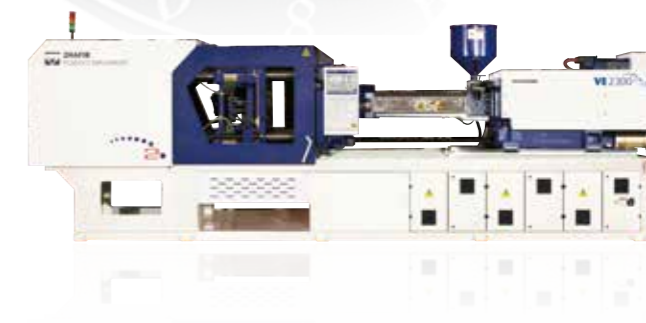


Zhafir **Venus²** Series
Packaging / International
1500-4500kN



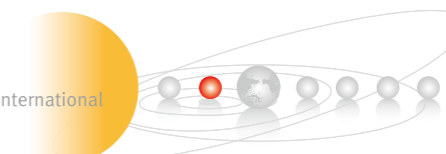
ZHAFIR PLASTICS MACHINERY

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ZF 2018060E-IV



Technical data **VE1500 II/p**

CLAMPING UNIT

		VE1500 II
Clamping force	kN	1500
Toggle stroke	mm	420
Min. mold height	mm	180
Max. mold height	mm	520
Max. mold opening stroke	mm	940
Space between tie bars HxV	mm	520x470
Min. mold dimension	mm	335x305
Ejector stroke	mm	120
Ejector force	kN (tf)	34.3 (3.5)
Mold platen dimension HxV	mm	770x730

		A	B	C (OP)	A	B	C (OP)
Screw diameter	mm	36	40	45	40	45	50
Screw L/D ratio	L/D	25	22.5	23	25	22.2	23
Injection volume (theoretical) cm ³		173	213	270	252	319	395
Injection weight (PS)	g	157	194	246	229	290	358
Screw speed	rpm		400			350	
Plasticizing capacity (PS)	g/s	22	30	42	27	39	50
Nozzle contact force	kN (tf)		29.4 (3.0)			29.4 (3.0)	
Heating power	kW	13.5	13.5	14.8	15.8	15.8	17.8

INJECTION UNIT

		430pns			640pns		
Injection speed	mm/s		200			160	
Injection rate (PS)	g/s	184	228	289	183	231	285
Injection pressure	Mpa	247	200	158	253	200	162
	bar	2470	2000	1580	2530	2000	1620

INJECTION UNIT

		430p			640p		
Injection speed	mm/s		300			300	
Injection rate (PS)	g/s	277	342	434	342	434	536
Injection pressure	Mpa	247	200	158	253	200	162
	bar	2470	2000	1580	2530	2000	1620

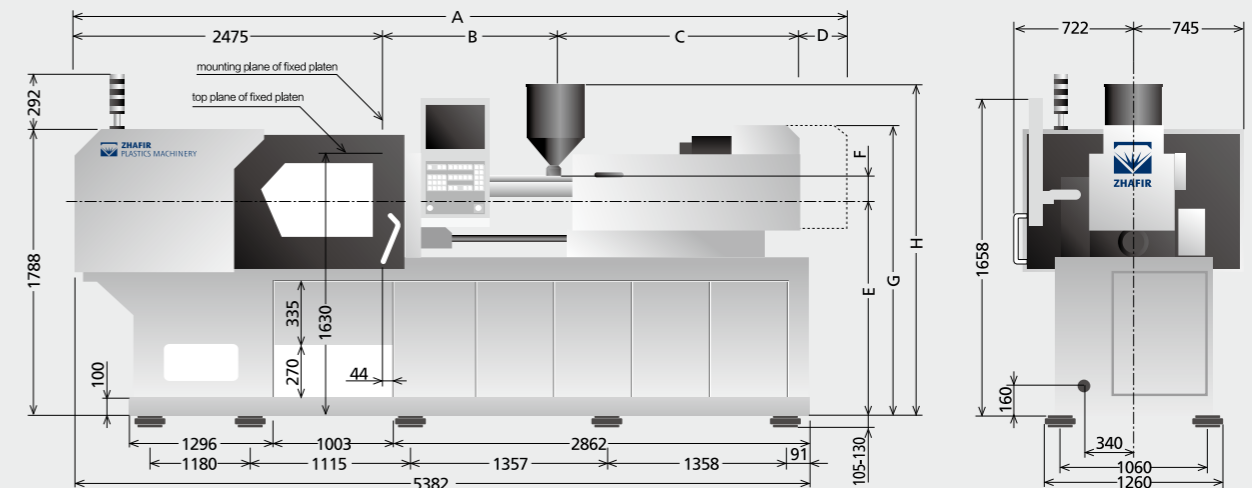
OTHERS

Connection power	kW/A	430pns:32.3/57 430p:44.2/79	640pns:39/69 640p:61/110
Hopper capacity	L	25	25
Machine dimension	m	5.60x1.47x2.08	5.82x1.47x2.08
Machine weight	t	7.8	8.5

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

Machine dimensions VE1500 II /p

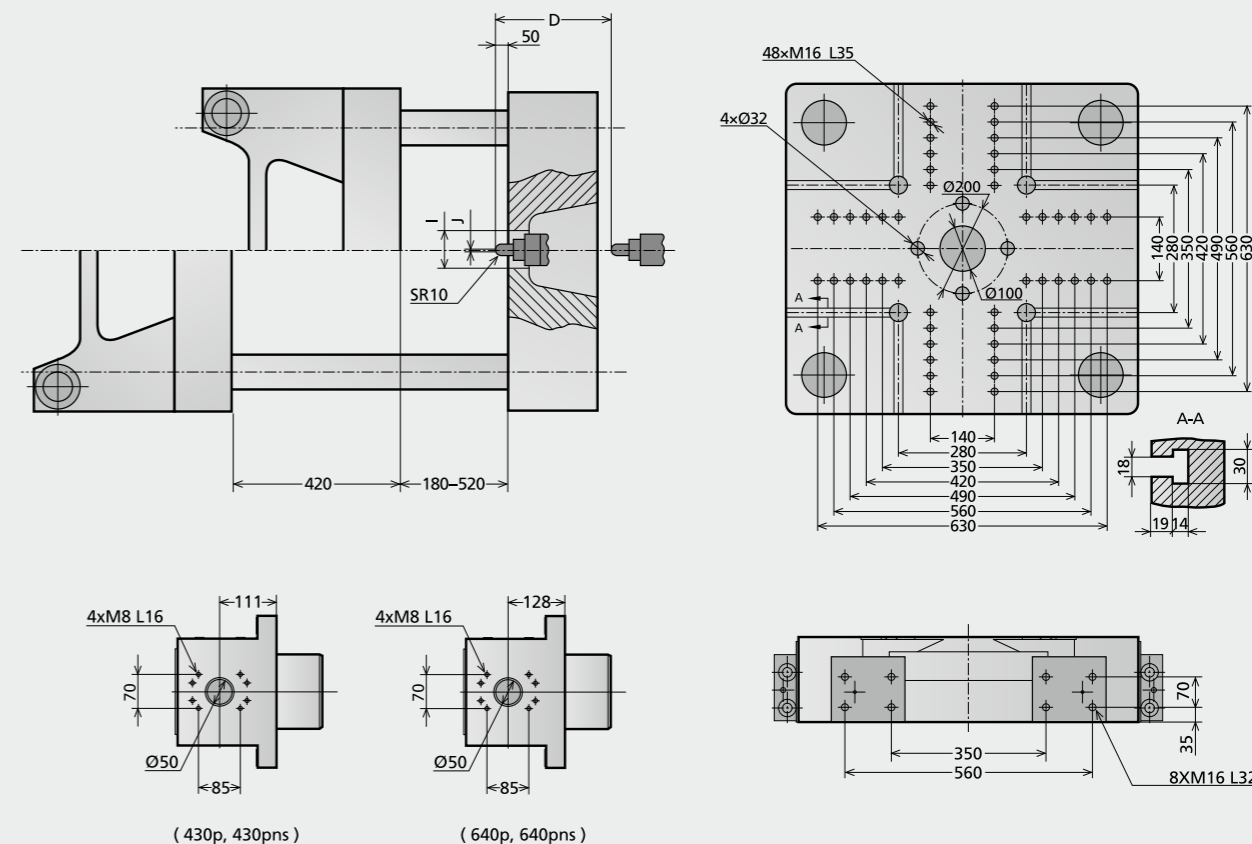
unit: mm



Note: The above machine size does not apply to the "C" type screw.

Platen dimensions VE1500 II /p

unit: mm



(430p, 430pns)

(640p, 640pns)

	A	B	C	D	E	F	G	H	I	J
640p, 640pns	5820	1153	1822	370	1260	209	1818	1993	Ø125	Ø3
430p,430pns	5597	1044	1628	450	1260	207	1810	1990	Ø125	Ø3

Technical data **VE1900 II/p**

CLAMPING UNIT

		VE1900 II
Clamping force	kN	1900
Toggle stroke	mm	470
Min. mold height	mm	200
Max. mold height	mm	550
Max. mold opening stroke	mm	1020
Space between tie bars HxV	mm	570x520
Min. mold dimension	mm	370x335
Ejector stroke	mm	130
Ejector force	kN (tf)	44.1 (4.5)
Mold platen dimension HxV	mm	840x790

	A	B	C (OP)	A	B	C (OP)
Screw diameter	40	45	50	45	50	55
Screw L/D ratio	25	22.2	23	25	22.5	23
Injection volume (theoretical) cm ³	252	319	395	334	412	499
Injection weight (PS)	229	290	358	304	375	454
Screw speed		350			320	
Plasticizing capacity (PS)	27	39	50	35	46	60
Nozzle contact force		39.2 (4.0)			39.2 (4.0)	
Heating power	15.8	15.8	17.8	21.2	21.2	23.4

INJECTION UNIT

	640pns			830pns		
Injection speed	mm/s	160		160		
Injection rate (PS)	g/s	183	231	285	231	346
Injection pressure	Mpa	253	200	162	247	200
	bar	2530	2000	1620	2470	2000

INJECTION UNIT

	640p			830p		
Injection speed	mm/s	300		300		
Injection rate (PS)	g/s	342	434	536	434	536
Injection pressure	Mpa	253	200	162	247	200
	bar	2530	2000	1620	2470	2000

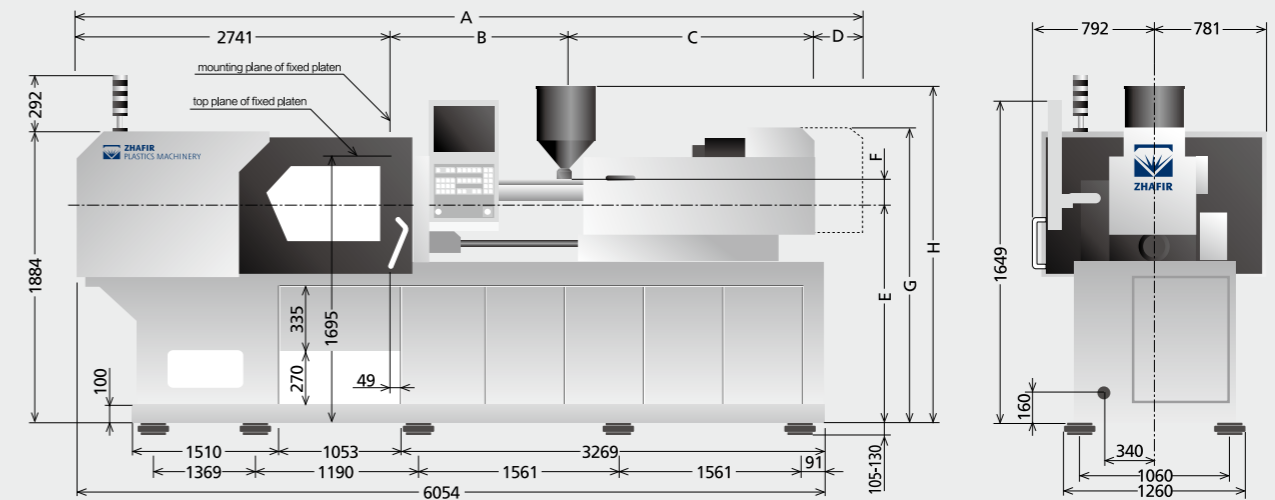
OTHERS

	640pns:39/69 640p:61/110	830pns:47.5/85 830p:68.6/123
Connection power	kW/A	
Hopper capacity	L	50
Machine dimension	m	6.13x1.57x2.18
Machine weight	t	10

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

Machine dimensions VE1900 II /p

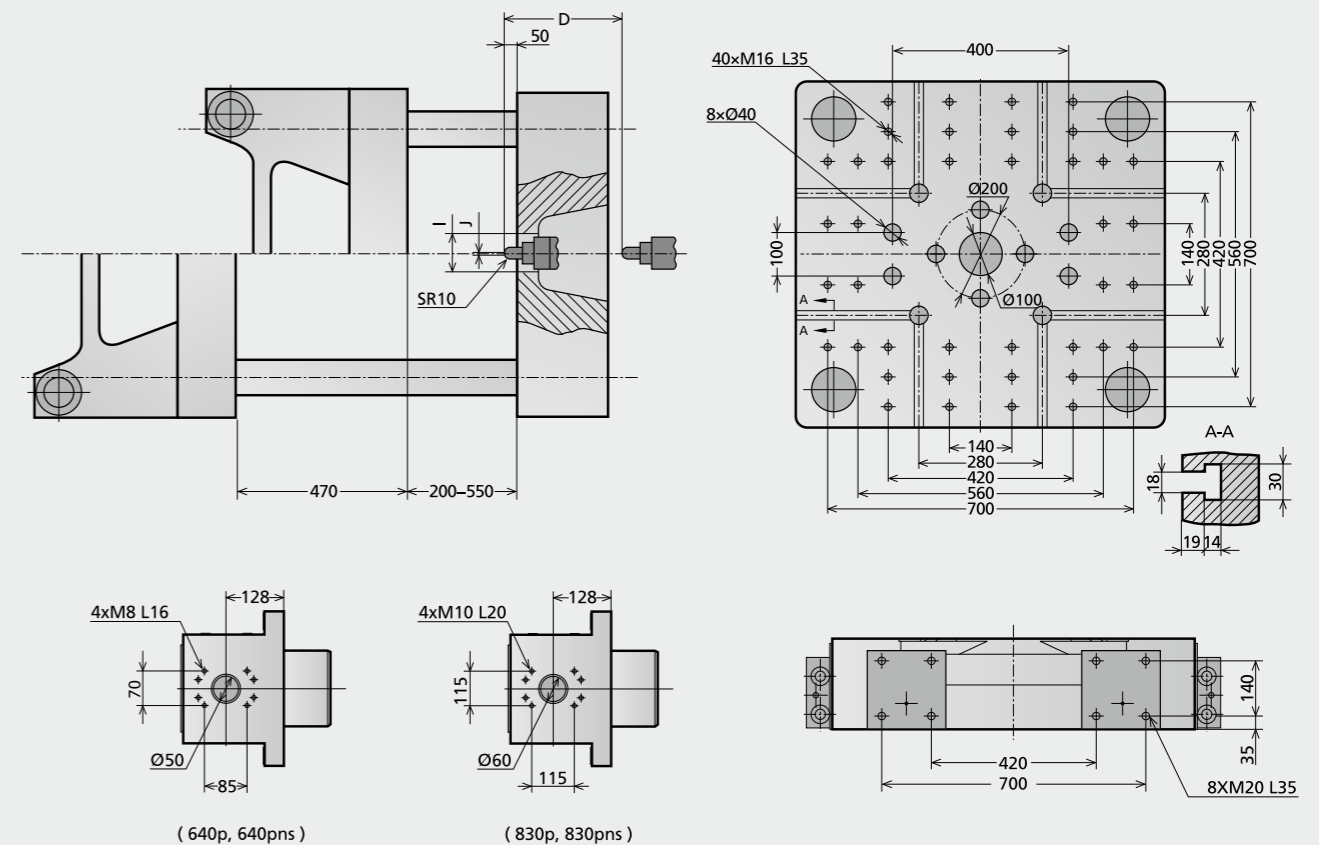
unit: mm



Note: The above machine size does not apply to the "C" type screw.

Platen dimensions VE1900 II /p

unit: mm



	A	B	C	D	E	F	G	H	I	J
830p, 830pns	6464	1277	1996	450	1295	233	1908	2209	Ø160	Ø3
640p, 640pns	6126	1153	1822	410	1295	209	1852	2028	Ø160	Ø3

Technical data **VE2300 II/p**

CLAMPING UNIT

		VE2300 II
Clamping force	kN	2300
Toggle stroke	mm	550
Min. mold height	mm	220
Max. mold height	mm	600
Max. mold opening stroke	mm	1150
Space between tie bars HxV	mm	620x570
Min. mold dimension	mm	400x370
Ejector stroke	mm	150
Ejector force	kN (tf)	49 (5.0)
Mold platen dimension HxV	mm	930x880

	A	B	C (OP)	A	B	C (OP)
Screw diameter	45	50	55	50	55	60
Screw L/D ratio	25	22.5	23	25	22.7	23
Injection volume (theoretical) cm ³	334	412	499	471	570	678
Injection weight (PS)	304	375	454	428	518	617
Screw speed		320			320	
Plasticizing capacity (PS)	35	46	60	46	60	71
Nozzle contact force		54 (5.5)			54 (5.5)	
Heating power	21.2	21.2	23.4	26.1	26.1	28.8

INJECTION UNIT

	830pns			1100pns		
Injection speed	mm/s	160		160		
Injection rate (PS)	g/s	231	285	346	411	
Injection pressure	Mpa	247	200	165	218	180
	bar	2470	2000	1650	2180	1800

INJECTION UNIT

	830p			1100p		
Injection speed	mm/s	300		300		
Injection rate (PS)	g/s	434	536	648	770	
Injection pressure	Mpa	247	200	165	230	190
	bar	2470	2000	1650	2300	1900

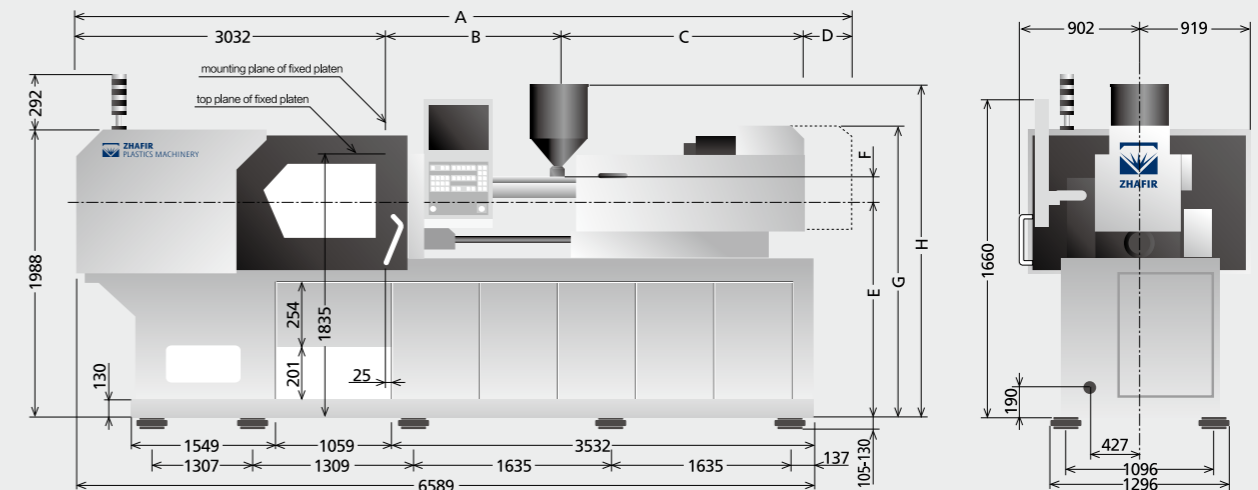
OTHERS

Connection power	kW/A	830pns:47.5/85 830p:68.6/123	1100pns:51/92 1100p:78.6/139
Hopper capacity	L	50	50
Machine dimension	m	6.74x1.82x2.3	7.06x1.82x2.3
Machine weight	t	13.2	13.8

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

Machine dimensions VE2300 II /p

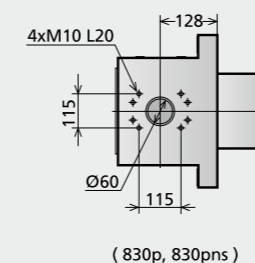
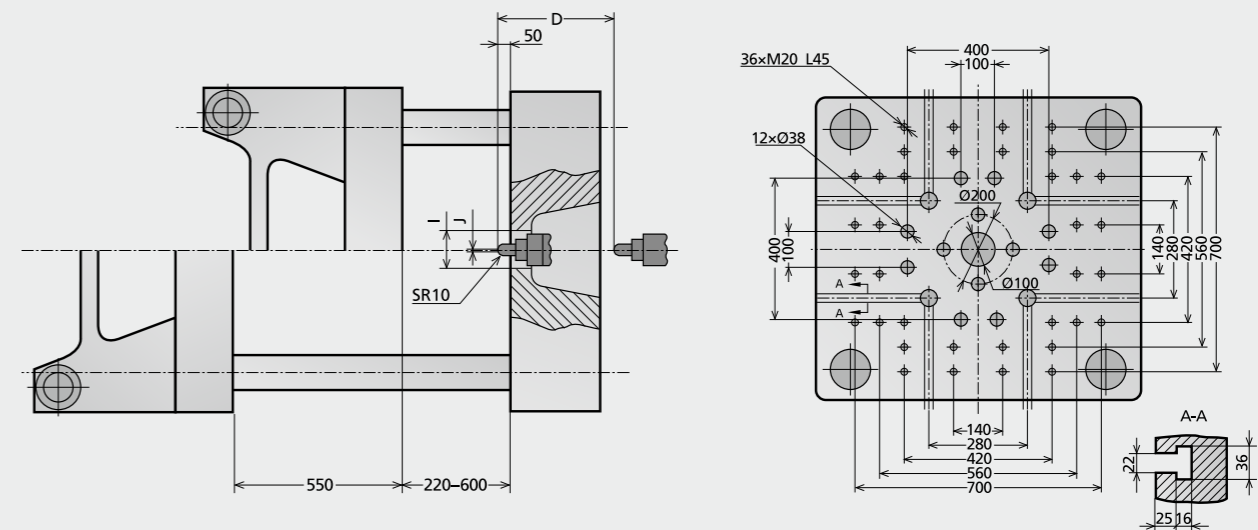
unit: mm



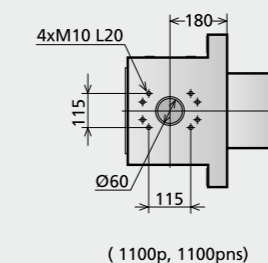
Note: The above machine size does not apply to the "C" type screw.

Platen dimensions VE2300 II /p

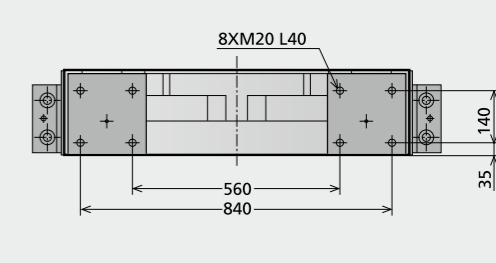
unit: mm



(830p, 830pns)



(1100p, 1100pns)



	A	B	C	D	E	F	G	H	I	J
1100p,1100pns	7061	1407	2152	470	1385	243	2003	2229	Ø160	Ø3
830p,830pns	6735	1277	1996	430	1385	233	1998	2219	Ø160	Ø3

Technical data **VE3000 II/p**

CLAMPING UNIT

		VE3000 II
Clamping force	kN	3000
Toggle stroke	mm	600
Min. mold height	mm	240
Max. mold height	mm	650
Max. mold opening stroke	mm	1250
Space between tie bars HxV	mm	670x620
Min. mold dimension	mm	435x400
Ejector stroke	mm	150
Ejector force	kN (tf)	58.8 (6.0)
Mold platen dimension HxV	mm	1000x950

	A	B	C (OP)	A	B	C (OP)	A	B	C (OP)
Screw diameter	50	55	60	55	60	65	60	65	70
Screw L/D ratio	25	22.7	23	25	22.9	23	25	23	23
Injection volume (theoretical) cm ³	471	570	678	617	735	863	792	929	1078
Injection weight (PS) g	428	518	617	562	668	785	720	845	980
Screw speed rpm		320			300			250	
Plasticizing capacity (PS) g/s	46	60	71	56	70	81	60	70	85
Nozzle contact force kN (tf)		54 (5.5)			54 (5.5)			54 (5.5)	
Heating power kW	26.1	26.1	28.8	32.9	32.9	35.6	36.1	36.1	38.8
INJECTION UNIT	1100pns			1400pns			1700pns		
Injection speed mm/s	160			160			160		
Injection rate (PS) g/s	285	346	411	346	411	483	411	483	560
Injection pressure Mpa	218	180	151	214	180	153	210	180	155
Injection pressure bar	2180	1800	1510	2140	1800	1530	2100	1800	1550
INJECTION UNIT	1100p			1400p			1700p		
Injection speed mm/s	300			300			300		
Injection rate (PS) g/s	536	648	770	648	770	905	770	905	1050
Injection pressure Mpa	230	190	159	230	193	164	230	196	169
Injection pressure bar	2300	1900	1590	2300	1930	1640	2300	1960	1690

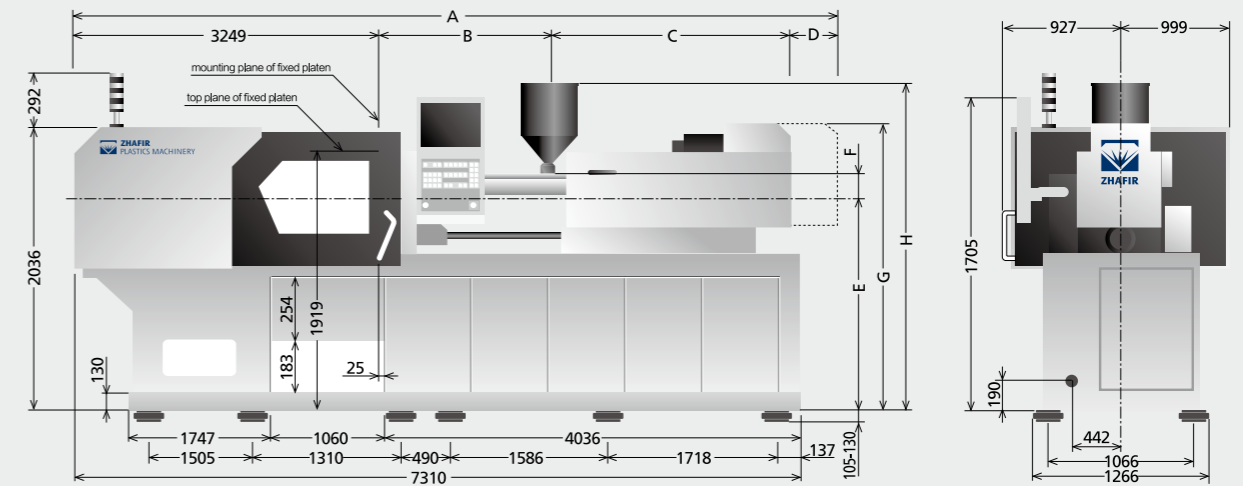
OTHERS

	1100pns:51/92 1100p:78.6/139	1400pns:56/101 1400p:89.2/157	1700pns:72/129 1700p:95.5/168
Connection power kW/A			
Hopper capacity L	50	50	50
Machine dimension m	7.35x1.93x2.33	7.81x1.93x2.33	8.0x1.93x2.33
Machine weight t	16.3	17.2	17.6

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

Machine dimensions VE 3000 II /p

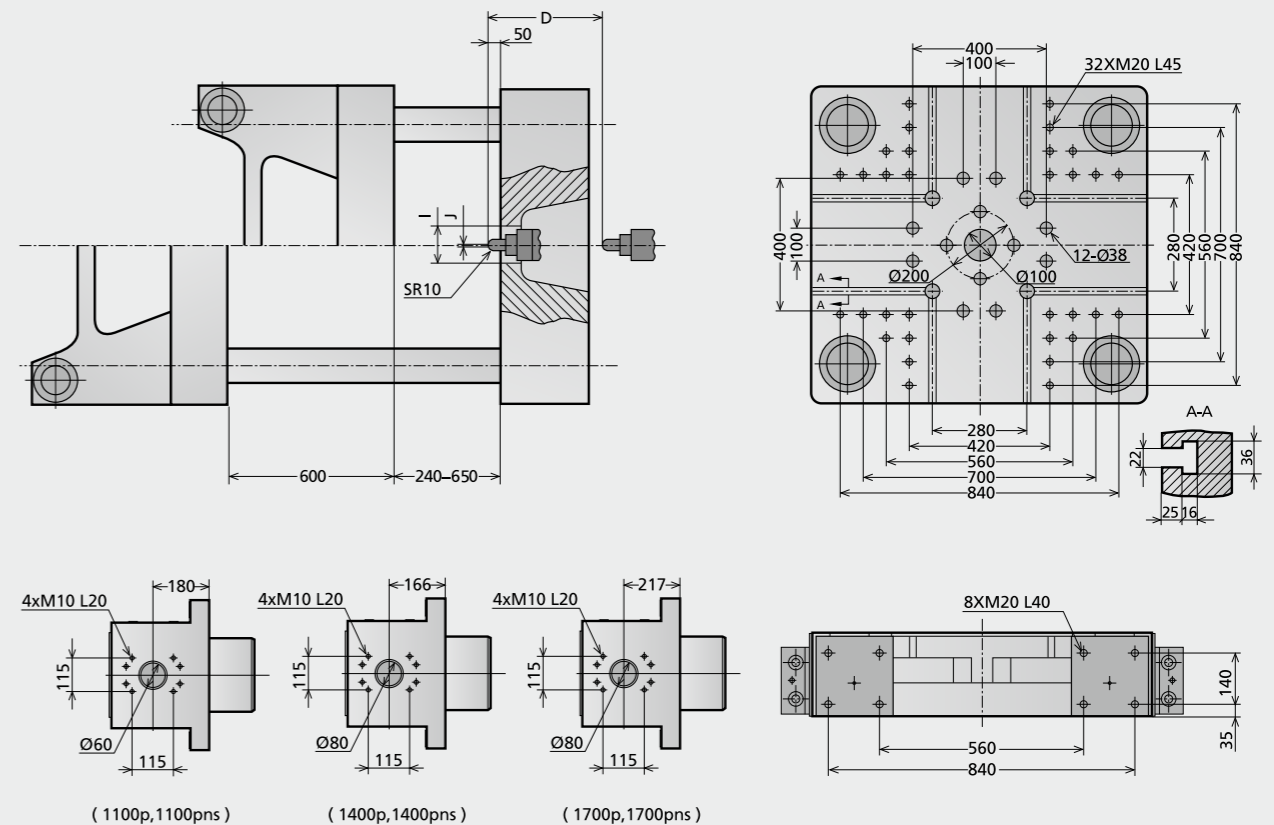
unit: mm



Note: The above machine size does not apply to the "C" type screw.

Platen dimensions VE3000 II /p

unit: mm



(1100p,1100pns) (1400p,1400pns) (1700p,1700pns)

	A	B	C	D	E	F	G	H	I	J
1700p,1700pns	7998	1697	2452	600	1388	248	2083	2237	Ø160	Ø3
1400p,1400pns	7810	1562	2459	540	1388	248	2083	2237	Ø160	Ø3
1100p,1100pns	7348	1407	2152	540	1388	243	2006	2232	Ø160	Ø3

Technical data **VE3800 II/p**

CLAMPING UNIT

		VE3800 II
Clamping force	kN	3800
Toggle stroke	mm	660
Min. mold height	mm	250
Max. mold height	mm	710
Max. mold opening stroke	mm	1370
Space between tie bars HxV	mm	770x770
Min. mold dimension	mm	500x500
Ejector stroke	mm	160
Ejector force	kN (tf)	58.8 (6.0)
Mold platen dimension HxV	mm	1150x1150

	A	B	C (OP)	A	B	C (OP)	A	B	C (OP)
Screw diameter	50	55	60	55	60	65	60	65	70
Screw L/D ratio	25	22.7	23	25	22.9	23	25	23	23
Injection volume (theoretical) cm ³	471	570	678	617	735	863	792	929	1078
Injection weight (PS)	428	518	617	562	668	785	720	845	980
Screw speed	320			300			250		
Plasticizing capacity (PS)	46	60	71	56	70	81	60	70	85
Nozzle contact force	54 (5.5)			54 (5.5)			54 (5.5)		
Heating power	26.1	26.1	28.8	32.9	32.9	35.6	36.1	36.1	38.8

INJECTION UNIT

	1100pns			1400pns			1700pns		
Injection speed	160			160			160		
Injection rate (PS)	285	346	411	346	411	483	411	483	560
Injection pressure	218			214			210		
	1800			1800			1800		
	1510			1530			1550		

INJECTION UNIT

	1100p			1400p			1700p		
Injection speed	300			300			300		
Injection rate (PS)	536	648	770	648	770	905	770	905	1050
Injection pressure	230			230			230		
	1900			1930			1960		
	1590			1640			1690		

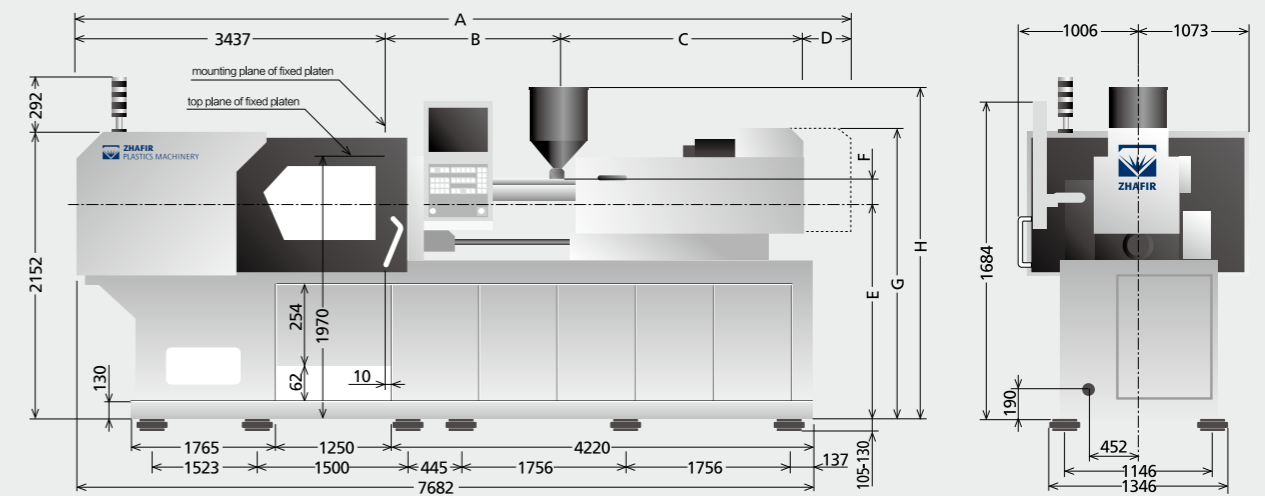
OTHERS

		1100pns:51/92 1100p:78.6/139	1400pns:56/101 1400p:89.2/157	1700pns:72/129 1700p:95.5/168
Connection power	kW/A			
Hopper capacity	L	50	50	50
Machine dimension	m	7.7x2.1x2.45	8.06x2.1x2.45	8.2x2.1x2.45
Machine weight	t	19.3	20.2	20.6

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

Machine dimensions VE3800 II /p

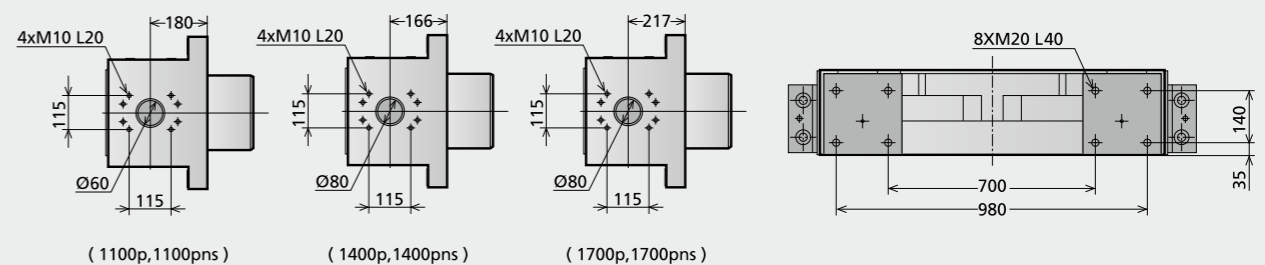
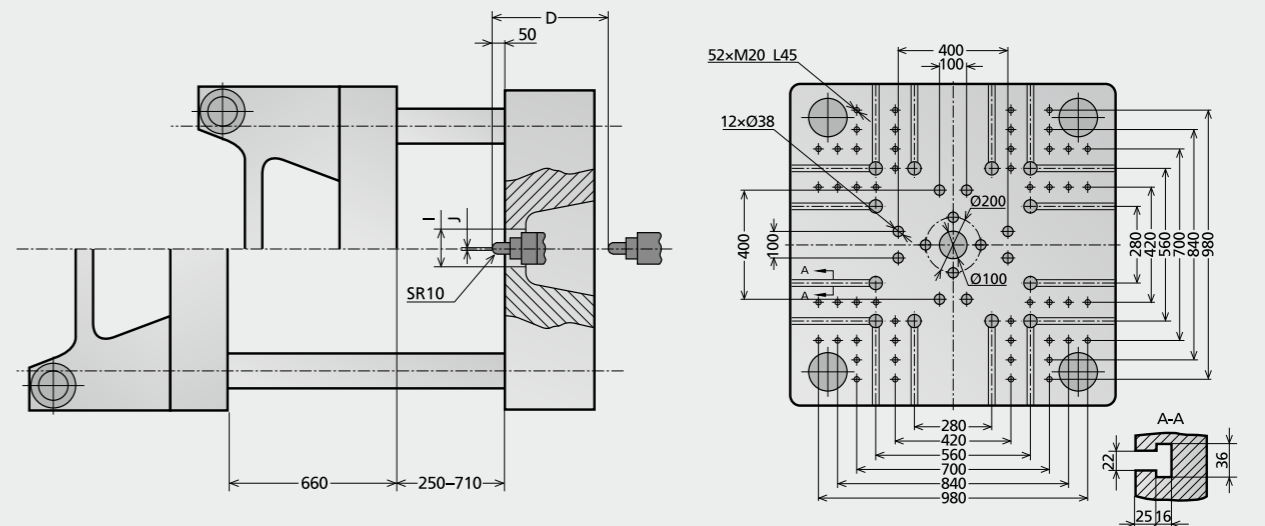
unit: mm



Note: The above machine size does not apply to the "C" type screw.

Platen dimensions VE3800 II /p

unit: mm



	A	B	C	D	E	F	G	H	I	J
1700p,1700pns	8186	1697	2452	600	1388	248	2083	2237	Ø160	Ø3
1400p,1400pns	8058	1562	2459	600	1388	248	2083	2237	Ø160	Ø3
1100p,1100pns	7576	1407	2152	580	1388	243	2006	2232	Ø160	Ø3

Technical data **VE4500 II/p**

CLAMPING UNIT

		VE4500 II
Clamping force	kN	4500
Toggle stroke	mm	800
Min. mold height	mm	400
Max. mold height	mm	820
Max. mold opening stroke	mm	1620
Space between tie bars HxV	mm	820x820
Min. mold dimension	mm	540x540
Ejector stroke	mm	180
Ejector force	kN (tf)	117.6(12.0)
Mold platen dimension HxV	mm	1220x1220

	A	B	C(OP)	A	B	C(OP)
Screw diameter	55	60	65	60	65	70
Screw L/D ratio	25	22.9	23	25	23	23
Injection volume (theoretical) cm ³	617	735	863	792	929	1078
Injection weight (PS)	562	668	785	720	845	980
Screw speed		300			250	
Plasticizing capacity (PS)	56	70	81	60	70	85
Nozzle contact force		54(5.5)			54(5.5)	
Heating power	32.9	32.9	35.6	36.1	36.1	38.8

INJECTION UNIT

	1400pns			1700pns		
Injection speed	mm/s	160		160		
Injection rate (PS)	g/s	346	411	483	560	
Injection pressure	Mpa	214	180	153	210	180
	bar	2140	1800	1530	2100	1800

INJECTION UNIT

	1400p			1700p		
Injection speed	mm/s	300		300		
Injection rate (PS)	g/s	648	770	905	1050	
Injection pressure	Mpa	230	193	164	230	196
	bar	2300	1930	1640	2300	1960

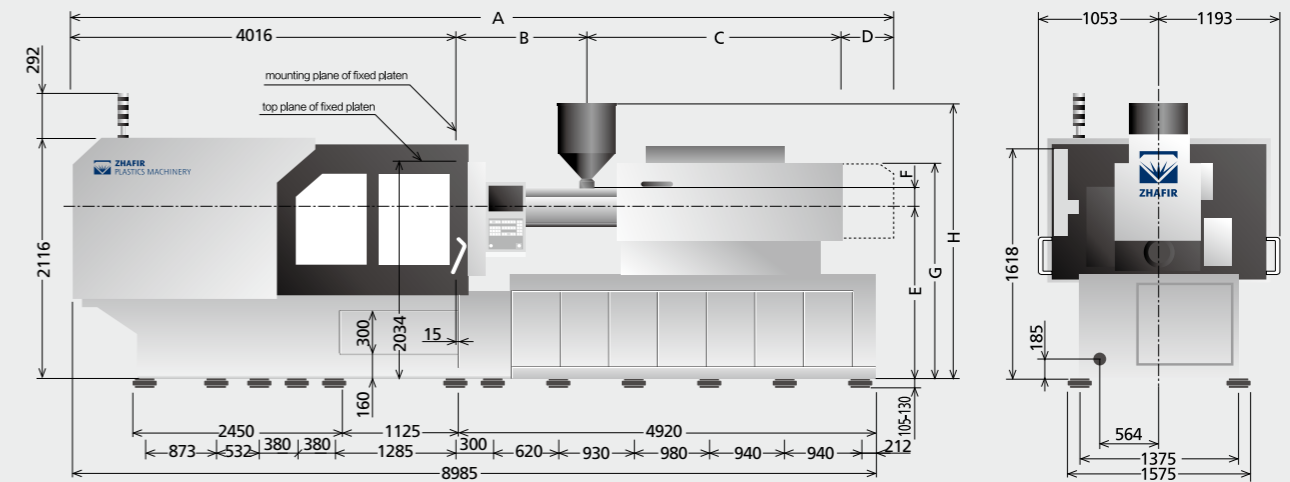
OTHERS

Connection power	kW/A	1400pns:56/101 1400p:89.2/157	1700pns:72/129 1700p:95.5/168
Hopper capacity	L	50	50
Machine dimension	m	9.0*2.3*2.42	9.0*2.3*2.42
Machine weight	t	25	25.4

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

Machine dimensions VE4500 II /p

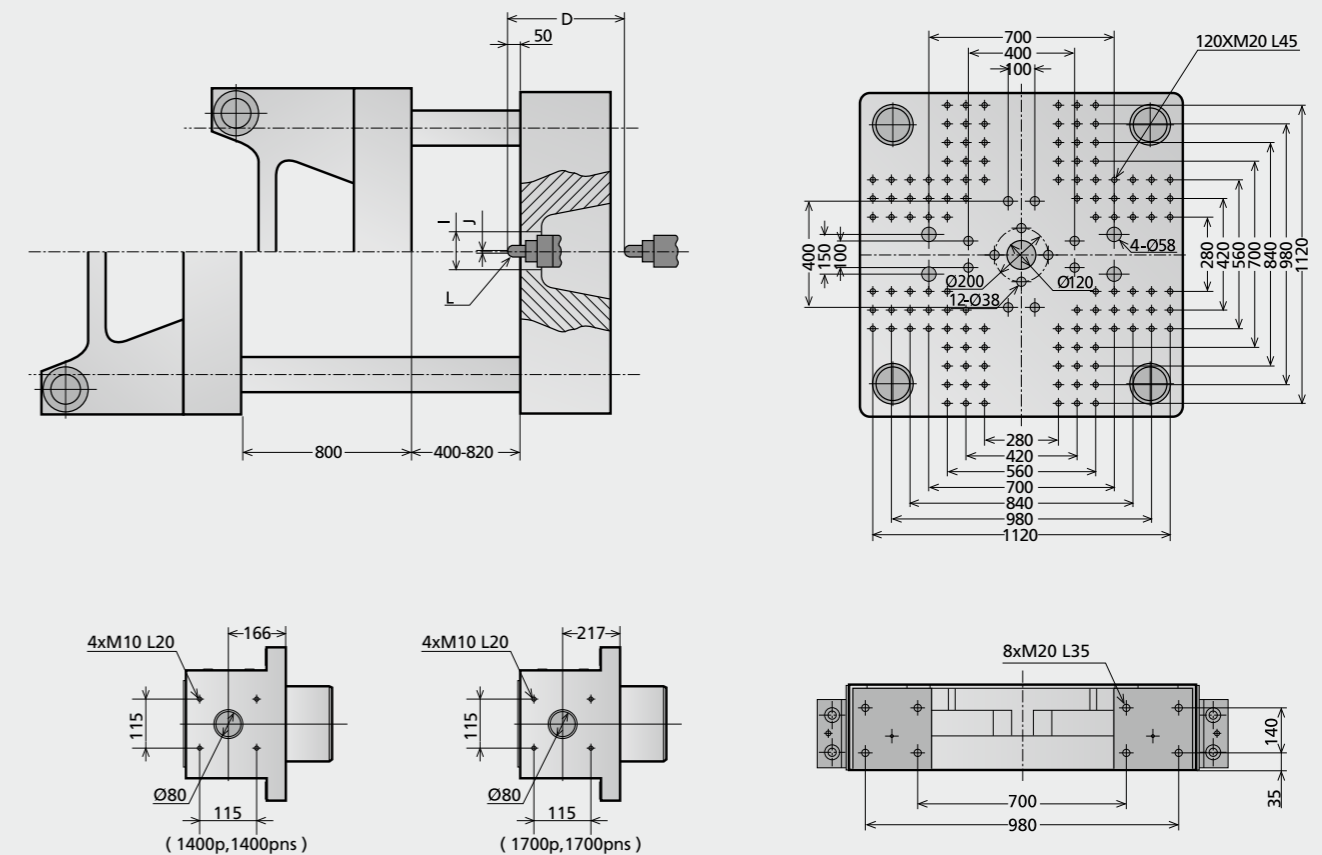
unit: mm



Note: The above machine size does not apply to the "C" type screw.

Platen dimensions VE4500 II /p

unit: mm



	A	B	C	D	E	F	G	H	I	J	L
1700p, 1700pns	8765	1697	2452	600	1404	248	2100	2233	Ø200	Ø3	SR10
1400p, 1400pns	8637	1562	2459	600	1404	248	2100	2233	Ø200	Ø3	SR10

Platen Layout **VE1500 II/p**

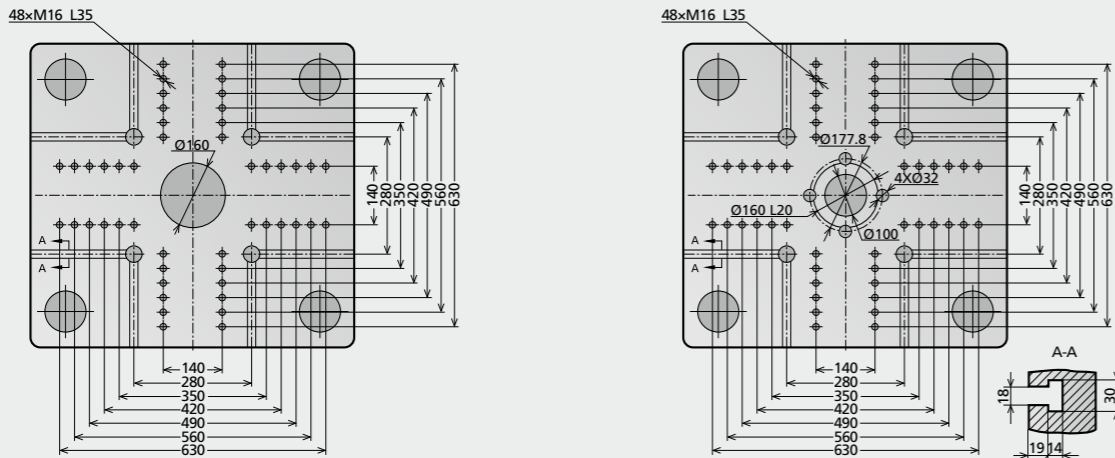
Platen Layout **VE1900 II/p**

European version

European version

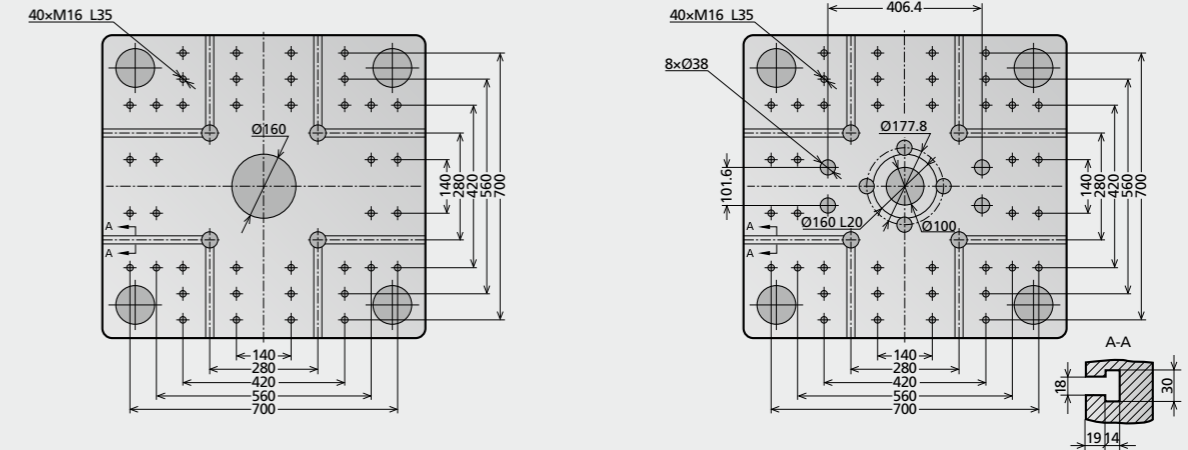
Fixed platen

Movable platen



Fixed platen

Movable platen

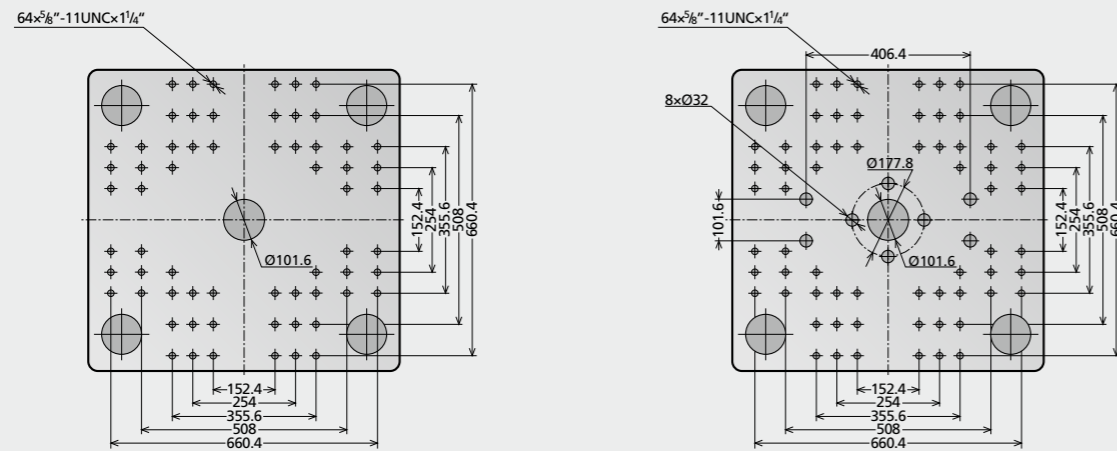


American version

American version

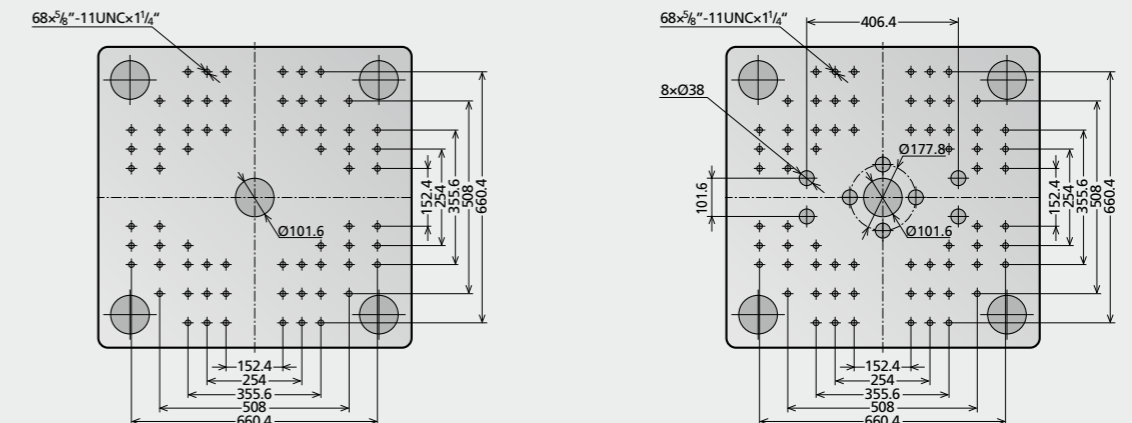
Fixed platen

Movable platen



Fixed platen

Movable platen

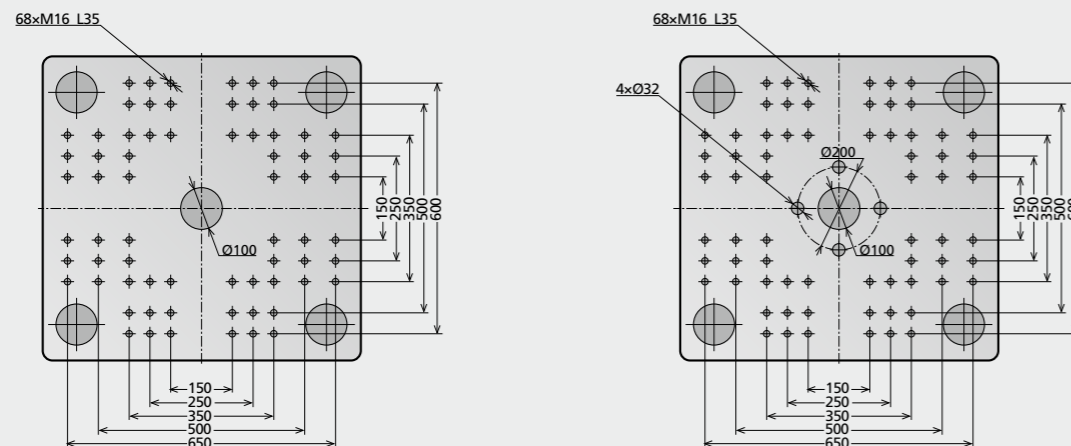


Japanese version

Japanese version

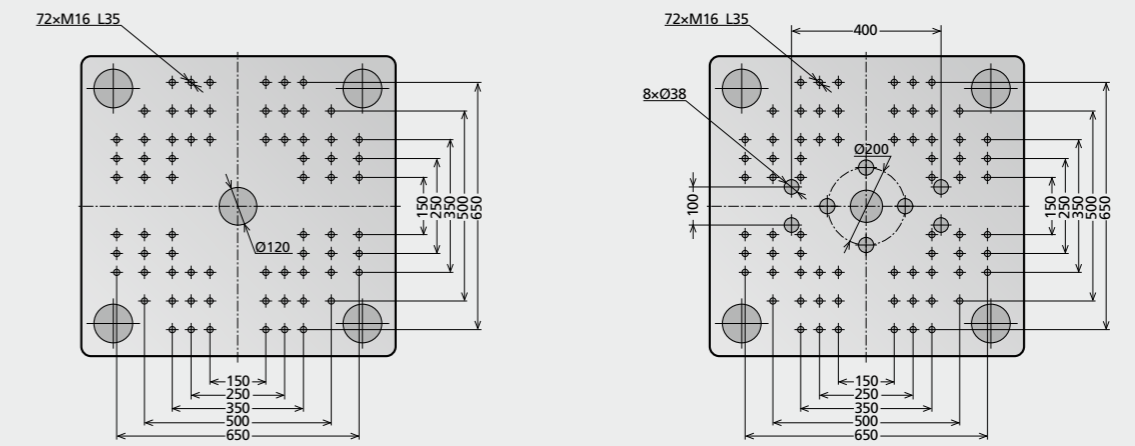
Fixed platen

Movable platen



Fixed platen

Movable platen



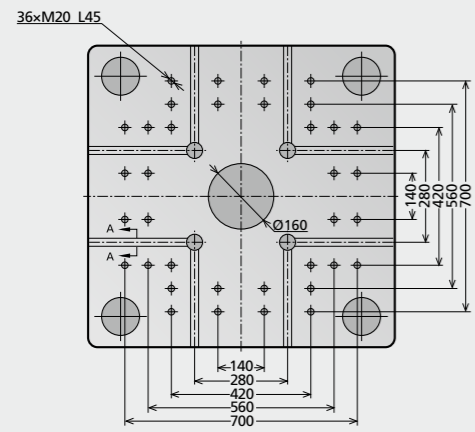
Platen Layout **VE2300 II/p**

Platen Layout **VE3000 II/p**

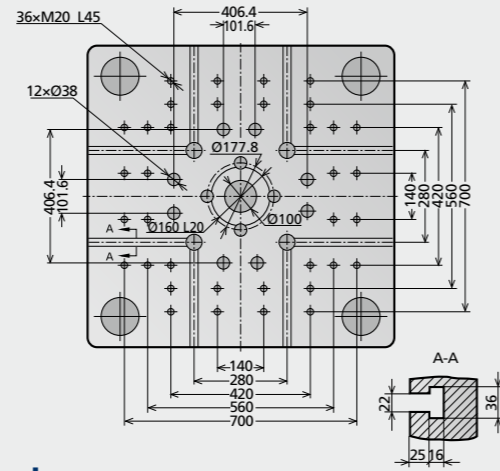
European version

unit: mm

Fixed platen



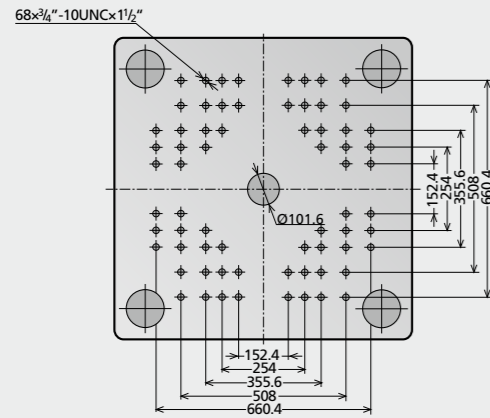
Movable platen



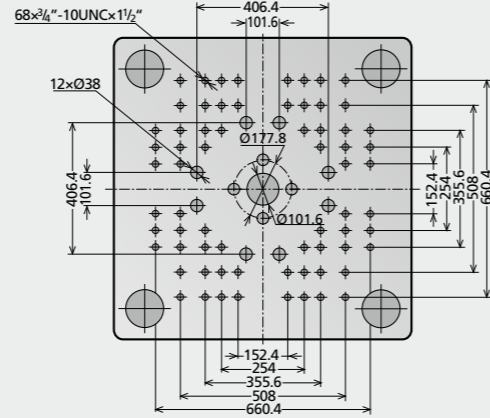
American version

unit: mm

Fixed platen



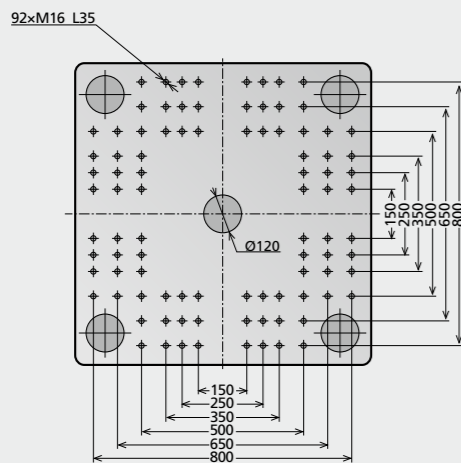
Movable platen



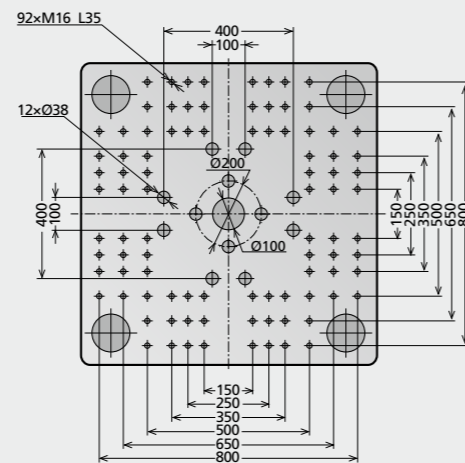
Japanese version

unit: mm

Fixed platen



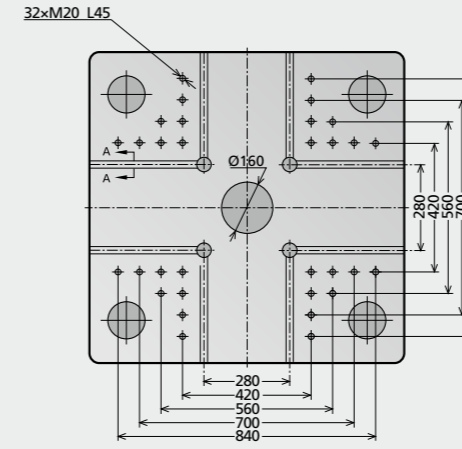
Movable platen



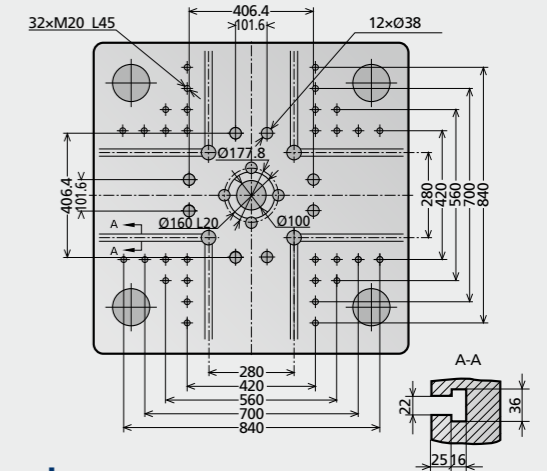
European version

unit: mm

Fixed platen



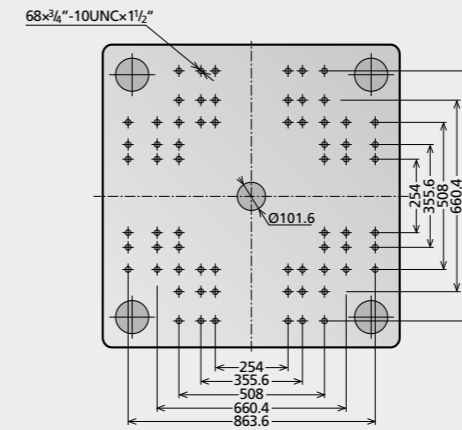
Movable platen



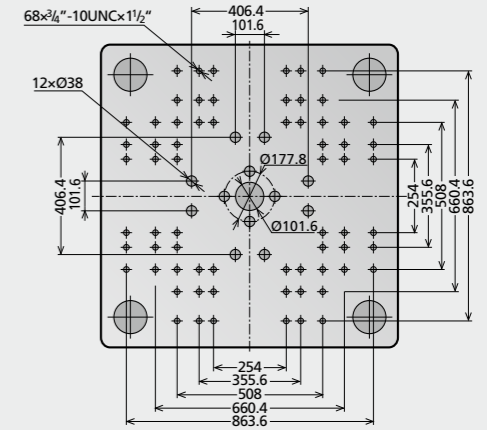
American version

unit: mm

Fixed platen



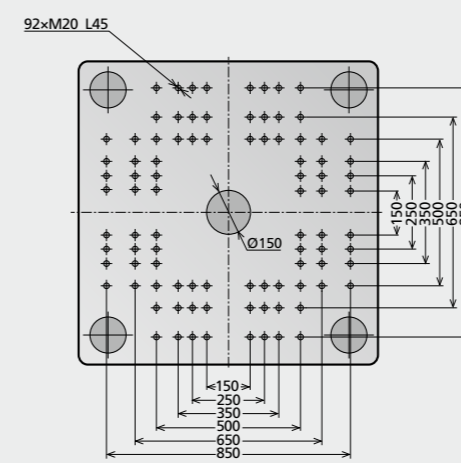
Movable platen



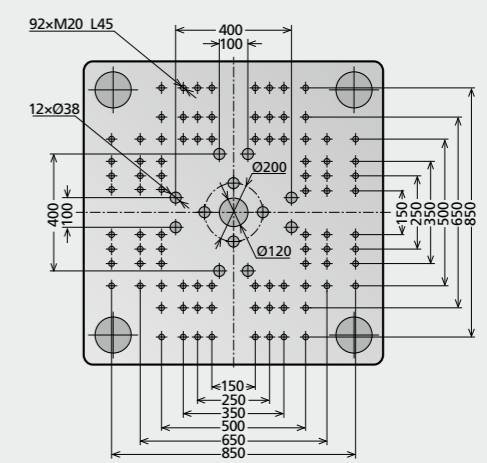
Japanese version

unit: mm

Fixed platen



Movable platen



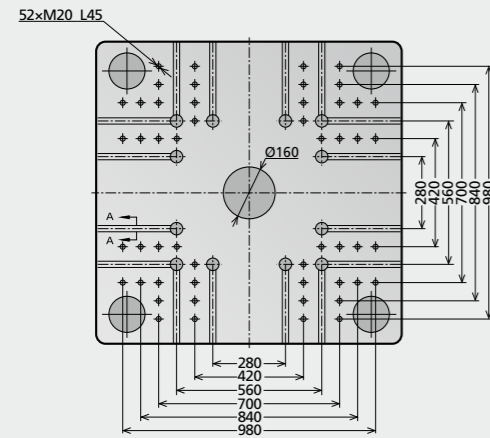
Platen Layout **VE3800 II/p**

Platen Layout **VE4500 II/p**

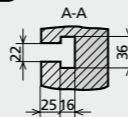
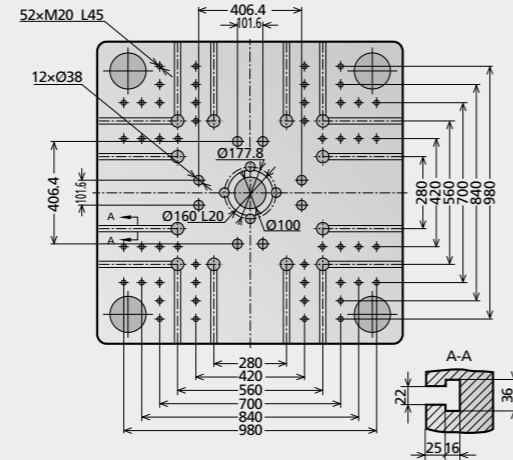
European version

unit: mm

Fixed platen



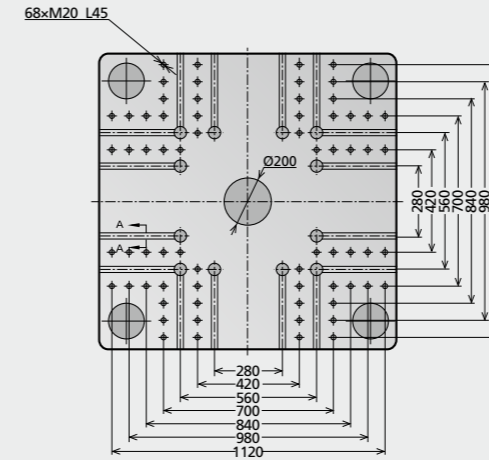
Movable platen



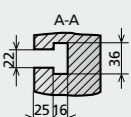
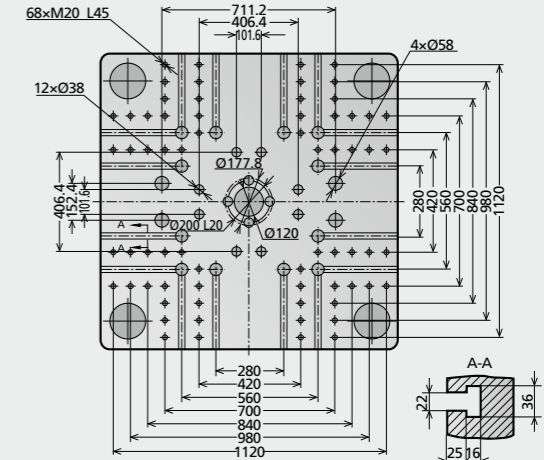
European version

unit: mm

Fixed platen



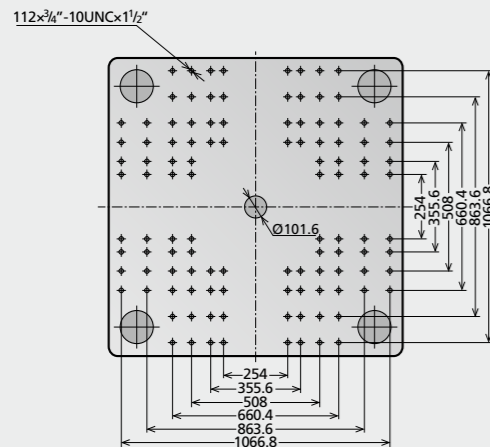
Movable platen



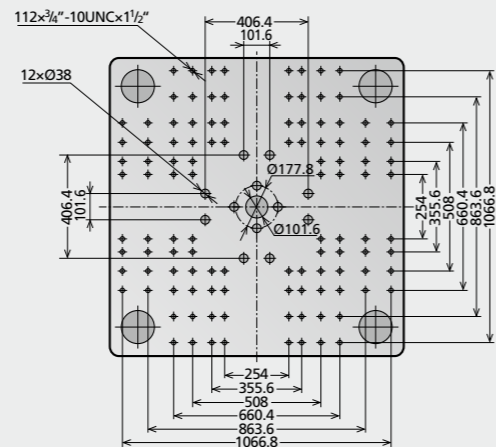
American version

unit: mm

Fixed platen



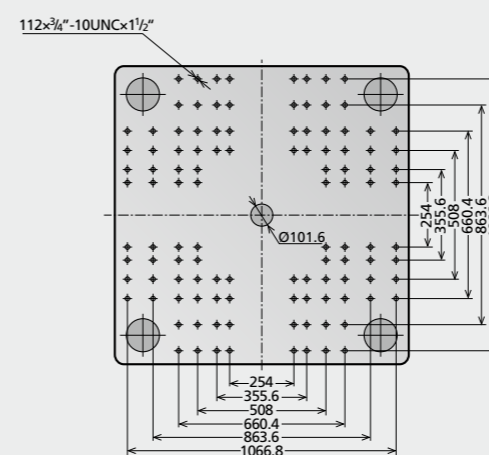
Movable platen



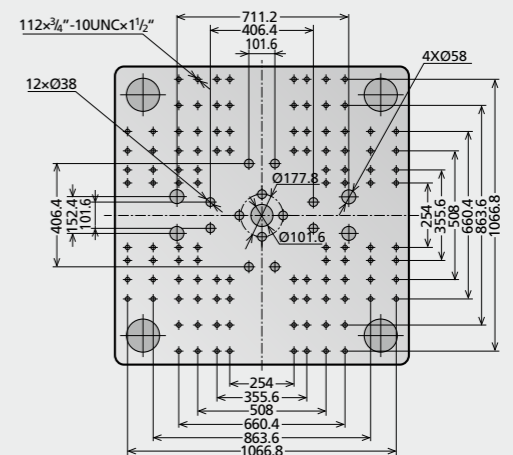
American version

unit: mm

Fixed platen



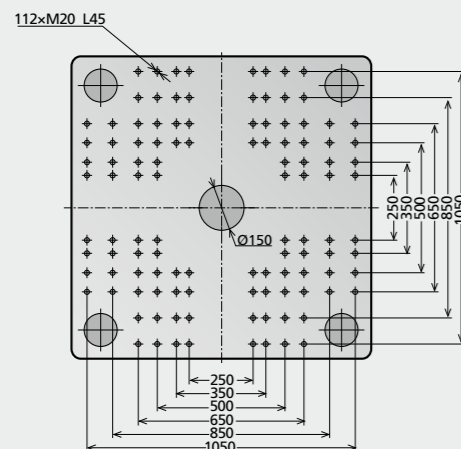
Movable platen



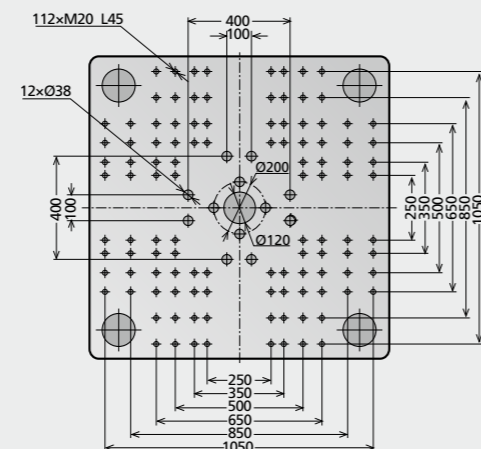
Japanese version

unit: mm

Fixed platen



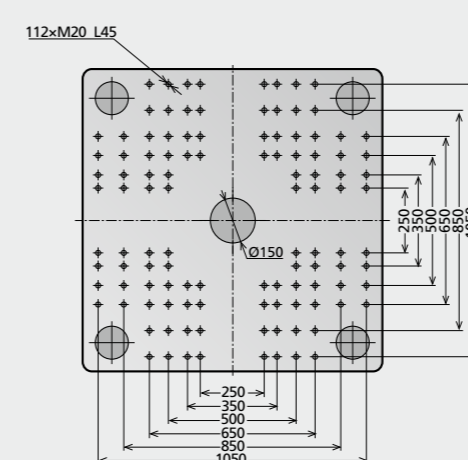
Movable platen



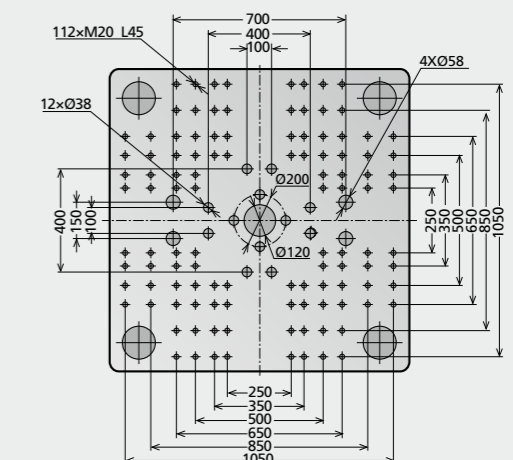
Japanese version

unit: mm

Fixed platen



Movable platen



Standard Equipment List

Injection Unit

- » Abrasion-resistant screw unit(open nozzle)
- » Nozzle safety guard
- » 6 Injection steps
- » 4 Pressure holding steps
- » 3 Dosing steps
- » 3 Back pressure steps
- » Screw suck back select(After holding/After dosing)
- » Screw suck back delay function
- » Injection delay function
- » Dosing delay function
- » Intrusion/filling by rotating screw
- » V/P switch over mode(position,time,pressure, speed)
- » Injection speed response mode select
- » Injection pressure segment control
- » Speed limit during holding pressure
- » Screw position setting(unit: 0.01mm)
- » Screw rotation speed setting
- » Holding pressure time setting
- » Mold open available during dosing
- » Barrel heating closed-loop control (K/J type available)
- » Barrel temperature holding function
- » Barrel temperature auto tuning function
- » Barrel pre-heating function
- » Barrel temperature synchronous control
- » Material overheating prevention function
- » Screw cold start prevention
- » Auto purge function

- » Screw rotation speed display
- » Setting for nozzle movement (switch/time)
- » Selection of nozzle retract (3 modes)
- » Nozzle contact device
- » Nozzle centre adjustable
- » Feeding throat temperature closed-loop control
- » Injection unit swiveling device
- » Independent nozzle temperature control

Clamping unit

- » 6 mold moving steps
- » Mold safety protection
- » Mold setup mode
- » Injection compression function
- » Clamping force pre-release during cooling
- » Injection during clamping(Pre-injection)
- » 2 Step mold close/clamp process
- » In mold cut function (ejector activate when mold closed)
- » Clamping safety device(Mechanical and Electrical)
- » Adjustable moving platen support
- » Clamping force setting
- » Ejector device
- » Ejector function deactivatable
- » 3 Ejector steps
- » Ejector forward delay function
- » Ejector vibration function
- » Ejector A/B function(2 steps ejector stroke)
- » Eject on the fly

Clamping unit

- » Ejector plate return signal confirmation
- » Cooling water distributor (12 sets up to 1500II, 18 sets for others)
- » 4 air valve groups
- » In mold ejector pin protection interface
- » Mold installation mode (Low speed mold move)
- » Needle shut off nozzle interface (one spare electrical interface)
- » Emergency stop(Operating and Non-operating sides)
- » Robot mounting layout
- » Central lubrication system
- » S-curve flexible control for mold movement

Controller & Monitor

- » 15 inch TFT color touch screen
- » Mold profile data memory (up to 200 sets)
- » Alarm history
- » Data setting record
- » 3 USB R/W interface
- » Injection pressure and speed curve display and record
- » Euromap 12 robot interface
- » Multi-language available(Chinese, German, English, Japanese etc.)
- » Metric/Imperial unit select
- » I/O monitor display
- » Printer interface(USB connector)
- » Production cycle monitor
- » New page for production

- » Production data record (5000 cycles display, 100,000 cycles record)
- » Production data graphics
- » Quality parameters tolerance setting
- » Quality abnormal alarm
- » Cycle counter
- » Machine overview display
- » Main data setting fast access
- » Machine maintenance administration
- » Clamping force curve display
- » Barrel temperature monitor
- » Display cycle time sequences in each phase
- » 3 Color alarm lamp(red/yellow/green)
- » Alarm buzzer
- » HPM function: Auto limit injection pressure
- » Display of actual performance data
- » Multi-action selectable during machine alarm

Others

- » Standard Zhafir color
- » Adjustable machine pads
- » 3 Power sockets
- » Standard hopper
- » Mold clammer
- » T-screw nuts(for T-slot use)
- » Tools box
- » Spare parts

