

Zhafir **Venus<sup>2</sup>** Series  
Specifications / International  
4500-8000kN



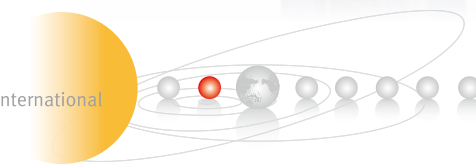
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ZF 20180730-IV





# Technical data **VE5500 II**

## CLAMPING UNIT

		VE5500 II
Clamping force	kN	5500
Toggle stroke	mm	900
Min. mold height	mm	380
Max. mold height	mm	880
Max. mold opening stroke	mm	1780
Space between tie bars HxV	mm	970x970
Min. mold dimension	mm	630x630
Ejector stroke	mm	180
Ejector force	kN (tf)	137.2 (14.0)
Mold platen dimension HxV	mm	1400x1400

	A	B	C	A	B	C	A	B	C	A	B	C	
Screw diameter	55	60	65	60	65	70	65	70	80	75	80	90	
Screw L/D ratio	21.8	20	18.5	21.6	20	18.6	21.5	20	17.5	21.3	20	17.8	
Injection volume (theoretical) cm <sup>3</sup>	617	735	863	792	929	1078	1068	1239	1619	1634	1860	2354	
Injection weight (PS)	562	668	785	720	845	980	972	1127	1473	1487	1693	2142	
Screw speed	300			250			210			185			
Plasticizing capacity (PS)	54	64	71	57	68	77	56	65	80	60	80	100	
Plasticizing capacity (HDPE)							80	95	120	100	115	150	
Nozzle contact force	54 (5.5)			54 (5.5)			63.7 (6.5)			63.7 (6.5)			
Heating power	29.8			34.4			38			42			
<b>INJECTION UNIT</b>	<b>1400</b>			<b>1700</b>			<b>2250</b>			<b>3350</b>			
Injection speed	160			160			160			160			
Injection rate (PS)	346	411	483	411	483	560	483	560	731	643	731	926	
Injection pressure	Mpa	214	180	153	210	180	155	210	180	138	205	180	142
	bar	2140	1800	1530	2100	1800	1550	2100	1800	1380	2050	1800	1420
Holding pressure	Mpa	190	160	136	187	160	138	190	162	124	185	162	128
	bar	1900	1600	1360	1870	1600	1380	1900	1620	1240	1850	1620	1280
<b>INJECTION UNIT</b>	<b>1400h</b>			<b>1700h</b>			--			--			
Injection speed	mm/s	250			250			--			--		
Injection rate (PS)	g/s	540	642	754	642	754	875	--	--	--	--	--	
Injection pressure	Mpa	214	180	153	210	180	155	--	--	--	--	--	
	bar	2140	1800	1530	2100	1800	1550	--	--	--	--	--	
Holding pressure	Mpa	190	160	136	187	160	138	--	--	--	--	--	
	bar	1900	1600	1360	1870	1600	1380	--	--	--	--	--	

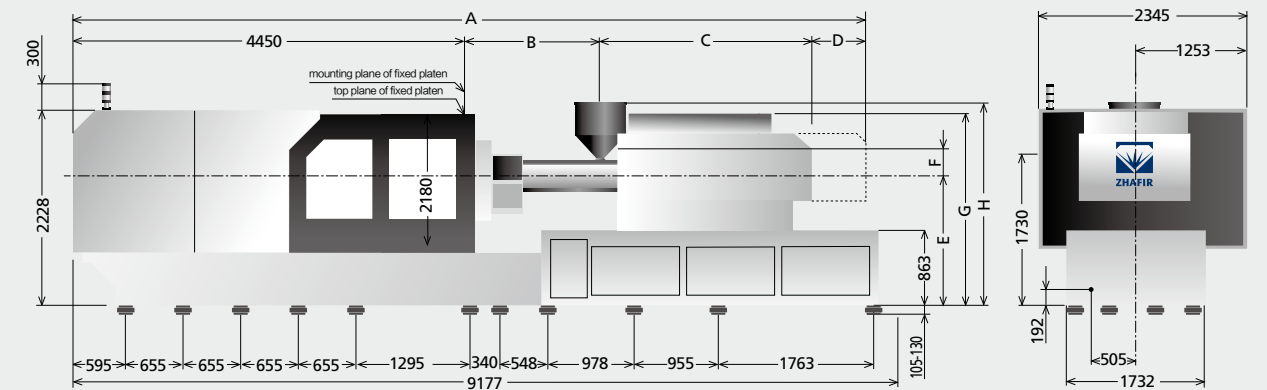
## OTHERS

Connection power	kW/A	1400:71/118 1400h:100/168	1700:83/139 1700h:102/171	2250:77/129 --	3350:105/176 --
Hopper capacity	l	50	50	100	100
Machine dimension	m	9.37x2.37x2.52	9.37x2.37x2.52	9.65x2.37x2.52	9.89x2.37x2.77
Machine weight	t	31.3	31.4	31.9	33.6

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

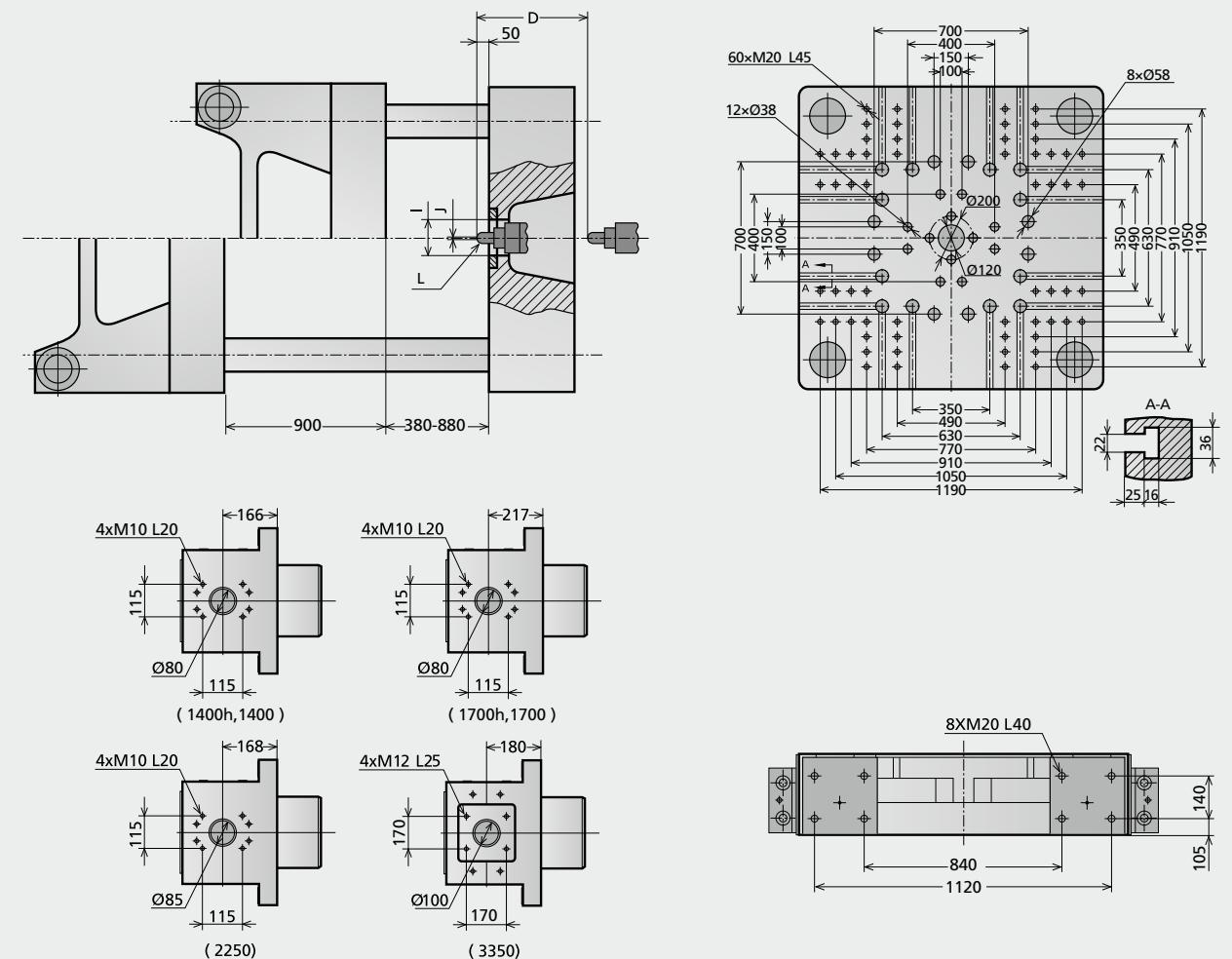
## Machine dimensions VE5500 II

unit: mm



## Platen dimensions VE5500 II

unit: mm



	A	B	C	D	E	F	G	H	I	J	L
3350	9896	1810	2916	720	1483	308	2146	2784	Ø250	Ø4	SR15
2250	9329	1606	2553	720	1483	308	2189	2444	Ø250	Ø4	SR15
1700h,1700	9003	1528	2415	610	1483	308	2189	2312	Ø250	Ø3	SR10
1400h,1400	8803	1358	2385	610	1483	308	2189	2312	Ø250	Ø3	SR10

# Technical data **VE6500 II**

## CLAMPING UNIT

		VE6500 II
Clamping force	kN	6500
Toggle stroke	mm	1000
Min. mold height	mm	420
Max. mold height	mm	1000
Max. mold opening stroke	mm	2000
Space between tie bars HxV	mm	1080x1080
Min. mold dimension	mm	700x700
Ejector stroke	mm	200
Ejector force	kN (tf)	196(20.0)
Mold platen dimension HxV	mm	1550x1550

	A	B	C	A	B	C	A	B	C
Screw diameter	60	65	70	65	70	80	75	80	90
Screw L/D ratio	21.6	20	18.6	21.5	20	17.5	21.3	20	17.8
Injection volume (theoretical) cm <sup>3</sup>	792	929	1078	1068	1239	1619	1634	1860	2354
Injection weight (PS)	720	845	980	972	1127	1473	1487	1693	2142
Screw speed		250			210			185	
Plasticizing capacity (PS)	57	68	77	56	65	80	60	80	100
Plasticizing capacity (HDPE)				80	95	120	100	115	150
Nozzle contact force		54(5.5)			63.7(6.5)			63.7(6.5)	
Heating power		34.4			38			42	

## INJECTION UNIT

	1700	2250	3350
Injection speed	160	160	160
Injection rate (PS)	411	483	560
Injection pressure	Mpa	180	155
	bar	2100	1800
Holding pressure	Mpa	187	160
	bar	1870	1600

## INJECTION UNIT

	1700h	--	--
Injection speed	250	--	--
Injection rate (PS)	642	754	875
Injection pressure	Mpa	210	180
	bar	2100	1800
Holding pressure	Mpa	187	160
	bar	1870	1600

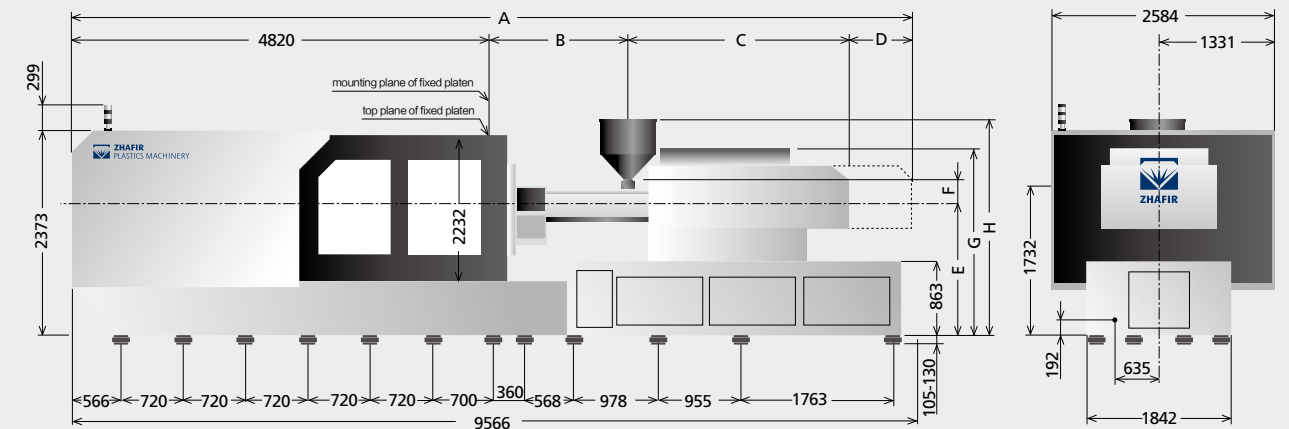
## OTHERS

	1700:83/139 1700h:102/171	2250:77/129 --	3350:105/176 --
Connection power	kW/A		
Hopper capacity	l	50	100
Machine dimension	m	9.77x2.58x2.66	10.26x2.58x2.83
Machine weight	t	38	42.3

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

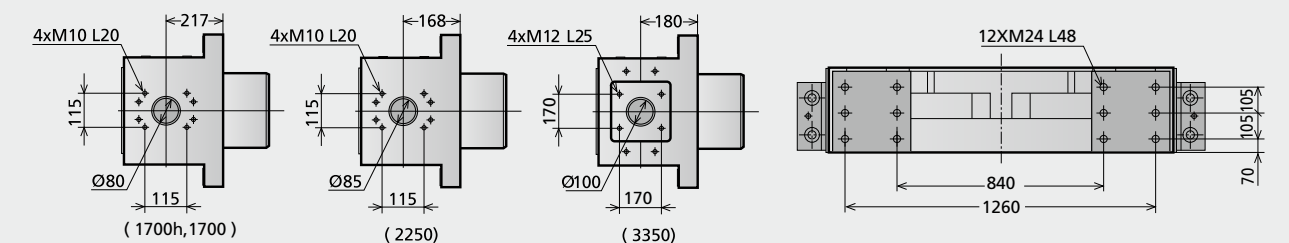
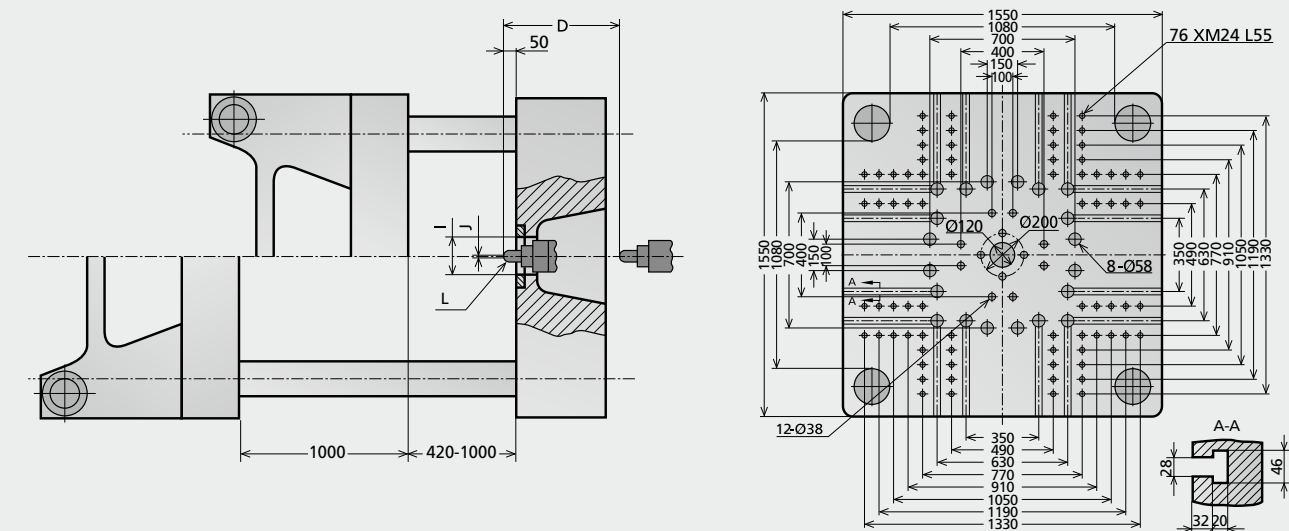
## Machine dimensions VE6500 II

unit: mm



## Platen dimensions VE6500 II

unit: mm



	A	B	C	D	E	F	G	H	I	J	L
3350	10264	1815	2913	720	1536	307	2199	2827	Ø250	Ø4	SR15
2250	9694	1609	2550	720	1536	270	2162	2497	Ø250	Ø4	SR15
1700h, 1700	9362	1519	2414	610	1536	248	2242	2365	Ø250	Ø4	SR15



# Technical data **VE8000 II**

## CLAMPING UNIT

		VE8000 II
Clamping force	kN	8000
Toggle stroke	mm	1000
Min. mold height	mm	420
Max. mold height	mm	1000
Max. mold opening stroke	mm	2000
Space between tie bars HxV	mm	1080x1080
Min. mold dimension	mm	700x700
Ejector stroke	mm	200
Ejector force	kN (tf)	196(20.0)
Mold platen dimension HxV	mm	1550x1550

	A	B	C	A	B	C	A	B	C
Screw diameter	60	65	70	65	70	80	75	80	90
Screw L/D ratio	21.6	20	18.6	21.5	20	17.5	21.3	20	17.8
Injection volume (theoretical) cm <sup>3</sup>	792	929	1078	1068	1239	1619	1634	1860	2354
Injection weight (PS)	720	845	980	972	1127	1473	1487	1693	2142
Screw speed		250			210			185	
Plasticizing capacity (PS)	57	68	77	56	65	80	60	80	100
Plasticizing capacity (HDPE)				80	95	120	100	115	150
Nozzle contact force		54(5.5)		63.7(6.5)			63.7(6.5)		
Heating power		34.4		38			42		

## INJECTION UNIT

	1700	2250	3350
Injection speed	160	160	160
Injection rate (PS)	411	483	560
Injection pressure	Mpa	210	180
	bar	2100	1800
Holding pressure	Mpa	187	160
	bar	1870	1600

## INJECTION UNIT

	1700h	--	--
Injection speed	250	--	--
Injection rate (PS)	642	754	875
Injection pressure	Mpa	210	180
	bar	2100	1800
Holding pressure	Mpa	187	160
	bar	1870	1600

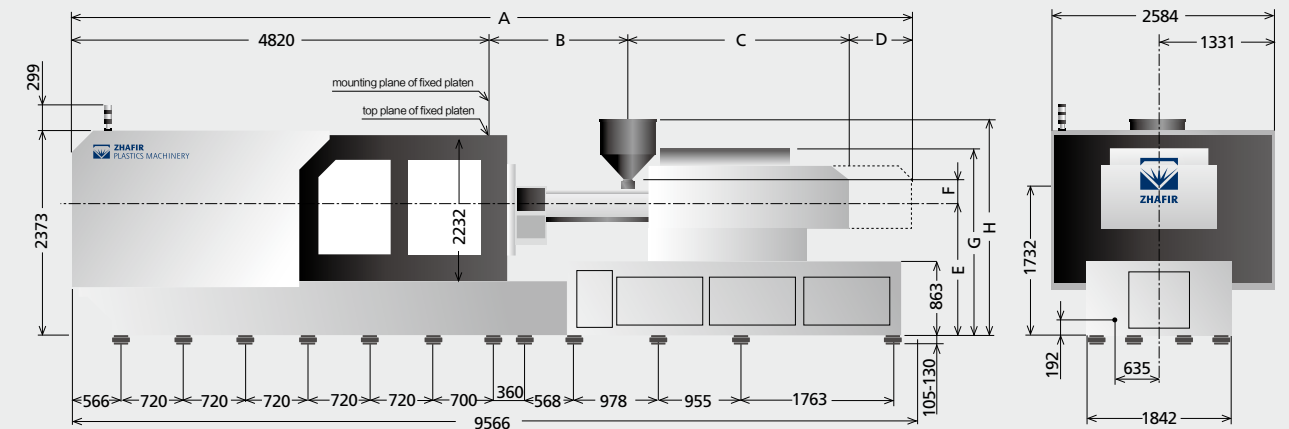
## OTHERS

	1700:83/139 1700h:102/171	2250:77/129 --	3350:105/176 --
Connection power	kW/A		
Hopper capacity	l	50	100
Machine dimension	m	9.77x2.58x2.66	10.26x2.58x2.83
Machine weight	t	38	42.3

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

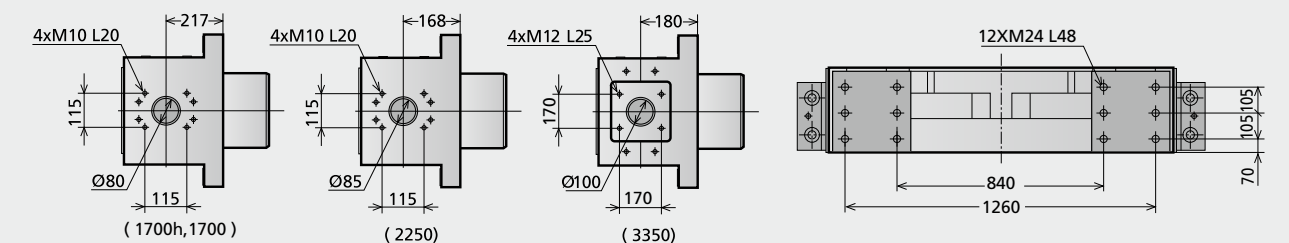
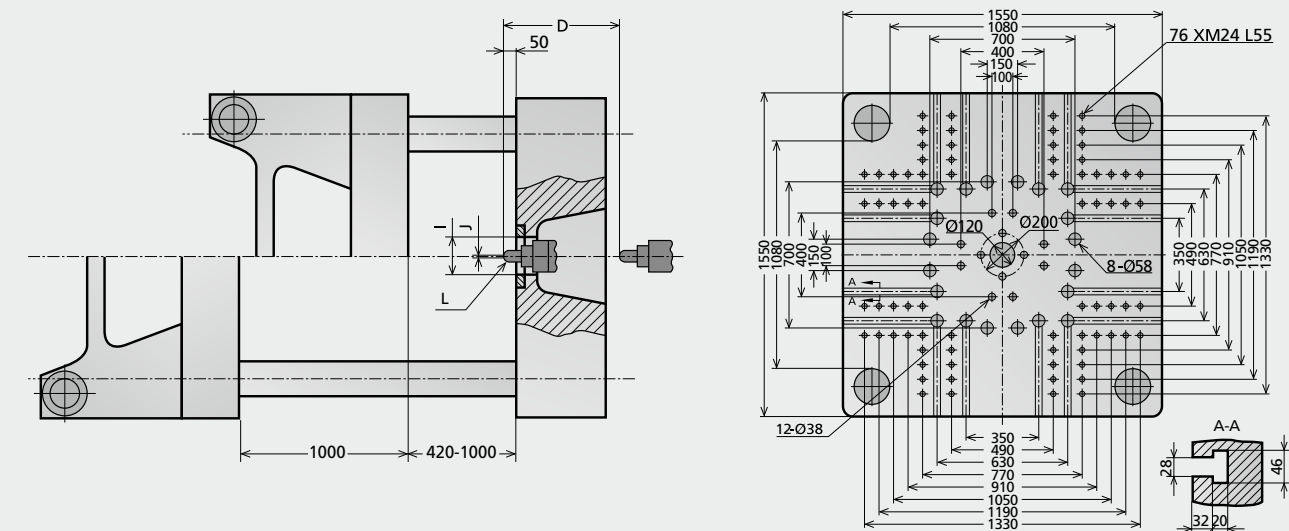
## Machine dimensions VE8000 II

unit: mm



## Platen dimensions VE8000 II

unit: mm



	A	B	C	D	E	F	G	H	I	J	L
3350	10264	1815	2913	720	1536	307	2199	2827	Ø250	Ø4	SR15
2250	9694	1609	2550	720	1536	270	2162	2497	Ø250	Ø4	SR15
1700h,1700	9362	1519	2414	610	1536	248	2242	2365	Ø250	Ø4	SR15

# Platen Layout **VE4500 II**

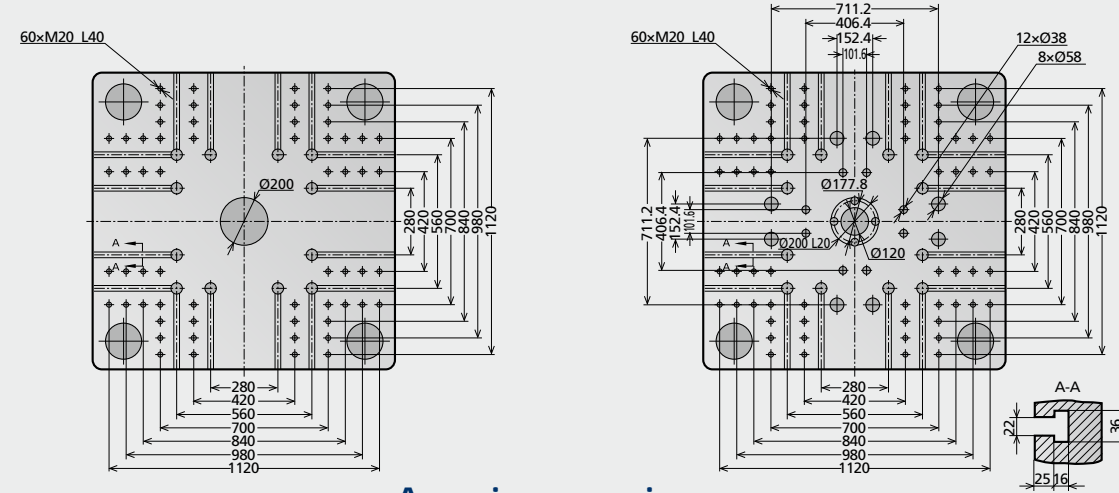
# Platen Layout **VE5500 II**

## European version

unit: mm

Fixed platen

Movable platen

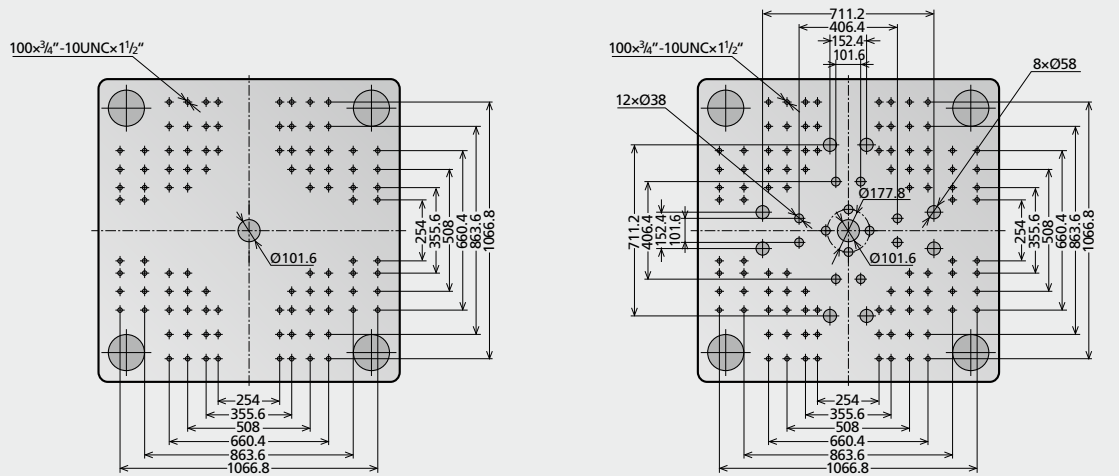


## American version

unit: mm

Fixed platen

Movable platen

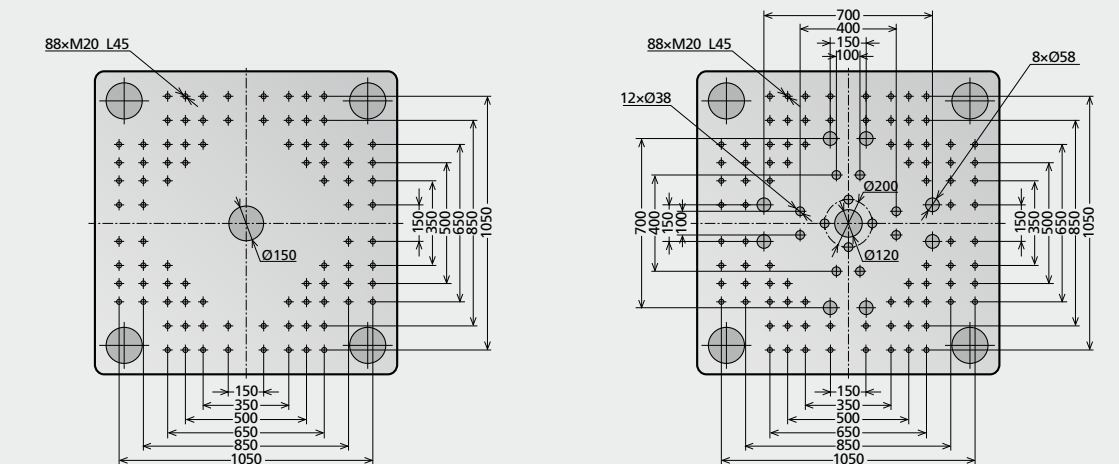


## Japanese version

unit: mm

Fixed platen

Movable platen

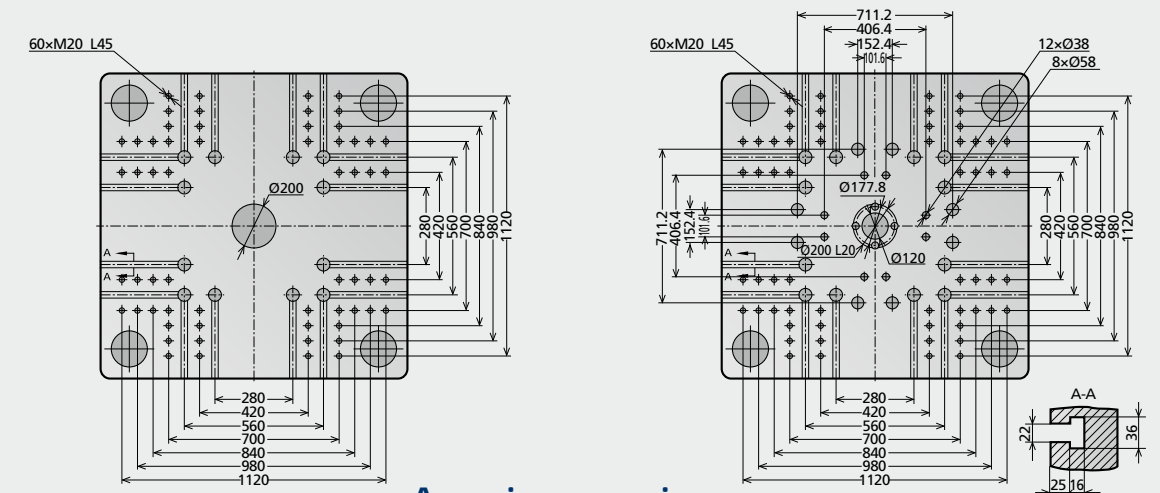


## European version

unit: mm

Fixed platen

Movable platen

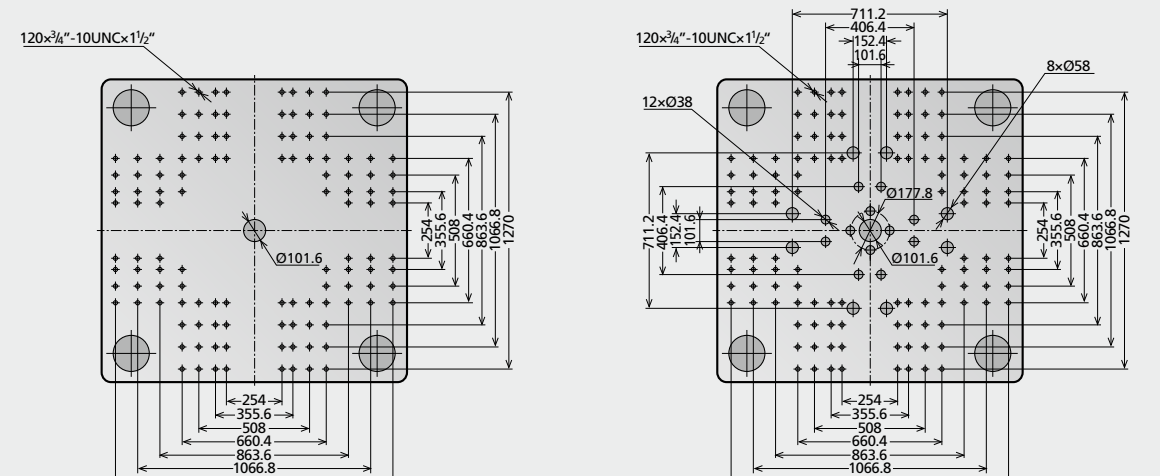


## American version

unit: mm

Fixed platen

Movable platen

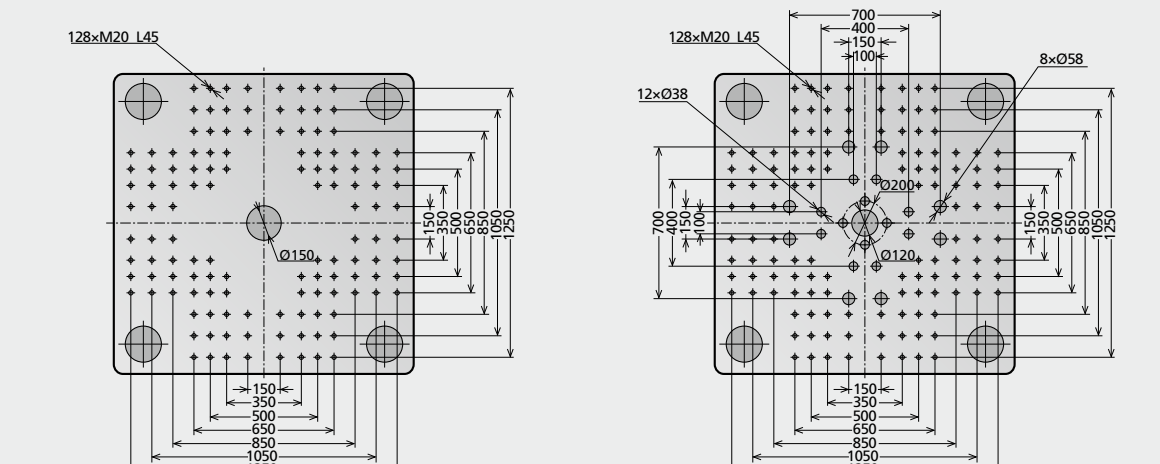


## Japanese version

unit: mm

Fixed platen

Movable platen

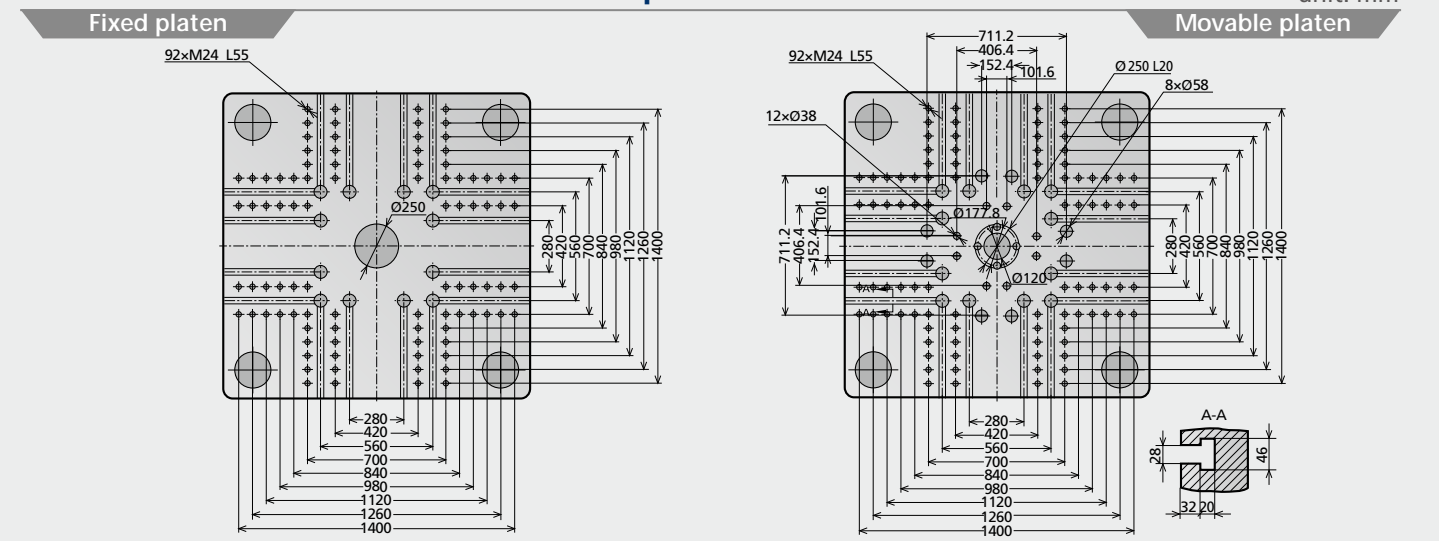
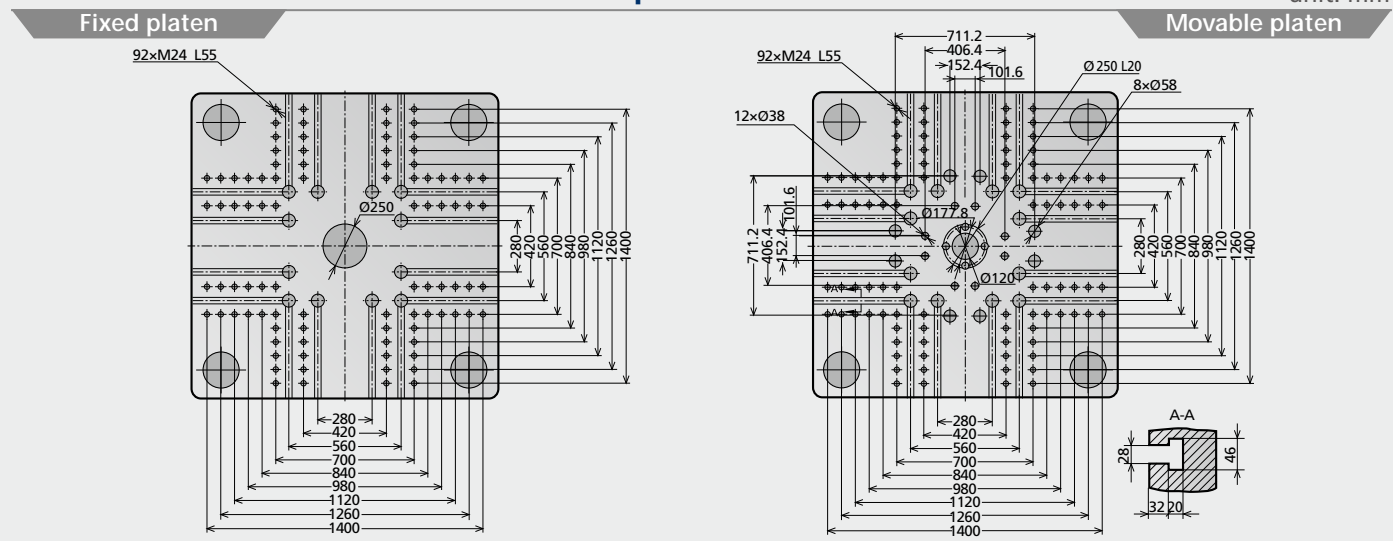


# Platen Layout **VE6500 II**

# Platen Layout **VE8000 II**

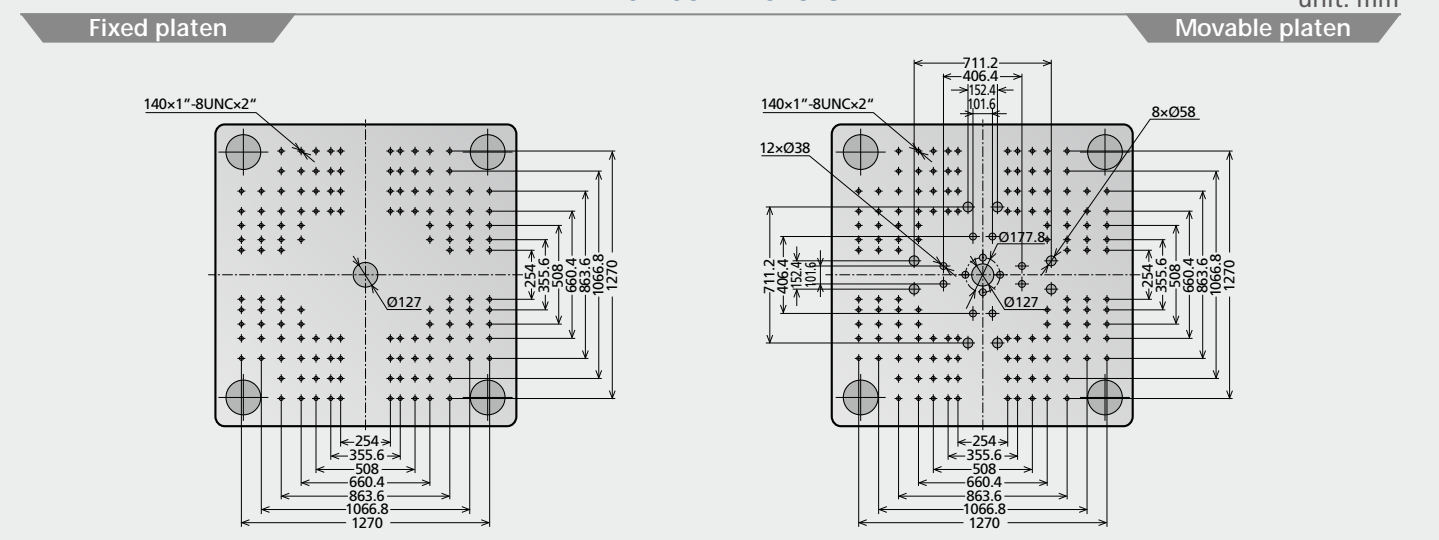
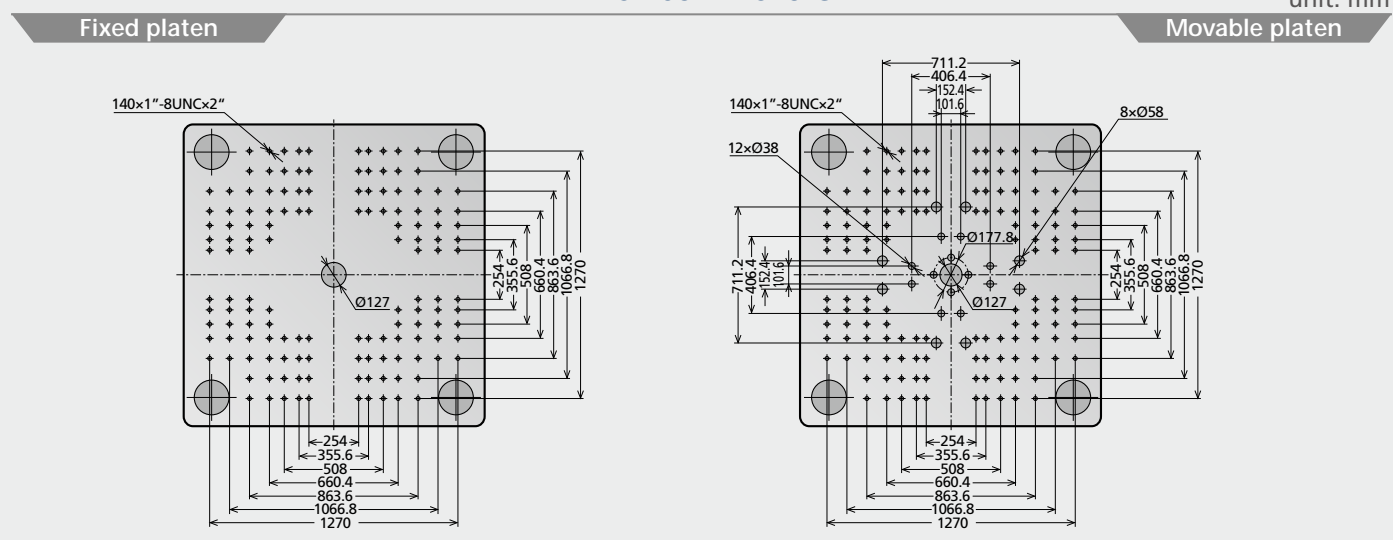
European version

European version



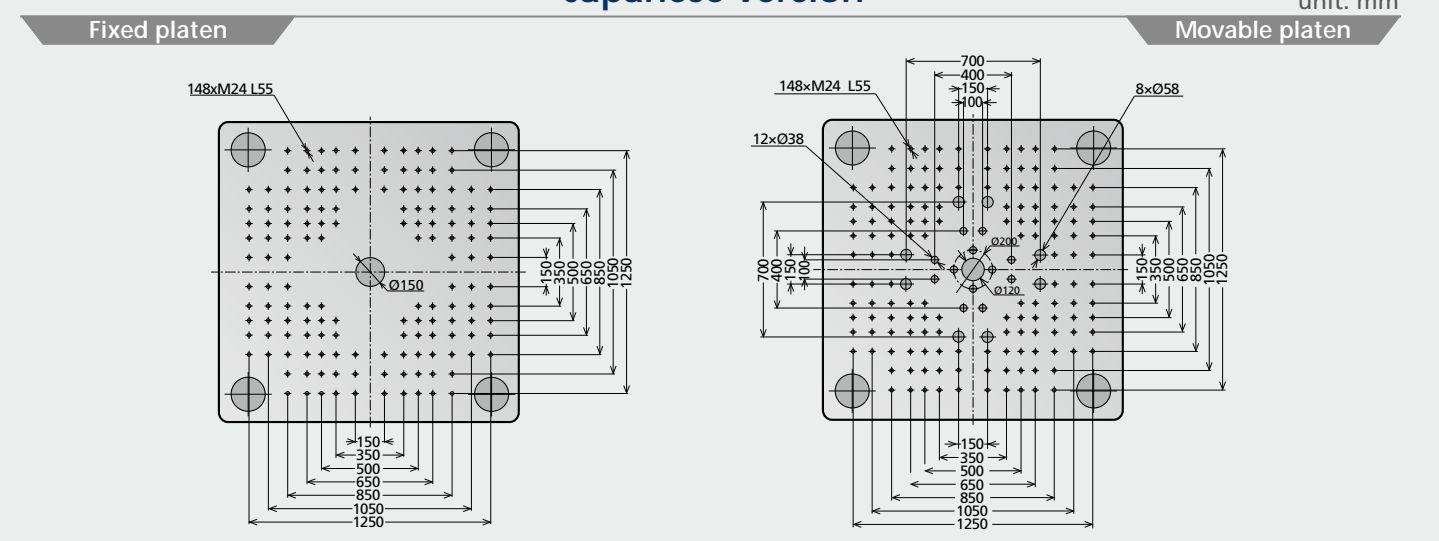
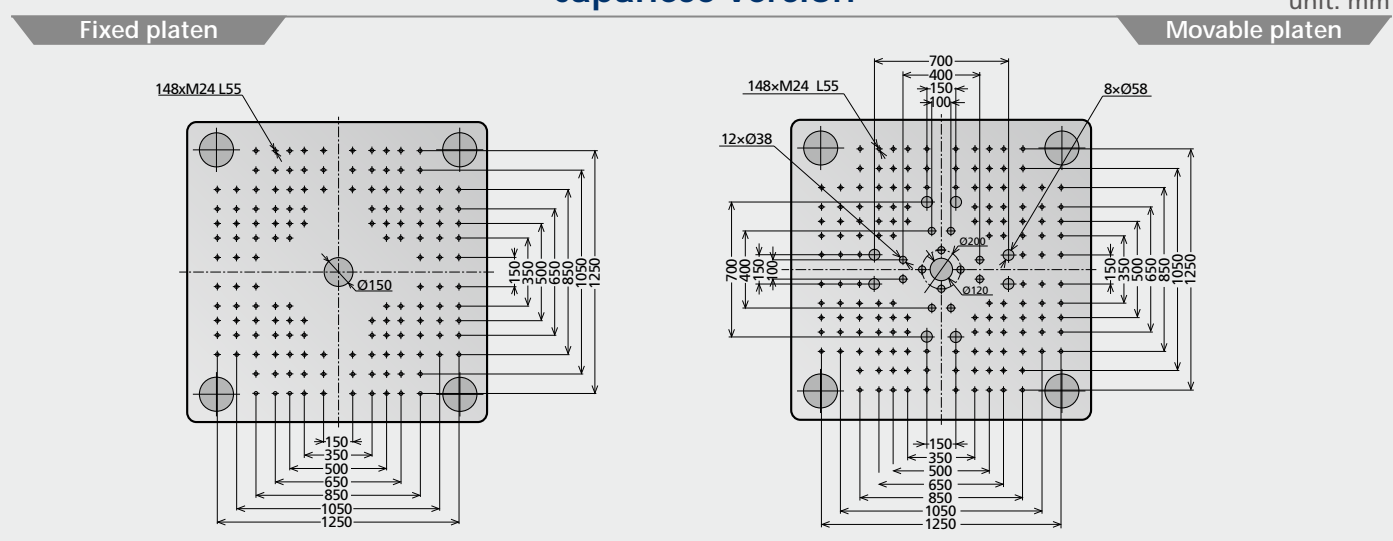
American version

American version



Japanese version

Japanese version



# 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
- » Nozzle movement setting(Switch/Time)
- » Nozzle retract select(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
- » Ejector plate return signal confirmation

- » Cooling water distributor(8 sets up to 8000kN)
- » 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 record
- » Data setting record
- » 3 USB R/W interface
- » Injection pressure 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
- » Production profile monitor
- » 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
- » Performance time sequence display
- » 3 Color alarm lamp(red/yellow/green)
- » Alarm buzzer
- » Injection overflow prevention (HPM)
- » Actual performance data display
- » Multi-action selectable during machine alarm

## Others

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





