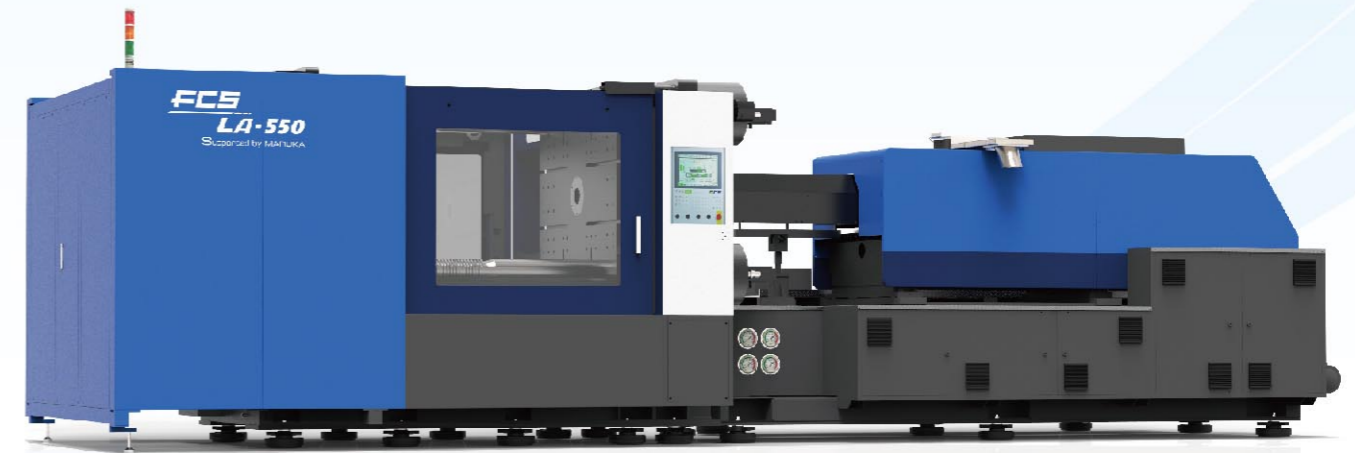


70 Global Service Centers



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FCS Group



Fu Chun Shin Machinery Manufacture Co., Ltd.

No. 269, Baodong Road, Pitou Village, Guanmiao District, Tainan City 71841, Taiwan
TEL: +886-6-5950688 • FAX: +886-6-5951129 • E-mail: fcsco@fcs.com.tw

Sold and Serviced in America by MARUKA U.S.A. INC.

Missouri (Headquarter)
1210 NE Douglas Lee's Summit, MO 64086-4604
TEL : (816)524-1811 FAX : (816)524-5444

New Jersey
45 Route 46 East, Suite 610 P.O. Box 747 Pine Brook, NJ 07058
TEL : (973)487-3800 (800)631-0426
FAX : (973)244-2147

Los Angeles
16440 Manning Way, Cerritos, CA 90703
TEL : (562)926-3654 FAX : (562)926-0884

Chicago
1082 Garfield Street Lombard, IL 60148
TEL : (630)953-1707 FAX : (630)953-1753

Charlotte
4526-B Westinghouse Blvd. Charlotte, NC 28273
Tel: (704) 588-9910 Fax: (704) 588-9950

NOTES

- The figures are subject to change without any legal obligation on the part of the manufacture.
- The specifications are expressed in SI units. (1Mpa=10.2kgf/cm² 1kN=0.102tonf)
- The applicable max. injection pressure and holding pressure will be restricted according to the material in the real molding operation.
- The applicable max. injection pressure and holding pressure will be restricted by molding conditions and cycle time.
- The figures for the max. injection rate and the max. injection speed are theoretical values.
- The actual injection rate and injection speed will be restricted by pressure.
- A large-sized screw may not be applicable to some kinds of material.
- Breaker capacity may be changed when optional devices are attached.



For safe use of LA Series, please read the respective manual carefully, especially sections for operation and maintenance, and follow all the safety precaution instructions specified in the manual.

Photographs in the catalog include optional devices. If these products and technologies (including programs) are subject to Taiwan export control laws, including Taiwan Foreign Exchange and Foreign Trade Law, the products and technologies are required to obtain an export license of the Taiwan government, when exported from Taiwan.

Version 2020

LA SERIES

Two-Platen Injection Molding Machine

Your mini Giant

Producing plastics products more efficiently has already become a key factor for winning the competition in the market, FCS two-platen injection molding machines are the best option for you, to help you decrease space usage and save energy to reach your goals.

- In comparison with conventional machinery, the LA has a larger mold clamping stroke and capacity, allowing for products with greater depth.
- Our proven two-platen-design saves up to 30% of your valuable floor space.
- The high-pressure clamping control is easy to set up and has higher precision.
- Accurate and stable mold closing force is achieved by continuously monitoring and controlling the pressure in each tonnage cylinder throughout the injection cycle.
- Servo motor technology allows customers to see an average power saving between 40%-70%.

Comparison of 2-platen and 3-platen type injection machine.

Item	Type	3-Platen	
		2-Platen	Direct Clamping
Footprint	Smallest	Common	Largest
Daylight	Largest	Common	Smallest
Die Height Adjustment	Shortest	Short	Long
Technique	Highest	High	Common
Cleanliness	Cleanest	Cleaner	Normal



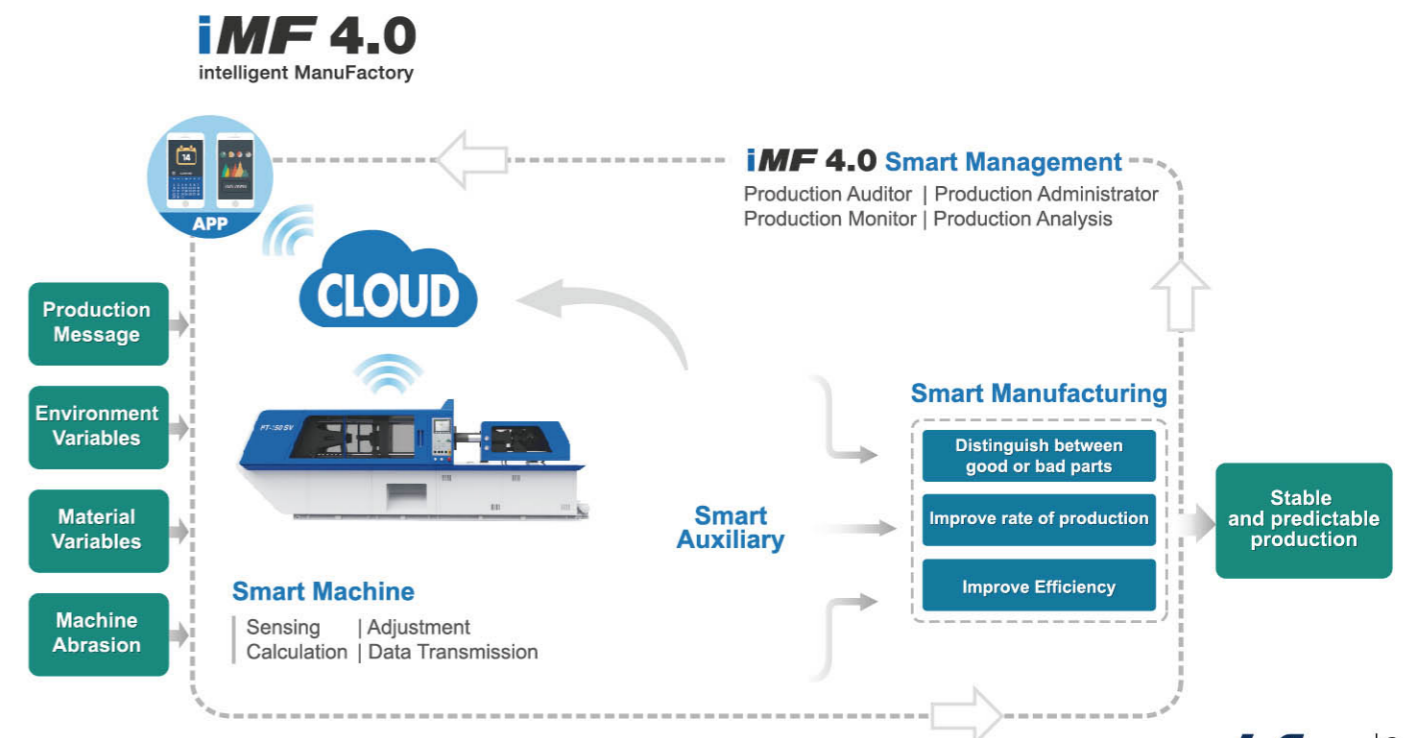
Product Applications

Control Unit

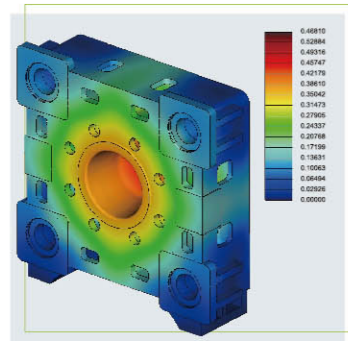
- A 10"~12" TFT LCD screen display, with 16 million color palettes, 800x600 pixel resolution and a touchscreen panel (optional); User Friendly controller.
- Equipped with a powerful CPU (1.1GHz~1.6 GHz). System reaction rate of 1ms promotes sensibility and stability of motion.
- Multiple communication interfaces (e.g. USB, RS232, Ethernet, EtherCAT, Sercos III)
- Multiple optional operation languages available for customers to choose from. (e.g. Chinese, English, German, Spanish, among others).
- Ability to detect abnormal temperatures and electrical wire connections.
- A multi-level authorization with password protection to prevent anyone from randomly changing parameters.
- The operating system contains integrated softwares such as statistic process control (SPC) and injection graphs for efficient quality assurance and increased productivity.
- Optional - EasyNet: The easy and cost effective host computer; FCS6500 offers interfaces for a high end production factory computer system.
- All software is stored on an exchangeable compact flash driver (CF Card), reducing downtime and providing ease of service.
- This controller also supports the open industry standard OPC. The controller was designed according to IEC-6113, featured together with a module, thus saving maintenance time.

Intelligent ManuFactory

- **Stabilization** - The injection unit has adaptive control to meet slight fluctuations in production conditions.
- **Optimization** - Process quality sensor utilized to improve production quality and reduce production waste.
- **Automation** - Communication between the machine and auxiliary equipment for seamless control of your molding parameters.
- **Intelligent Machine** - Extensive use of smart monitoring and remote maintenance tools to reduce unplanned downtime and to effectively plan maintenance.

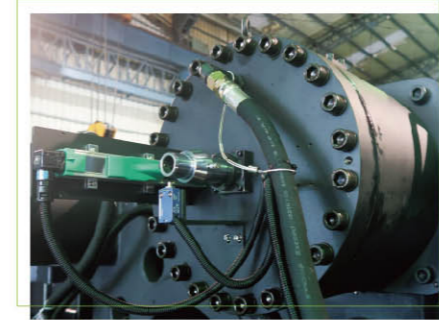


Specific Features



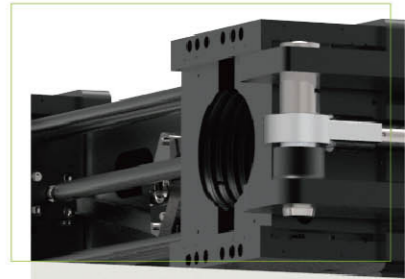
Clamping Unit

- Platens are designed with FEM analysis to ensure the machine and the mold sustaining force balance which extends the machine life and also increases product quality.



High Pressure Cylinder Design

- The industry proven valves balance force across all four tie bars to minimize platen deflection.



Tie Bar Locking Mechanism

- A tie bar locking system with split nut mechanism for accurate clamping force and position.



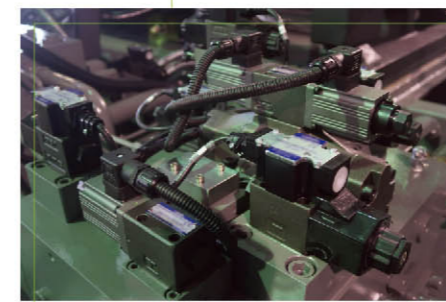
Injection Unit

- An injection unit featured with a multi-axled driven mechanism for precision and stability.



Moving Platen Guide

- Moving platen support with exact guiding design to ensure precise movements even when heavy molds are mounted.



Power Saving Hydraulic Loop

- High pressure to break mold vacuum.
- Low pressure protection to enhance the mold life.
- Mold clamping system with high-pressure design can increase the clamping force and ensures operational stability.

Automotive Application



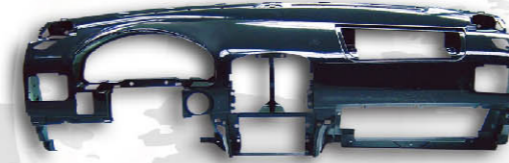
Wheel Cap



Inner Door Trim



Fender



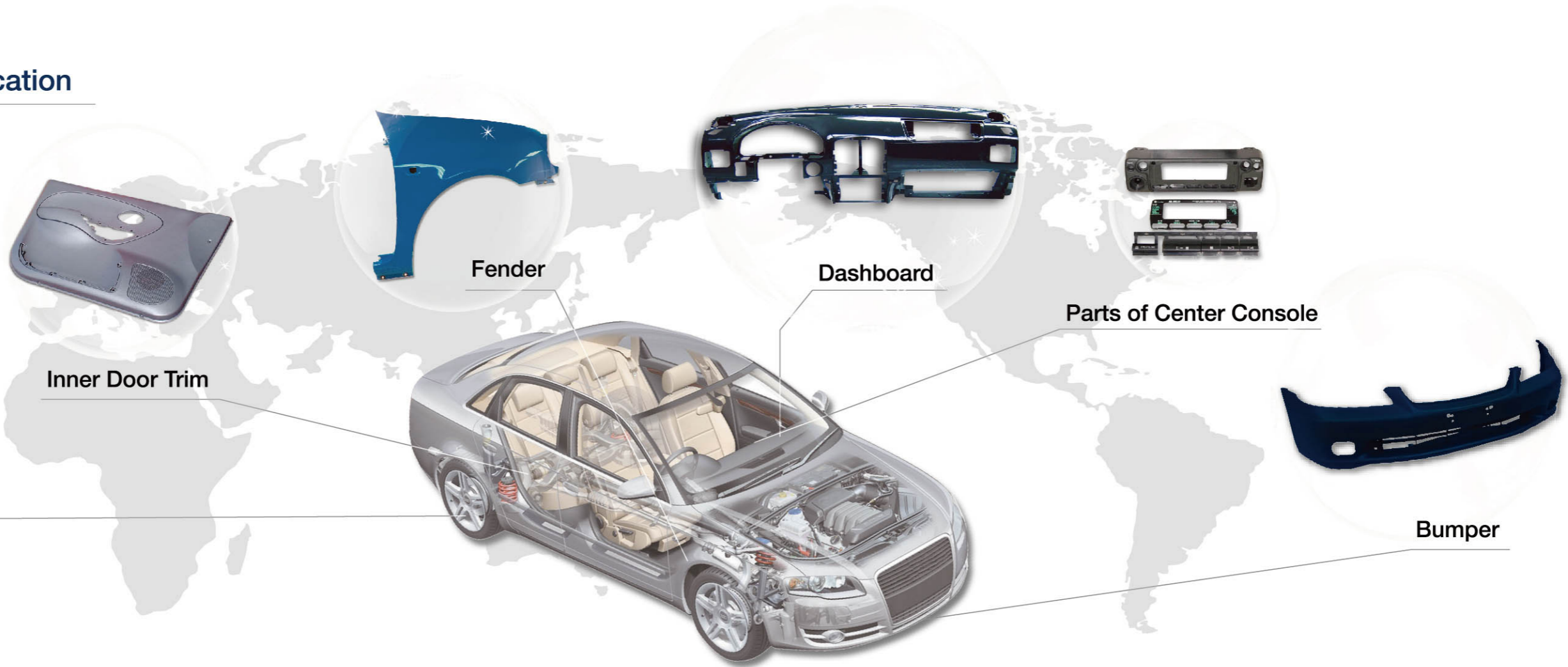
Dashboard



Parts of Center Console



Bumper



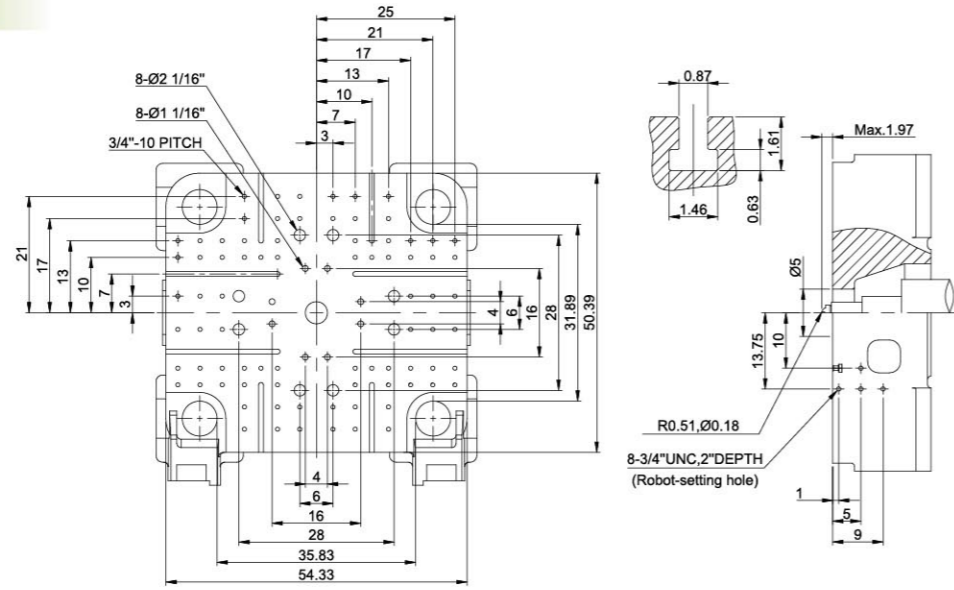
Specifications

ITEMS		UNIT	LA-550		LA-770		LA-990		LA-1210		LA-1430		LA-1650		LA-1870		LA-2090		LA-2310		LA-2640		LA-3080		LA-3630		LA-4400							
Injection unit	Screw diameter	in (mm)	2.95 (75)	3.35 (85)	3.74 (95)	3.35 (85)	3.74 (95)	4.13 (105)	3.74 (95)	3.94 (100)	4.33 (110)	3.94 (100)	4.33 (110)	4.72 (120)	4.33 (110)	4.72 (120)	5.12 (130)	4.72 (120)	5.12 (130)	5.51 (140)	5.12 (140)	5.51 (150)	5.12 (140)	5.51 (150)	5.91 (160)	6.30 (160)	6.30 (160)	6.69 (170)	7.48 (190)	7.87 (200)				
	Screw stroke	in	16.54		16.93		17.72		19.49		21.26		23.03		24.80		29.53		33.46		33.46		350.4		36.61		39.37							
	Theoretical shot volume	in ³	113.17	145.36	181.58	148.82	185.90	227.10	194.55	215.57	260.83	237.12	286.92	341.46	313.00	372.50	437.17	403.54	473.60	549.26	510.03	591.51	704.18	808.37	798.07	916.15	798.07	916.15	959.26	1091.43	1140.48	1287.50	1729.31	1916.13
	Shot weight of injection (PS)	oz	59	76	95	78	98	119	102	113	137	125	151	179	164	196	230	212	249	288	268	311	370	424	419	481	419	481	504	573	599	676	908	1006
	Injection pressure	psi	35072	27305	21859	34771	27836	22787	31276	28226	23327	30108	24883	20908	28561	23999	20449	29205	24885	21457	24885	21457	27309	23789	27309	23789	27309	23789	25811	22686	24269	21497	19769	17482
	Injection speed	in ³ /sec	3.40		3.05		3.39		3.18		3.21		3.20		3.41		3.14		3.14		3.14		3.14		3.30		3.33		3.11					
Injection rate	in ³ /sec	23.24	29.85	37.29	26.79	33.47	40.88	37.23	41.26	49.92	38.68	46.80	55.70	47.30	56.29	66.06	56.07	65.80	76.31	70.19	81.41	74.88	85.96	74.88	85.96	74.88	85.96	90.23	102.67	103.65	117.01	136.66	151.42	
Mold clamping unit	Mold clamping force	U.S.ton	550		770		990		1210		1430		1650		1870		2090		2310		2640		3080		3630		4400							
	Mold clamping stroke	in	49.21		53.15		62.99		80.71		90.55		94.49		102.36		102.36		110.24		114.17		125.98		125.98		137.80							
	Mold thickness	in	15.74~31.49		15.74~37.41		19.68~43.31		23.62~49.21		23.62~55.12		27.56~59.06		27.56~62.99		27.56~62.99		27.56~70.87		31.49~70.87		35.43~74.80		39.37~78.74		39.37~82.68							
	Daylight	in	64.96		68.90		82.68		104.33		114.17		122.05		129.92		129.92		137.80		145.67		161.42		165.35		177.17							
	Tie bar spacing (H x V)	in	35.82x31.88		41.33x36.61		46.46x39.76		49.21x44.09		55.12x50.39		60.24x54.33		64.96x58.27		70.87x61.02		74.80x62.99		78.74x66.93		86.61x70.87		90.55x74.80		94.49x80.71							
	Mold platen (H x V)	in	54.33x50.39		61.42x56.69		67.32x61.02		70.87x66.14		79.92x74.80		86.22x80.31		96.06x89.37		102.36x92.13		106.29x94.09		111.81x100.00		120.08x106.29		131.89x116.14		135.83x122.05							
	Ejector stroke	in	9.84		9.84		11.81		13.78		13.78		15.75		15.75		17.72		17.72		17.72		17.72		17.72		21.65		21.65					
Ejector force	U.S.ton	12.1		12.1		23.5		26.3		26.3		40.6		40.6		50.8		50.8		50.8		50.8		50.8		64.6		64.6						
Electrical equipment	Max.pump driving motor	kW(460V)	75		82		114		114		132		155		171		199		199		199		228		246		269							
	Pump driving motor	HP (kW)	13(9.7)		23(17.2)		23(17.2)		23(17.2)		23(17.2)		25.5(19.0)		25.5(19.0)		25.5(19.0)		25.5(19.0)		25.5(19.0)		35.5(26.5)		35.5(26.5)		35.5(26.5)							
	Temperature controller	set	8		8		8		8		8		9		9		8		8		8		8		8		8							
	Heater capacity	kW	35.2		41.7		47.2		51.3		65.2		76.1		76.1		113.2		113.2		113.2		113.2		123.2		175							
Others	Machine dimensions (L x W x H)	in	314.96x102.36x82.67		322.83x110.23x86.61		366.14x125.98x94.49		413.38x133.86x102.36		425.19x137.79x112.20		464.56x149.60x118.11		492.13x155.51x125.98		551.18x177.16x129.92		578.74x181.10x135.83		590.55x181.10x141.73		625.98x188.98x149.60		637.79x196.85x159.45		653.54x208.66x165.35							
	Oil tank capacity	U.S.Gallon	264.2		290.6		330.2		383.1		449.1		528.4		620.8		665.7		665.7		665.7		747.6		747.6		845.4							
	Machine weight	U.S.ton	29		35		43		53		66		83		110		132		154		176		209		242		275							
	Max. system pressure	psi	2000		2000		2000		2000		2000		2000		2000		2000		2000		2000		2000		2000		2000							

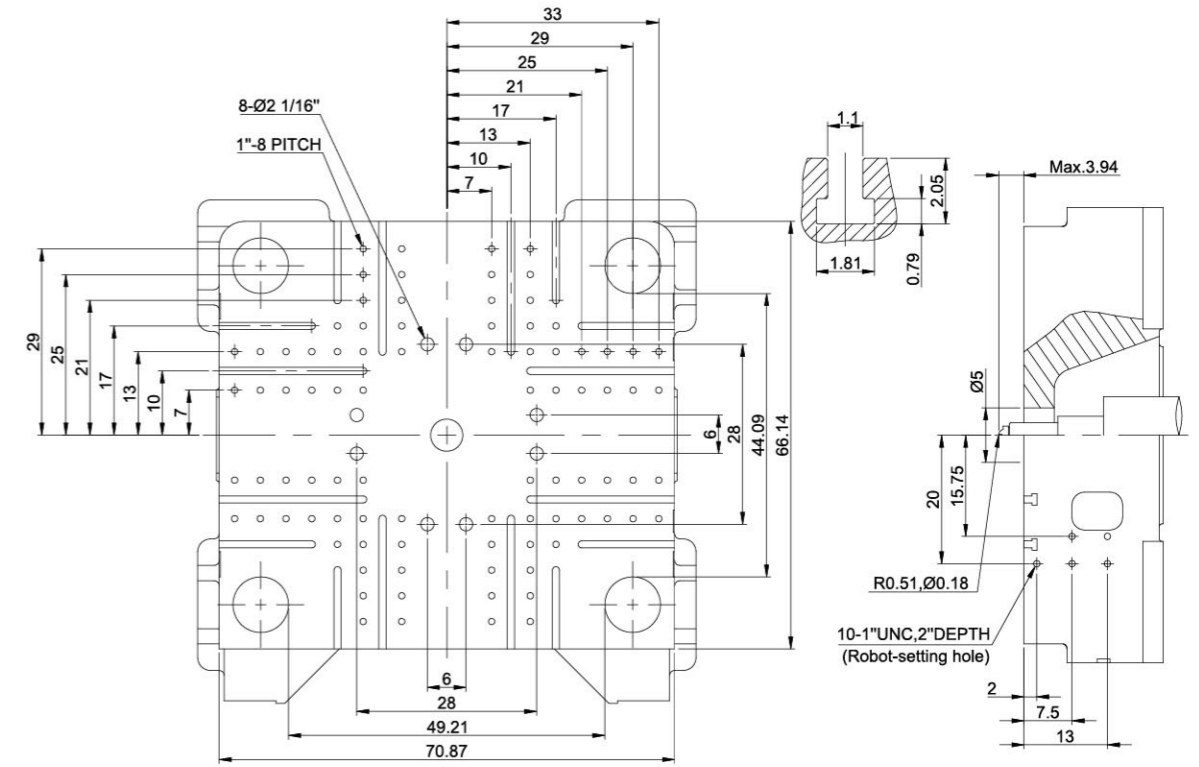
The features are for your reference only. Due to continuous improvements, we reserve the right to amend any of the above specifications without prior notice.

Mold Platen Dimension

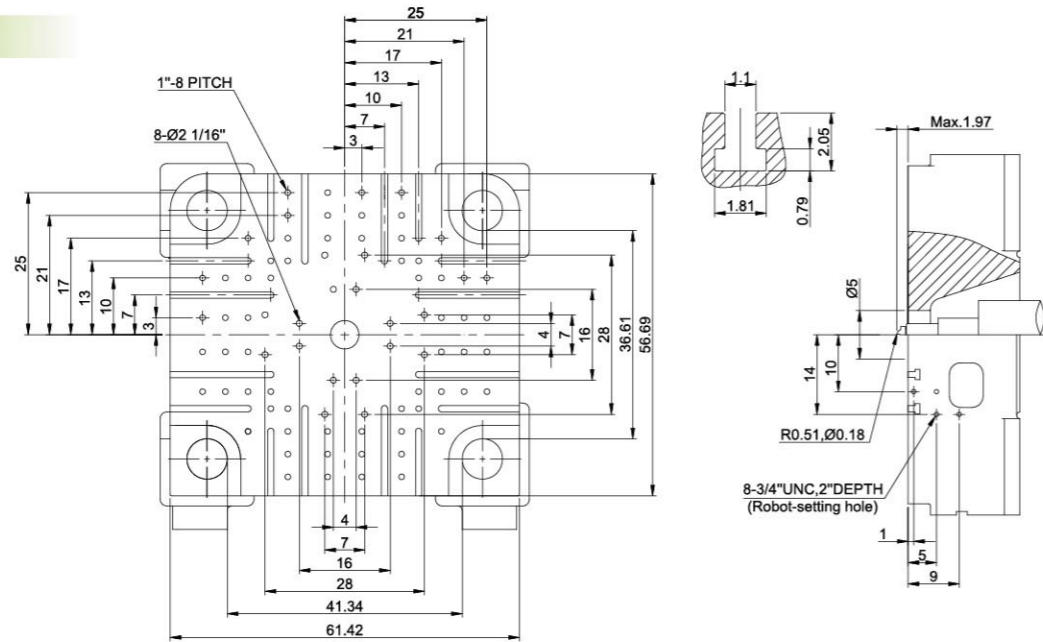
LA 550



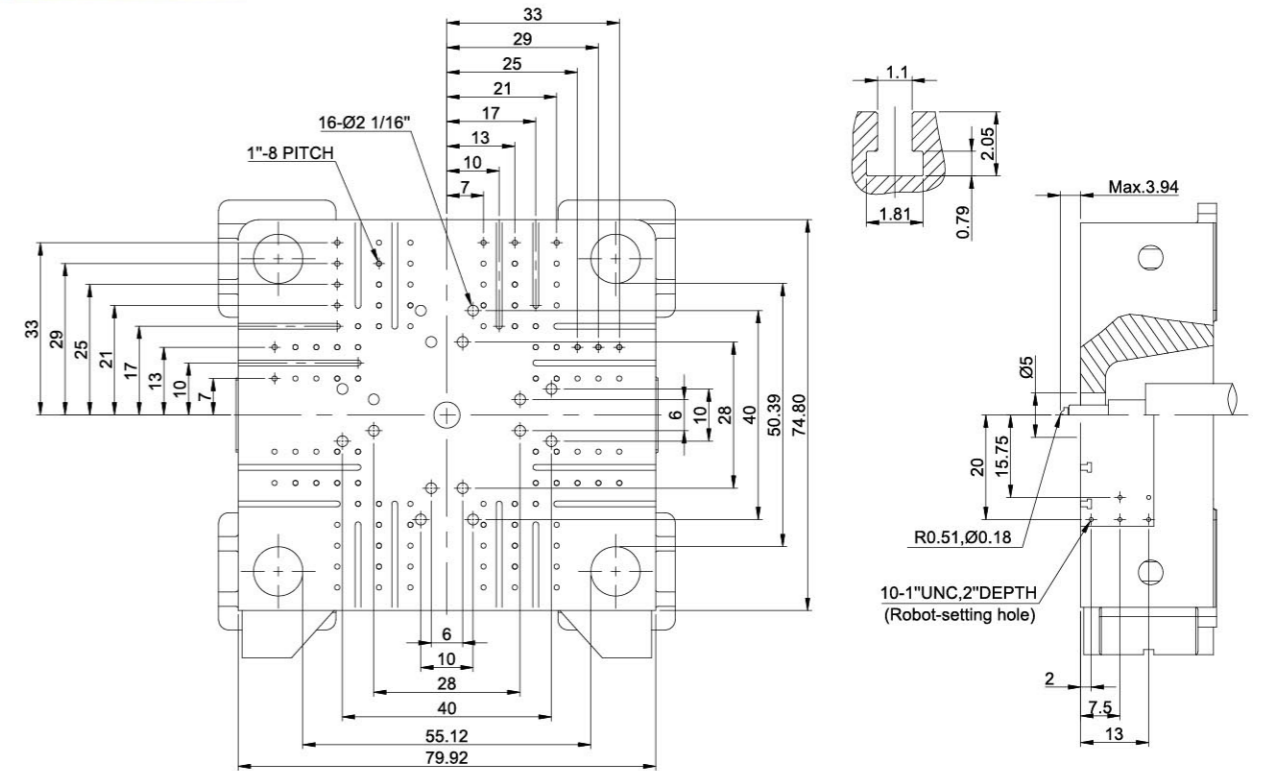
LA 1210



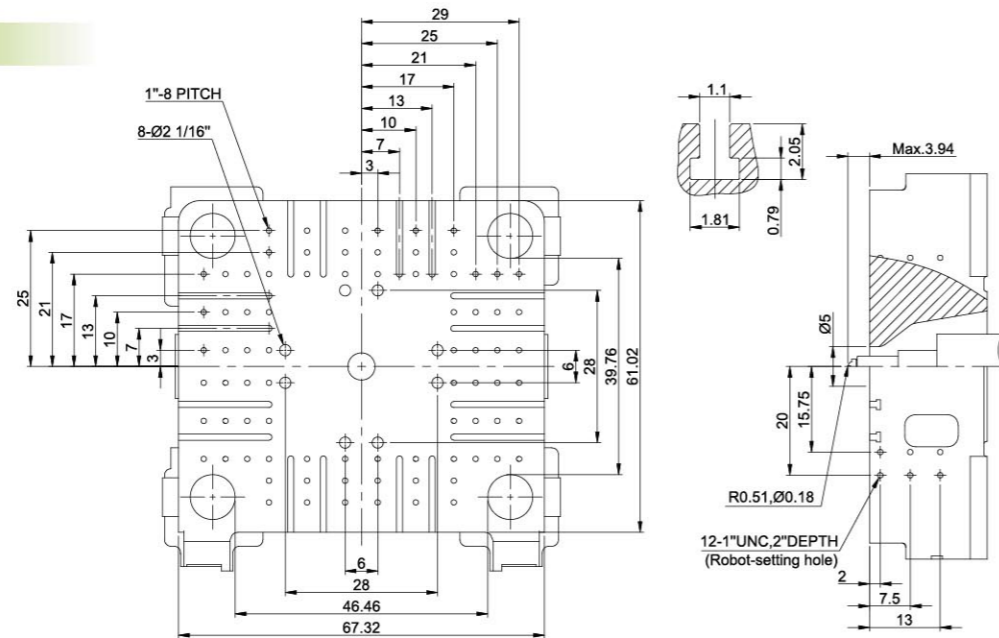
LA 770



LA 1430

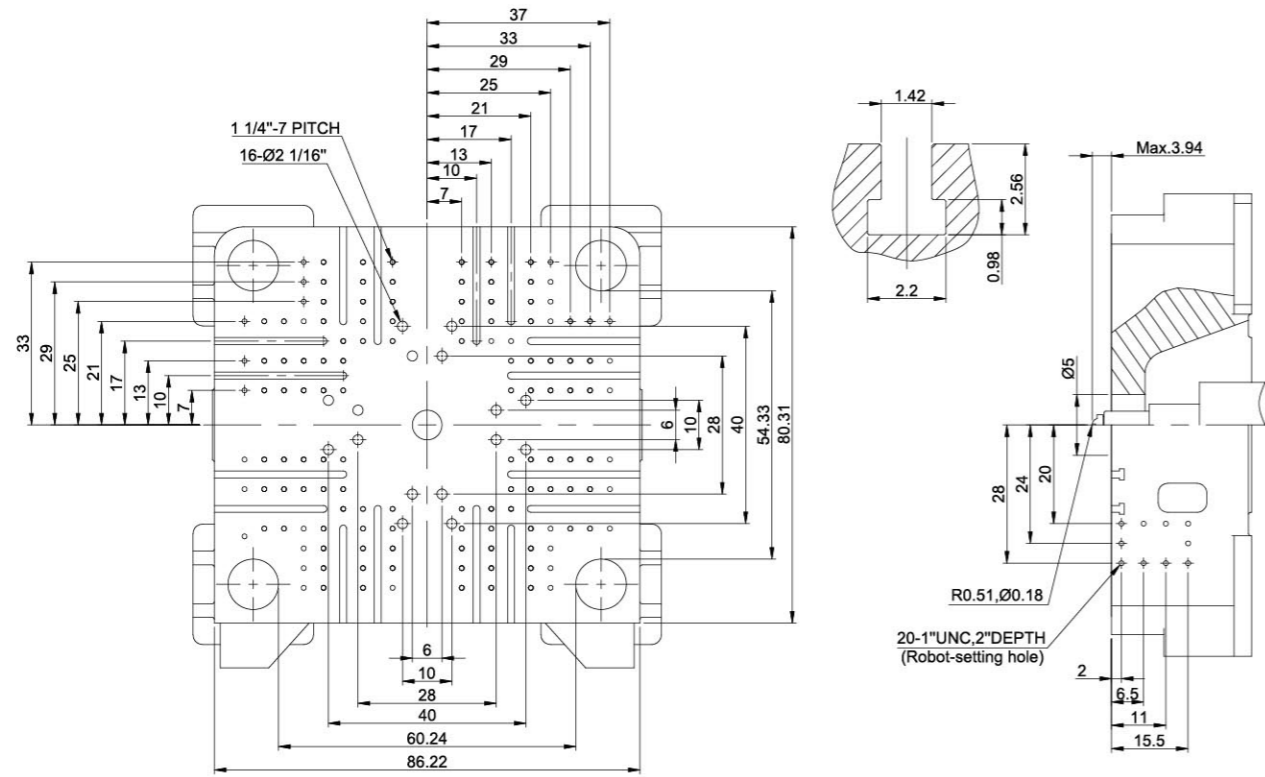


LA 990

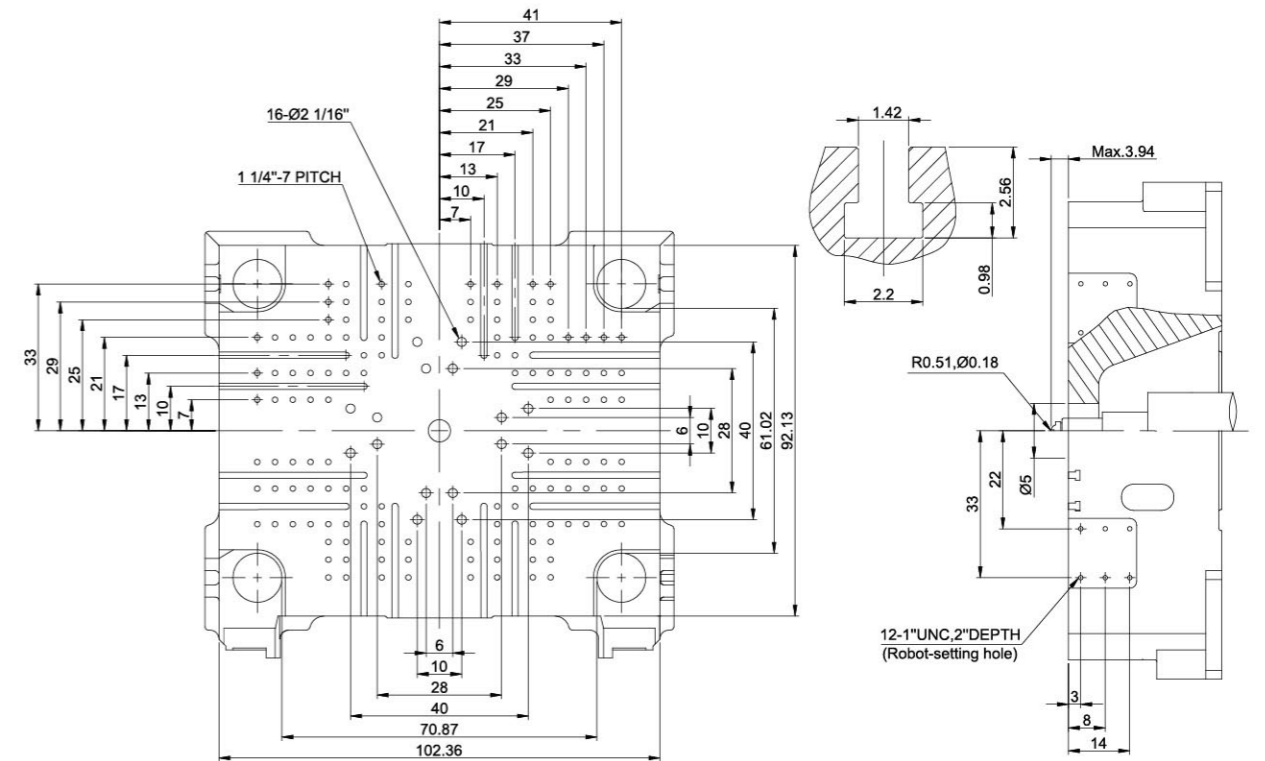


Mold Platen Dimension

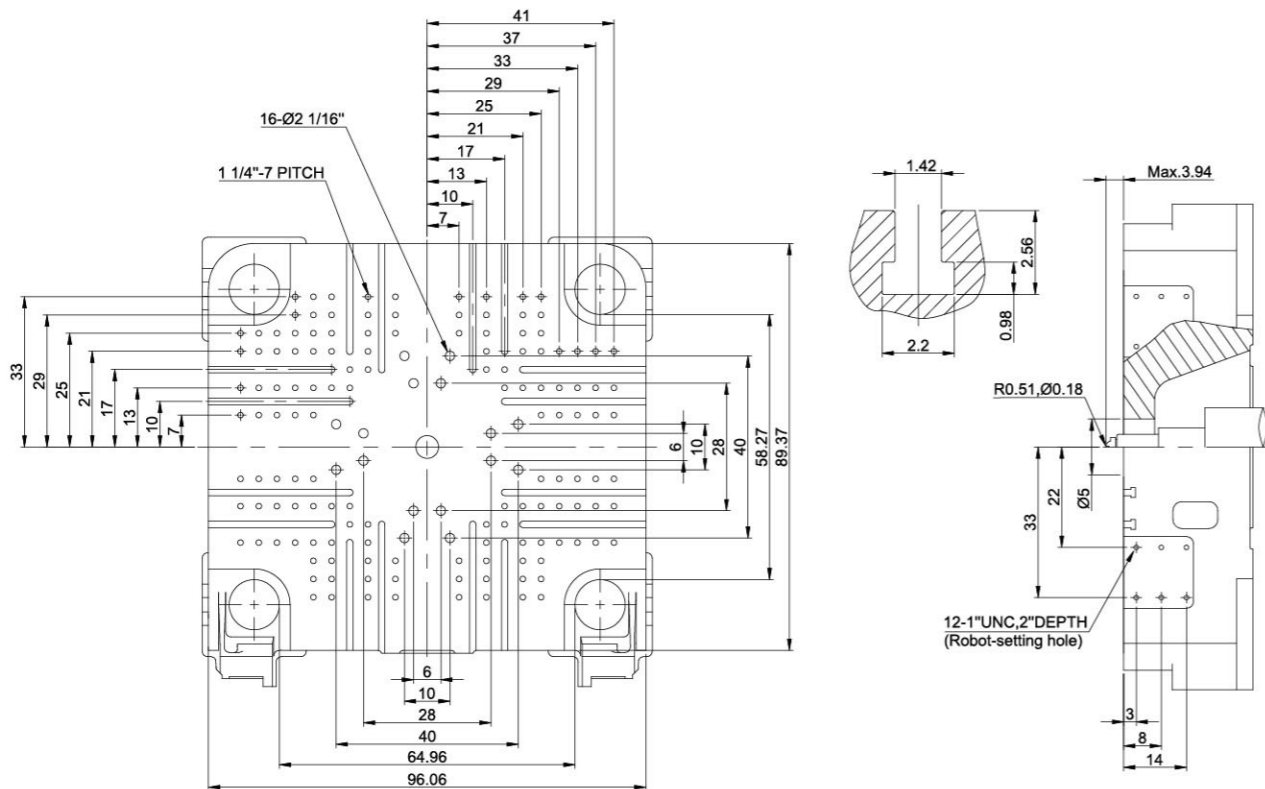
LA 1650



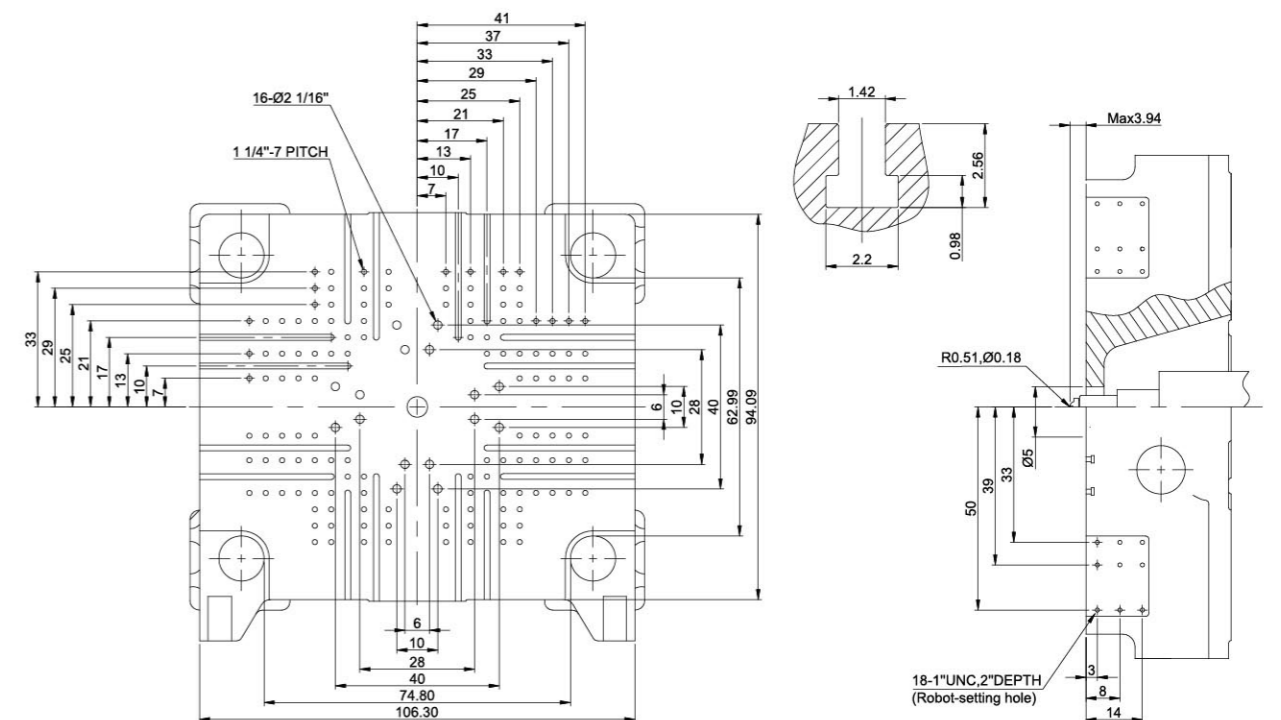
LA 2090



LA 1870

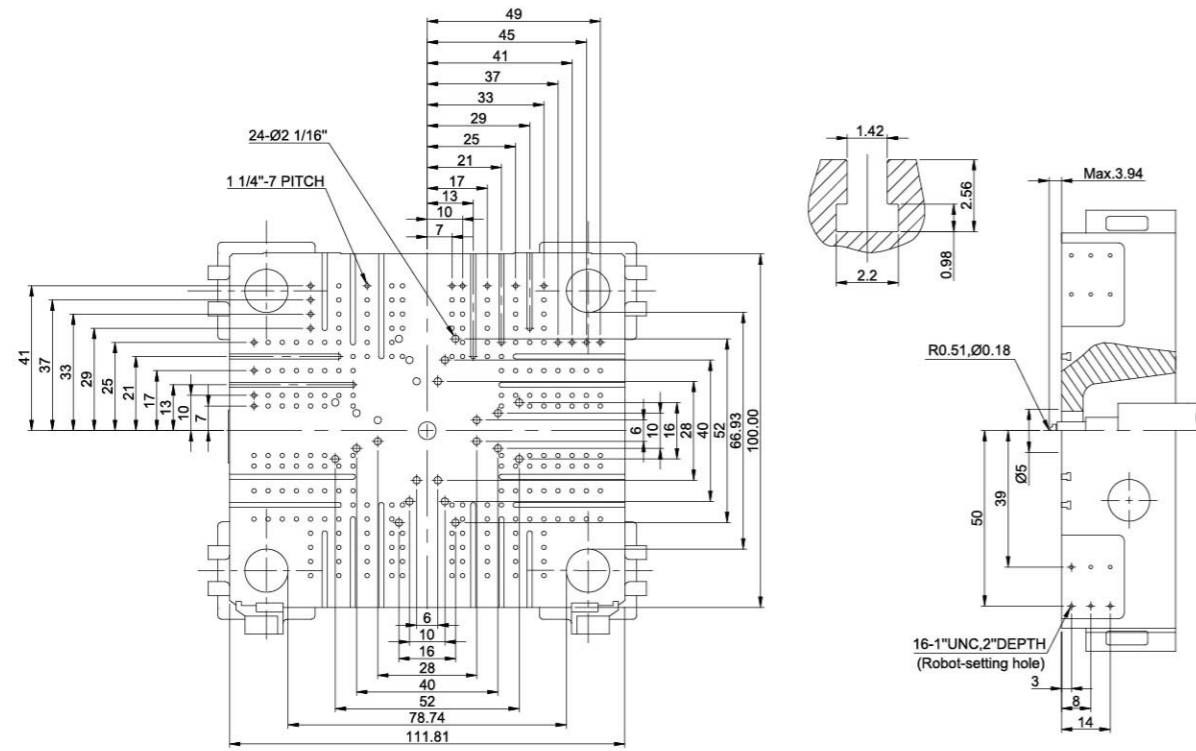


LA 2310

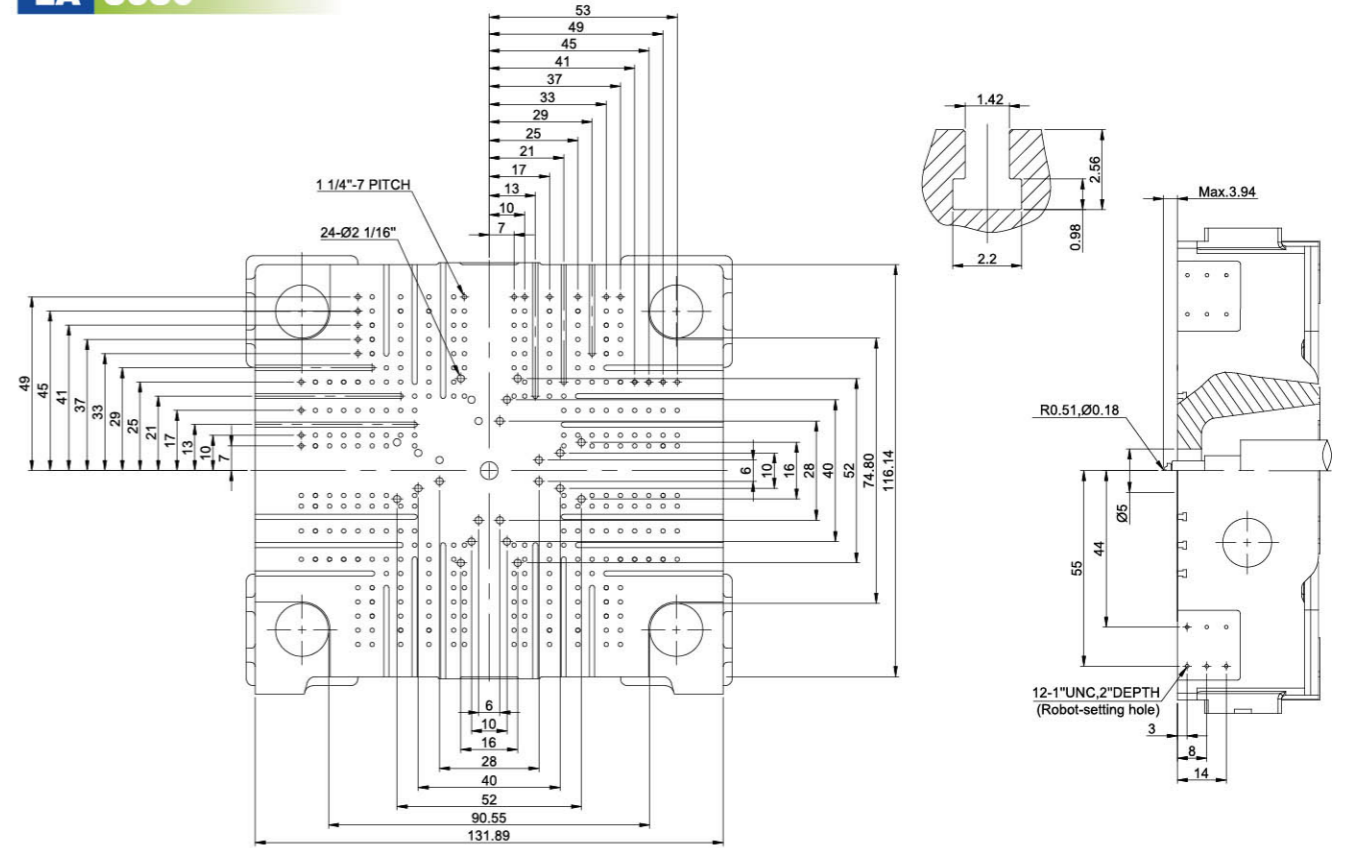


Mold Platen Dimension

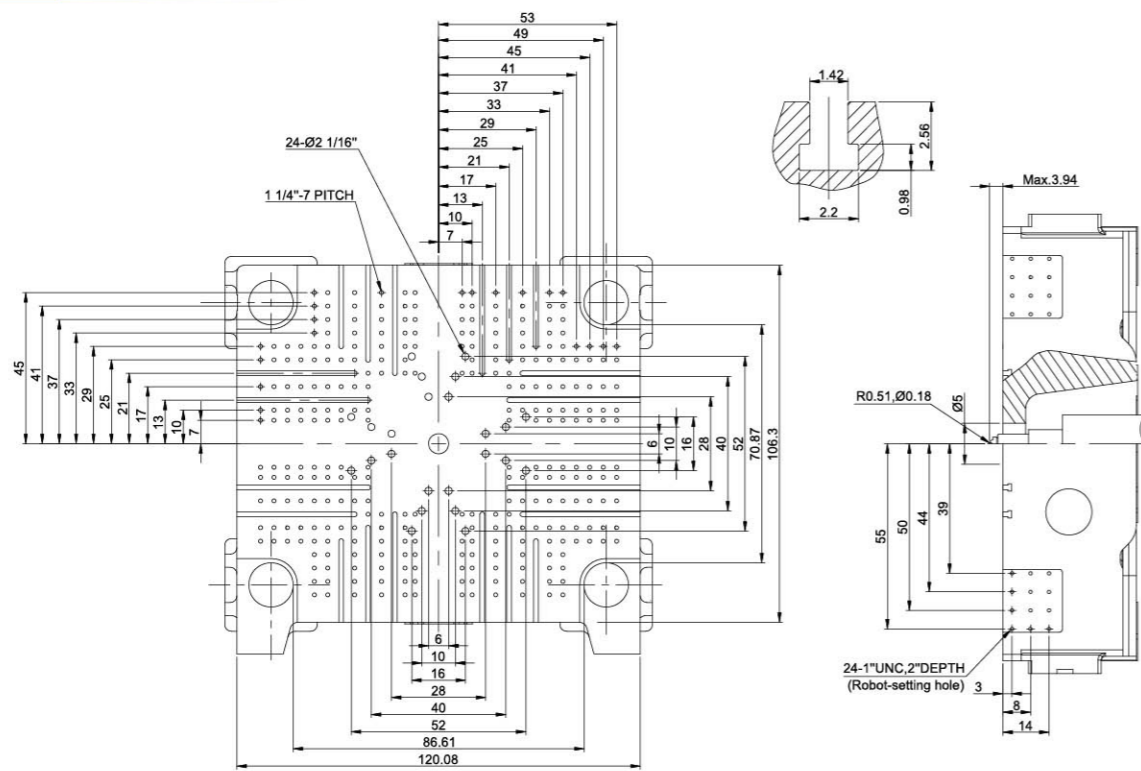
LA 2640



LA 3630



LA 3080



LA 4400

