2017-01

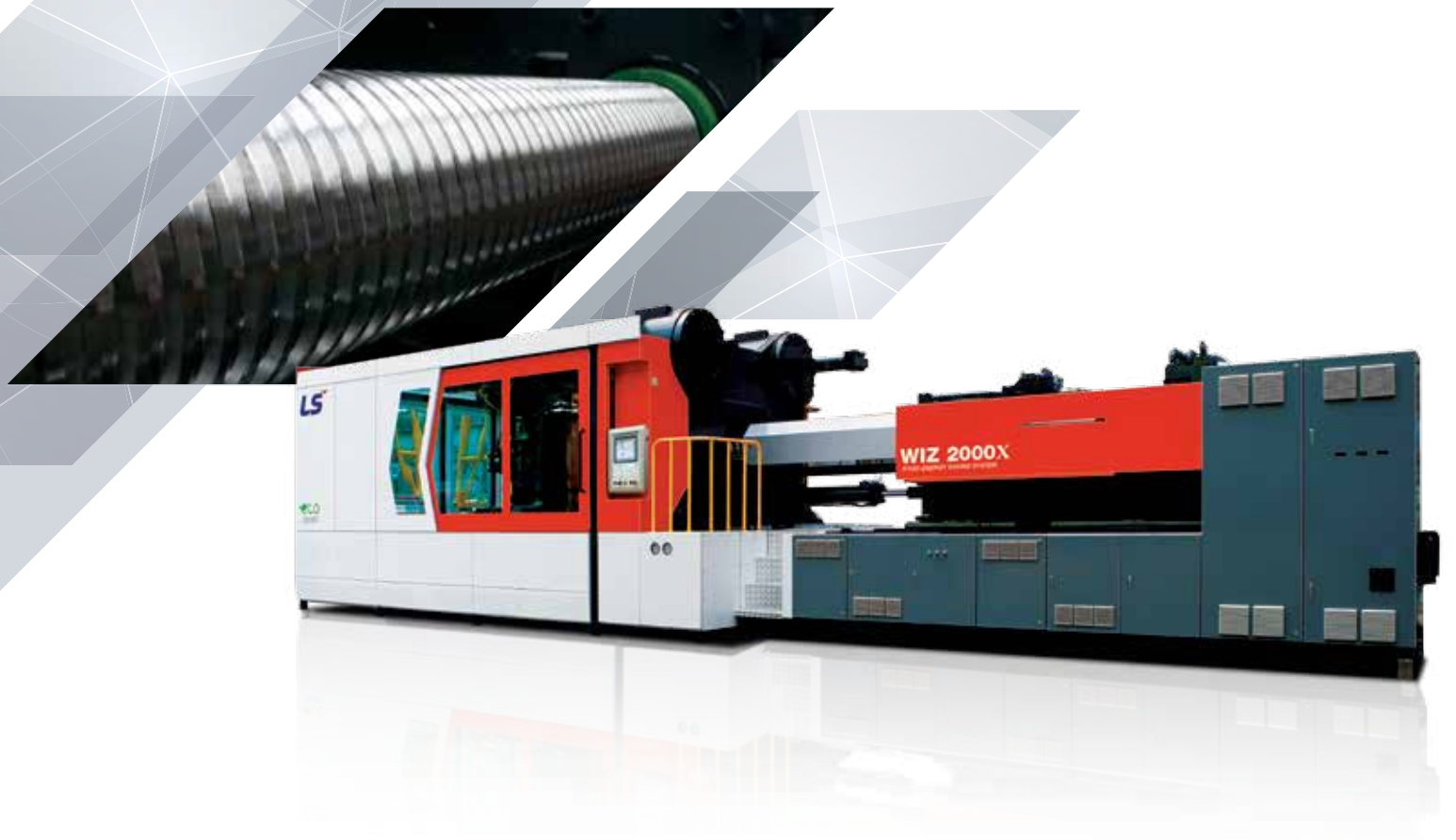
Be the ONE*

Outstanding People, Best-in-Class Product, Winning Partnership

LS Hybrid Injection Molding Machine

WIZ/X Series

450 ~ 4000 Ton



LS Mtron

www.lsinjection.com

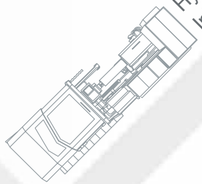
Be the ONE
Outstanding People, Best-in-Class Product, Winning Partnership

INNOVATIVE TECHNOLOGY PARTNER

Customer Focused Corporation

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 all-electric injection molding machines which are the fruit of the most advanced technology.

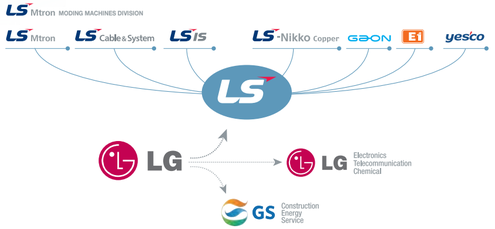


Hybrid
Injection Molding Machine

About LS Mtron

Management Philosophy

LSpartnership is about achieving exceptional performance based on mutual respect, care and trust by the people of LS who value integrity and who have a sense of ownership resulting in creating a greater value together, both internally as well as externally with our customers, through cooperation and having open minds.
LSpartnership pursues true partnerships based on action.
Together with its global partners around the world, all those at LS will seek greater value for the next generation through collaborative relationships.



Vision

LS Mtron has announced its vision to begin the second act of its new growth story.

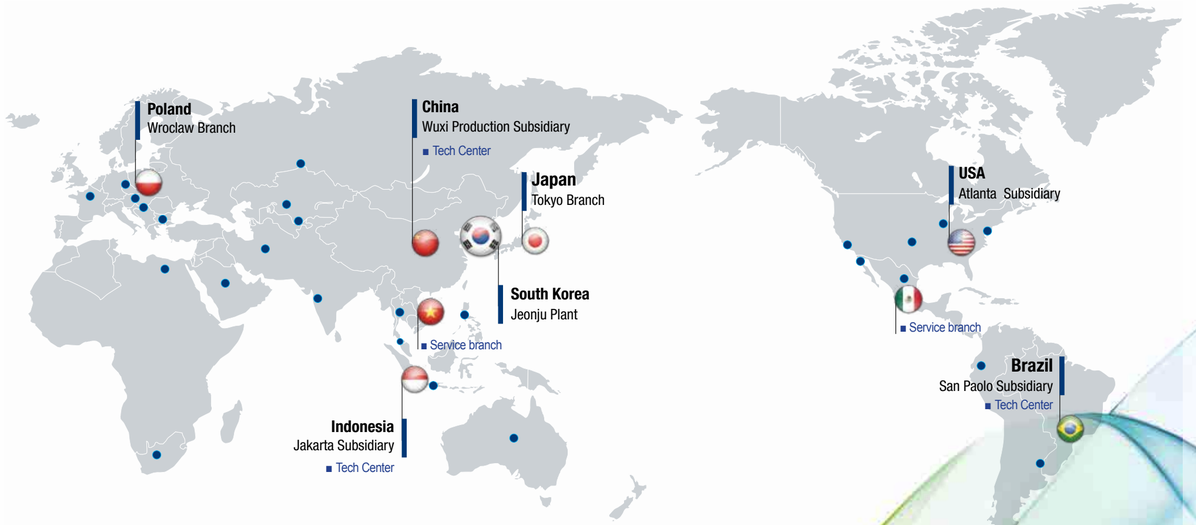
Be the ONE*
Outstanding People, Best-in-Class Product, Winning Partnership

LS Mtron's vision is to "Be the ONE* Outstanding People, Best-in-Class Product, Winning Partnerships".
In "Be the ONE*", "Be" indicates the determination to "accomplish at all costs!", while "ONE*" declares our future state to be the "Top No. 1 and first." "Be the ONE*" signifies LS Mtron's goal in which outstanding people join forces to create best-in-class products that impress customers and drive prosperity for all stakeholders. In addition,"Ownership, New-thinking and Excellence" are the driving forces behind "Be the ONE*" and these core values shall become the basis by which the behaviors of LS Mtron staff are evaluated.

Vision Structure

	Outstanding People	Best-in-Class product	Winning Partnership
Vision	The person with the world-class competences in the area of his or her role and task.	Products and services with excellent quality and value giving satisfaction to customers beyond expectations.	Sharing growth with employees, subcontractors. customers and society.
Core Values	**Ownership** Threw themselves heart and soul into the tasks as if the company and businesses are their own.	**New-thinking** Pursuit of positive changes with enlighten and flexible thinking	**Excellence** Create customer value with its expertise and insights.

Global Networks




Head Quater


LS Mtron Ltd.


Jeonju Plant


US branch


Brazil branch

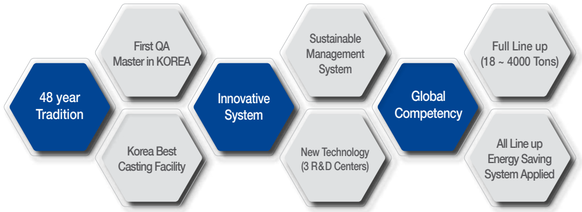

Indonesia branch


China Plant

LS IMM History

Difference in technology is a keyword for success!

LS Mtron is offering various model from 18tons to 4,000tons in Automotive, Home appliances, Medical, Packaging, etc



1947 ~ 1970's

The opening chapter of a great story in the Korean plastic industry with LS

1947 • Established as Lucky Chemical Industrial Corporation (Manufacturing of cosmetics begun)
1951 • Produced Korea's first injection-molded synthetic resin products
1969 • Gold Star started IMM business with Toshiba as T/A at Chang-won plant (Currently LG Electric)
1978 • Gold Star developed own model-vertical IMM 10 ton, horizonal IMM 80 ton.

1990's

Premiere on the export market to worldwide

1985 • Developed LG's own model, ID-EN Series
1987 • Started to export to USA & Southeast Asia
1992 • Developed 1800 ton(1st machine in Korea)
1995 • Developed 3000 ton IMM(1st machine in Korea)

2000's

Opening of a plant in Jeonju in Korea and Wuxi in China, Reinforce the product line up and strong our business

2002 • Developed 8 models of All-Electric machine LGE II-Series (30~300 Ton)
2004 • LG Electric IMM was awarded JYS by Science and Technology Administration
2005 • Developed 4000 ton IMM(4500 Injection unit)
• Established LS Machinery(LSMW) LTD. In CHINA.
2007 • Developed all-electric injection molding machine (450, 550 ton)
2008 • Developed brand-new premium LGH-S Series, 1300, 2000 Ton
• Changed name to LS Mtron from LS Cable
2009 • Developed two color electric molding machine (LGH EC150, 250)
• Developed brand new premium LGH-S Series, 3000 Ton
• Developed the new type of electric molding machine : LGE 180III
• Developed the large & electric injection molding machine, 2000 Ton

2010's

Continuous development of customized injection molding machine will be recognized as a global leader in plastic industry

2010 • Developed super high speed (& hydraulic) injection molding machine : LGH 150 ton
• Developed LGH-S Series : 2500 Ton
• Developed the new type of electri molding machine : LGE 220III, 280III, 330III, 350III, 400III
2011 • Developed all-electric injection molding machine
• Oem toggle injection machine
2012 • Developed IML electric injection molding machine : LGE 280II
• Developed ultra-high speed electric injection molding machine for mold frame
2013 • Completed the construction of the High Tech Center of LS Mtron
• Developed direct high speed injection molding machine (injection speed 1,000mm/s)
• Developed electric injection molding machine for mobile phone (150 ton ~ 650ton)
• Developed Large size electric injection molding machine (LGE 1300HB)
• Developed servo system injection molding machine (150 ton~650ton) : WIZ 500, 600, 700, 900, 1100
2014 • Developed brand-new premium energy-saving WIZ-X Series (1300, 1800, 2000, 2500, 3000ton)
• Developed 8 models of hybrid IMM, LTE model
• Develoled electric injection molding machine for super compact connector
2015 • Developed vertical hybrid IMM (110, 150ton)
• Developed electric IMM for automobile precision parts (650, 850ton)
• Developed all-electric model for Injection Blow : IBM-170Ton
• Developed new model for the plastic palette : 700 ~ 4000Ton
2016 • Developed new model for the cosmetic packaging : CPM - 170, 220, 280, 350Ton
2017 • Developed Premium Hybrid ' the ONE Series ' : 500 ~ 3,300Ton

1947 1951 1969 1978 1985 1987 1992 1995 2004 2005 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

“LS injection molding machine provides innovated performance and advanced technology!”

Currently all of the accumulated know-how working is for you, the customer, who is the object of all the technology efforts of LS Mtron.
The smallest of defects do not go unattended to as LS is constantly pursuing research and experiments to meet the future expectations of our customers as we move forward together.

Be the ONE*
Outstanding People, Best-in-Class Product, Winning Partnership

* LS Hybrid Injection Molding Machine Line-up

WIZ Series
(Energy Saving Two-Platen Injection Molding Machine)

WIZ-X Series
(Brand-New Premium Injection Molding Machine)

Energy Saving Two-Platen Injection Molding Machine

WIZ Series (450 ~ 1050 Ton)

WIZ model is the best-selling mid-sized hydraulic injection molding machine in korea. These machines are the latest renewed in 2015. Increasing a molding capacity, decreasing the maintenance cost, particularly optimized in the automobile and electronic components.


0.07% Weight Deviation


Precision Of Mold Open Position ±0.5mm


Dry cycle time 4.8sec


Improved Plasticizing Capacity

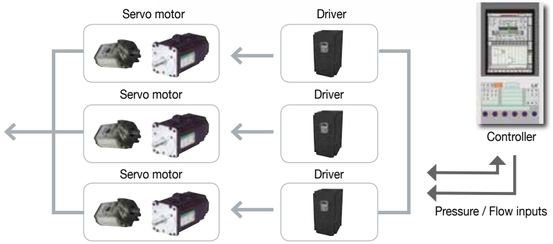

Noise Level Around 80dB

ECO-SMART Function Applied Repeatability Increased

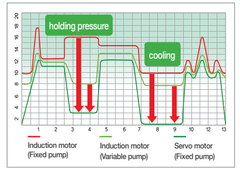
Energy saving system

Saving of electric consumption, less hydraulic oil and cooling water

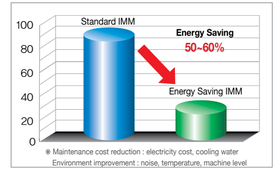
- Servo motor controls pressure speed and realize 50~60% of energy saving.



Energy reduction by each part of cycle



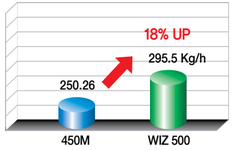
Energy saving rate



Applies advanced technology

Made a technical agreement on screw design with Nordson Xaloy

- Fit for all materials
- Mixing effect
- Heat stability
- Damage proof
- Fast resin change



LS Barrel Technoloygy

Spin casting manufacturing method

- Heating Furnace heat up
- Rotation Spin casting at high RPM
- Cooling Cool down, tempering

- Bi metal ballel is made of nordson Xaloy's 85 years know-how, it is stable and also anti corrosive.
- Minimize faulty on plasticizing by maintain heat processing quality.

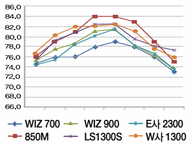
Enhanced safety and applied new design

Improvement for working environment through noise reductions and the cooling water requirement is reduced by 30% and with lower hydraulic oil temperature

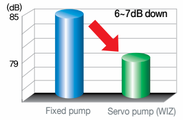
Noise reduction

- To improve the working environment of workers up to 79dB noise
- Reduced by about 6~7dB hydraulic IMM (hydraulic 85dB)

Noise level



Noise reduction



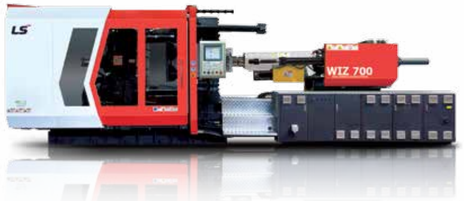
Cooling water savings

Controlling oil temperature by servo motor

- More than 30% of the cooling water required for cooling water-saving
- Improved reproducibility of mechanical behavior of low temperature

Saving cooling water : 30%

Low hydraulic oil temperature : ~ 8℃



Applied high quality air breather

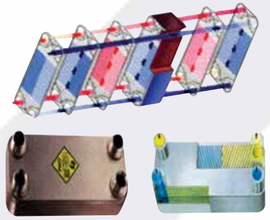
- Corrosion resistant
- Mic 10(μm), Air Flow (900 → 1420 l/min) Volume UP

High quality air breather

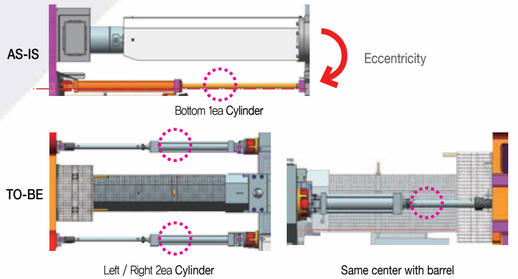
Applyied high efficient water saving cooler

- Compact & light weight
- Excellent resistance against freezing
- Inter-corrosive & Resistance
- Excellent heat exchange

Water saving platen oil cooler



Eccentricity prevention by parallel installment of moving cylinder

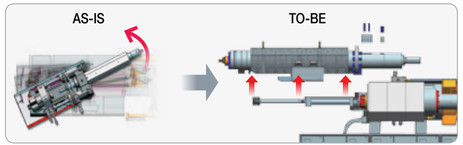


Injection unit move by LM guide

AS-IS : Sliding type

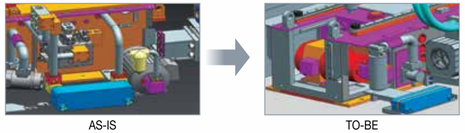
TO-BE : Roller type

Upper unit divided for barrel change



Pressure pump capacity changed (7.5kW → 11kW)

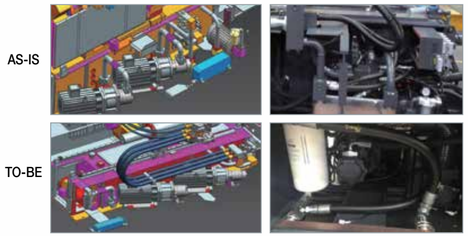
- Durability increased, Noise decreased



AS-IS

TO-BE

Circulation filter & circulation cooling unit applied



WIZ Series

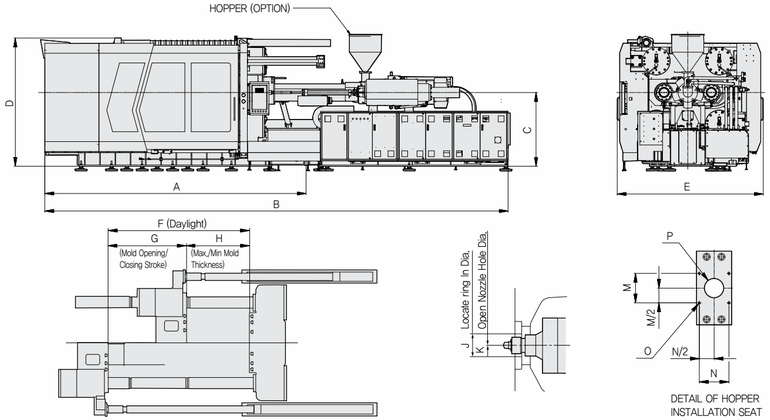
Major Specification

			WIZ 500			WIZ 600		
INJECTION UNIT								
Injection Unit Code			i27			i33		
Screw Code			Y	*A	B	Y	*A	B
Screw Diameter		mm	65	70	80	70	75	85
Injection Capacity Calculated		cm^3	1,277	1,482	1,935	1,595	1,830	2,355
Injection Capacity	PS	g	1,175	1,363	1,780	1,470	1,685	2,165
		oz	41	48	63	52	59	76
	PE	g	932	1,082	1,413	1,165	1,340	1,720
		oz	33	38	50	41	47	61
Injection Pressure		kg/cm^2	2,218	1,910	1,460	2,200	1,916	1,492
Injection Rate		cm^3/s	401	466	608	496	570	732
Plasticizing Capacity (PS)		kg/h	233	284	334	275	318	361
Max Screw Speed		rpm	180	180	160	180	170	150
CLAMPING UNIT								
Clamping Force		ton	450			550		
Mold Opening Force		ton	24.1			30.1		
Distance Between Tie-rods : H x V		mm	830 x 830			900 x 900		
Die Plate Dimension : H x V		mm	1200 x 1200			1350 x 1350		
Clamping Stroke		mm	1,100			1,200		
Daylight		mm	1,450			1,600		
Mold Thickness		mm	350 - 800			400 - 950		
Mold Close Speed	High	m/min	52			49		
	Low	m/min	2			2		
Mold Open Speed	High	m/min	48			50		
	Low	m/min	2			2		
Ejector Force		ton	13.3			13.3		
Ejector Stroke		mm	200			200		
GENERAL								
Utilized Oil Quantity		kW	700			940		
Capacity of Motor (60Hz)		kW	83 (44 + 28 + 11)			94 (55 + 28 + 11)		
Electric Heater		kW	24.1			27.4		
Machine Dimension : L×W×H		m	7.0 x 2.4 x 2.2			7.3 x 2.6 x 2.4		
Machine Weight		ton	19.5 (14 + 5.5)			25 (16.5 + 8.5)		

Note 1. Operation condition
Power : AC 380V±10%, 60Hz±5%, Humidity : 30% ~ 95%, Temperature : +5°C~ +40°C
Height : That not more than 100m used in standard.
2. It is injection capacity, injection rate, plasticizing capacity are vary with material, mold and machine condition.
3. Screw code. * mark : screw of standard
4. Due to continuous improvements, specifications are subject to change without notice.

			WIZ 700			WIZ 900			WIZ 1100		
INJECTION UNIT											
Injection Unit Code			i54			i90			i90		
Screw Code			Y	*A	B	Y	*A	B	Y	*A	B
Screw Diameter		mm	85	90	100	95	105	115	95	105	115
Injection Capacity Calculated		cm^3	2,809	3,149	3,880	4,110	5,022	6,024	4,110	5,022	6,024
Injection Capacity	PS	g	2,584	2,897	3,575	3,780	4,620	5,540	3,780	4,620	5,542
		oz	91	102	126	133	163	195	133	163	195
	PE	g	2,050	2,298	2,830	3,000	3,666	4,396	3,000	3,666	4,398
		oz	72	81	100	106	129	155	106	129	155
Injection Pressure		kg/cm^2	2,045	1,896	1,536	2,152	1,750	1,469	2,152	1,750	1,469
Injection Rate		cm^3/s	678	760	938	807	986	1,180	807	986	1,180
Plasticizing Capacity (PS)		kg/h	678	760	938	807	986	1,180	807	986	1,180
Max Screw Speed		rpm	150	140	125	125	120	110	125	120	110
CLAMPING UNIT											
Clamping Force		ton	650			850			1,050		
Mold Opening Force		ton	40.0			63.5			63.5		
Distance Between Tie-rods : H x V		mm	1000 x 1000			1100 x 1100			1400 x 1250		
Die Plate Dimension : H x V		mm	1440 x 1440			1580 x 1580			1950 x 1800		
Clamping Stroke		mm	1,350			1,750			1,800		
Daylight		mm	1,800			2,250			2,400		
Mold Thickness		mm	450 - 1100			500 - 1300			600 - 1500		
Mold Close Speed	High	m/min	46			39			39		
	Low	m/min	2			2			2		
Mold Open Speed	High	m/min	45			34			34		
	Low	m/min	2			2			2		
Ejector Force		ton	18.6			24.7			24.7		
Ejector Stroke		mm	250			250			250		
GENERAL											
Utilized Oil Quantity		kW	1,070			1,350			1,350		
Capacity of Motor (60Hz)		kW	121 (55 + 55 + 11)			133 (67 + 55 + 11)			133 (67 + 55 + 11)		
Electric Heater		kW	39.6			55.4			55.4		
Machine Dimension : L×W×H		m	8.1 x 2.7 x 2.5			9.5 x 3.0 x 2.7			9.8 x 3.3 x 2.8		
Machine Weight		ton	31 (21 + 10)			41 (28 + 13)			53 (39 + 14)		

WIZ Series



External Form Drawing

(단위 : mm)

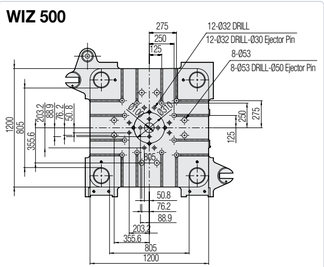
	A	B	C	D	E	F	G	H	I	J	K	M	N	O	P
WIZ 500	3,799	6,940	1,285	2,190	2,353	1,450	650 ~ 1,100	350 ~ 800	200	Ø100	Ø5	160	160	4-M12 DP25	Ø68
WIZ 600	4,095	7,287	1,450	2,384	2,503	1,600	650 ~ 1,200	400 ~ 950	220	Ø100	Ø5	160	160	4-M12 DP25	Ø73
WIZ 700	4,534	8,073	1,450	2,422	2,646	1,800	700 ~ 1,350	450 ~ 1,100	250	Ø100	Ø5	160	160	4-M12 DP25	Ø88
WIZ 900	5,313	9,421	1,500	2,610	2,968	2,250	950 ~ 1,750	500 ~ 1,300	250	Ø120	Ø5	160	160	4-M12 DP25	Ø103
WIZ 1100	5,636	9,751	1,530	2,760	3,233	2,400	900 ~ 1,800	600 ~ 1,500	250	Ø120	Ø5	160	160	4-M12 DP25	Ø103

Energy Saving
Two-Platen Injection Molding Machine

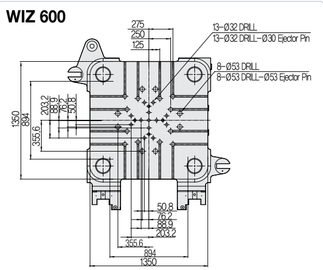
WIZ Series

Moving Platen Drawing

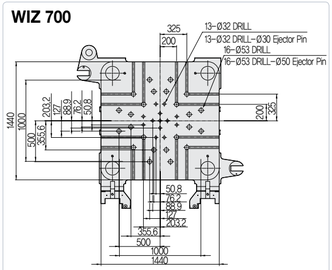
WIZ 500



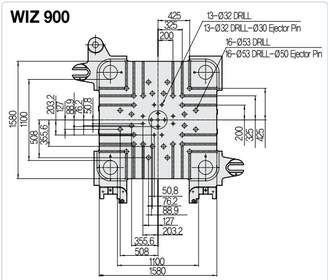
WIZ 600



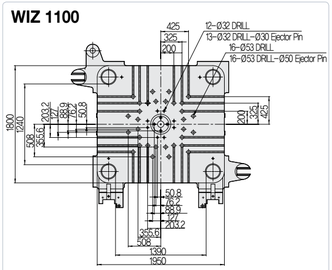
WIZ 700



WIZ 900



WIZ 1100



Brand-New Premium Injection Molding Machine

WIZ-X Series (1300 ~ 4000 Ton)

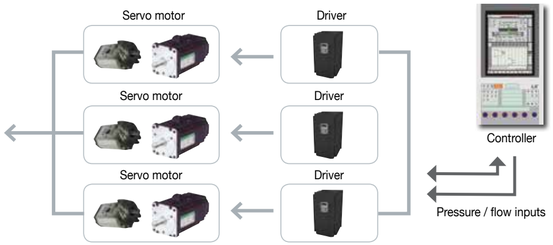
Brand-new premium injection molding machines provide high efficiency and low running cost, delivering value and satisfaction to the customers who want the middle to large size injection molding machines that require small space but have high efficiency.

50~60% less Energy | 20% less space | 40% less cycle time | 30% less Hyd. Oil | Noise Level Around 80dB | GOOD DESIGN

Energy saving system

Energy saving machine → Energy saving 50%

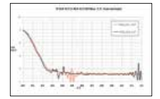
- Dual Operation System
  - Shorten Cycle Time by Dual Operation System
- Advanced Servo Energy Saving System(Option)
  - More than 50% of energy saving could be accomplished by controlling the revolution with servo motor



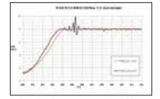
Optimized structure design

Applied new mold clamping device → 40% improvement in mold clamping time

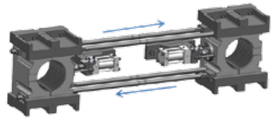
- Simultaneous operation of half nut and 4 sets of tie bar
- Precise placement, Fast mold clamping, Reduced cycle time



체결시간 : 0.5sec ex. WIZ-1300X

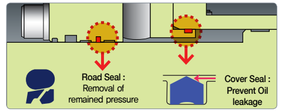


해체시간 : 0.5sec ex. WIZ-1300X



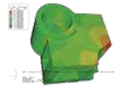
Booster cylinder flexible rod structure, applied high functional sealing / Decrease in oil leakage

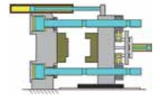
- Low load design through stable circuit configuration
- Hydraulic Block G-Fitting is applied
- High functional sealing
- Reconfiguration of mold opening & closing cylinder



Optimized platen design

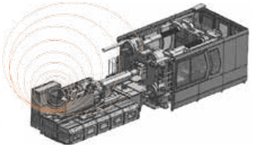
- Two platen type : Installation space minimized
- Tieber, Cylinder : Precise injection
- Optimized Design by FEA





Minimized noise and vibration design

- Minimized noise and vibration - Max. 80dB (based on EUROMAP)
- Optimized design for frame, piping and covering

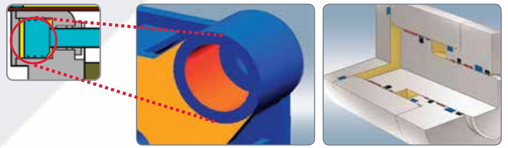


Applying High efficiency / Performance Parts

Improved oil leakage quality by accomplishing the special solid sealing system

- No internal chip forming ⇒ No damage (Packing & Cylinder)
- Pressure leakage during boosting ⇒ Reducing Energy loss & Cycle time

※ Patent application



Precision horning treatment

Applying merkel seal

Applied new DBG screw excellent in plasticizing

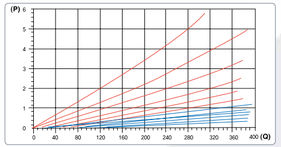
- Comparison in plasticizing
- Capacity according to charging stroke

Cooling system

- Maintains oil cleaness & temperature
- Economizing cooling water usage

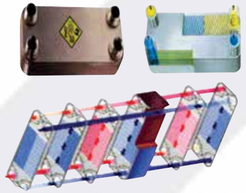
High functional return filter was applied

- High quality element & filter protection system
- Filter pollution detecting sensor
- SMX-10 micron element : Filtering minute particle
- Protecting pollution via operating separately (Pump, Cooler, Filter)



Applied high efficient water saving cooler

- Compact & light weight
- Excellent resistance against freezing
- Inter-corrosive & Resistance
- Excellent heat exchange



Water saving platen oil cooler

Convenience of maintenance

- New Design
  - Wide sight glass is applied, secured machine inside view
- Operating Box
  - Adjustable to be fit to the eye evel of the operator

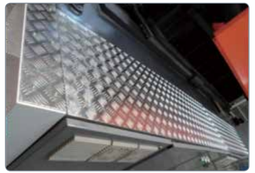
Improved the safety operation convenience

Optimization of wiring and electric system

- Integrated with main body of drive box
- Simple mold & projection separation, Connector applied

Work safety, convenience

- Secured spacious work platform on barrel area
- Safety guard on Clamping and Injection unit
- Ladder is installed inside of the moldfor maintenance
- Non slip footboard



WIZ Series

WIZ-X Series

WIZ-X Series

Major Specification

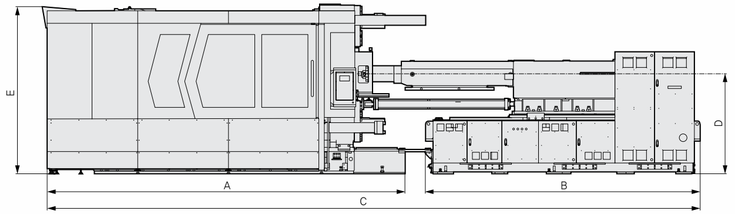
			WIZ 1300X			WIZ 1800X			WIZ 2000X		
INJECTION UNIT											
Injection Unit Code			i115			i150			i150		
Screw Code			Y	*A	B	Y	*A	B	Y	*A	B
Screw Diameter		mm	105	115	125	115	125	140	115	125	140
Injection Capacity Calculated		cm^3	5,477	6,570	7,762	7,141	8,437	10,583	7,141	8,437	10,583
Injection Capacity	PS	g	5,039	6,044	7,141	6,570	7,762	9,737	6,570	7,762	9,737
		oz	178	213	252	232	273	344	232	273	344
	PE	g	4,112	4,932	5,827	5,361	6,334	7,945	5,361	6,334	7,945
		oz	145	174	205	189	223	280	189	223	280
Injection Pressure		kg/cm^2	2,122	1,769	1,497	2,069	1,751	1,396	2,069	1,751	1,396
Injection Rate		cm^3/s	995	1,194	1,410	1,164	1,375	1,725	1,164	1,375	1,725
Plasticizing Capacity(PS)		kg/h	459	594	675	546	675	757	546	675	757
Max. Injection Speed		mm/sec	115	115	115	112	112	112	112	112	112
Max. Screw Speed		rpm	125 / 110	12 5/ 110	115 / 102	115 / 102	115 / 102	102 / 90	115 / 102	115 / 102	102 / 90
CLAMPING UNIT											
Clamping Force		ton	1,300			1,800			2,000		
Mold Opening Force		ton	90			120			140		
Tie Bar Distance		mm	1,400 × 1,400 (1,500 × 1,400)			1,600 × 1,600 (1,800 × 1,600)			1,800 × 1,600		
Die Plate Dimension : H x V		mm	1,950 × 1,950 (2,050 × 1,950)			2,150 × 2,150 (2,350 × 2,150)			2,450 × 2,250		
Clamping Stroke		mm	1,800 / 1,300			2,400 / 1,700			2,400 / 1,700		
Daylight		mm	2,500			3,200			3,200		
Mold Thickness		mm	700 ~ 1,200			800 ~ 1,500			800 ~ 1,500		
Mold Close Speed	High	m/min	59			67			67		
	Low	m/min	2			2			2		
Mold Open Speed	High	m/min	59			67			67		
	Low	m/min	2			2			2		
Ejector Force		ton	36			45			45		
Ejector Stroke		mm	300			300			300		
GENERAL											
Utilized Oil Quantity		ℓ	2,500			3,200			3,200		
Capacity of Motor (60Hz)		kW	179 (60 x 2 + 44 + 11 + 4)			195 (60 x 3 + 11 + 4)			195 (60 x 3 + 11 + 4)		
Electric Heater		kW	79			87			87		
Machine Dimension : LxWxH		m	11.5 × 3.5 × 3			12.8 × 3.8 × 3.4			12.8 × 3.8 × 3.4		
Machine Weight		ton	70			100			100		

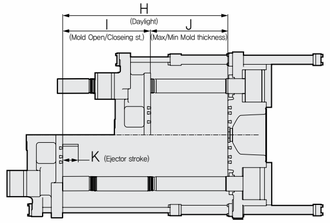
Note
1. Operation condition
Power : AC 380V±10%, 60Hz±5%, Humidity : 30% ~ 95%, Temperature : +5°C~ +40°C
Height : That not more than 100m used in standard.
2. It is injection capacity, injection rate, plasticizing capacity are vary with material, mold and machine condition.
3. Screw code. * mark : screw of standard
4. Due to continuous improvements, specifications are subject to change without notice.

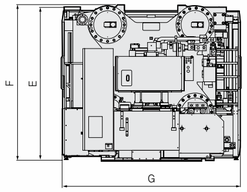
			WIZ 2500X			WIZ 3000X			WIZ 4000X					
INJECTION UNIT														
Injection Unit Code			i215			i315			i610			i1200		
Screw Code			Y	*A	B	Y	*A	B	Y	*A	B	Y	*A	
Screw Diameter		mm	125	140	160	140	160	180	180	200	220	240	250	
Injection Capacity Calculated		cm^3	9,449	11,853	15,482	13,547	17,693	22,393	27,992	34,558	41,815	61,977	67,250	
Injection Capacity	PS	g	8,693	10,905	14,243	12,463	16,278	20,602	25,752	31,793	38,469	57,019	61,870	
		oz	307	385	503	440	574	726	910	1,122	1,358	2,013	2,184	
	PE	g	7,093	8,898	11,622	10,170	13,283	16,811	21,014	25,943	31,391	46,528	50,486	
		oz	250	314	410	358	468	592	741	914	1,106	1,640	1,779	
Injection Pressure		kg/cm^2	2,268	1,808	1,384	2,351	1,800	1,422	2,185	1,770	1,460	1,928	1,777	
Injection Rate		cm^3/s	1,285	1,612	2,105	1,366	1,784	2,258	1,830	2,268	2,745	2,915	3,163	
Plasticizing Capacity(PS)		kg/h	675	757	1,053	757	1,053	1,202	1,127	1,205	1,346	1,572	1,706	
Max. Injection Speed		mm/sec	105	105	105	89	89	89	72	72	72	64	64	
Max. Screw Speed		rpm	115 / 102	102 /90	90 / 80	102 / 90	90 / 80	80 / 70	75 / 55	65 / 50	60 / 45	55 / 40	55 / 40	
CLAMPING UNIT														
Clamping Force		ton	2,500			3,000			4,000					
Mold Opening Force		ton	165			200			250					
Tie Bar Distance		mm	2,000 × 1,600			1,900 × 1,800 (2,100 × 1,800)			2,300 x 2,000					
Die Plate Dimension : H x V		mm	2,730 × 2,250			2,550 × 2,450 (2,750 × 2,450)			3,200 x 2,900					
Clamping Stroke		mm	2,900 / 1,900			2,700 / 1,800			3,200					
Daylight		mm	3,800			3,700			4,200					
Mold Thickness		mm	900 ~ 1,900			1,000 ~ 1,900			1,000 ~ 2,000					
Mold Close Speed	High	m/min	48			53			31					
	Low	m/min	2			2			3					
Mold Open Speed	High	m/min	48			53			31					
	Low	m/min	2			2			3					
Ejector Force		ton	61			79			79					
Ejector Stroke		mm	350			350			450					
GENERAL														
Utilized Oil Quantity		ℓ	3,800			4,200			5,500			7,500		
Capacity of Motor (60Hz)		kW	239 (60 x 3 + 44 + 11 + 4)			255 (60 x 4 + 11 + 4)			322 (60 x 5 + 11 x 2)			442 (60 x 7 + 11 x 2)		
Electric Heater		kW	110			145			165	181	204	299		
Machine Dimension : LxWxH		m	15.4 × 4.6 × 3.5			16 × 4.5 × 3.9			19 x 5.3 x 4.4			19.7 x 5.3 x 4.4		
Machine Weight		ton	145			170			230			320 (220 + 100)		

Brand-New Premium Injection Molding Machine

WIZ-X Series







External Form Drawing

(Unit : mm)

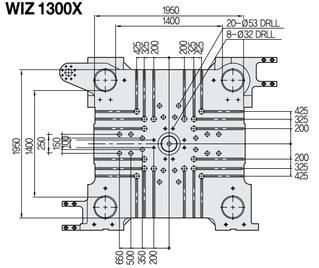
	A	B	C	D	E	F	G	H	I	J	K
WIZ 1300X	6,257	4,810	11,417	1,750	2,924	2,967	3,404	2,500	1,300	1,200	300
WIZ 1800X	7,060	5,290	12,725	1,950	3,174	3,326	3,754	3,200	1,700	1,500	300
WIZ 2000X	7,090	2,590	12,750	1,950	3,182	3,380	4,010	3,200	1,700	1,500	300
WIZ 2500X	7,000	6,000	14,500	2,100	3,200	3,580	4,260	3,600	1,900	1,700	350
WIZ 3000X	8,444	6,528	15,904	2,148	3,463	3,914	4,534	3,700	1,800	1,900	350
WIZ 4000X	7,460	7,320	19,710	2,540	3,710	4,390	5,267	4,200	2,200	2,000	450

Brand-New Premium Injection Molding Machine

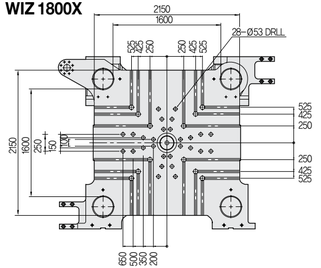
WIZ-X Series

Moving Platen Drawing

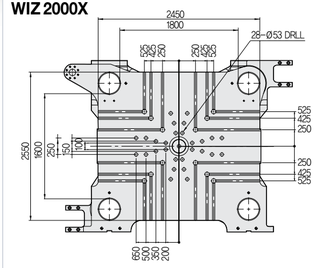
WIZ 1300X



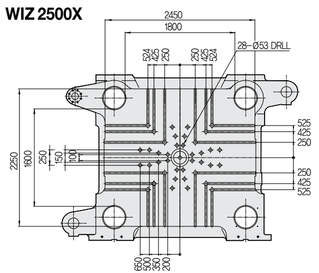
WIZ 1800X



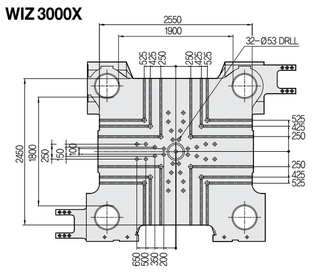
WIZ 2000X



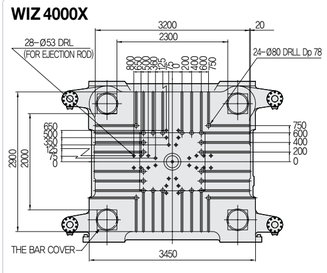
WIZ 2500X



WIZ 3000X



WIZ 4000X



WIZ Series / WIZ-X Series

Standard Equipment

Clamping Unit
- Automatic Lubrication Device
- Mold Clamps (Manual)
- Overrun Prevention Device
- Holes Tapped for Installation of Robot
- Mechanical safety device(KC Standard)
- Hydraulic Ejector (A-Circuit)
- Low-Pressure Speed Circuit for Mold Set-Up and Mold Protection
- Try Again Mold Close Circuit with Mold Protection
- Clamping Position Adjusting Device (Potentiometer)
- High Speed Mold Open/Close Adjusting Device
- Quick Mold Opening Circuit
- Safety Gate & Covers
- Support for Moving Platen
- T-Slot Platen
- Multi-Ejection (Up to 9 Times) and Vibration Ejection
- Single Hydraulic Core Puller (A or C)
- Dual Hydraulic Core Puller (A & C)

Injection Unit
- Wear Resistant Bimetallic Barrel
- Screw (For General Resins)
- Closed Loop Control for Injection Process
- Ceramic Band Heater (4 Zones)
- Cable Heater for Nozzle Zone
- Heater Cover
- Pre-Heating Temperature Control
- Injection Ram Advance and Retract Device
- Nozzle (Open Type)
- Nozzle Retract Timing Selector(Sprue Break)
- Safety Cover for Injection Unit (Operating Side Only)
- Screw Back Pressure Regulator
- Screw Cold Start Preventing Device
- Screw Drive Hydraulic Motor
- Screw 1st and 2nd Suck Back
- Screw Tip (For General Resins, Non-Return Valve Type)
- Injection Speed & Pressure Control Device

Hydraulic System
- Clamping Pressure Holding Circuit
- Selectable Clamp Pump Unloading Circuit During Cooling Time
- Back Pressure Relieving Circuit
- Hydromatch System (Multi-Pump)
- Injection Pressure Holding Circuit
- Mold Open/Close Hydraulic Brake Circuit
- Abnormal Hyd. Oil Temperature Detector
- Hyd. Oil Warming-Up Device
- Oil Cleaning System (Filter Type)
- Oil Cooler & Level Gauge
- Solenoid Valve (With Indicator Light)

Electric System
- Closed Loop Controller (HICOM-5000 Injection Unit)
- Abnormal Operation Warning Device(Buzzer)
- Abnormal Operation Indicating Device
- Intrusion Circuit
- Emergency Stop Push Button Switch

General
- Automatic Barrel Heat-Up Control Device
- Safety Gate With Interlocks
- Shot Counter and Count Up Detection for Target Production
- PID Temperature Control (J-Type)
- Nozzle Temperature Control by SSR
- Abnormal Operation Alarm Lamp
- Automatic Purge Circuit
- Automatic Power Shut Down Circuit

General
- Instruction Manual
- Standard Machine Color Body, Frame : LS Gray, Cover : LS White/Orange/Red, Gate : LS Orange
- Cooling Water Distributor
- Level Pad
- Safety Foot board Ass'y
- Maintenance Tools & Spare Parts

Optional Equipment

Clamping Unit
- Air Blow Off Unit
- Auto. Mold Clamps (QDC)
- Hydraulic Ejector Holding Circuit with Valve
- Hydraulic Core Puller (B or D)
- Mechanical safety device
- Hydraulic Ejector B Circuit
- Screw Ejector
- Pneumatic Powered Safety Gate (Opening & Closing)
- Pneumatic Powered Safety Gate (Opening)
- Tap-Hole Platen

Injection Unit
- High Response Closed Loop Control with Servo Valve
- Anti-Wear and Anti-Corrosive Barrel and Screw
- Automatic Lubrication Device
- Extension Nozzle (STD+30, 50, 70, 100, 125, 150mm)
- Temperature Controller (For Extension Nozzle Heater)
- Fan Blower
- High Speed Injection Device (Accumulator)
- Nozzle Safety Cover with Interlock
- Hydraulic Shut Off Nozzle
- Pneumatic Shut Off Nozzle
- Special Screw for Flame-Resistant ABS
- Special Screws for Various Materials (Uni-Melt, Etc.)
- Thermosetting Barrel and Screw
- Injection Compression

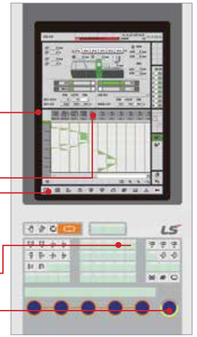
Hydraulic System
- Automatic Cooling Temperature Regulating Device for Hyd. Oil
- Mold Open and Close during Charging
- Mold Move on Charging with High Speed Injection (By Pump)
- Abnormal Hyd. Oil Leveling Device

Electric System
- Automatic Voltage Regulator
- Air Conditioning Unit in Control Cabinet
- Auxiliary Consent Box
- Ejector Retract Circuit
- Valve Gate Circuit
- Safety Gate Opening interlock Switch (Clamp, Ejector & Core)
- Gas Injection Interlock Circuit
- Robot Interlock Circuit
- Heater Band Failure Indicator
- Centralized Network System

General
- Chiller
- Crusher
- General Hopper
- Hopper Dryer
- Hopper Loader
- Hopper Ladder
- Mixer
- Conveyor
- Different Color Painting Finish-Recommended Color (Pantone No.)
  - LS Gray : Coo Gray 7C(Cover), Cool Gray 11C (Frame,Body)
  - LS Red : 199C
  - LS Orange : 7417C
- Mold Temperature Controller
- Take-Out Robot
- Foundation Parts

Control System (HICOM Gamma)

- TFT clear screen and quicker response time provide easy operation
- Real time data setting and operation
- User-friendly UI
- Manual operation button
- USB port, Key switch(Option)



12 INCH(STD)

15 INCH(OPTION)

Overview

- Overview of machine operation
- Set/Monitor clamp/Ejector position
- Monitoring temperature

Injection

- Injection speed-Max 10steps
- Holding pressure-Max 10steps
- Cut over by pressure, time, speed

Clamp

- Mold close speed-Max 5steps
- Mold open speed-5steps
- Monitoring parameter by graph

Mold protect

- Adjust sensitivity

Unit setup

- Able to set display unit by User

Core

- 2 CORE(Standard)
- Able to change Core operation by User

IO parm

- Monitoring digital outpu (1 zone standard)

International Quality, Environment, Safety, Health Certification

KCS Mark CE ISO9001: 2008 ISO14001 OHSAS18001

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