Screw Type			B	C	A*	B	C	A	B	C	B	C	A*	B	C	A	B	C	A*	B	C	A	B	C	C
Screw Diameter		mm	160	180	160	180	200	200	230	250	160	180	160	180	200	200	230	250	160	180	200	200	230	250	250
Injection Capacity Calculted		cm^3	15582	19721	17693	22393	27646	34558	45702	53996	15582	19721	17693	22393	27646	34558	45702	53996	17693	22393	27646	34558	45702	53996	66268
Injection Capacity	PS	g	14803	18144	16808	21273	25434	31845	42115	49757	14803	18144	16808	21273	25434	31845	42115	49757	16808	21273	25434	31845	42115	49757	61066
	PP/PE	g	11375	14397	12916	16347	20182	25141	33248	39282	11375	14397	12916	16347	20182	25141	33248	39282	12916	16347	20182	25141	33248	39282	48210
Injection Pressure		kgf/cm^2	1384	1094	1834	1449	1174	1823	1379	1167	1384	1094	1834	1449	1174	1823	1379	1167	1834	1449	1174	1823	1379	1167	1167
Injection Rate		cm^3/s	1749	2219	1834	2322	2888	2427	3210	3793	1749	2219	1834	2322	2888	2427	3210	3793	1834	2322	2888	2427	3210	3793	3793
Injection Speed		mm/sec	87	87	91	91	91	77	77	77	87	87	91	91	91	77	77	77	91	91	91	77	77	77	77
Plasticizing Capacity(PS)		kg/h	930	1227	1260	1525	2130	1162	1531	1581	930	1227	1260	1525	2130	1162	1531	1581	1260	1525	2130	1162	1531	1581	1581
		g/sec	258	341	350	424	592	323	425	439	258	341	350	424	592	323	425	439	350	424	592	323	425	439	439
Screw Speed		rpm	76	76	103	80	63	65	60	50	76	76	103	80	63	65	60	50	103	80	63	65	60	50	50
Clamping Force		ton(M)	2500								2800								3200						
Mold Opening Force		ton(M)	175								196								231						
Tie Bar Distance		mm	2030x1610								2190x1750								2270x1900						
Die Plate Dimension: HxV		mm	2770x2410								3010x2610								3110x2820						
Opening stroke	Min	mm	1900								2000								2100						
	Max	mm	2900								3000								3100						
Daylight		mm	3700								3900								4100						
Mold Thickness	Min	mm	800								900								1000						
	Max	mm	1800								1900								2000						
Min Mold Size	L	mm	1420								1530								1580						
	W	mm	1120								1220								1330						
Clamping Speed Max.	High speed	m/min	53 (880)								53 (880)								52 (870)						
Open Mold Speed Max.	High speed	m/min	45 (750)								45 (750)								52 (870)						
Maximum Mold Weight		ton	50								56								64						
Ejector Force		ton(M)	50								50								60						
Ejector Stroke		mm	400								400								500						
DRY CYCLE (EUROMAP 6)		sec	6.8								7.2								8.2						
Oil		ℓ	2000		3000			3300			2000		3000			3300			3000			3300			
Capacity of servo motor	Main	kW	52.6x2+48.1+11=164.3		52.6*3+48.1+11=216.9			71.9*4=287.6			52.6x2+48.1+11=164.3		52.6*3+48.1+11=216.9			71.9*4=287.6			52.6*3+48.1+11=216.9			71.9*4=287.6			
	Charging	kW	310		310		358	358		509	310		310		358	358		509	310		358	358		509	
Heater		kW	93		145			191	218	231	93		145			191	218	231	145			191	218	231	273
Machine Dimension(LxWxH)		m	14.6x4.4x3.6		15.4x4.4x3.6			16.4x4.4x3.6			14.6x4.4x3.6		15.7x4.4x3.6			16.8x4.4x3.6			16.5x4.7x4.1			17.5x4.7x4.1			
Machine Weight		ton	140								140								180						

LS injection molding machine for pallet

the ONE*-PLT Series Option



Major Specification

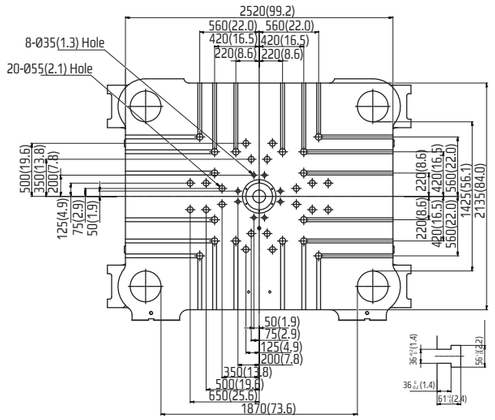
Model			theONE* 1800 PLT							theONE* 2300 PLT					theONE* 2700 PLT						theONE* 3300 PLT				theONE* 4000 PLT			
Injection Unit Code			i174		i216		i332			i216		i332			i332			i630			i630			i770	i630			i770
Screw Code			B	C	B	C	A	B	C	B	C	A	B	C	A	B	C	A	B	C	A	B	C	C	A	B	C	C
Screw Diameter		mm	140	160	160	180	160	180	200	160	180	160	180	200	160	180	200	200	230	250	200	230	250	250	200	230	250	250
Injection Capacity Calculated		cm^3	10622	13873	15482	19594	17693	22393	27646	15482	19594	17693	22393	27646	17693	22393	27646	34558	45702	53996	34558	45702	53996	66268	34558	45702	53996	66268
Injection Capacity	PS	g	9788	12784	14266	18056	16305	20635	25476	14266	18056	16305	20635	25476	16305	20635	25476	31845	42115	49757	31845	42115	49757	61066	31845	42115	49757	61066
	PE	g	7727	10093	11263	14255	12872	16291	20112	11263	14255	12872	16291	20112	12872	16291	20112	25141	33248	39282	25141	33248	39282	48210	25141	33248	39282	48210
	PP/PE	g	7521	9824	10963	13875	12529	15857	19576	10963	13875	12529	15857	19576	12529	15857	19576	24470	32362	38235	24470	32362	38235	46924	24470	32362	38235	46924
Injection Pressure		Mpa	161	123	137	108	184	145	118	137	108	184	145	118	184	145	118	179	135	114	179	135	114	114	179	135	114	114
		kgf/cm^2	1640	1256	1394	1101	1874	1480	1199	1394	1101	1874	1480	1199	1874	1480	1199	1823	1379	1167	1823	1379	1167	1167	1823	1379	1167	1167
Injection Rate		cm^3/s	1632	2160	2074	2625	2019	2555	3155	2074	2625	2019	2555	3155	2019	2555	3155	2427	3210	3793	2427	3210	3793	3793	2427	3210	3793	3793
Plasticizing Capacity		kg/h	823	881	949	1037	949	1113	1162	949	1037	949	1113	1162	949	1113	1162	1162	1531	1581	1162	1531	1581	1581	1162	1531	1581	1581
		g/sec	229	245	264	288	264	309	323	264	288	264	309	323	264	309	323	323	425	439	323	425	439	439	323	425	439	439
Maximum Screw Speed		rpm	105	90	90	80	90	80	65	90	80	90	80	65	90	80	65	65	60	50	65	60	50	50	65	60	50	50
Heater Capacity		kw	99.8	130.0	130.0	140.7	130.0	140.7	190.8	130.0	140.7	130.0	140.7	190.8	130.0	140.7	190.8	190.8	217.8	231.3	190.8	217.8	231.3	231.3	190.8	217.8	231.3	231.3
Injection Speed		mm/sec	106		103		100			103		100			100			77			77			77	77			77
Injection Stroke		mm	690		690		770			770		770			880			880			1100			1350	1100			1100
Clamping Force		KN	17708							22642					26574						32385				39227			
		ton(M)	1806							2309					2710						3302				4000			
Mold Opening Force		KN	1216							1571					1832						2262				2942			
		ton(M)	124							160					186.8						231				300			
Tie Bar Distance		mm	1850*1610							2030*1610					2190*1750						2270*1810				2400*2000			
Platen Size (h x w)		mm	2450*2260							2720*2440					2980*2650						3120*2700				3400*3100			
Daylight		mm	3400							3700					3900						4100				5500			
Clamping Stroke	Min	mm	1800							1900					1900						2000				3300			
	Max	mm	2600							2900					3000						3100				4400			
Min Mold Size	Min	mm	800							800					900						1000				1100			
	Max	mm	1600							1800					2000						2100				2200			
Maximum Mold Weight		ton	45							62					75						81				100			
Clamping Speed Max		m/min	60.0							60.0					60						60				60.0			
Open Mold Speed Max		m/min	60.0							60.0					60						60				60.0			
DRY CYCLE (EUROMAP 6)		sec	4.9							5.5					5.8						6.8				7.5			
		mm	1300							1420					1530						1590				2240			
Ejector Force		kN	258							422					422						422				422			
		ton(M)	26							43					43						43				43			
Ejector Stroke		mm	300							400					400						400				500			
Capacity of servo motor	Main	kW	56.3x3		56.3x3		56.3x2+71.9			56.3x2+71.9		56.3x2+71.9			56.3x3+71.9			71.9x4			71.9x4				71.9x4			
	Charging	kW	310		310		310		358	310		310		358	310			358		509	358		509		358		509	
Oil		ℓ	1800		1800		2100			2100		2900			2900			3300			3300				3300			
Machine Dimensions (L x W x H)		m	13.0x4.1x3.4		13.0x4.1x3.4		14.5x4.1x3.4			13.7x3.9x3.3		15.3x3.9x3.3			15.6x4.5x3.7			17.5x4.5x3.7			17.7x5.0x3.9				20.0x5.0x3.9			
Machine Weight		ton	72+20		72+38		72+41			72+38		72+41			122+41			122+65			145+65							

LS injection molding machine for pallet

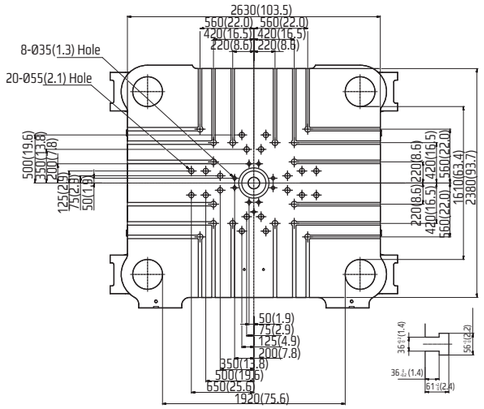
WIZ-PLT Series

Moving Platen Drawing

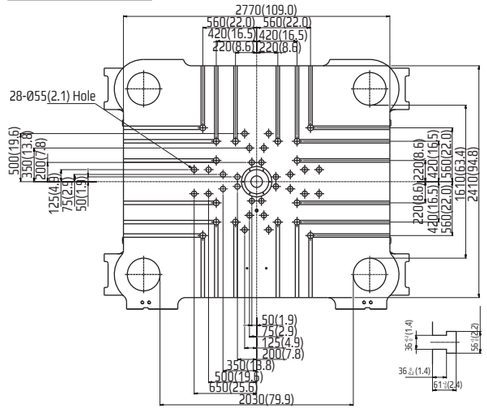
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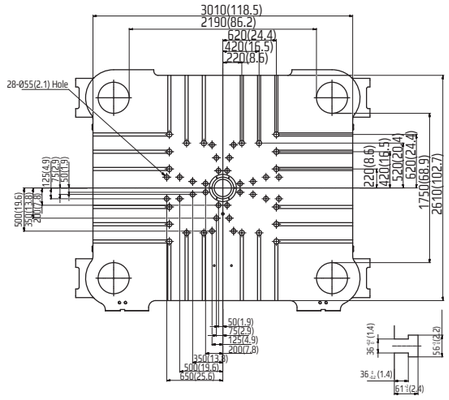
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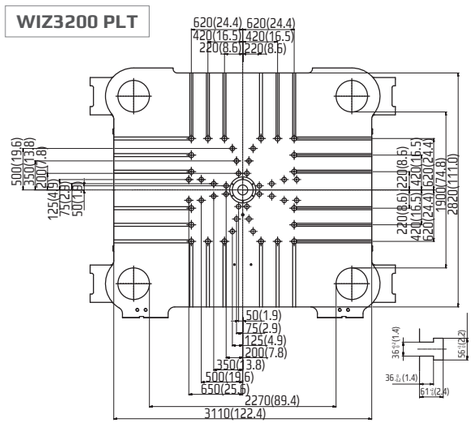
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WIZ2800 PLT



WIZ3200 PLT

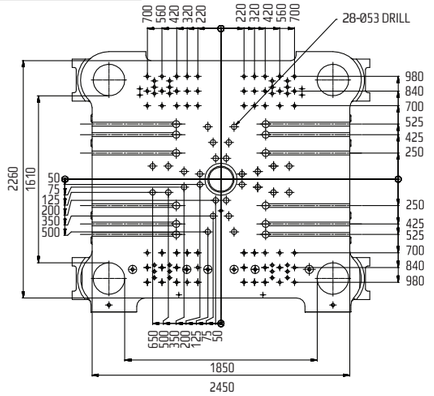


LS injection molding machine for pallet

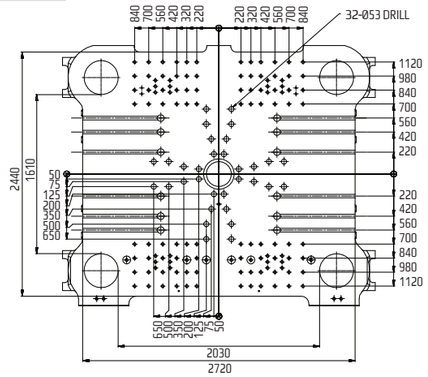
the ONE*-PLT Series Option

Moving Platen Drawing

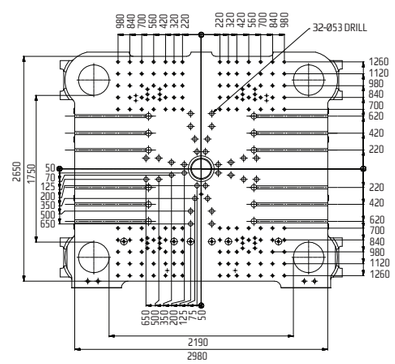
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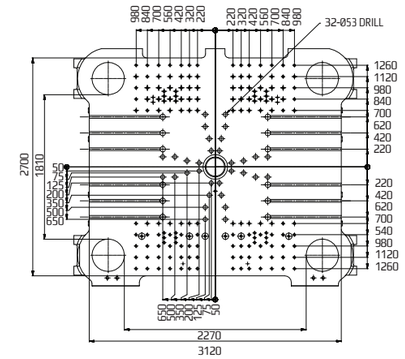
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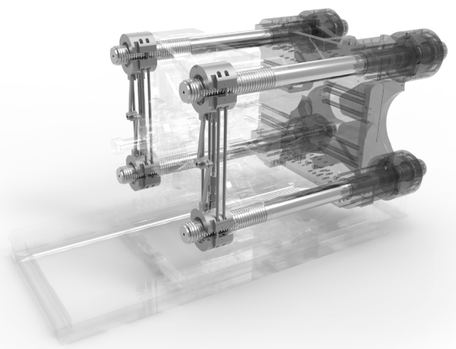


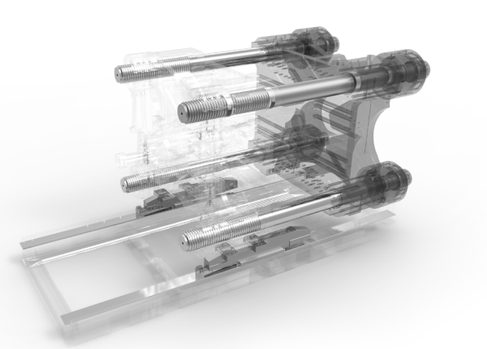
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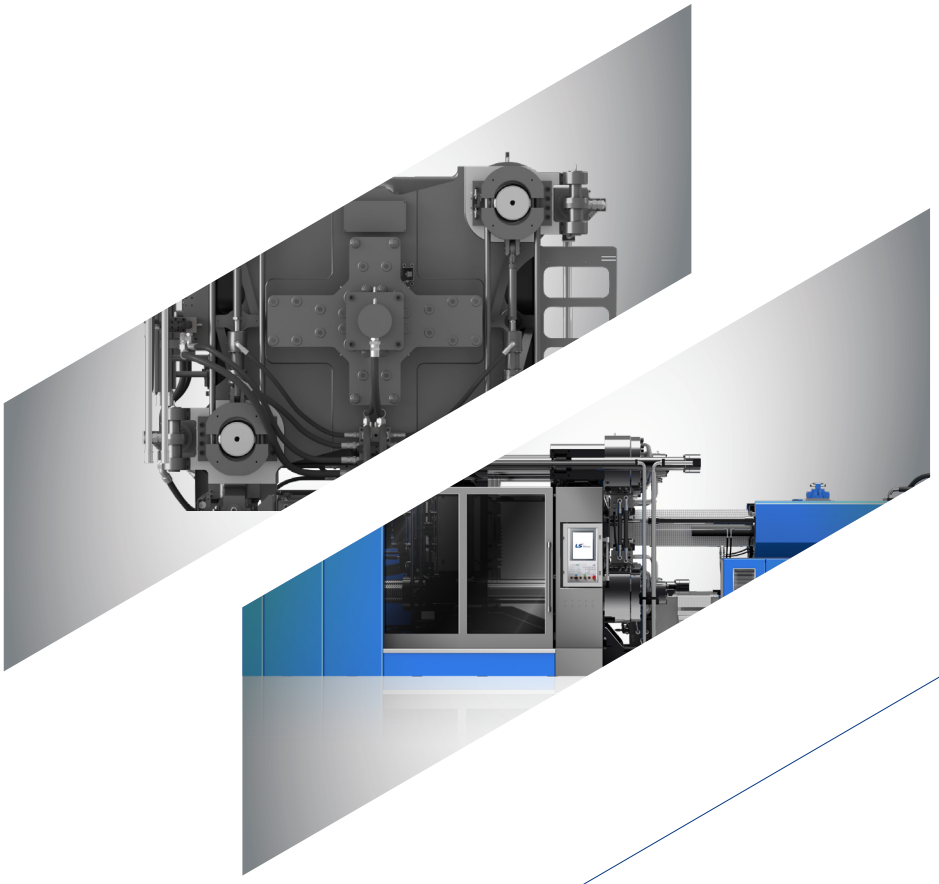


the ONE* 3300









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