

NINGBO ZHAFIR PLASTICS MACHINERY MANUFACTURING CO., LTD.

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ZE-F

FAST CYCLING INJECTION
MOLDING MACHINE

1,500 – 4,500 kN

ZF 20200705-IV



TECHNICAL DATA ZE1500F

		ZE1500F						
CLAMPING UNIT	Clamping force	kN					1500	
	Mold opening stroke	mm					420	
	Mold height min.	mm					180	
	Mold height max.	mm					520	
	Max. daylight	mm					940	
	Dist. between tie bars (H×V)	mm					520×520	
	Min. mold dimension	mm					335×335	
	Ejector stroke	mm					120	
	Ejector force	kN					33	
	Size of mold platen (H×V)	mm					770×770	
INJECTION UNIT			A	B	C(op) ³	A	B	C(op) ³
	Screw diameter	mm	36	40	45	40	45	50
	Screw L/D ratio	L/D	25	25	25	25	25	25
	Injection volume (theoretical)	cm ³	173	213	270	252	319	394
	Screw speed	rpm	400		350			
	Plasticizing rate (HDPE) ¹	g/s	43	54	68.6	47.3	60	74.4
	Nozzle contact force	kN	63.7		63.7			
	Heating power	kW	17.5	19.9	21.7	20.7	24.9	26.3
	INJECTION UNIT		430h			640h		
	Injection speed	mm/s	200		160			
Injection rate ²	cm ³ /s	204	251	318	201	254	314	
Injection pressure	MPa	247	200	158	253	200	162	
	bar	2470	2000	1580	2530	2000	1620	
INJECTION UNIT		430h			640h			
Injection speed	mm/s	350		350				
Injection rate ²	cm ³ /s	356	439	556	439	556	687	
Injection pressure	MPa	247	200	158	253	200	162	
	bar	2470	2000	1580	2530	2000	1620	
OTHERS	Connection power	kW/A	430h:37/62 430:31/51		640h:46/77 640:33/56			
	Pressure	MPa	17.5		17.5			
	Flow	l/min	45		45			
	Oil tank	l	93		93			
	Hopper capacity	l	25		25			
Machine dimension	m	6.1×1.5×2.2		6.3×1.5×2.2				
Machine weight	t	7.7		7.8				

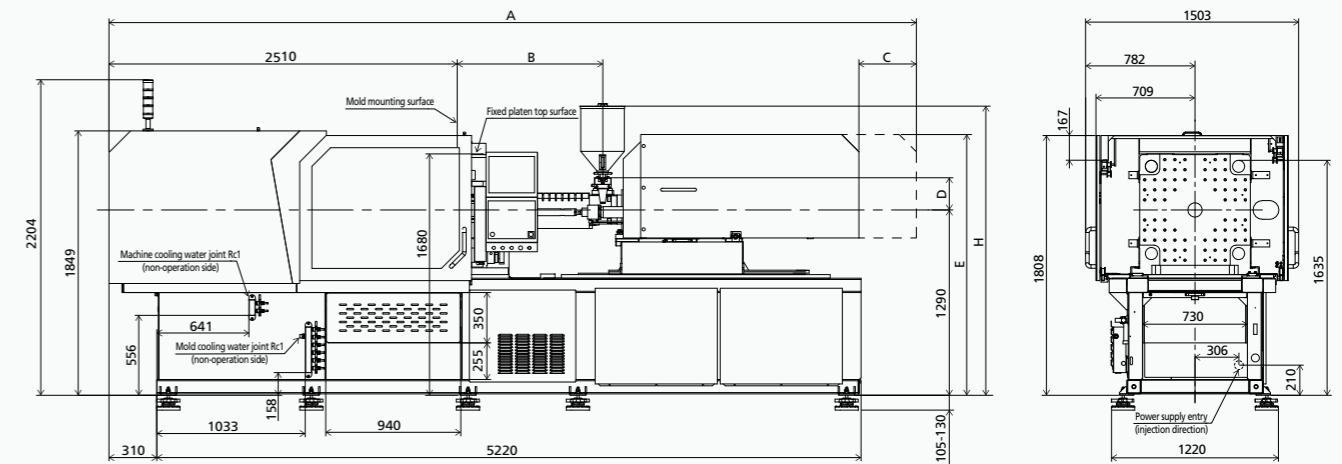
NOTE: ¹ Plasticizing capacity (HDPE): with standard packaging screw configuration, tested according to EUROMAP 19.

² Theoretical value at max. injection speed.

³ Op means optional plasticizing assembly.

The above data are only for ZHAFIR standard machines, and the data for customized are slightly different. We reserve the right to make changes as a result of further technical advances.

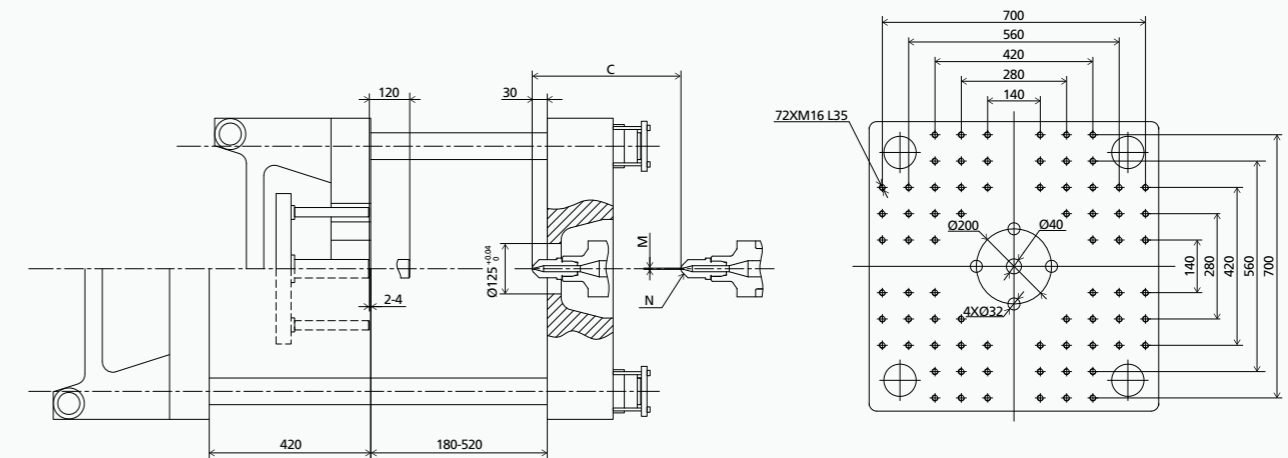
MACHINE DIMENSIONS



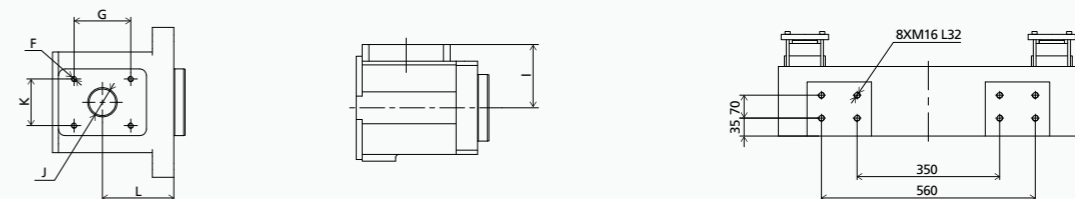
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
430,430h	5785/5902/6022	1093/1210/1330	400	224	1815	4×M8 L15	85	2038	135	Ø50	70	99	Ø4	SR10
640,640h	5943/6108/6220	1211/1376/1488	400	214	1815	4×M8 L15	85	2038	125	Ø50	70	138	Ø4	SR10

Figures at "A,B" refers to the respective size of screw A/B/C on the injection unit.

PLATEN DIMENSIONS



OTHERS DIMENSIONS



TECHNICAL DATA ZE1900F

		ZE1900F						
CLAMPING UNIT	Clamping force	kN	1900					
	Mold opening stroke	mm	470					
	Mold height min.	mm	200					
	Mold height max.	mm	550					
	Max. daylight	mm	1020					
	Dist. between tie bars (H×V)	mm	570×570					
	Min. mold dimension	mm	370×370					
	Ejector stroke	mm	150					
	Ejector force	kN	55					
	Size of mold platen (H×V)	mm	840×840					
INJECTION UNIT			A	B	C(op) ³	A	B	C(op) ³
	Screw diameter	mm	40	45	50	45	50	55
	Screw L/D ratio	L/D	25	25	25	25	25	25
	Injection volume (theoretical)	cm ³	252	319	394	333	412	498
	Screw speed	rpm		350			320	
	Plasticizing rate (HDPE) ¹	g/s	47.3	60	74.4	55	68	86
	Nozzle contact force	kN		63.7			88.2	
	Heating power	kW	20.7	24.9	26.3	27.1	32	34.1
	INJECTION UNIT			640			830	
	Injection speed	mm/s		160			160	
OTHERS	Injection rate ²	cm ³ /s	201	254	314	254	314	380
	Injection pressure	MPa	253	200	162	247	200	165
		bar	2530	2000	1620	2470	2000	1650
	INJECTION UNIT			640h			830h	
	Injection speed	mm/s		350			350	
	Injection rate ²	cm ³ /s	439	556	687	556	687	831
	Injection pressure	MPa	253	200	162	247	200	165
		bar	2530	2000	1620	2470	2000	1650
	Connection power	kW/A		640h:46/77 640:33/56			830h:56/95 830:42/70	
	Pressure	MPa		17.5			17.5	
Flow	l/min		74			74		
Oil tank	l		115			115		
Hopper capacity	l		25			50		
Machine dimension	m		6.6×1.7×2.3			6.9×1.7×2.3		
Machine weight	t		9.1			9.7		

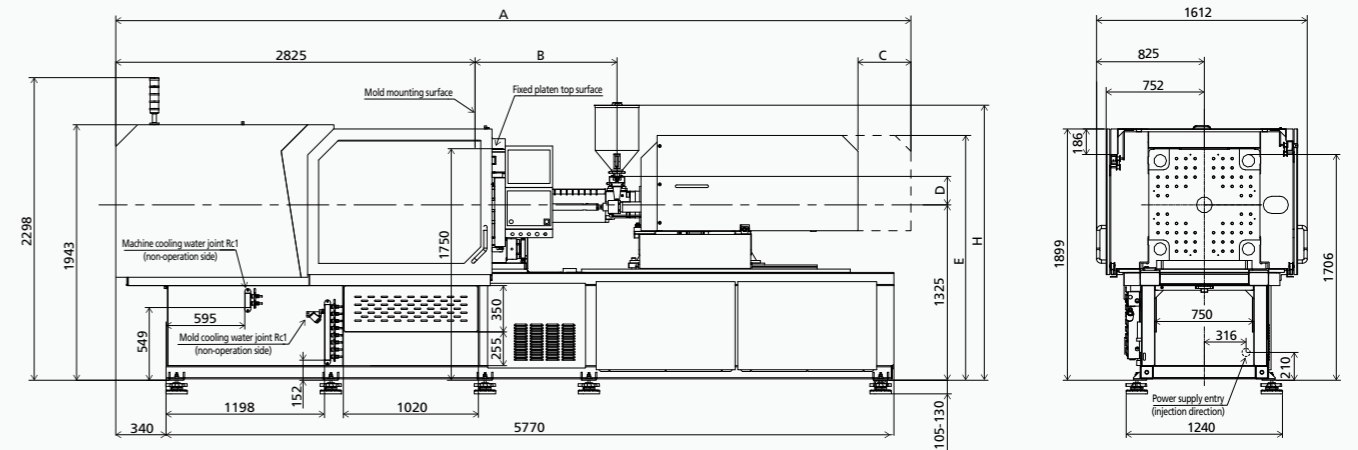
NOTE: ¹ Plasticizing capacity (HDPE): with standard packaging screw configuration, tested according to EUROMAP 19.

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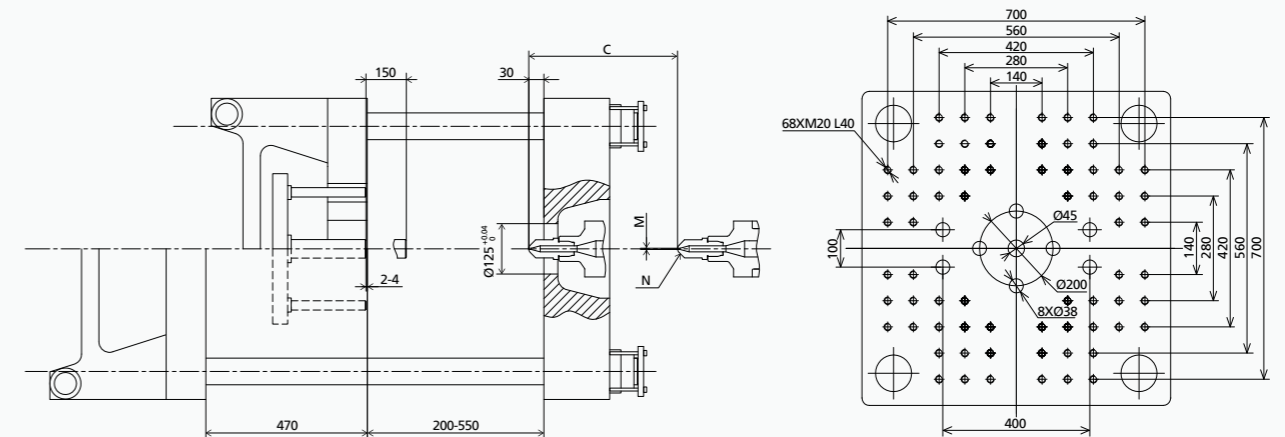
MACHINE DIMENSIONS



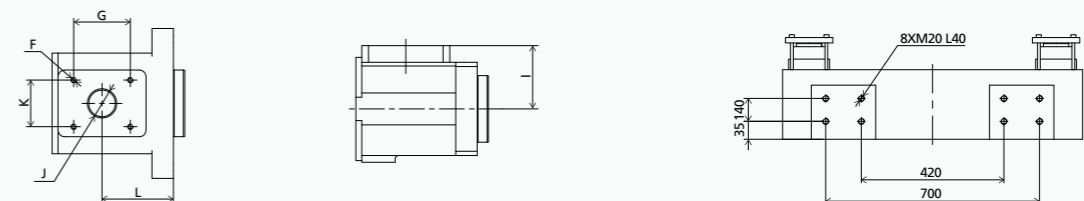
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
640,640h	6257/6422/6534	1211/1376/1488	400	214	1850	4×M8 L15	85	2063	125	Ø50	70	138	Ø4	SR10
830,830h	6546/6716/6813	1332/1502/1599	430	255	2019	4×M10 L20	115	2183	153	Ø60	115	122.5	Ø4	SR10

Figures at "A,B" refers to the respective size of screw A/B/C on the injection unit.

PLATEN DIMENSIONS



OTHERS DIMENSIONS



TECHNICAL DATA ZE2300F

		ZE2300F						
CLAMPING UNIT	Clamping force	kN	2300					
	Mold opening stroke	mm	550					
	Mold height min.	mm	220					
	Mold height max.	mm	600					
	Max. daylight	mm	1150					
	Dist. between tie bars (H×V)	mm	620×620					
	Min. mold dimension	mm	400×400					
	Ejector stroke	mm	150					
	Ejector force	kN	55					
	Size of mold platen (H×V)	mm	920×920					
INJECTION UNIT			A	B	C(op) ³	A	B	C(op) ³
	Screw diameter	mm	45	50	55	50	55	60
	Screw L/D ratio	L/D	25	25	25	25	25	25
	Injection volume (theoretical)	cm ³	333	412	498	471	570	678
	Screw speed	rpm		320		320		
	Plasticizing rate (HDPE) ¹	g/s	55	68	86	68	86	117.3
	Nozzle contact force	kN		88.2		88.2		
	Heating power	kW	27.1	32	34.1	33.7	40.7	44.2
	INJECTION UNIT			830		1100		
	Injection speed	mm/s		160		160		
OTHERS	Injection rate ²	cm ³ /s	254	314	380	314	380	452
	Injection pressure	MPa	247	200	165	230	190	159
		bar	2470	2000	1650	2300	1900	1590
	INJECTION UNIT			830h		1100h		
	Injection speed	mm/s		350		350		
	Injection rate ²	cm ³ /s	556	687	831	687	831	989
	Injection pressure	MPa	247	200	165	230	190	159
		bar	2470	2000	1650	2300	1900	1590
	Connection power	kW/A		830h:56/95 830:42/70		1100h:70/117 1100:51/86		
	Pressure	MPa		17.5		17.5		
Flow	l/min		74		74			
Oil tank	l		122		122			
Hopper capacity	l		50		50			
Machine dimension	m		7.0×1.8×2.4		7.3×1.8×2.4			
Machine weight	t		12.5		12.9			

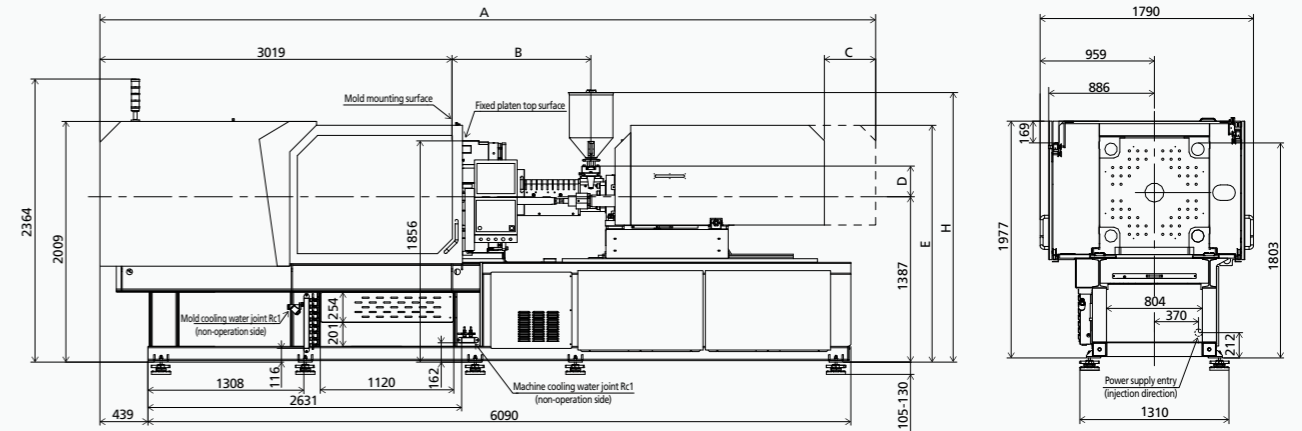
NOTE: ¹ Plasticizing capacity (HDPE): with standard packaging screw configuration, tested according to EUROMAP 19.

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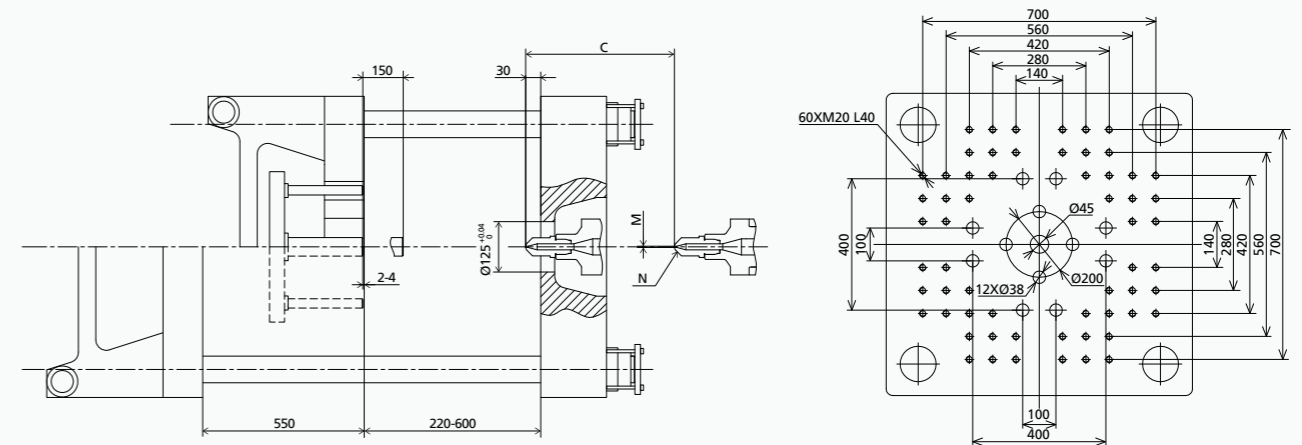
MACHINE DIMENSIONS



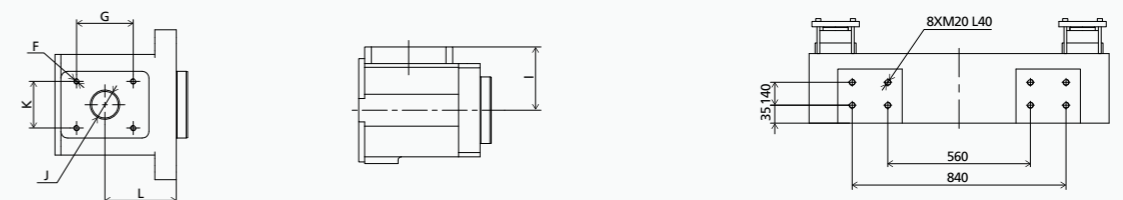
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
830,830h	6738/6908/7005	1330/1500/1597	430	255	2081	4×M10 L20	115	2245	153	Ø60	115	122.5	Ø4	SR10
1100,1100h	6930/7110/7223	1465/1645/1758	430	245	2081	4×M10 L20	115	2235	143	Ø60	115	180	Ø4	SR10

Figures at "A,B" refers to the respective size of screw A/B/C on the injection unit.

PLATEN DIMENSIONS



OTHERS DIMENSIONS



TECHNICAL DATA ZE3000F

		ZE3000F									
CLAMPING UNIT	Clamping force	kN	3000								
	Mold opening stroke	mm	600								
	Mold height min.	mm	250								
	Mold height max.	mm	650								
	Max. daylight	mm	1250								
	Dist. between tie bars (H×V)	mm	670×670								
	Min. mold dimension	mm	435×435								
	Ejector stroke	mm	160								
	Ejector force	kN	68.6								
	Size of mold platen (H×V)	mm	1000×1000								
INJECTION UNIT			A	B	C(op) ³	A	B	C(op) ³	A	B	C(op) ³
	Screw diameter	mm	50	55	60	55	60	65	60	65	70
	Screw L/D ratio	L/D	25	25	25	25	25	25	25	25	25
	Injection volume (theoretical)	cm ³	471	570	678	617	735	862	791	929	1077
	Screw speed	rpm	320			300			250		
	Plasticizing rate (HDPE) ¹	g/s	68	86	117.3	80.6	110	144	91.7	120	155
	Nozzle contact force	kN	88.2			88.2			88.2		
	Heating power	kW	33.7	40.7	44.2	41.6	47.2	51.2	45.6	51.2	55.2
	INJECTION UNIT		1100			1400			1700		
	Injection speed	mm/s	160			160			160		
Injection rate ²	cm ³ /s	314	380	452	380	452	530	452	530	615	
Injection pressure	MPa	230	190	159	230	193	164	210	180	155	
	bar	2300	1900	1590	2300	1930	1640	2100	1800	1550	
INJECTION UNIT		1100h			1400h			1700h			
Injection speed	mm/s	350			350			350			
Injection rate ²	cm ³ /s	687	831	989	831	989	1161	989	1161	1346	
Injection pressure	MPa	230	190	159	230	193	164	210	180	155	
	bar	2300	1900	1590	2300	1930	1640	2100	1800	1550	
Connection power	kW/A	1100h:70/117 1100:51/86			1400h:77/130 1400:62/104			1700h:93/156 1700:64/108			
Pressure	MPa	17.5			17.5			17.5			
Flow	l/min	90			90			90			
Oil tank	l	135			135			135			
Hopper capacity	l	50			50			50			
Machine dimension	m	7.7×2.0×2.5			8.2×2.0×2.5			8.4×2.0×2.5			
Machine weight	t	15.2			16.3			16.4			

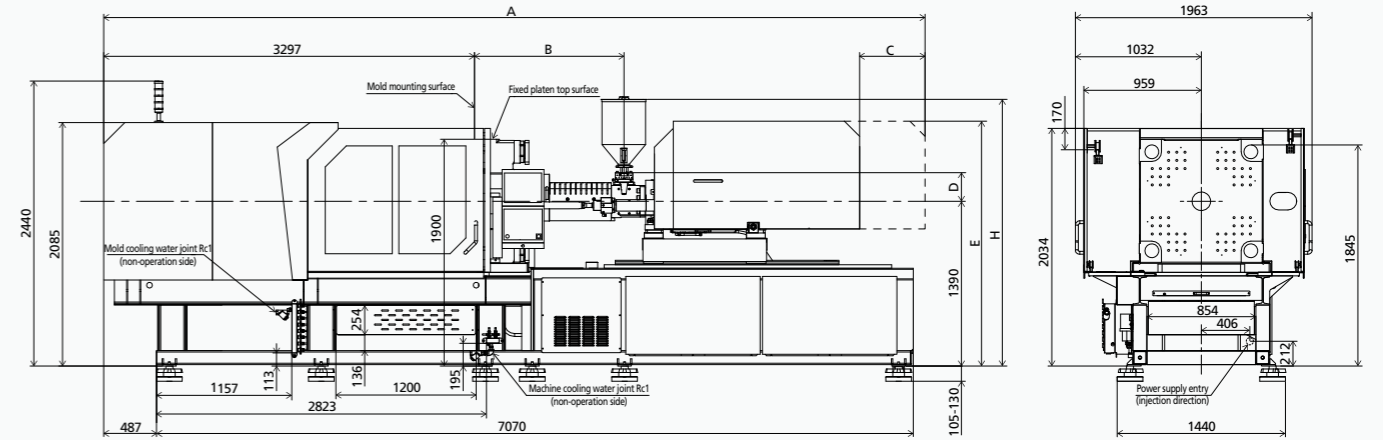
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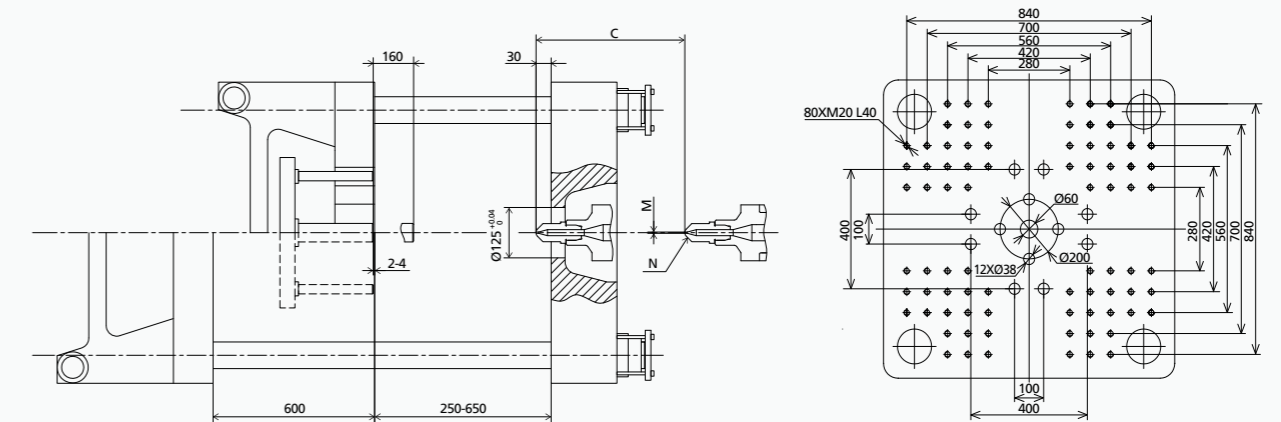
MACHINE DIMENSIONS



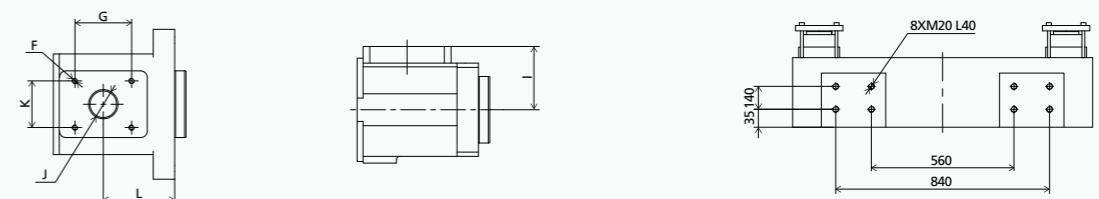
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1100,1100h	7338/7518/7631	1465/1645/1758	560	245	2084	4×M10 L20	115	2238	143	Ø60	115	180	Ø4	SR10
1400,1400h	7903/8064/8185	1614/1775/1896	610	251	2095	4×M10 L20	115	2244	149	Ø80	115	184	Ø4	SR10
1700,1700h	8076/8238/8359	1754/1916/2037	610	250	2095	4×M10 L20	115	2244	148	Ø80	115	217	Ø4	SR10

Figures at "A,B" refers to the respective size of screw A/B/C on the injection unit.

PLATEN DIMENSIONS



OTHERS DIMENSIONS



TECHNICAL DATA ZE3800F

		ZE3800F									
CLAMPING UNIT	Clamping force	kN	3800								
	Mold opening stroke	mm	700								
	Mold height min.	mm	300								
	Mold height max.	mm	710								
	Max. daylight	mm	1410								
	Dist. between tie bars (H×V)	mm	770×770								
	Min. mold dimension	mm	500×500								
	Ejector stroke	mm	160								
	Ejector force	kN	68.6								
	Size of mold platen (H×V)	mm	1150×1150								
INJECTION UNIT	Screw diameter	mm	A	B	C(op) ³	A	B	C(op) ³	A	B	C(op) ³
	Screw L/D ratio	L/D	25	25	25	25	25	25	25	25	25
	Injection volume (theoretical)	cm ³	471	570	678	617	735	862	791	929	1077
	Screw speed	rpm	320			300			250		
	Plasticizing rate (HDPE) ¹	g/s	68	86	117.3	80.6	110	144	91.7	120	155
	Nozzle contact force	kN	88.2			88.2			88.2		
	Heating power	kW	33.7	40.7	44.2	41.6	47.2	51.2	45.6	51.2	55.2
	INJECTION UNIT		1100			1400			1700		
	Injection speed	mm/s	160			160			160		
	Injection rate ²	cm ³ /s	314	380	452	380	452	530	452	530	615
Injection pressure	MPa	230	190	159	230	193	164	210	180	155	
	bar	2300	1900	1590	2300	1930	1640	2100	1800	1550	
INJECTION UNIT		1100h			1400h			1700h			
Injection speed	mm/s	350			350			350			
Injection rate ²	cm ³ /s	687	831	989	831	989	1161	989	1161	1346	
Injection pressure	MPa	230	190	159	230	193	164	210	180	155	
	bar	2300	1900	1590	2300	1930	1640	2100	1800	1550	
Connection power	kW/A	1100h:70/117 1100:51/86			1400h:77/130 1400:62/104			1700h:93/156 1700:64/108			
Pressure	MPa	17.5			17.5			17.5			
Flow	l/min	90			90			90			
Oil tank	l	135			135			135			
Hopper capacity	l	50			50			50			
Machine dimension	m	8.0×2.1×2.6			8.5×2.1×2.6			8.7×2.1×2.6			
Machine weight	t	18.5			19.6			19.7			

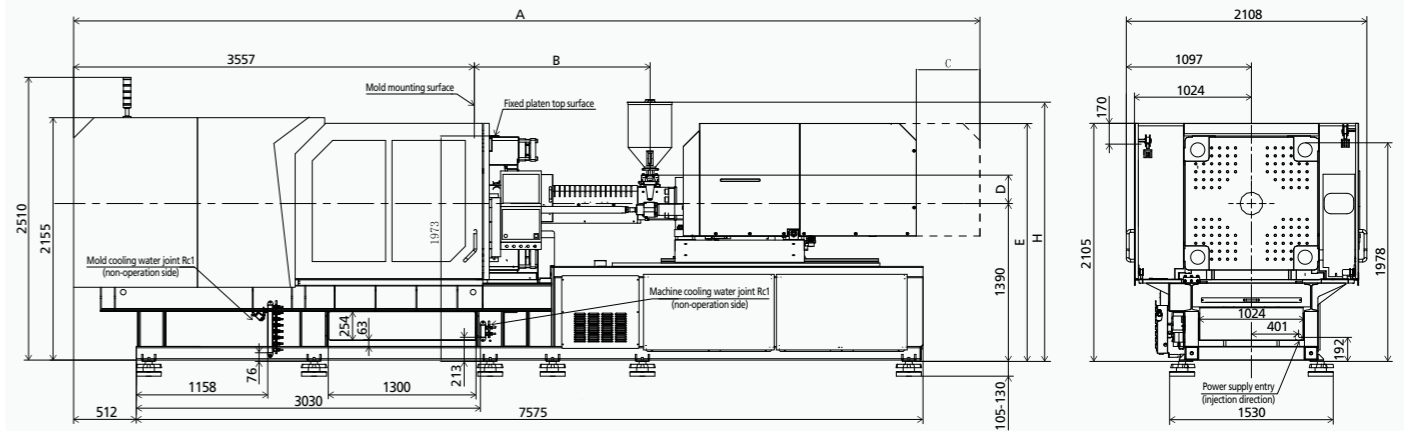
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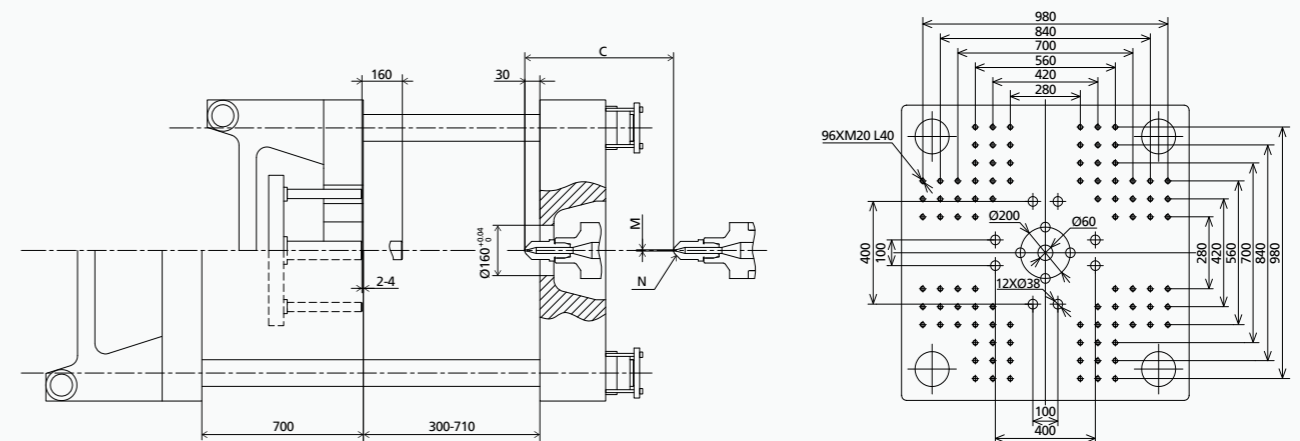
MACHINE DIMENSIONS



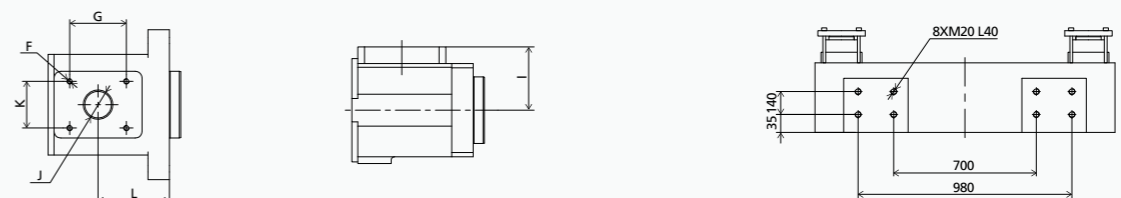
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1100,1100h	7649/7829/7942	1467/1647/1760	610	245	2084	4×M10 L20	115	2238	143	Ø60	115	180	Ø4	SR10
1400,1400h	8163/8324/8445	1615/1776/1897	610	251	2095	4×M10 L20	115	2244	149	Ø80	115	184	Ø4	SR10
1700,1700h	8336/8498/8619	1754/1916/2037	610	250	2095	4×M10 L20	115	2244	148	Ø80	115	217	Ø4	SR10

Figures at "A,B" refers to the respective size of screw A/B/C on the injection unit.

PLATEN DIMENSIONS

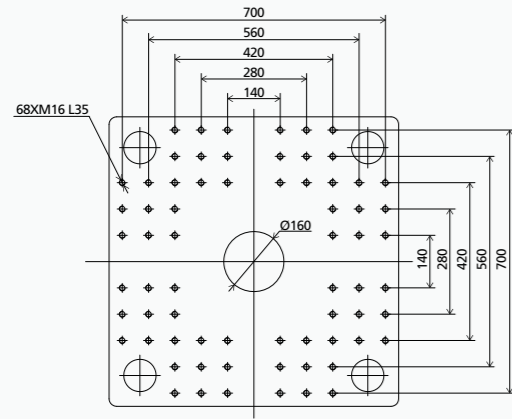


OTHERS DIMENSIONS

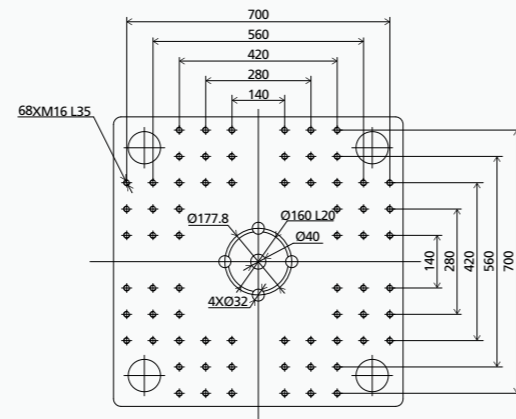


PLATEN LAYOUT ZE1500F

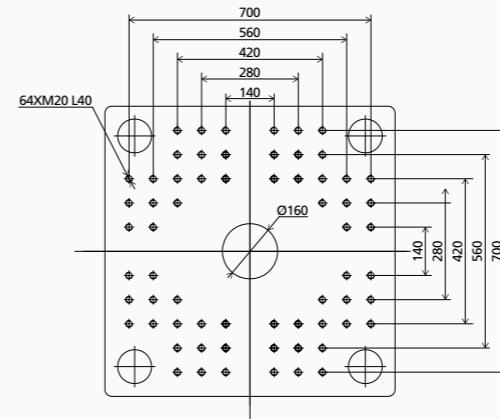
EUROPEAN VERSION
FIXED PLATEN



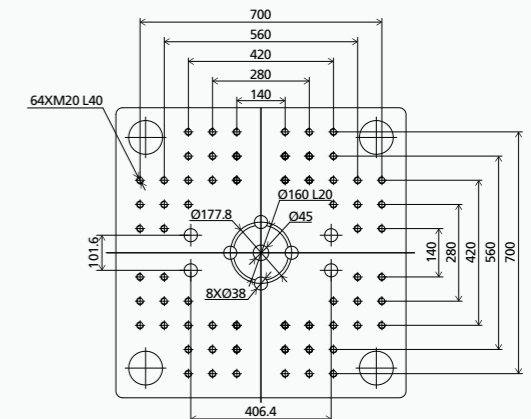
MOVABLE PLATEN



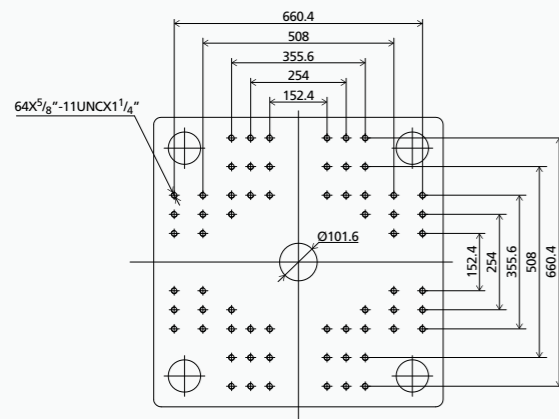
EUROPEAN VERSION
FIXED PLATEN



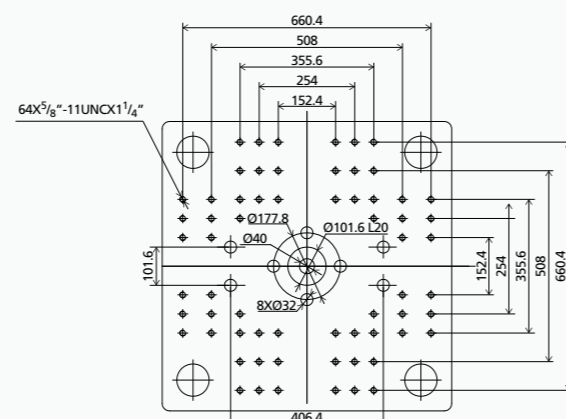
MOVABLE PLATEN



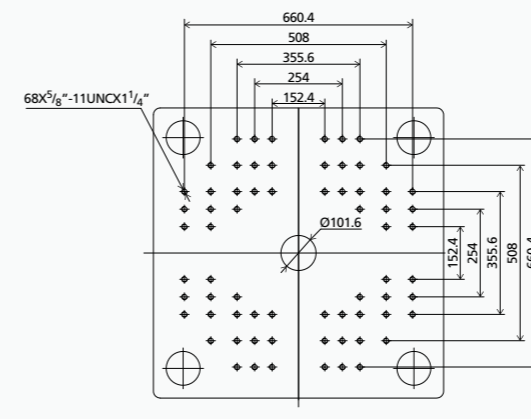
AMERICAN VERSION
FIXED PLATEN



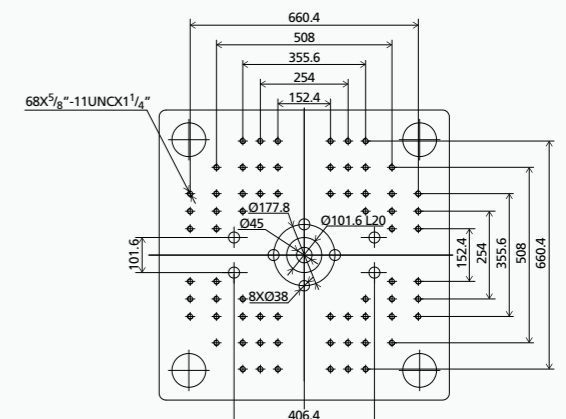
MOVABLE PLATEN



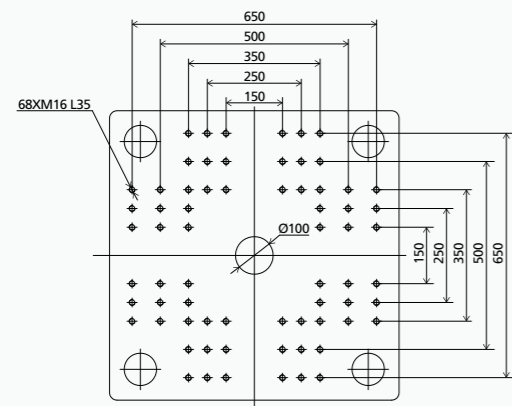
AMERICAN VERSION
FIXED PLATEN



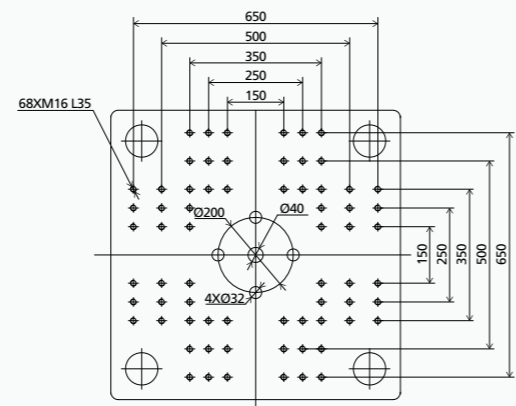
MOVABLE PLATEN



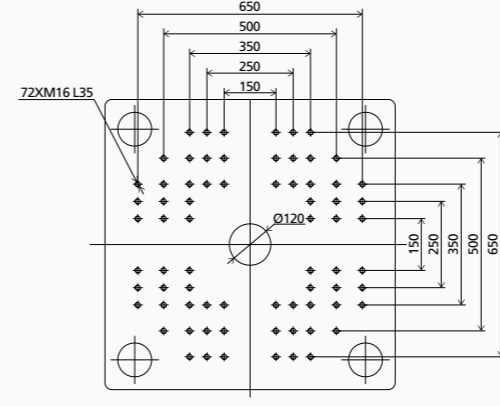
JAPANESE VERSION
FIXED PLATEN



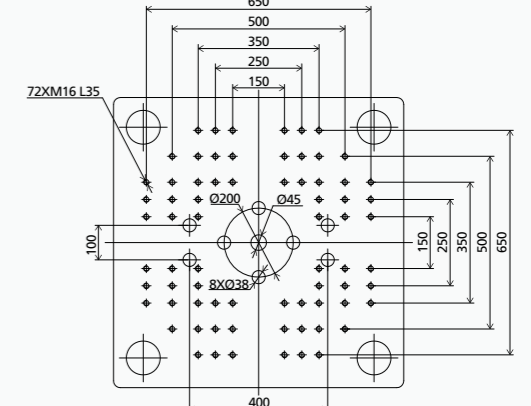
MOVABLE PLATEN



JAPANESE VERSION
FIXED PLATEN



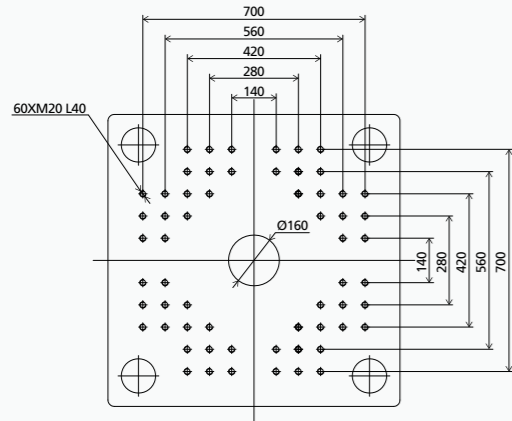
MOVABLE PLATEN



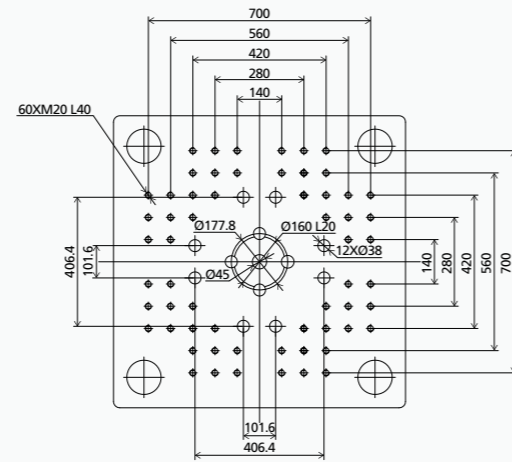
We reserve the right to make changes as a result of further technical advances.

PLATEN LAYOUT ZE2300F

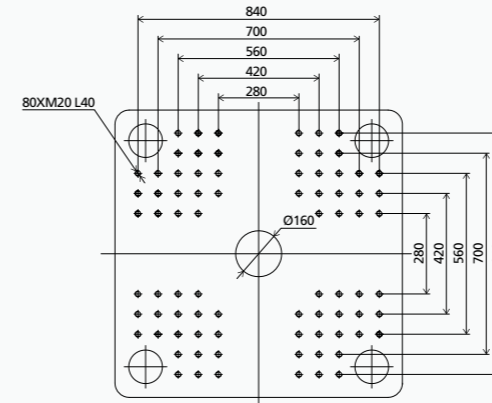
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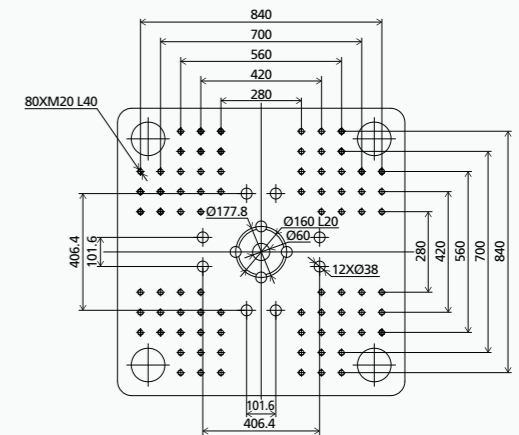
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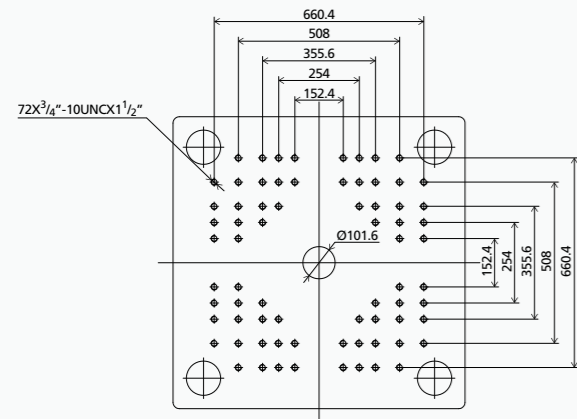
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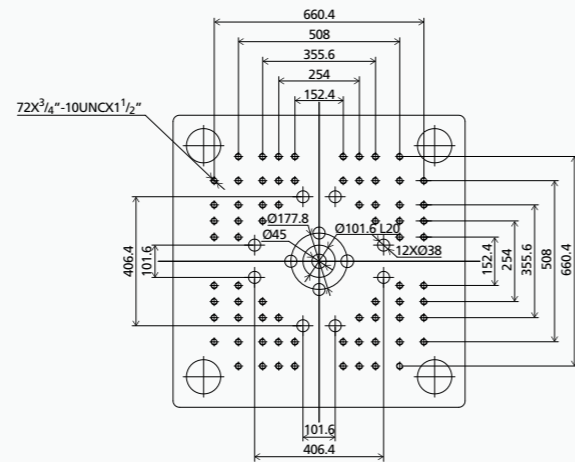
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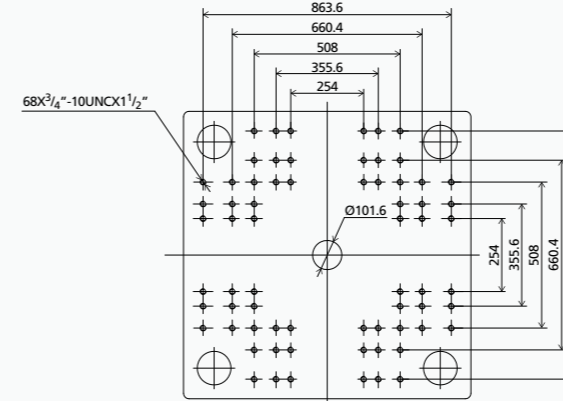
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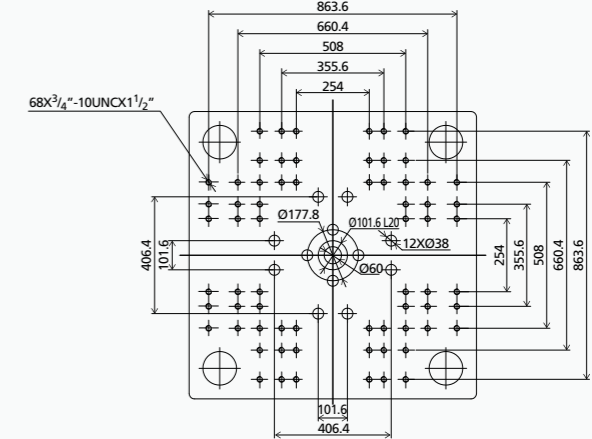
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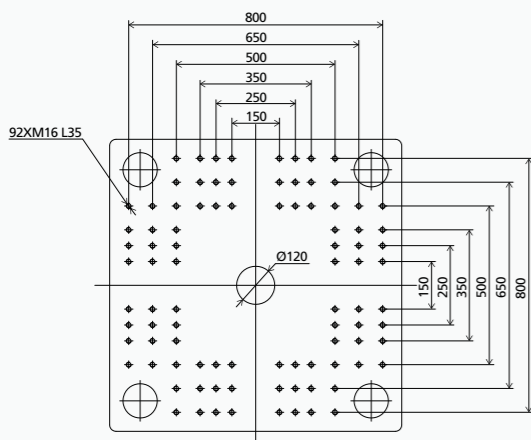
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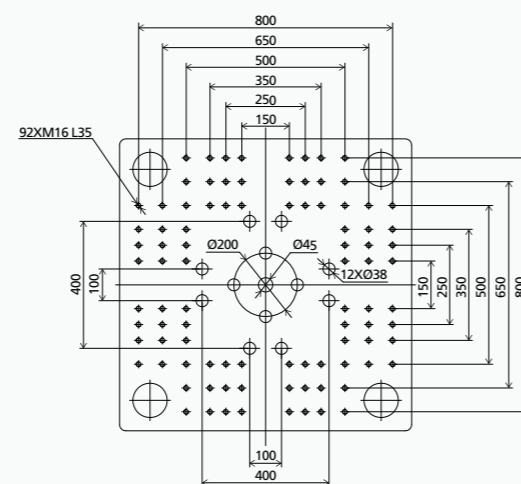
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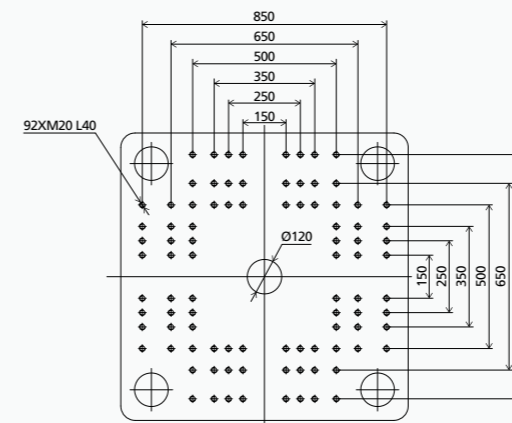
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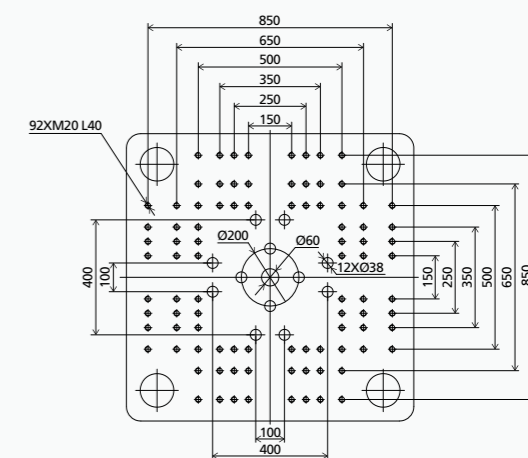
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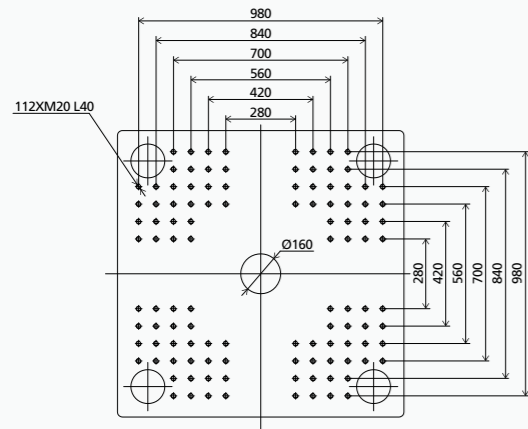
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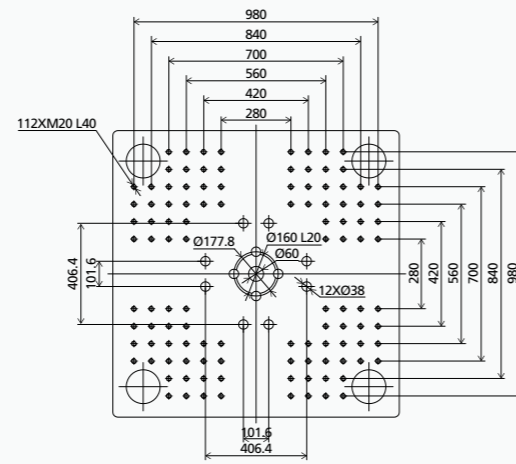
We reserve the right to make changes as a result of further technical advances.

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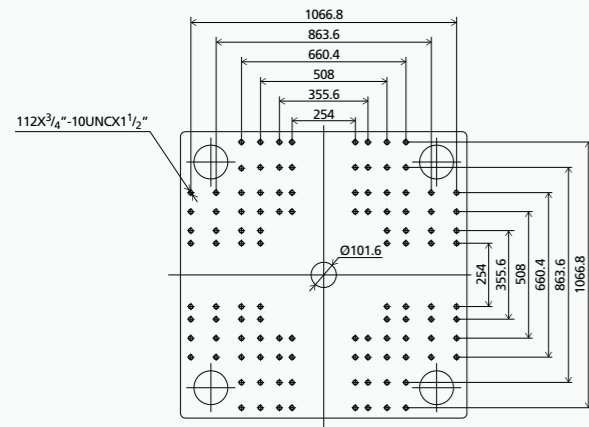
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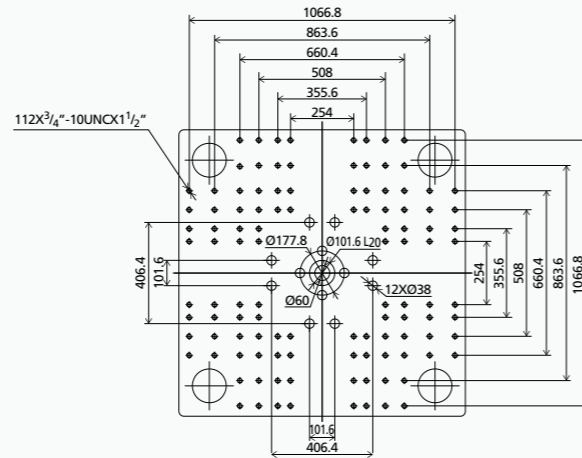
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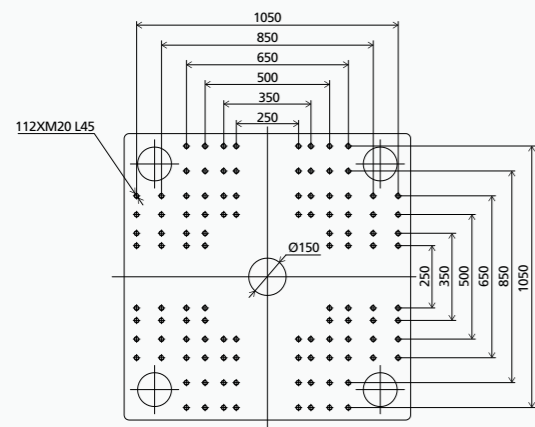
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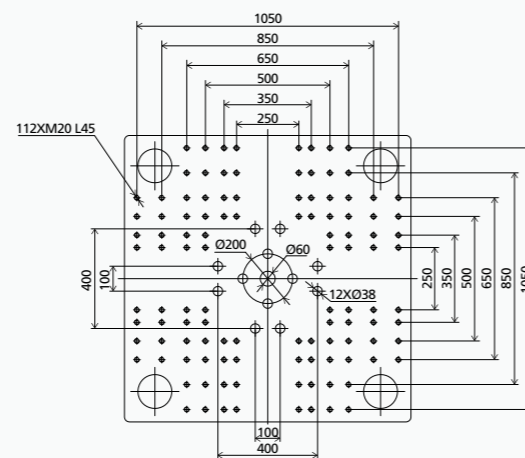
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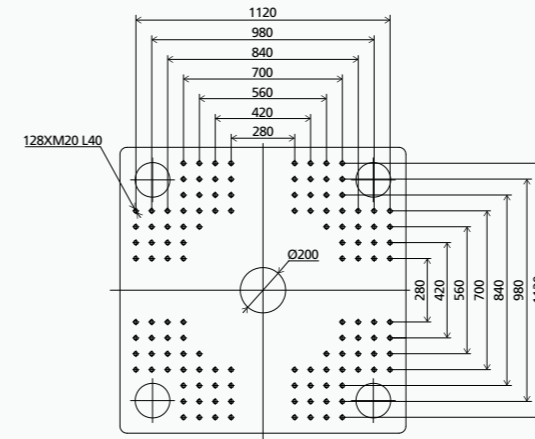


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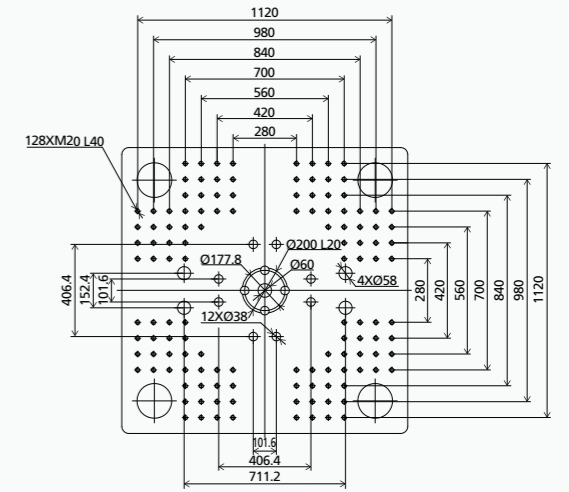


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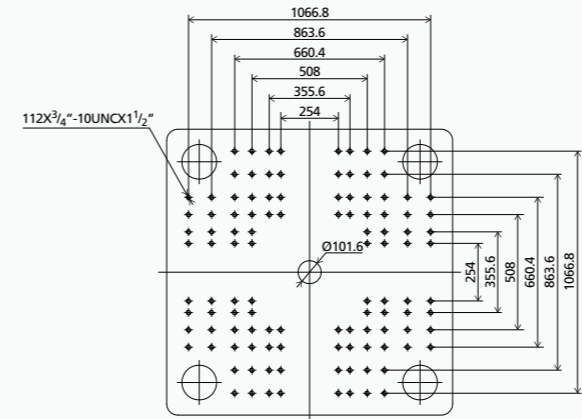
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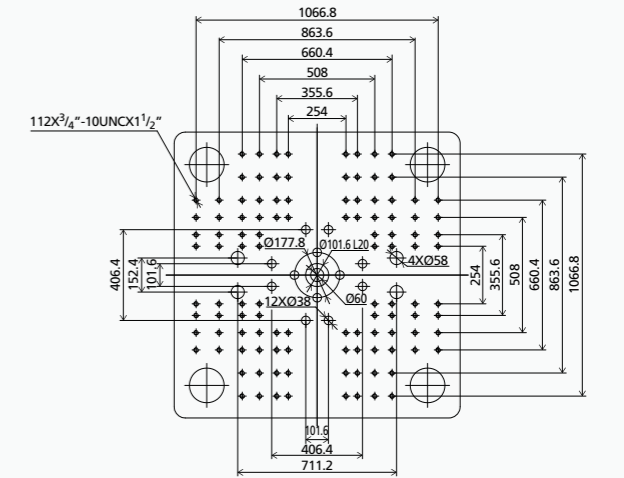
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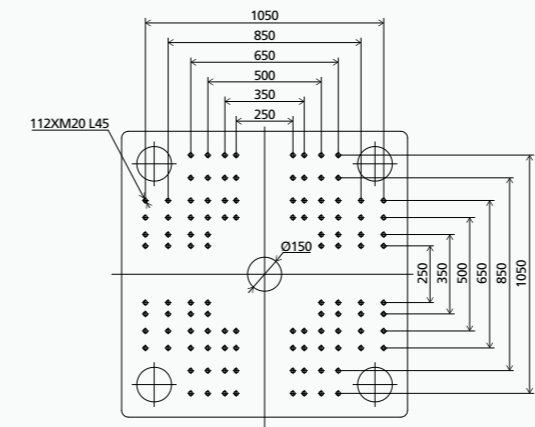
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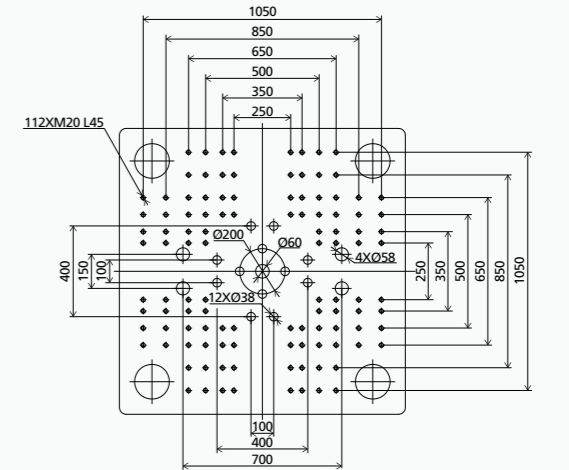
MOVABLE PLATEN



JAPANESE VERSION FIXED PLATEN



MOVABLE PLATEN



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