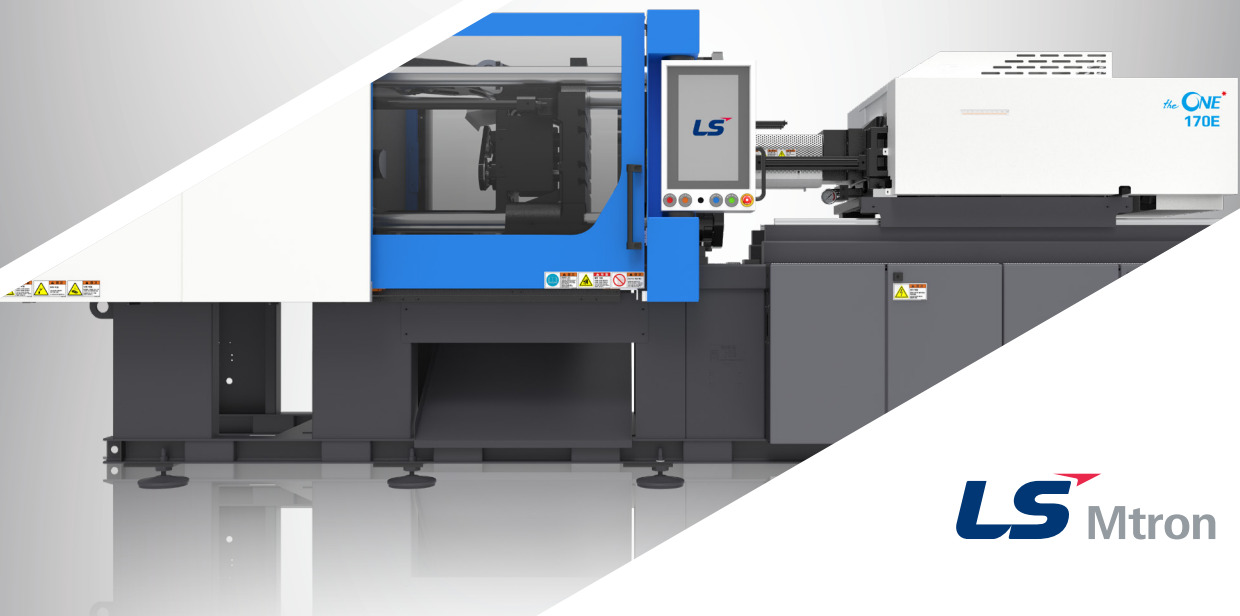
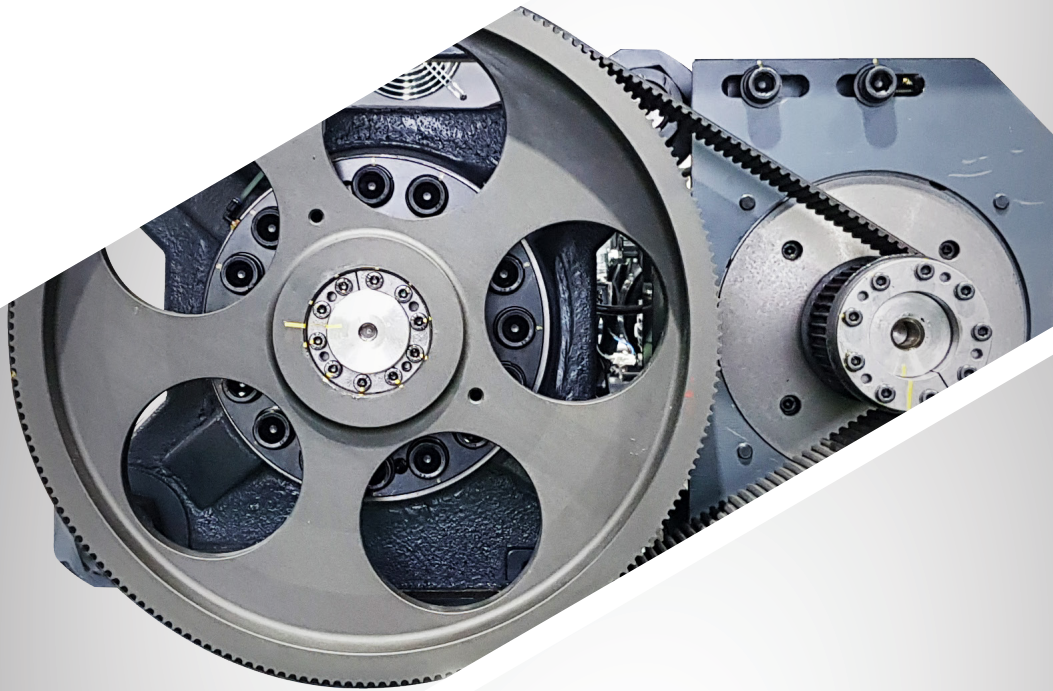


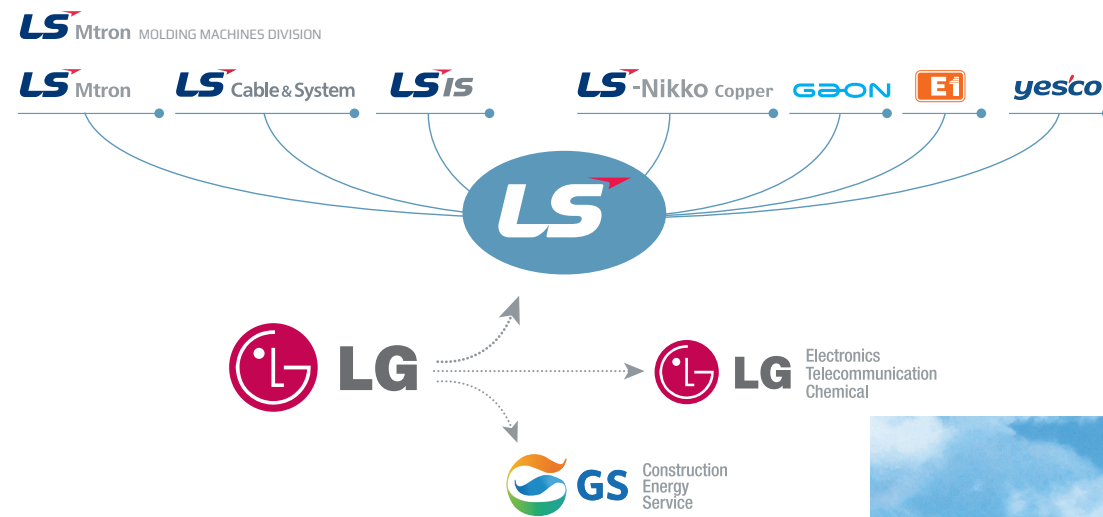
LS Injection Molding Machine

the ONE* - E SERIES



About LSMtron

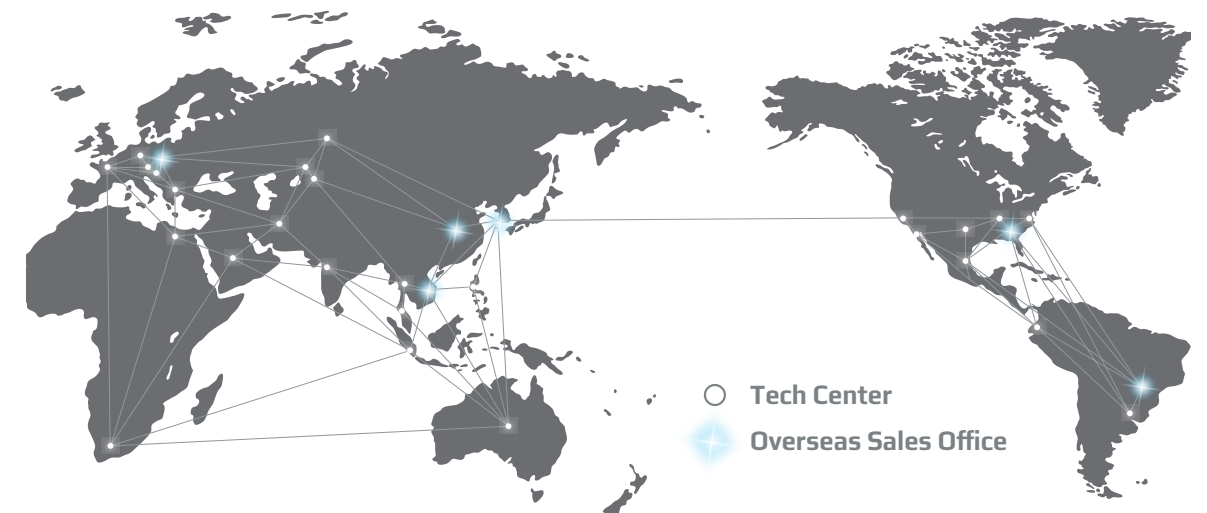
LS Mtron's injection molding machine was first launched in 1969 by the Machinery Division of Goldstar (currently LG Group), and has been expanding its scope not only domestically but also globally through continuous technology development and quality innovation over the past half-century. Growing together with Korean major customers during the period of high growth called the Miracle on the Han River, taking the needs of our customers, which have now become global standards, as an indicator of our core technology, and steadily leading the next half-century with ceaseless development. LS Mtron injection molding machines started with the development of Korea's first direct pressure injection molding machine, followed by the launch of the Two-Platen injection molding machine, and the first electric injection molding machine in Korea, leading the standard of injection molding machines in Korea. In addition, we have developed special machines (IBM, IML, CPM, Two color, etc.), high-spec, ultra-high-speed injection molding machines the ONE* and the ONE*-E to meet the diversified manufacturing environment of our customers, and strive for continuous product development. In line with the era of Industry 4.0, we are pioneering a new chapter of innovation in injection molding machines by developing smart injection molding machines and smart digital molding solutions.



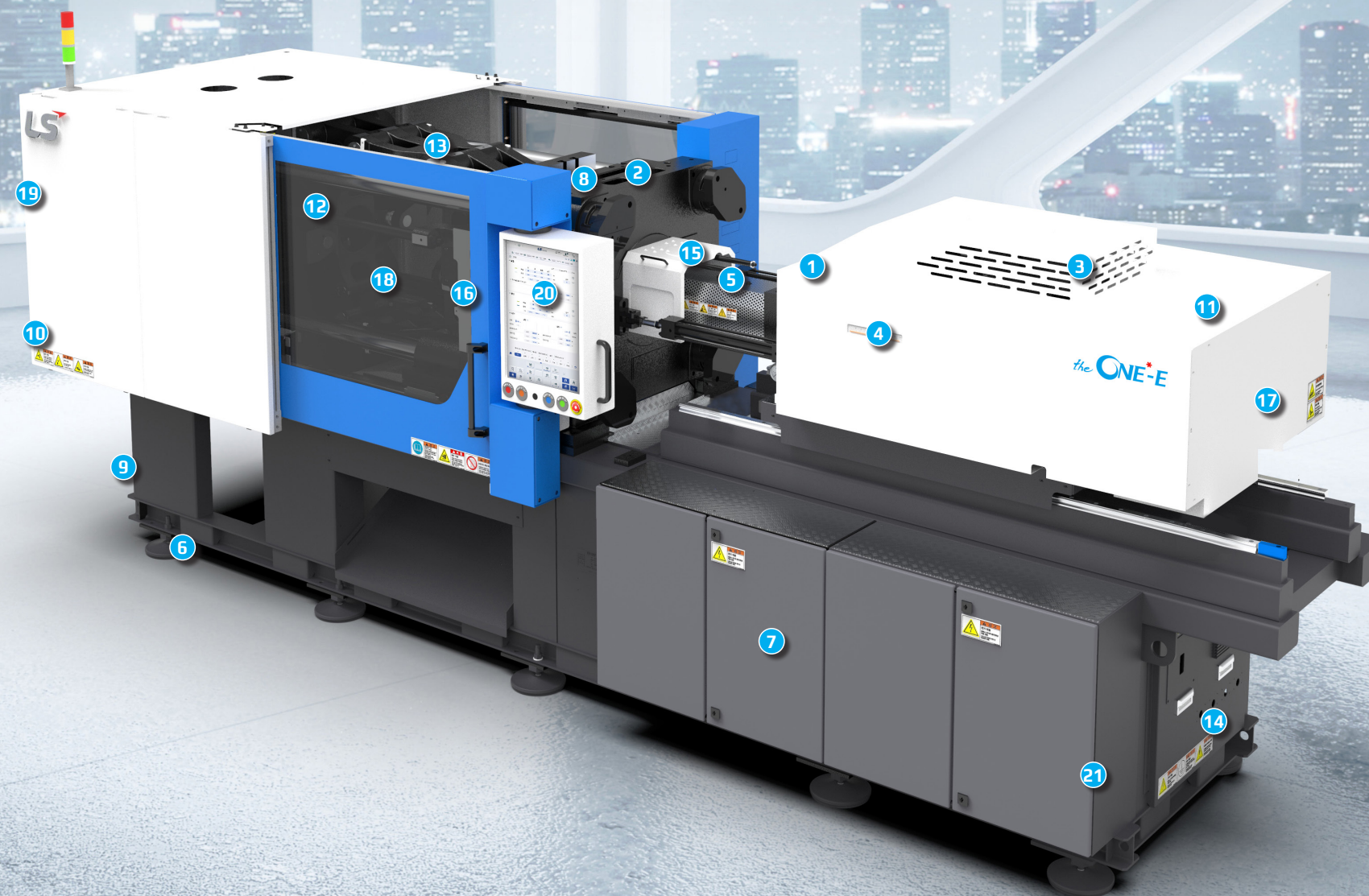
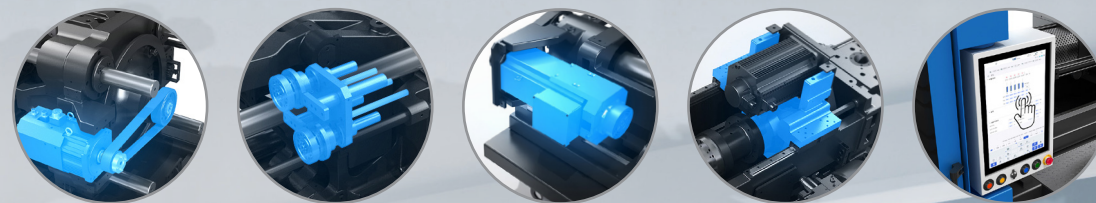
INNOVATIVE TECHNOLOGY PARTNER



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



LS Injection Molding Machine *the ONE* -E SERIES*



1. Machine cover

- Straight design (simplification, Compact size)
- Detachable cover applied

3. Injection unit

- High rigidity one-piece casting structure
- Increased injection pressure (for high loads)
- LM guide applied to the weighing drive unit (low friction structure)

5. Delete Hopper Support

- Direct fastening of hopper dryer
- Improving resin supply

7. KEBA controller

- Applied to i3000 series
- 50% reduction in scan time
- Improved communication data processing speed

9. Spacious under the clamping unit

- Hydraulic core unit
- Utilize for peripheral space

11. Load cell

- Digital load cell applied
- Improvement of measurement control cycle
- Minimize pressure deviation (reproducibility UP)

13. High-speed toggle system

- Reduced dry-cycle time (35~40% reduced compared to the standard model)
- Low vibration operation (shock reduction control)

15. Increase the number of temperature control zones

- 5-zone control (nozzle 1 + barrel 4)
- Thermocouple K type

17. Low inertia motor applied

- Low inertia design (motor & pulley)
- Acceleration/deceleration performance 향상 (Reproducibility UP)

19. Clamping speed acceleration

- Capacity up
- High-speed pulley ratio
- Improved clamping open/closing speed (45~50% improvement compared to the standard model)

21. Electric unit

- BOX type application
- Separation of electrical parts/drives (noise improvement)
- Easy maintenance of electronic parts
- Improves the durability of electronic parts by securing drive cooling space and removing fans

2. Center press fixed platen

- Improved mold surface pressure uniformity (35% improvement compared to the standard model)
- Extend mold life

4. Structure for easy replacement of plasticization

- Easy exchange of Y, A, B screws
- Screw adapter type applied (inserted type)
- LM integrated type at the bottom of the injection unit

6. Anti-vibration pad application **Optional**

- Minimize vibration
- Increase support load

8. Mold Thickness

- Minimum thickness -50mm shortened
- Maximum thickness +100mm increase
- Increase the application of variable mold types

10. Spacious under the clamping unit

- Hydraulic core unit
- Utilize for peripheral space

12. Automatic Clamping Force Correction **Optional**

- Automatic clamping force calibration function
- Low pressure clamping force function
- Equipped with tie bar sensor

14. Energy saving

- Electricity monitoring (S/W)

16. Extended ejector stroke

- Extended ejecting stroke (10~70% improvement)
- Faster ejecting speed

18. LM guide for Moving platen

- Low friction mold opening and closing operation
- Tie bar bush not applied
- Clean working environment

20. Full-Touch op

- 18.5" screen (option 21.5")
- Full touch function
- Improved user convenience

BEST SOLUTION FOR MEDICAL DEVICE

CREATING PRECISION POLYMER OPTICS

➤ **High productivity** Cycle time reduction

➤ **Defect rate zero** Minimized defect rate to optimise the production of body parts requiring completeness

➤ **Maintenance** Easy maintenance improves workers' productivity



"LS Mtron challenge to the customer does not stop."

SPECIAL SOLUTION FOR PACKAGING



the ONE^{*}-E SERIES

Provide Best solution for production of Special solution for packaging

LS Mtron offer suitable solution against the customer's needs. We can design the IMM for high -precision. We can supply not only IMM but also the high performance values.

➤ **High Design Reproducibility** Meet the customer's need with Special IMM

➤ **Clean Surface** Precision injection ensures complete surface treatment

➤ **Innovative Jump** High quality solution with set up of Smart Factory



"LS Mtron challenge to the customer does not stop."

STRUCTURE THAT CAN COPE WITH HIGH CYCLE AND MORE PRECISE MOLDING

Based on 170ton model testing

the ONE*-E Series **Clamping Acceleration**

- High-speed pulley ratio applied (high cycle)
- Clamping motor capacity UP

the ONE*-E Series **Mold Thickness**

- Minimum thickness -50mm shortened
- Maximum thickness +100mm increase
- Increase the application of variable mold types

the ONE*-E Series **Increase the number of temperature control zones**

- Ejector stroke extension (120→130mm) Ejecting stroke (Optional)
- Ejecting speed UP(30%)

Ejector stroke Optional

- Ejector stroke extension (150mm)
- Corresponds to long molding products

the ONE*-E Series **Equipped with tie bar sensor** Optional

- Clamp force monitoring function
- Automatic clamping force calibration function
- Automatic zero adjustment mode function for spring mold
- Clamping force optimization control function (gas draining effect, mold life extension, maintenance cost reduction)

the ONE*-E Series **Fast Toggle System**

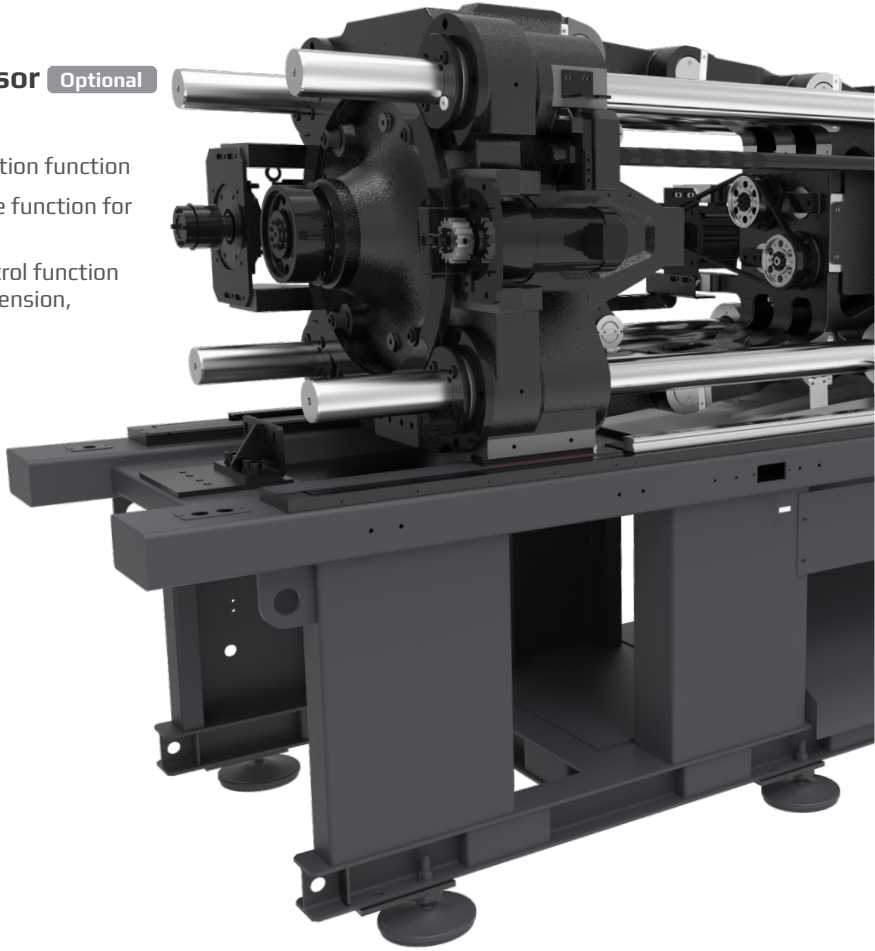
- 30% improvement in link speed ratio
- Low vibration operation (CI-Curve control)
- Dry cycle time 1.49s

the ONE*-E Series **Center press fixed platen**

- Minimize the deformation of the platen (suppression of deviation by cavity)
- Improved mold surface pressure distribution (33% ↑)
- Extend mold life

the ONE*-E Series **Moving platen LM guide support structure**

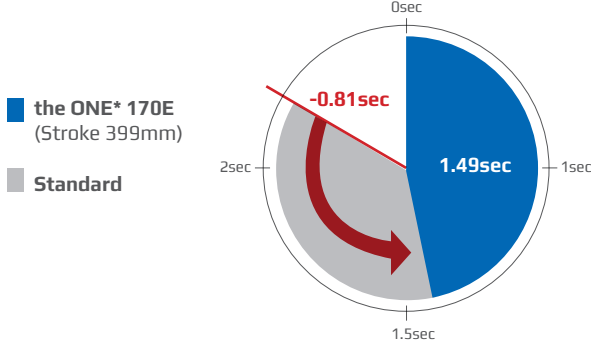
- Fast mold opening and closing with low friction structure
- Precise platen parallelism
- Tie bar bush not applied
- Clean working environment



IMPROVED PRODUCTION REDUCED CYCLE TIME

the ONE*-E Series **Reduced dry cycle time**

- 170Ton



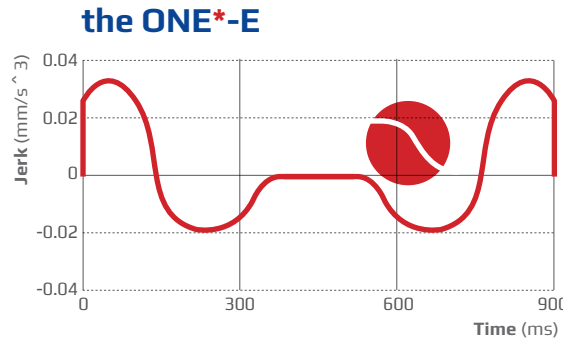
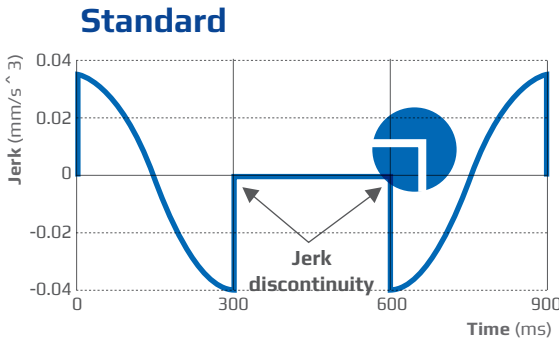
the ONE*-E Series **Reduced mechanical vibration**

- Clamp closing
- the ONE* 170E **0.87G**



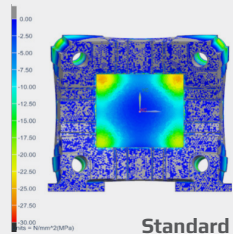
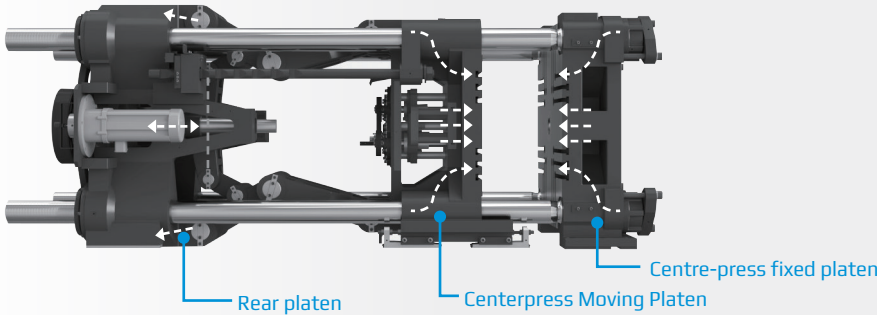
the ONE*-E Series **CI-Curve control**

- Vibration section

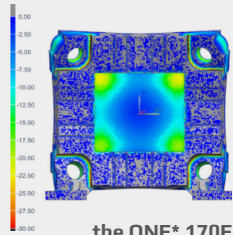


the ONE*-E Series **Double Center Press Die**

- Minimize the amount of deformation of the platen when increasing pressure (suppression of deviation by cavity)
- Improved mold surface pressure distribution (33% ↑, fixed platen)
- Extend mold life



Standard



the ONE* 170E

HIGH-RIGIDITY ONE-PIECE CASTING STRUCTURE IMPROVES DURABILITY PRECISE INJECTION MOLDING CONTROL POSSIBLE

Based on 170ton model testing

the ONE*-E Series Low inertia motor application

- Standard injection speed of 300 mm/s (Heizen Sanyo)
- Low inertia design (motor & pulley)
- Acceleration/deceleration performance 20ms (improved reproducibility)

the ONE*-E Series Digital load cell application

- Improvement of measurement control cycle
- High-speed/high-precision pressure control (improved reproducibility)

the ONE*-E Series Easy plasticization replacement

- Screw adapter applied (inserted type)
- Easy exchange of Y, A, B screws
- Tee box assembly is not disassembled (easy to exchange)

the ONE*-E Series Fast charging

- Increase the screw RPM
- Improvement of plasticizing ability

the ONE*-E Series Nozzle Touch Force Control Optional

- Prevention of tilting of fixed platen (prevents pin damage by maintaining mold parallelism)
- Pressure holding [Holding pressure,charging] → Depressurization → Minimum pressure holding [Mold open/close] → Pressurized → Pressurized holding [Fill]

the ONE*-E Series Extended temperature control zone

- 5 Zone control(Nozzle 1point+Barrel 4points)
- K-type

the ONE*-E Series One-piece injection unit

- High-rigidity one-piece casting structure improves durability
- Injection pressure increase +270~350 kg/cm² (for high load)

the ONE*-E Series Injection drive part LM guide applied

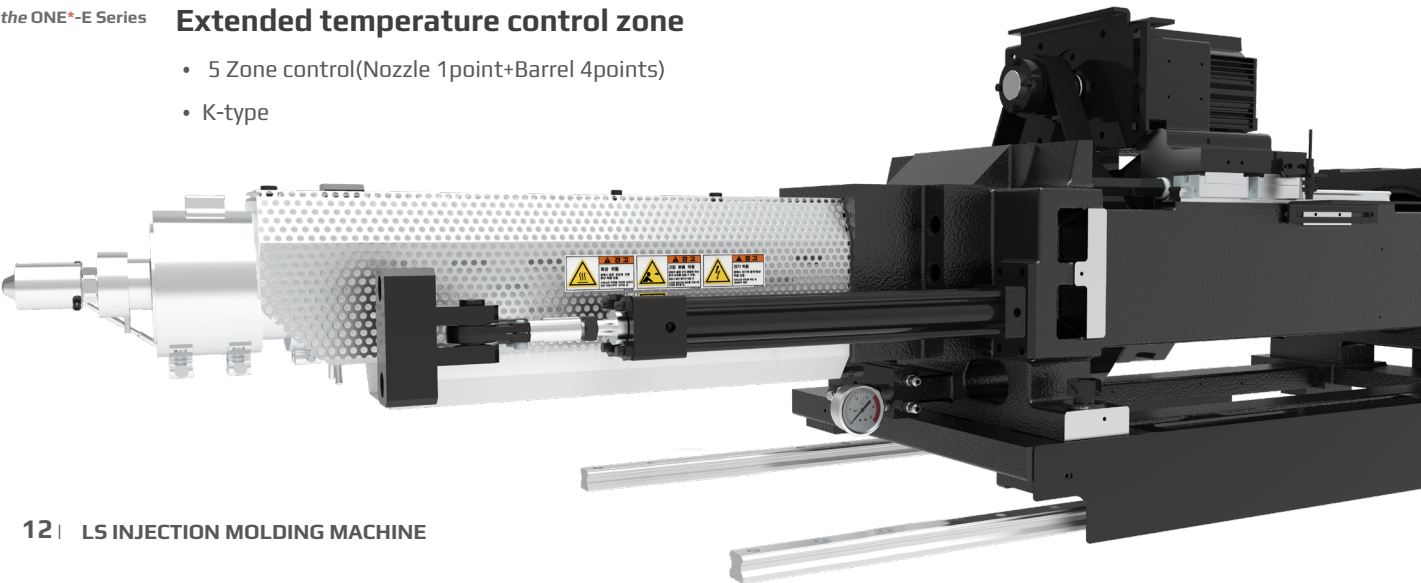
- Low friction structure
- Excellent acceleration and precise control (improving reproducibility)

the ONE*-E Series Delete Hopper Support

- Direct mounting of hopper dryer (~50kg)
- Improvement of resin supply (blockage)

the ONE*-E Series Integrated LM Guide

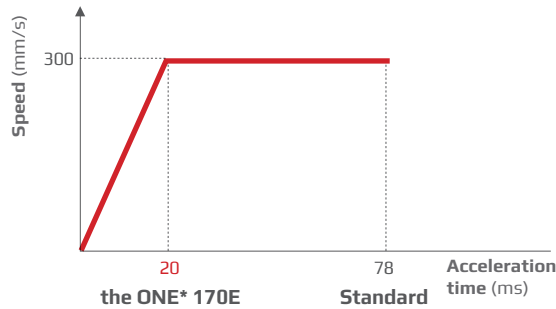
- Easy exchange of Y, A, B screws



SHORTENED INJECTION ACCELERATION TIME IMPROVED REPRODUCIBILITY / PRECISION

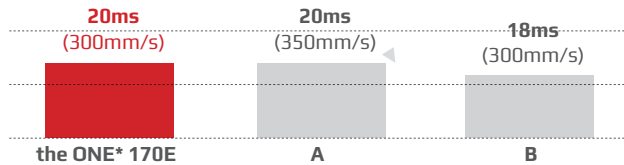
Based on 170ton model testing

the ONE*-E Series Improved reproducibility of thick molding products by shortening injection acceleration time by 3.9 times.



Comparison with Japanese maker

A: Clamping force 170Ton, B: Clamping force 110Ton



Acceleration time reduction

- 74% reduction in acceleration time for thick-walled molding (78 → 20ms)
- 74% reduction in rotational inertia through low inertia design
- Low inertia servo motor application / Low inertia drive system design

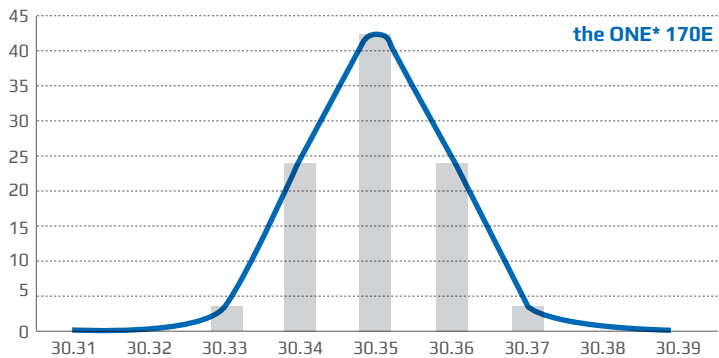
Reduced control speed for high-speed injection

- Increase servo motor encoder resolution (17bit → 20bit)
- Drive control frequency response improved by 3.7 times (600Hz → 2,200Hz)
- Double Ethercat communication cycle (1ms → 0.5ms)

the ONE*-E Series Measurement of reproductivity and precision

Product	Spiral		NO	Max pressure (kgf/cm ²)	Cushion(mm)	Weight(g)
Shot weight	30g		Max	2,031	11.56	단위
Cavity	1		Min	1,987	11.56	30.33
Resin	HIPS		R (max-Min)	44	0	0.04
Model	theONE*170E		X (Average)	2,006.77	11.56	30.35
Screw Dia	D36		6(Standard Deviation)	8.415780	0	0.0094809
			R/X	0.021926	0	0.0013179
			36/X	0.012581	0	0.0009371

Reproductivity (weight deviation) ±0.094%

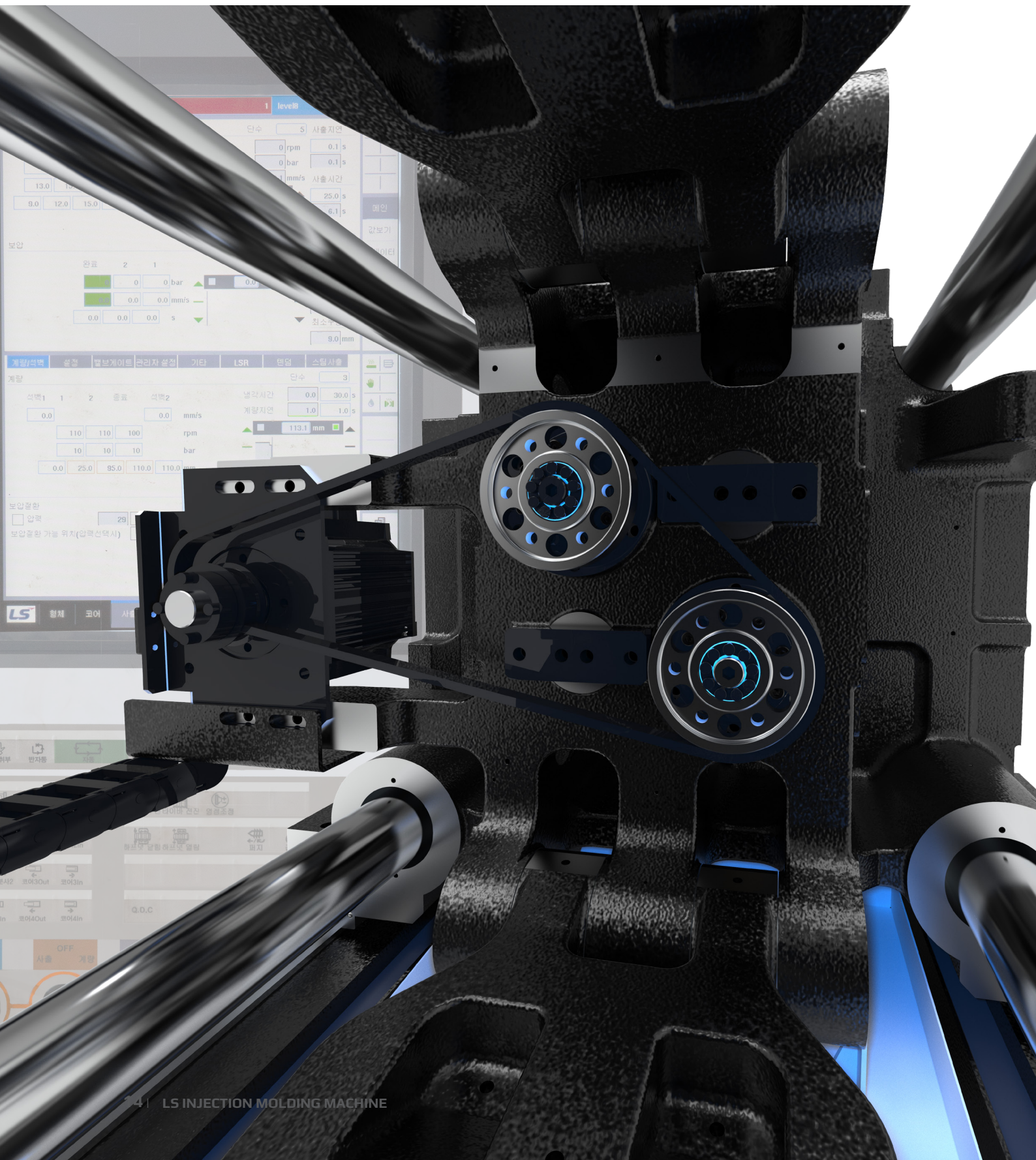


Precision level
99.45%

Precision level(Normal distribution)

Weight average value ±0.02g range based on frequency

Integrated ONE Solution
Smart Machine for Industry 4.0
Delivering value



UPGRADED SPECIFICATION FOR IMPROVING PERFORMANCE AND USER-FRIENDLINESS

the ONE*-E Series Main Controller

H/W upgrade

- **CPU**
 - CPU- Main, HMI processing with existing single core CPU
 - CPChange to dual core CPU and separate main and HMI
 ➔ CPUU load improvement ➔ Data Add various modes
- **EtherCat**
 - SW processing ➔ HW processing ➔ Data processing speed improvement ➔ Precision and reproducibility improvement

New S/W

- Clamp force optimization mode
- Clamping high-speed low-vibration profile mode
- Injection high-speed mode, holding pressure pattern selection mode
- Residual pressure removal mode when charging is complete

the ONE*-E Series HMI

H/W upgrade

- Full-touch screen
- Improved size & resolution
- **CPU**
 - Added convenience function for CPU application for separate HMI

New S/W

- Graph condition setting function
- Screen favorite function (screen order user set)
- PDF viewer (viewer for drawings, manuals, etc.)
- Notifications for machine maintenance

the ONE*-E Series User friendly function

- **PDF viewer**
 - Check the supplied manual and electrical drawings
 - PDF documents can be checked by USB connection
- **Maintenance reminder alert**
 - Machine maintenance notification function according to the operation period
- **Graph setting function**
 - Operation settings can be checked and changed on the graph screen
- **Electricity monitoring**
 - Monitoring and displaying the amount of electricity on the screen

the ONE*-E Series Energy saving rating



theONE*-E Efficiency classes	170E
Machine weight (g)	68.65
Electrical energy (kWh)	0.01
Energy consumption (kWh/kg)	0.15
Energy rating	10

CONTROL SYSTEM (KEBA CONTRLLER)

User Sequence changed : Easy maintenance & Flexible for user demand



- Provides operational convenience for users by increasing the screen size
- Convenient operation with High-response color panel



- Easy and various graphic functions
- Real-time data adjustment and operation
- Function to search data on molds



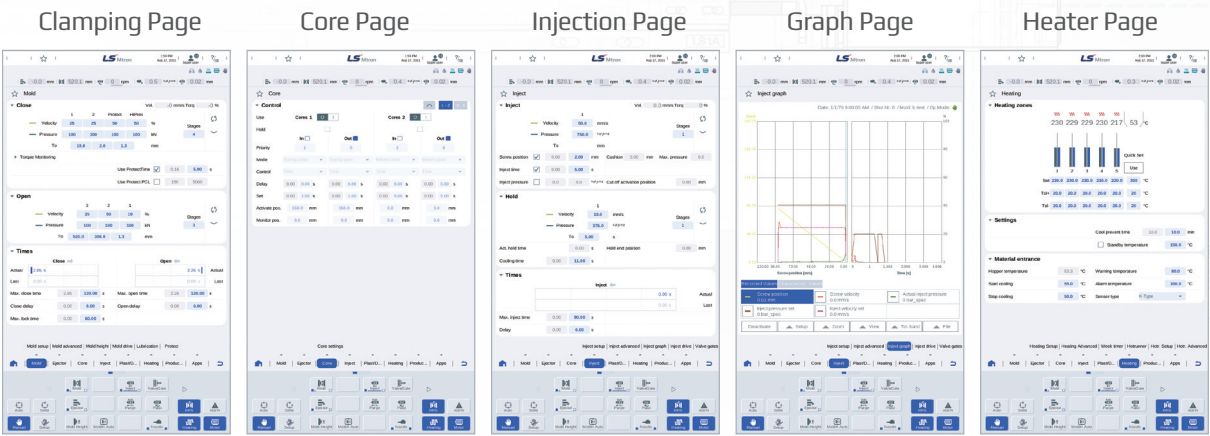
- Easy to analyze cycles with monitoring screen
- East to convert unit
- Adds a memo function : possible to make an independent memo and associate with mold information



- Possible to monitor and communicate with peripheral devices.
- Possible to monitor I/O and turn ON/OFF the forced output on the touch screen



- User-friendly UI
- User can change the sequence of cycles
- Mix and match units (psi,inch,mm,bar, etc.)
- Multi language selection
- Multi-level, customizable password control for each user.



the ONE*-E Series

Customer's Benefits

- Easy to analyze and monitor an injection molding process with the improved user interface
- Easy to maintain and change the User's sequence
- Responding flexibly to customer's demand

LS Injection Molding Machine

the ONE*-E SERIES

Clamping and Injection unit matrix | the ONE*-E

Model	theONE* 50E	theONE* 80E	theONE* 110E	theONE* 130E	theONE* 170E	theONE* 220E	theONE* 280E	theONE* 350E	theONE* 400E
iu133	22Y 25A 28B	22Y 25A 28B							
iu190	25Y 28A 32B	25Y 28A 32B	25Y 28A 32B	25Y 28A 32B					
iu265		28Y 32A 36B	28Y 32A 36B	28Y 32A 36B	28Y 32A 36B				
iu420			32Y 36A 40B 45C	32Y 36A 40B 45C	32Y 36A 40B 45C	32Y 36A 40B 45C			
iu680					36Y 40A 45B 50C	36Y 40A 45B 50C			
iu880						40Y 45A 50B 55C	40Y 45A 50B 55C	40Y 45A 50B 55C	40Y 45A 50B 55C
iu1400						50Y 55A 60B 65C	50Y 55A 60B 65C	50Y 55A 60B 65C	50Y 55A 60B 65C
iu1770							55Y 60A 65B 70C	55Y 60A 65B 70C	55Y 60A 65B 70C

Connected and Smart Injection 4.0

the ONE*-E **Connected and Smart Injection 4.0** Option

LS-Mtron's CSI 4.0 is a solution that can help customers quickly respond to the 4th industrial revolution and digital transformation. The solution is the initial stage of data collection, the stage of making it meaningful information, and furthermore, big data processing technology and it consists of the stages of intelligence application of AI.

* Connected and Smart Injection

SMART PRODUCTION

SMART PRODUCTION

Smart Monitoring

Smart Production Control

Smart Mold Reognition

Smart Equipment Control

Smart Data interface

Anywhere, 24/7 access by mobile

Real-time Monitoring Control

RFID check and immediate application of molding data via QR code

Real-time Monitoring

Responding to customer data realization needs

AI

INJECTION SYSTEM

AI Injection System

AI Molding Assistant

AI Weight Control

Smart Injection Molding Machine

SAMRT SERVICE

SMART REMOTE SERVICE

SMART REMOTE SERVICE

Remotely monitor

Access and repair products in use at customer sites

SMART MACHINE

SMART WEIGHT CONTROL

SMART WEIGT CONTROL

Automatic Weight Adjustment

Injection with a constant weight even when mixing recycled resin

LS Injection Molding Machine

the ONE*-E SERIES



MAJOR SPECIFICATION

Model			theONE* 50E						theONE* 80E						theONE* 110E								theONE* 130E														
Injection Unit Code			iu 133			iu 190			iu 133			iu 190			iu 265			iu 190			iu 265			iu 420				iu 190			iu 265			iu 420			
Screw Code			Y	*A	B	Y	A	B	Y	A	B	Y	*A	B	Y	A	B	Y	A	B	Y	*A	B	Y	A	B	C	Y	A	B	Y	A	B	Y	*A	B	C
Screw Diameter		mm	22	25	28	25	28	32	22	25	28	25	28	32	28	32	36	25	28	32	28	32	36	32	36	40	45	25	28	32	28	32	36	32	36	40	45
Screw		mm	110	120	120	140	140	140	110	120	120	140	140	140	140	160	160	140	140	140	140	160	160	160	180	180	180	140	140	140	140	160	160	160	180	180	180
Injection Capacity Calculated		㎤	42	59	74	69	86	113	42	59	74	69	86	113	86	129	163	69	86	113	86	129	163	129	183	226	286	69	86	113	86	129	163	129	183	226	286
Injection Capacity	PS	g	38	54	68	63	79	104	38	54	68	63	79	104	79	118	150	63	79	104	79	118	150	118	169	208	263	63	79	104	79	118	150	118	169	208	263
	PE	g	31	43	54	50	63	82	31	43	54	50	63	82	63	94	119	50	63	82	63	94	119	94	134	165	209	50	63	82	63	94	119	94	134	165	209
Injection Pressure		Mpa	275	221	177	270	216	165	275	221	177	270	216	165	260	201	157	270	216	165	260	201	157	275	226	181	142	270	216	165	260	201	157	275	226	181	142
		kgf/㎤	2800	2250	1800	2750	2200	1680	2800	2250	1800	2750	2200	1680	2650	2050	1600	2750	2200	1680	2650	2050	1600	2800	2300	1850	1450	2750	2200	1680	2650	2050	1600	2800	2300	1850	1450
Max. Holding Pressure		Mpa	220	177	141	216	173	132	220	177	141	216	173	132	208	161	126	216	173	132	208	161	126	220	180	145	114	216	173	132	208	161	126	220	180	145	114
		kgf/㎤	2240	1800	1440	2200	1760	1344	2240	1800	1440	2200	1760	1344	2120	1640	1280	2200	1760	1344	2120	1640	1280	2240	1840	1480	1160	2200	1760	1344	2120	1640	1280	2240	1840	1480	1160
Injection Rate	Standard	㎤ /s	114	147	185	147	185	241	114	147	185	147	185	241	185	241	305	147	185	241	185	241	305	241	305	377	477	147	185	241	185	241	305	241	305	377	477
Injection Speed		mm/sec	300			300			300			300			300			300			300				300			300									
Injection Rate	Speed ①	㎤ /s	76	98	123	98	123	161	76	98	123	98	123	161	123	161	204	98	123	161	123	161	204	121	153	188	239	98	123	161	123	161	204	121	153	188	239
Injection Speed		mm/sec	200			200			200			200			200			200			200				150				200			200			150		
Injection Rate	Speed ②	㎤ /s	152	196	246	196	246	322	152	196	246	196	246	322	246	322	407	196	246	322	246	322	407	161	204	251	318	196	246	322	246	322	407	161	204	251	318
Injection Speed		mm/sec	400			400			400			400			400			400			400				200				400			400			200		
Injection Rate	Speed ③	㎤ /s	190	245	308	245	308	402	190	245	308	245	308	402	308	402	509	245	308	402	308	402	509	402	509	628	-	245	308	402	308	402	509	402	509	628	-
Injection Speed		mm/sec	500			500			500			500			500			500			500				500				500			500					
Plasticizing Capacity		kg/h	33	45	59	35	46	69	33	45	59	35	46	69	46	69	97	35	46	69	46	69	97	69	97	129	179	35	46	69	46	69	97	69	97	129	179
Max Screw Speed		rpm	~500			~400			~500			~400			~400			~400			~400			~400				~400			~400			~400			
Clamping Force		ton(kN)	50(490)						80(784)						110(1,080)								130(1,275)														
Tie Bar Distance		mm	360 x 360						420 x 420						530 x 510								530 x 510														
Opening Stroke		mm	270						320						400								400														
Clamping Speed		mm/sec	1,513						1,550						1,500								1,333														
Daylight		mm	690						770						910								950														
Die Plate Dimension		mm	505 x 505						615 x 615						730 x 730								730 x 730														
Mold Thickness		mm	150 ~ 420						150 ~ 450						150 ~ 510								150 ~ 550														
Ejector Force		ton	2						2						2.5								3.0														
Ejector Stroke		mm	70						80						120								120														
DRY CYCLE (EUROMAP 6)		s-mm	1.07-252						1.2-294						1.3-371								1.3-371														
Hopper Dryer		kg	~25			~25			~25			~25			~50			~25			~50			~50				~25			~50			~50			
Heater		mm	4.3	5.7	6.4	5.7	6.4	8.2	4.3	5.7	6.4	5.7	6.4	8.2	6.8	8.2	9.1	5.7	6.4	8.2	6.8	8.2	9.1	8.2	9.1	13.4	13.4	5.7	6.4	8.2	6.8	8.2	9.1	8.2	9.1	13.4	13.4
Machine Dimension (LxWxH)		m	3.81 x 1.19 x 1.57			3.99 x 1.19 x 1.57			4.23 x 1.21 x 1.66			4.23 x 1.21 x 1.66			4.54 x 1.21 x 1.66			4.75 x 1.40 x 1.81			4.85 x 1.40 x 1.81			5.05 x 1.40 x 1.81				5.04 x 1.40 x 1.81			5.04 x 1.40 x 1.81			5.09 x 1.40 x 1.81			
Machine Weight		ton	2.5			2.7			3.5			3.7			4.0			4.9			5.1			5.3				5.5			5.7			6.0			

the ONE*-E SERIES



MAJOR SPECIFICATION

Model			theONE* 170E										theONE* 220E																
Injection Unit Code			iu 265			iu 420			iu 680				iu 420				iu 680				iu 880				iu 1400				
Screw Code			Y	A	B	Y	*A	B	C	Y	A	B	C	Y	A	B	C	Y	A	B	C	Y	*A	B	C	Y	A	B	C
Screw Diameter		mm	28	32	36	32	36	40	45	36	40	45	50	32	36	40	45	36	40	45	50	40	45	50	55	50	55	60	65
Screw		mm	140	160	160	160	180	180	180	180	240	240	240	160	180	180	180	180	240	240	240	240	240	240	240	280	280	280	280
Injection Capacity Calculated		㎤	86	129	163	129	183	226	286	183	302	382	471	129	183	226	286	183	302	382	471	302	382	471	570	550	665	792	929
Injection Capacity	PS	g	79	118	150	118	169	208	263	169	277	351	434	118	169	208	263	169	277	351	434	277	351	434	525	506	612	728	855
	PE	g	63	94	119	94	134	165	209	134	220	279	344	94	134	165	209	134	220	279	344	220	279	344	416	401	486	578	678
Injection Pressure		Mpa	260	201	157	275	226	181	142	270	221	177	147	275	226	181	142	270	221	177	147	275	226	181	147	245	206	172	147
		kgf/㎤	2650	2050	1600	2800	2300	1850	1450	2750	2250	1800	1500	2800	2300	1850	1450	2750	2250	1800	1500	2800	2300	1850	1500	2500	2100	1750	1500
Max. Holding Pressure		Mpa	208	161	126	220	180	145	114	216	177	141	118	220	180	145	114	216	177	141	118	220	180	145	118	196	165	137	118
		kgf/㎤	2120	1640	1280	2240	1840	1480	1160	2200	1800	1440	1200	2240	1840	1480	1160	2200	1800	1440	1200	2240	1840	1480	1200	2000	1680	1400	1200
Injection Rate	Standard	㎤ /s	185	241	305	241	305	377	477	204	251	318	393	241	305	377	477	204	251	318	393	251	318	393	475	295	356	424	498
Injection Speed		mm/sec	300			300			200				300				200				200				150				
Injection Rate	Speed ①	㎤ /s	123	161	204	121	153	188	239	153	188	239	295	121	153	188	239	153	188	239	295	188	239	295	356	393	475	565	664
Injection Speed		mm/sec	200			150			150				150				150				150				200				
Injection Rate	Speed ②	㎤ /s	246	322	407	161	204	251	318	305	377	477	589	161	204	251	318	305	377	477	589	377	477	589	713	589	713	848	995
Injection Speed		mm/sec	400			200			300				200				300				300				300				
Injection Rate	Speed ③	㎤ /s	308	402	509	402	509	628	-	509	628	795	-	402	509	628	-	509	628	795	-	628	795	982	-	982	1188	1414	-
Injection Speed		mm/sec	500			500			500				500				500				500				500				
Plasticizing Capacity		kg/h	46	69	97	69	97	129	179	85	113	156	206	69	97	129	179	85	113	156	206	113	156	206	276	206	276	338	413
Max Screw Speed		rpm	~400			~400			~350				~400				~350				~350				~350				
Clamping Force		ton(kN)	170(1,666)										220(2,156)																
Tie Bar Distance		mm	570 x 520										660 x 660																
Opening Stroke		mm	460										575																
Clamping Speed		mm/sec	1,333										1,373																
Daylight		mm	1,060										1,225																
Die Plate Dimension		mm	840 x 790										930 x 930																
Mold Thickness		mm	200 ~ 600										200 ~ 650																
Ejector Force		ton	3.5										4.6																
Ejector Stroke		mm	130										220																
DRY CYCLE (EUROMAP 6)		s-mm	1.49-399										1.7-462																
Hopper Dryer		kg	~50			~50			~75				~50				~75				~75				~75				
Heater		mm	6.8	8.2	9.1	8.2	9.1	13.4	13.4	9.1	13.4	15.1	17.4	8.2	9.1	13.4	13.4	9.1	13.4	15.1	17.4	14.2	15.1	17.4	18.5	17.4	18.5	21.4	22.4
Machine Dimension (LxWxH)		m	5.20 x 1.47 x 1.87			5.28 x 1.47 x 1.87			6.08 x 1.47 x 1.87				6.32 x 1.64 x 2.0				6.38 x 1.64 x 2.0				6.49 x 1.64 x 2.0				6.86 x 1.64 x 2.0				
Machine Weight		ton	6.3			6.5			7.0				9.5				9.8				10.0				10.3				

1. Theoretical injection capacity: screw cross-sectional area x screw stroke
2. The clamping force method is a 5-point double-tug type for all models.
3. The maximum injection pressure and maximum holding pressure are the maximum values that can be set on the machine.

4. Injection rate and injection speed are theoretical values. The actual injection rate and injection speed are limited by the injection pressure.
5. The mold size should be more than 60% of the tie bar distance (HxV).
6. This specification is subject to change without notice to improve product quality.

the ONE*-E SERIES

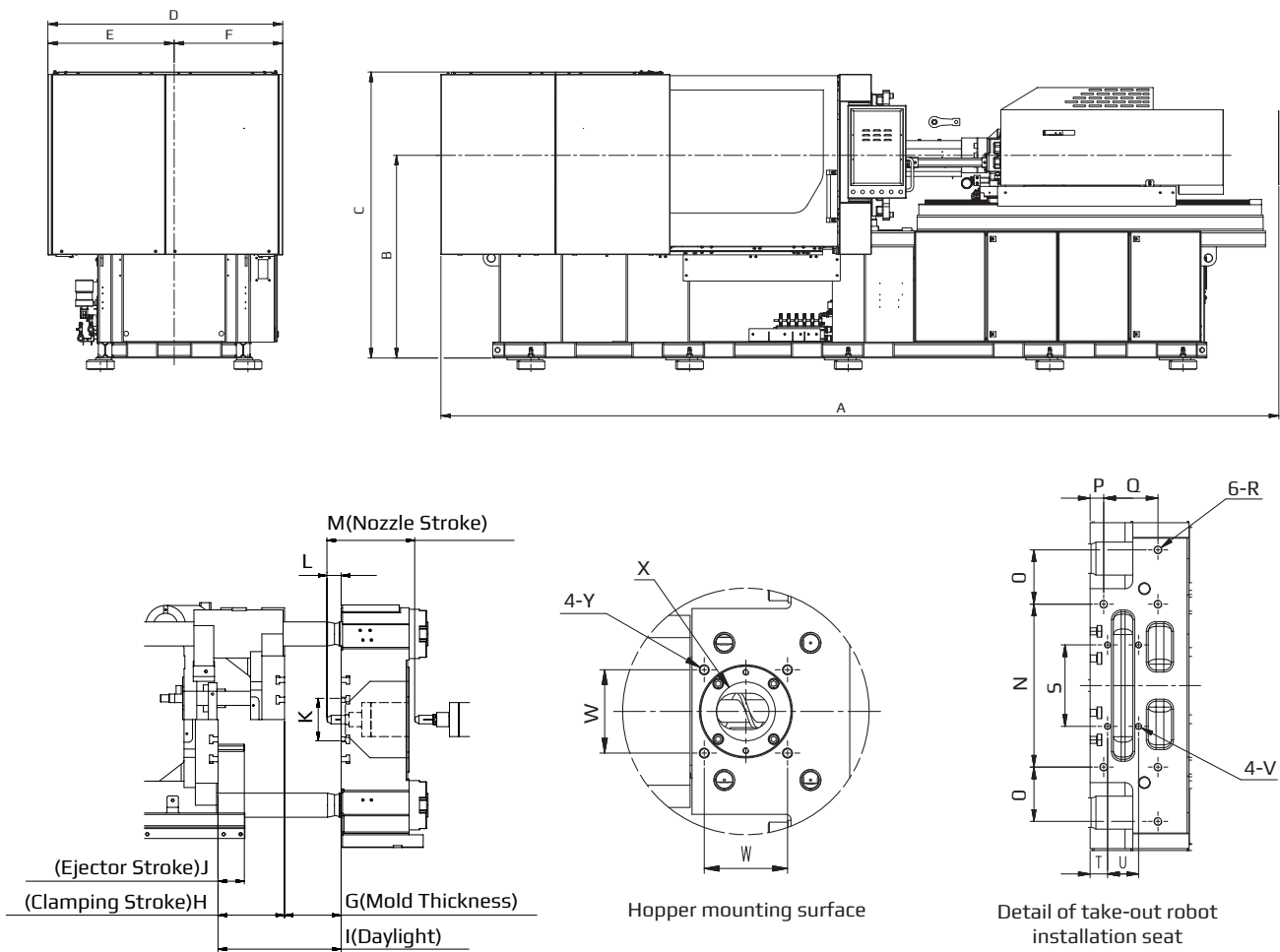


MAJOR SPECIFICATION

Model			theONE* 280E												theONE* 350E												theONE* 400E											
Injection Unit Code			iu 880				iu 1400				iu 1770				iu 880				iu 1400				iu 1770				iu 880				iu 1400				iu 1770			
Screw Code			Y	A	B	C	Y	*A	B	C	Y	A	B	C	Y	A	B	C	Y	A	B	C	Y	*A	B	C	Y	A	B	C	Y	*A	B	C	Y	*A	B	C
Screw Diameter		mm	40	45	50	55	50	55	60	65	55	60	65	70	40	45	50	55	50	55	60	65	55	60	65	70	40	45	50	55	50	55	60	65	55	60	65	70
Screw		mm	240	240	240	240	280	280	280	280	280	280	280	280	240	240	240	240	280	280	280	280	280	280	280	280	240	240	240	240	280	280	280	280	280	280	280	280
Injection Capacity Calculated		㎤	302	382	471	570	550	665	792	929	665	792	929	1078	302	382	471	570	550	665	792	929	665	792	929	1078	302	382	471	570	550	665	792	929	665	792	929	1078
Injection Capacity	PS	g	277	351	434	525	506	612	728	855	612	728	855	991	277	351	434	525	506	612	728	855	612	728	855	991	277	351	434	525	506	612	728	855	612	728	855	991
	PE	g	220	279	344	416	401	486	578	678	486	578	678	787	220	279	344	416	401	486	578	678	486	578	678	787	220	279	344	416	401	486	578	678	486	578	678	787
Injection Pressure		Mpa	275	226	181	147	245	206	172	147	255	216	181	157	275	226	181	147	245	206	172	147	255	216	181	157	275	226	181	147	245	206	172	147	255	216	181	157
		kgf/㎤	2800	2300	1850	1500	2500	2100	1750	1500	2600	2200	1850	1600	2800	2300	1850	1500	2500	2100	1750	1500	2600	2200	1850	1600	2800	2300	1850	1500	2500	2100	1750	1500	2600	2200	1850	1600
Max. Holding Pressure		Mpa	220	180	145	118	196	165	137	118	204	173	145	126	220	180	145	118	196	165	137	118	204	173	145	126	220	180	145	118	196	165	137	118	204	173	145	126
		kgf/㎤	2240	1840	1480	1200	2000	1680	1400	1200	2080	1760	1480	1280	2240	1840	1480	1200	2000	1680	1400	1200	2080	1760	1480	1280	2240	1840	1480	1200	2000	1680	1400	1200	2080	1760	1480	1280
Injection Rate	Standard	㎤ /s	251	318	393	475	295	356	424	498	404	481	564	654	251	318	393	475	295	356	424	498	404	481	564	654	251	318	393	475	295	356	424	498	404	481	564	654
		mm/sec	200				150				170				200				150				170				200				150				170			
Injection Speed	Speed ①	㎤ /s	188	239	295	356	393	475	565	664	475	565	664	770	188	239	295	356	393	475	565	664	475	565	664	770	188	239	295	356	393	475	565	664	475	565	664	770
		mm/sec	150				200				200				150				200				200				150				200				200			
Injection Rate	Speed ②	㎤ /s	377	477	589	713	589	713	848	995	713	848	995	1155	377	477	589	713	589	713	848	995	713	848	995	1155	377	477	589	713	589	713	848	995	713	848	995	1155
		mm/sec	300				300				300				300				300				300				300				300				300			
Injection Rate	Speed ③	㎤ /s	628	795	982	-	982	1188	1414	-	-	-	-	-	628	795	982	-	982	1188	1414	-	-	-	-	-	628	795	982	-	982	1188	1414	-	-	-	-	-
		mm/sec	500				500				-				500				500				-				500				500				-			
Plasticizing Capacity		kg/h	113	156	206	276	206	276	338	413	237	290	354	443	113	156	206	276	206	276	338	413	237	290	354	443	113	156	206	276	206	276	338	413	237	290	354	443
Max Screw Speed		rpm	~350				~350				~300				~350				~350				~300				~350				~350				~300			
Clamping Force		ton(kN)	280(2,744)												350(3,430)												400(3,923)											
Tie Bar Distance		mm	730 x 730												830 x 830												830 x 830											
Opening Stroke		mm	620												725												775											
Clamping Speed		mm/sec	1,427												1,500												1,500											
Daylight		mm	1,350												1,525												1,625											
Die Plate Dimension		mm	1050 x 1050												1150 x 1150												1150 x 1150											
Mold Thickness		mm	250 ~ 730												300 ~ 800												300 ~ 850											
Ejector Force		ton	6.2												6.2												8.0											
Ejector Stroke		mm	220												220												220											
DRY CYCLE (EUROMAP 6)		s-mm	1.8-511												2.1-581												2.1-581											
Hopper Dryer		kg	~75				~75				~75				~75				~75				~75				~75				~75				~75			
Heater		mm	14.2	15.1	17.4	18.5	17.4	18.5	21.4	22.4	20.2	21.4	22.4	23.9	14.2	15.1	17.4	18.5	17.4	18.5	21.4	22.4	20.2	21.4	22.4	23.9	14.2	15.1	17.4	18.5	17.4	18.5	21.4	22.4	20.2	21.4	22.4	23.9
Machine Dimension (LxWxH)		m	6.82 x 1.73 x 2.10				7.06 x 1.73 x 2.10				7.51 x 1.73 x 2.10				7.48 x 1.85 x 2.19				7.48 x 1.85 x 2.19				7.86 x 1.85 x 2.19				7.48 x 1.85 x 2.19				7.48 x 1.85 x 2.19				7.86 x 1.85 x 2.19			
Machine Weight		ton	11.7				12.0				12.5				15.4				15.7				16.0				15.4				15.7				16.0			

the ONE*-E SERIES

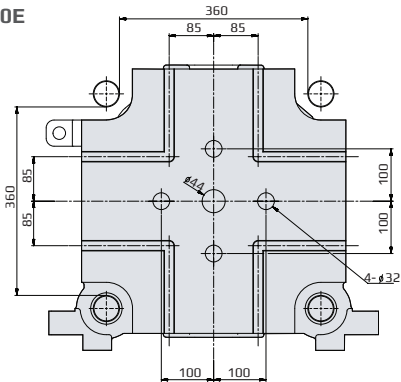
EXTERNAL FORM DRAWING



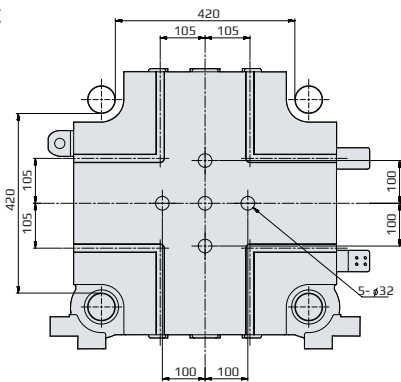
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
theONE* 50E	3808	1149	1563	1158	616	542	150~420	270	690	70	Ø100	50	250	280	70	17.5	35	M12	-	-	-	-	85	Ø48	M10
theONE* 80E	4228	1205	1663	1198	636	562	150~450	320	770	80	Ø100	50	300	280	105	35	70	M16	-	-	-	-	85	Ø48	M10
theONE* 110E	4848	1272	1810	1404	752	652	150~510	400	910	120	Ø100	50	310	350	105	35	70	M16	-	-	-	-	85	Ø60	M10
theONE* 130E	5089	1272	1810	1404	752	652	150~550	400	950	120	Ø100	50	350	350	105	35	70	M16	-	-	-	-	85	Ø60	M10
theONE* 170E	5281	1289	1870	1474	787	687	200~600	460	1060	130	Ø100	50	350	420	140	35	140	M20	210	45	80	M16	85	Ø60	M10
theONE* 220E	6486	1339	1995	1644	847	797	200~650	575	1225	220	Ø100	50	420	560	140	35	140	M20	350	50	80	M16	85	Ø64	M10
theONE* 280E	7060	1391	2098	1734	917	817	250~730	620	1350	220	Ø100	50	450	700	140	35	140	M20	450	60	80	M20	85	Ø64	M10
theONE* 350E	7863	1452	2190	1854	977	877	300~800	725	1525	220	Ø100	50	500	700	140	35	140	M20	620	160	80	M20	85	Ø64	M10
theONE* 400E	7863	1452	2190	1854	977	877	300~850	775	1625	220	Ø100	50	500	700	140	35	140	M20	620	160	80	M20	85	Ø64	M10

Moving Platen Drawing

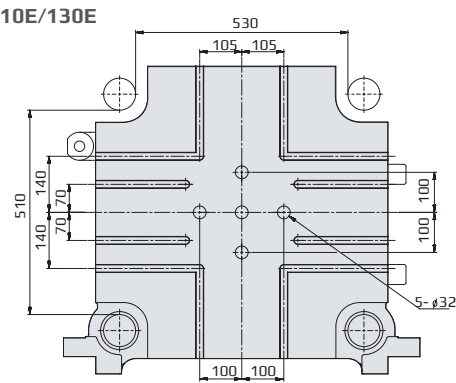
theONE* 50E



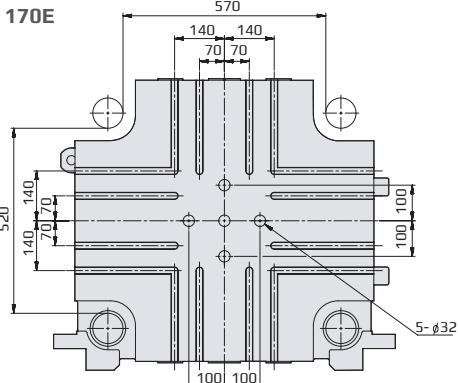
theONE* 80E



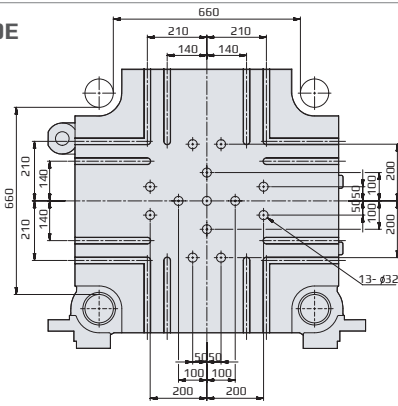
theONE* 110E/130E



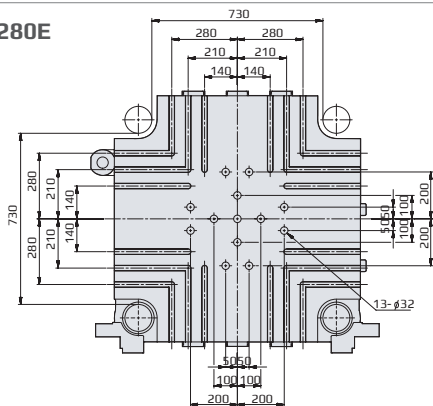
theONE* 170E



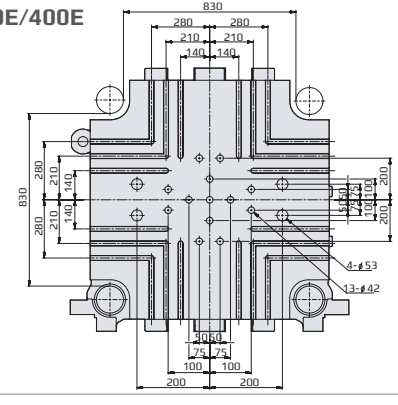
theONE* 220E

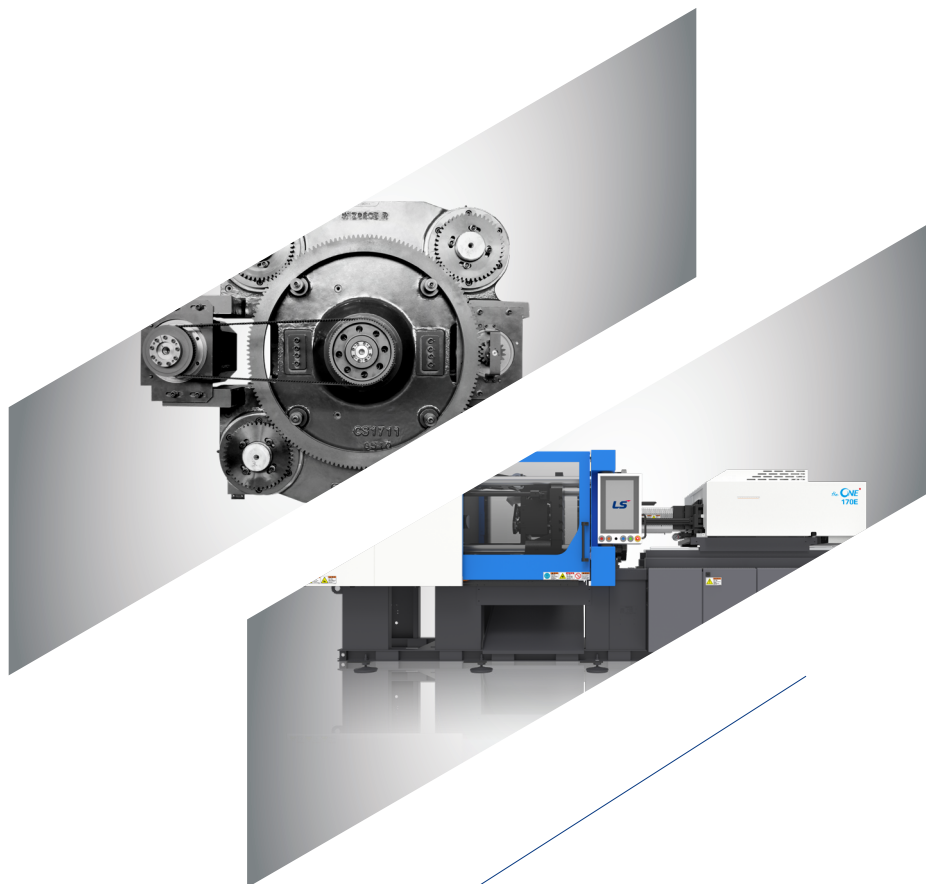


theONE* 280E



theONE* 350E/400E





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