

technical
parameters

NEO·M

Multi-Component
Injection Molding Machine

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t.NEO.M.202207.03

tederic
SMART INJECTION

NEO-M

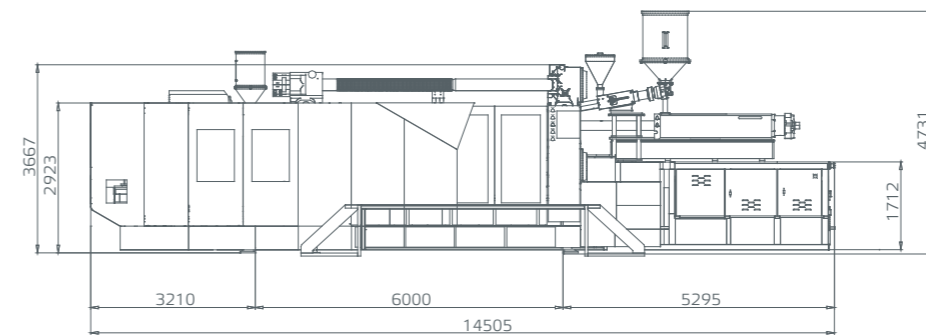
NEO-Ms Parameters

Clamping unit	Unit	NEO-M1420s			
Clamping force	kN	14200			
Clamping stroke (moving platen)	mm	3180			
Clamping stroke (middle platen)	mm	2090			
Space between tie bar	mm	1460x1360			
Max. mold height	mm	2900			
Min. mold height	mm	1000			
Max. daylight	mm	4400			
Min. mold dimension	mm	1022x952			
Platen dimensions (HxV)	mm	1980x1900			
Bearing capacity of rotary platen	t	25.0			
Medium plate	mm	1900x1600			
Thickness of medium plate	mm	220			
Space between the medium plate center and the platform below	mm	800			
Injection unit	Unit	Type 1		Type 2	
		i3800	i1900	m3700	e1400h
Screw diameter	mm	75.0	55.0	75.0	55.0
Shot size (theoretical)	cm ³	1784	710	1785	617
Injection weight (PS)	g	1623	646	1624	562
Injection pressure	MPa	205.3	260.3	210.3	220.0
Injection rate into air (PS)	g/s	786	378	767	648
screw speed	rpm	165	210	180	350
Max. injection speed	mm/s	196	175	191	300
Injection stroke	mm	404	299	404	260
Others	Unit	i3800	i1900	m3700	e1400h
Max. pump pressure	MPa	17.5		17.5	
Pump motor power	kW	61x2+51x2+51+16		61x2+51x2+51+16	
Heater power	kW	45.9	24.0	45.9	24.0
Hopper capacity	kg	50	50	50	50
Oil tank volume	L	1500	1200	2700	
Machine weight	t	74		74	
Machine dimension (LxWxH)	m	15.5x4.1x3.7		15.5x4.1x3.7	

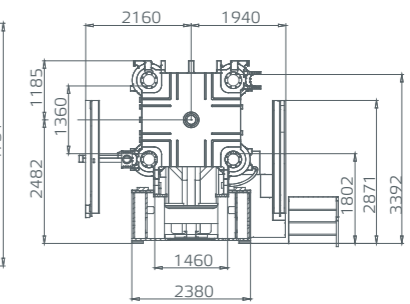
Remarks:
 Theoretical capacity is the calculated volume of injection, equals the cross-sectional area of the screw or cylinder plunger x rated injection stroke;
 The injection weight (PS) is the theoretical value converted from the injection volume x the melting density of polystyrene.
 The screw speed is the theoretical maximum screw speed.

Due to continuous improvements, we reserve the right to modify any aspect of the specification without prior notice.

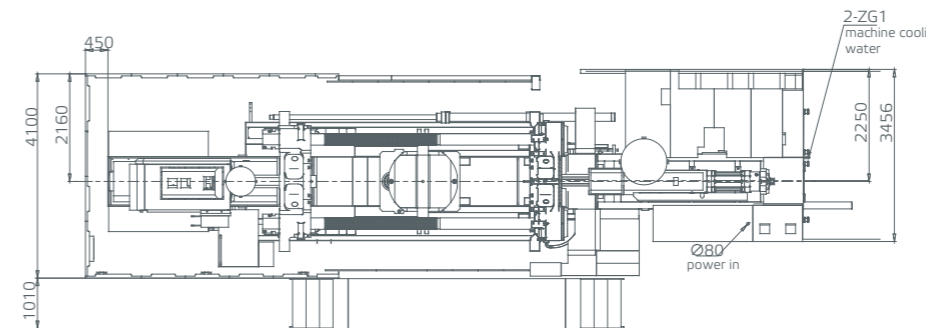
Front view of machine dimension



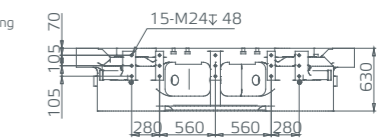
Robot installation dimension



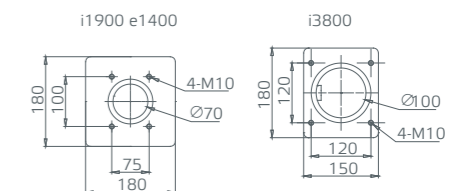
Top view of machine dimension



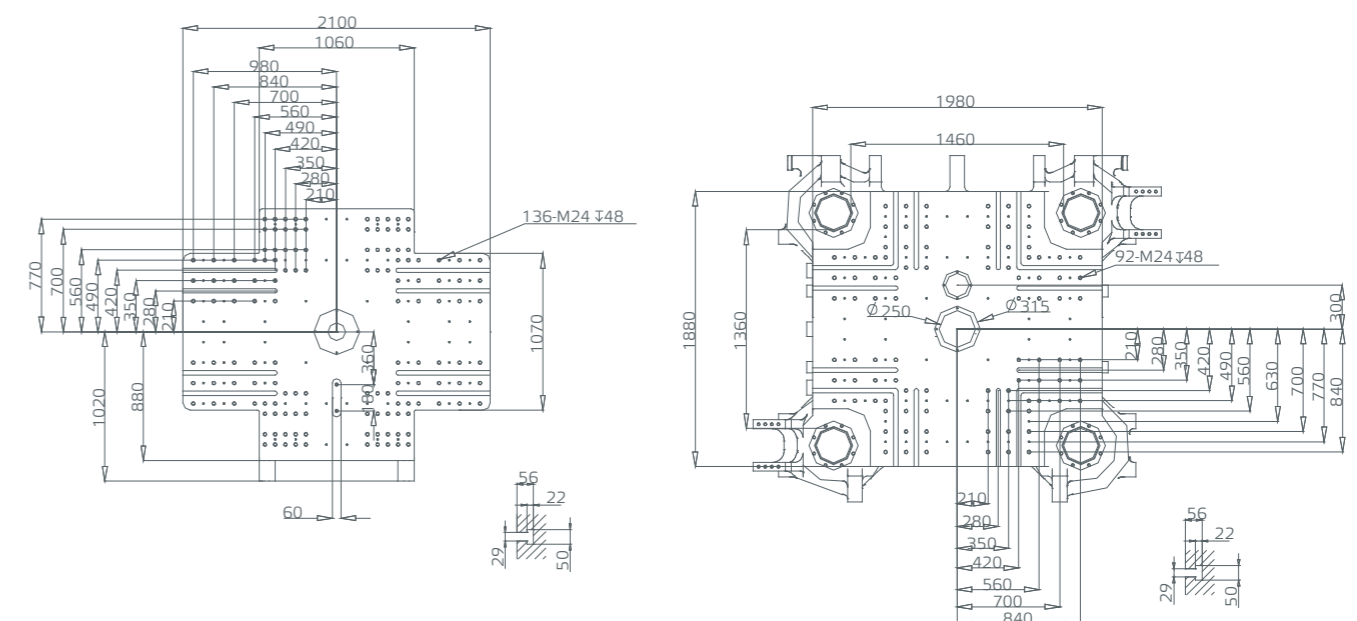
Robot fixed platen dimension



Feeding port dimensions



Front moving platen and horizontal rotary table dimension



Unit:mm

NEO-M

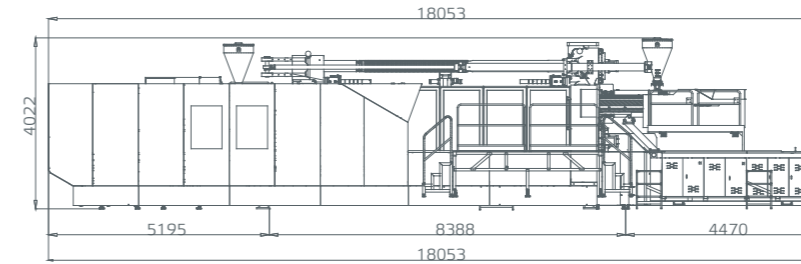
NEO-Ms Parameters

Clamping unit	Unit	NEO-M1920s			
Clamping force	kN	19200			
Clamping stroke (moving platen)	mm	4140			
Clamping stroke (middle platen)	mm	2300			
Space between tie bar	mm	1850x1500			
Max. mold height	mm	3100			
Min. mold height	mm	1300			
Max. daylight	mm	5700			
Min. mold dimension	mm	1295x1050			
Platen dimensions (HxV)	mm	2500x2110			
Bearing capacity of rotary platen	t	30.0			
Medium plate	mm	2400x1700			
Thickness of medium plate	mm	260			
Space between the medium plate center and the platform below	mm	850			
Injection unit	Unit	Type 1		Type 2	
		i9500	i5800	i7500	i5800
Screw diameter	mm	100.0	85.0	85.0	80.0
Shot size (theoretical)	cm ³	4318	2683	2921	2376
Injection weight (PS)	g	3929	2441	2658	2162
Injection pressure	MPa	212.8	202.9	249.4	229.0
Injection rate into air (PS)	g/s	924	796	789	705
screw speed	rpm	120	120	120	120
Max. injection speed	mm/s	129	154	153	154
Injection stroke	mm	550	473	515	473
Others	Unit	i9500	i5800	i7500	i5800
Max. pump pressure	MPa	17.5		17.5	
Pump motor power	kW	51X3+61X2+61+16		51X3+61X2+61+16	
Heater power	kW	78.0	55.0	69.0	55.0
Hopper capacity	kg	100	100	100	100
Oil tank volume	L	1800	1500	1800	1500
Machine weight	t	110		110	
Machine dimension (LxWxH)	m	18.3x4.5x3.9		18.3x4.5x3.9	

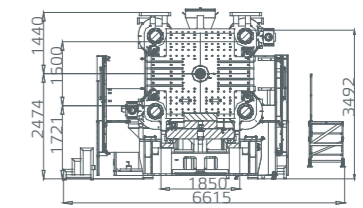
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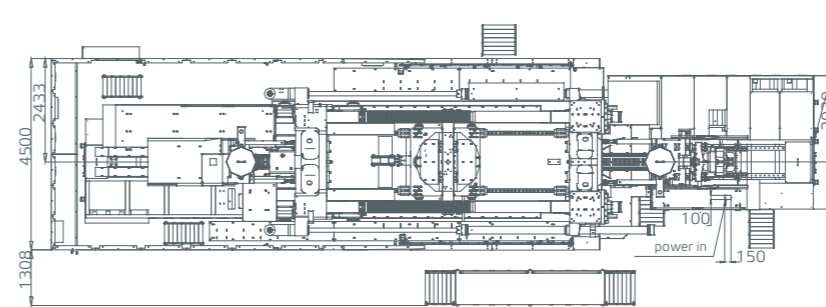
Front view of machine dimension



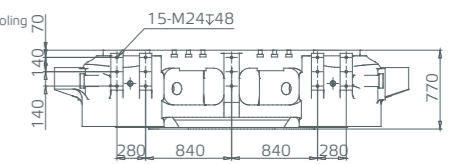
Robot installation dimension



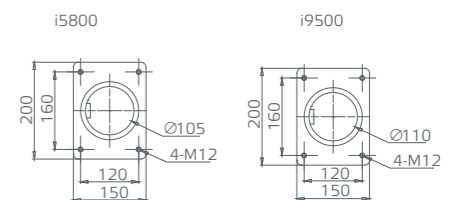
Top view of machine dimension



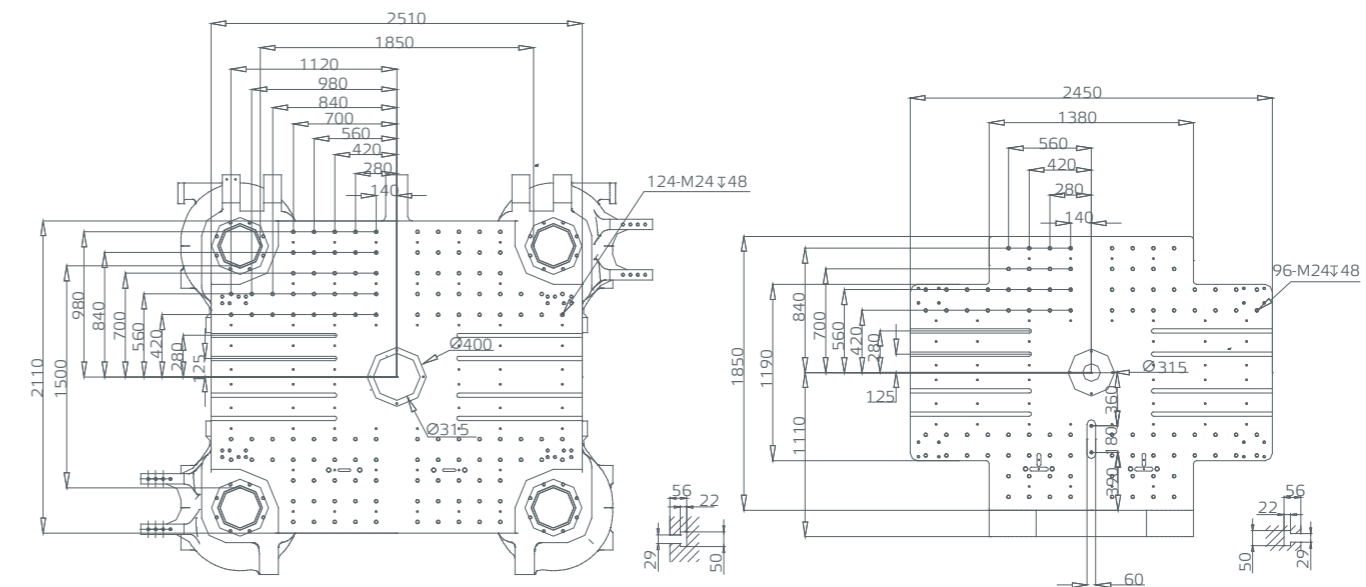
Robot fixed platen dimension



Feeding port dimensions



Front moving platen and horizontal rotary table dimension



Unit:mm

NEO-M

NEO-Ms Parameters

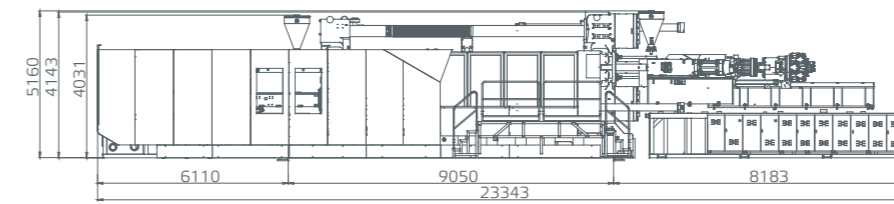
Clamping unit	Unit	NEO-M2720s	
Clamping force	kN	27200	
Clamping stroke (moving platen)	mm	3940	
Clamping stroke (middle platen)	mm	1970	
Space between tie bar	mm	2000X1700	
Max. mold height	mm	3600	
Min. mold height	mm	2000	
Max. daylight	mm	6200	
Min. mold dimension	mm	1400X1190	
Platen dimensions (HxV)	mm	2700X2470	
Bearing capacity of rotary platen	t	50.0	
Medium plate	mm	2500X1900	
Thickness of medium plate	mm	260	
Space between the medium plate center and the platform below	mm	950	
Injection unit	Unit	Type 1	
		i17800	i9500
Screw diameter	mm	120.0	90.0
Shot size (theoretical)	cm ³	7788	3497
Injection weight (PS)	g	7087	3182
Injection pressure	MPa	250.1	271.8
Injection rate into air (PS)	g/s	968	594
screw speed	rpm	90	112
Max. injection speed	mm/s	94	103
Injection stroke	mm	689	550
Others	Unit	i17800	i9500
Max. pump pressure	MPa	17.5	
Pump motor power	kW	61X3+61X3+61	
Heater power	kW	104.4	55.0
Hopper capacity	kg	100	100
Oil tank volume	L	2200	2200
Machine weight	t	149	
Machine dimension (LxWxH)	m	23.3X4.7X4.1	

Remarks:

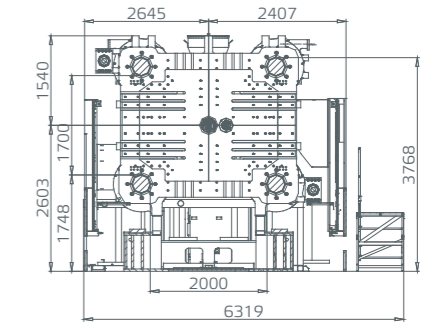
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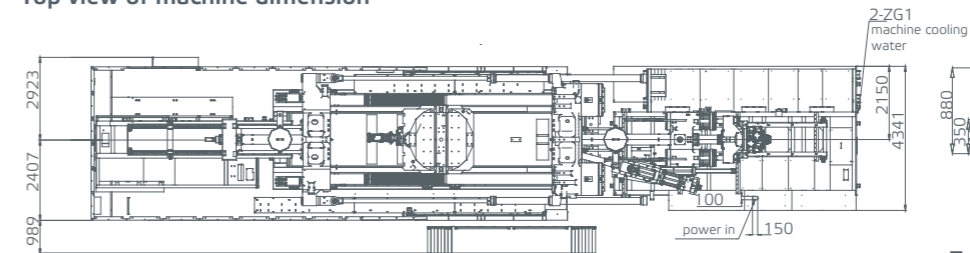
Front view of machine dimension



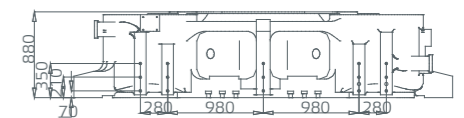
Robot installation dimension



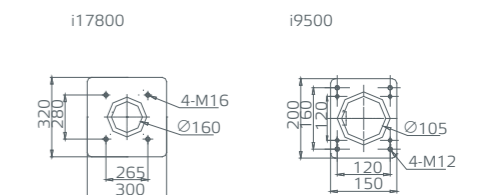
Top view of machine dimension



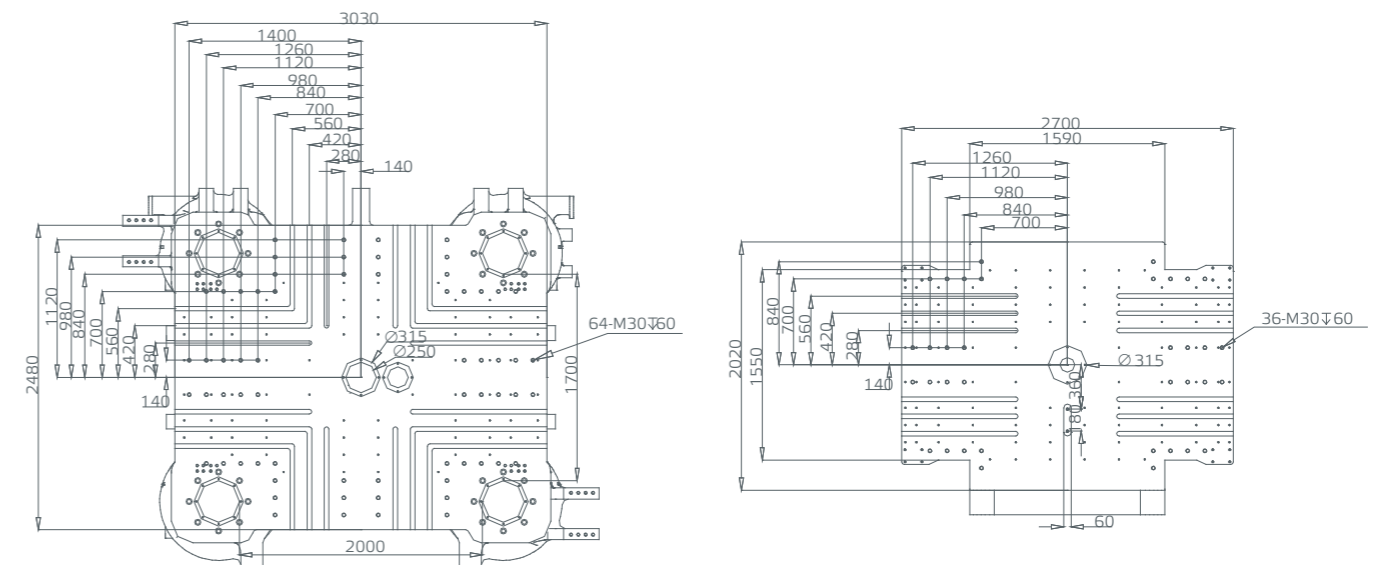
Robot fixed platen dimension



Feeding port dimensions



Front moving platen and horizontal rotary table dimension



Unit:mm

NEO-M

NEO-Ms Components & functions list

For clamping

Function description / Clamping force	NEO-M1120s-NEO-M1420s	NEO-M1920s-NEO-M2720s
Platen with tapped holes	○	○
Platen with T slots	●	●
Platen (according to EUROMAP2)	○	○
High rigid two-platen clamping unit	●	●
Electrical safety	●	●
Hydraulic safety	●	●
Auto-mold height adjustment function	●	●
Mold open, closing and mold adjusting are controlled by transducer	●	●
Fix-quantity type auto central lubrication system	●	●
Adjustable support for moving platen	●	●
High rigidity steel wear strips for moving platen	●	●
Middle plate moving linear guide	●	●
Auto safety door	●	●
EUROMAP 18 robot mechanical interface	●	●
Magnetic platen	○	○
Hydraulic/electrical unscrew device	○	○
Safety pressure plate under mold area	●	●
Six water regulation manifolds	●	●
Quick coupling for water regulator	●	●
Four groups of air blaster	●	●
Glass water flow regulators	○	○
Self-locking mold height adjustment valve	●	●
Buffer lock brake control	●	●
Drive by rotary servo motor	●	●
Auxiliary mold breaking device	○	●

● Standard ○ Optional

For injection

Function description/ Injection unit	NEO-M1120s-NEO-M1420s	NEO-M2720s
Standard screw	●	●
Other screw	○	○
Shut off nozzle	○	○
Single cylinder injection	○	○
Electric injector	○	○
Double cylinder injection	●	●
Double carriage cylinders	●	●
Double stage linear guid injection structure	●	●
Transducer control for carriage cylinder	●	●
Screw rotating speed display	●	●
Proportional injection valve	●	●
Plasticizing with hydraulic motor	●	●
Proportional back pressure control	●	●
Temp-monitoring for material feeding zone	●	●
Barrel Insulation cover	●	●
Nozzle cover	●	●
Self-lock valve for carriage forward	●	●
Material loading platform	○	●
Carriage central lubrication device	●	●
Carriage central auto lubrication device	○	○
Stainless heater bands	○	○
Ceramic heater band	●	●
Electrical plasticizing	○	○
Screw mobile feed hopper	○	○
Gas-assisted injection interface	○	○
Foam moulding	○	○
Hopper dryer	○	○
Stainless hopper	●	●
Barrel Insulation device	○	○
Stock pan	●	●

● Standard ○ Optional

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NEO·Ms Components & functions list

For electric

Function description /Clamping unit	NEO-M1120s-NEO-M2720s
KEBA Controller	●
KEBA 15-inch touch screen	●
Memory with 200 sets of mold parameters	●
All action instant monitoring	●
Production monitoring	●
Failure alarm display	●
Changeover from injection fill to hold by injection pressure	○
I/O monitoring display	●
3 color light (with buzzer)	●
Motor overload protection	●
Front/back door emergency stop switch	●
5 pins socket of 380V/32A, two groups 5 pins socket of 380V/16A, one group 3 pins socket of 230V/16A, one group	●
230V/10A Industrial plug	●
Electrical cabinet lighting device	●
Transformer for servomotor system	○
EUROMAP 13 neutron connection	●
EUROMAP 12 robot interface	●
EUROMAP 67 robot interface	○
Double protection for heating	●
Safety relay monitoring	●
SSR heating control	●
Hot runner control system & interface	○
Instant power consumption monitoring	○
Instant clamping force monitoring	●
Remote control	○
Close-loop control for mold open/close	●
Safety pedal monitoring	●
Inspection of repair door	●

● Standard ○ Optional

For hydraulic

Function description /Clamping unit	NEO-M1120s	NEO-M1420s-NEO-M2720s
Servo motor pump	●	●
Increased motor-pump unit	○	○
Independent cooling system	●	●
Independent filtration system	●	●
Changeover from injection fill to hold by injection pressure	○	○
Function-multiple sets of injection sequently	○	○
Carriager self-lock valve	●	●
Injection proportional valve	●	●
Injection servo valve	○	○
Oil temp. detector	●	●
Oil level alarm	○	○
Anti-explosive chain	●	●
Self-lock suction oil filter	●	●
Cooling water valve	●	●
Two core pull circuit on moving platen, two core pull circuit on fixed	●	●
Four groups of core pullings(Middle Platen)		
Six groups of core pullings(Middle Platen)	●	
Eight groups of core pullings(Middle Platen)		●
Sequence valve	○	○
Quick clamping device	●	●
Mold open differential device	●	●
Low pressure mold protection	●	●
Hydraulic safety device	●	●
Ejector on-the-fly	●	●
Plasticize on-the-fly	○	○
Plasticizing & ejector on the fly	○	○
Proportional valve control for clamp open and close	●	●
Proportional valve control for middle platen moving	●	●

For other

Function description/ Other	NEO-M1120s	NEO-M1420s-NEO-M2720s
Tederic standard color	●	●
Shock-proof pad	●	●
Foundation steel plate, foundation anchor bolts	○	○
Spare parts box, tools, mould clamps, easy broken parts, extended nozzle, operation manual	●	●
Robot	○	○
Magnet (for hopper dryer)	○	○
Chiller	○	○
Mould temp controller	○	○
Dehumidifier	○	○
Autoloader	○	○
Fumigated wooden packaging	○	○
With full-tank hydraulic oil	○	○
Products fetching platform	○	●

● Standard ○ Optional

NEO-M

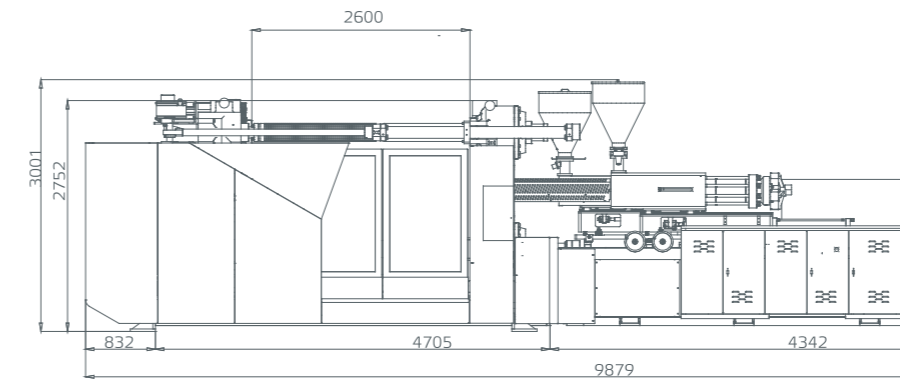
NEO-Mv Parameters

Clamping unit	Unit	NEO-M1120v					
Clamping force	kN	11200					
Clamping stroke	mm	1300					
Space between tie bar	mm	1260x1175					
Max. mold height	mm	1300					
Min. mold height	mm	500					
Eject stroke	mm	200					
Eject force	kN	110					
No. of ejector pins	piece	11					
Max. daylight	mm	2600					
Min. mold dimension	mm	882x822.5					
Platen dimensions (HxV)	mm	1830x1730					
Distance bet. molds positing centers	mm	710					
Diameter of rotary platen	mm	1700					
Max. rotary diameter of mold	mm	1790					
Bearing capacity of rotary platen	t	7					
Injection unit	Unit	Type 1		Type 2		Type 3	
		m2500	m840	m2500	m1100	m3700	m1100
Screw diameter	mm	65	45	65	50	75	50
Shot size (theoretical)	cm ³	1161	358	1161	497	1785	497
Injection weight (PS)	g	1057	452	1057	452	1624	452
Injection pressure	MPa	219.1	235.3	219.1	226.8	210.3	226.8
Injection rate into air	g/s	506	236	506	245	528	245
screw speed	rpm	220	240	220	240	220	240
Max. injection speed	mm/s	168	163	168	137	131	137
Injection stroke	mm	350	225	350	253	404	253
Others	Unit	m2500	m840	m2500	m1100	m3700	m1100
Max. pump pressure	MPa	17.5		17.5		17.5	
Pump motor power	kW	40x2+40+16		40x2+40+16		40x2+40+16	
Heater power	kW	33.0	16.0	33.0	20.0	46.0	20.0
Hopper capacity	kg	50	50	50	50	50	50
Oil tank volume	L	1500		1500		1500	
Machine weight	t	45		45		46	
Machine dimension (LxWxH)	m	10.5x3.8x2.9		10.5x3.8x2.9		10.5x3.8x2.9	

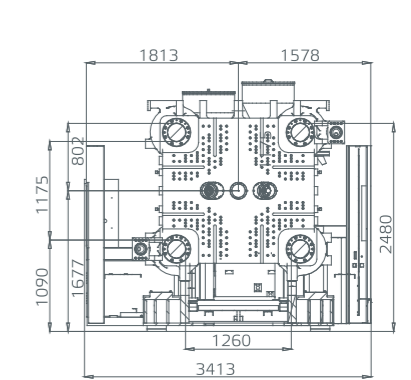
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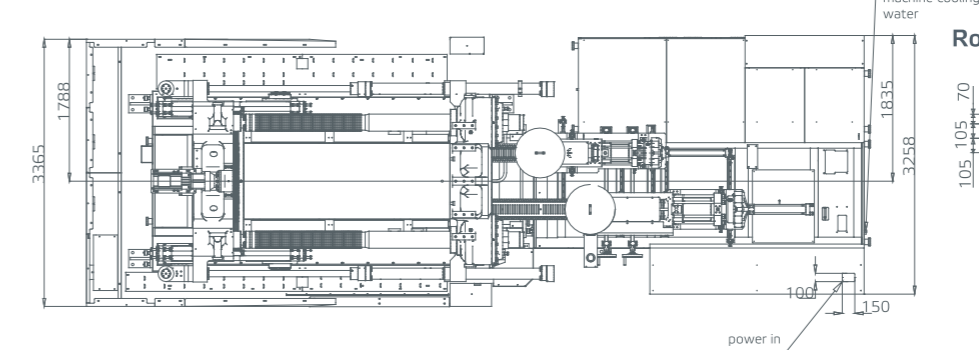
Front view of machine dimension



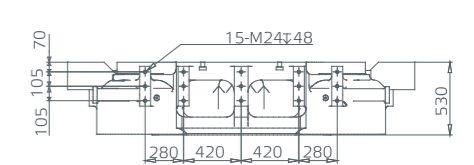
Robot installation dimension



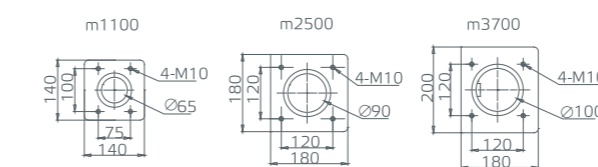
Top view of machine dimension



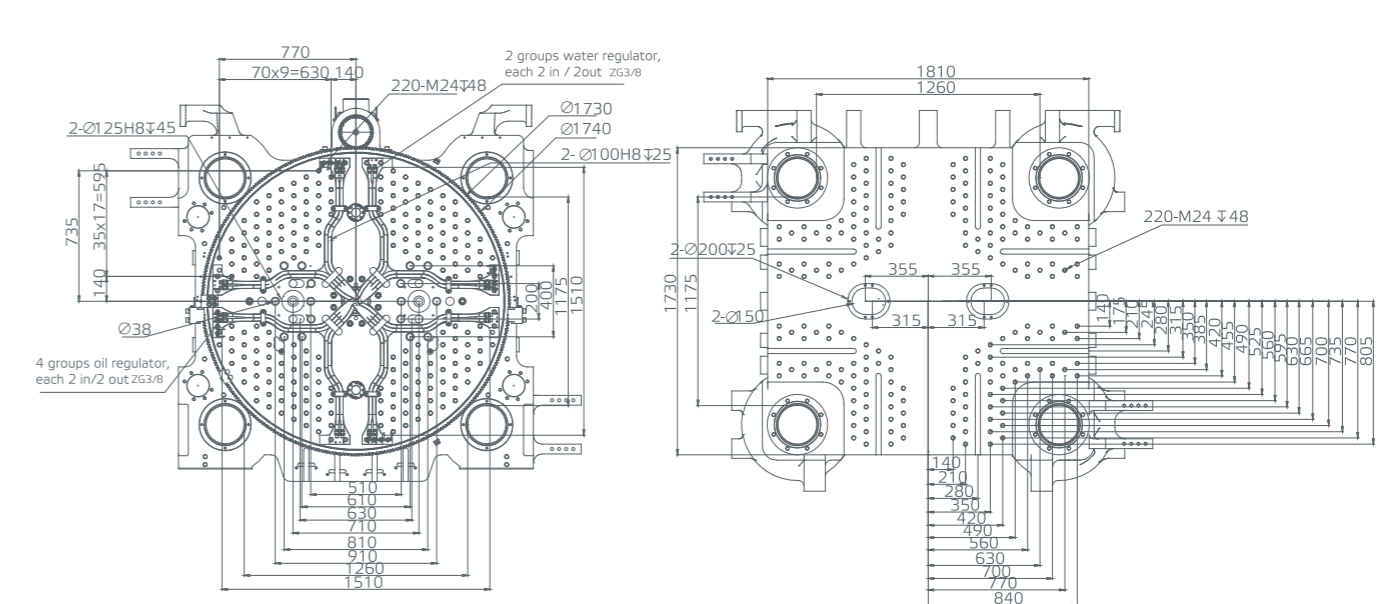
Robot fixed platen dimension



Feeding port dimensions



Front moving platen and rotary table dimension



Unit:mm

NEO-M

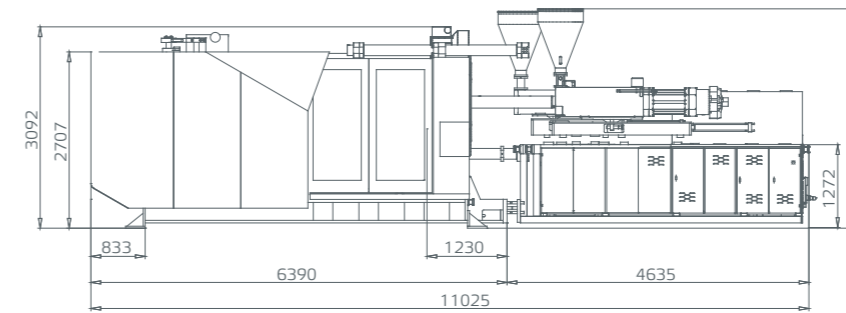
NEO-Mv Parameters

Clamping unit	Unit	NEO-M1420v					
Clamping force	kN	14200					
Clamping stroke	mm	1550					
Space between tie bar	mm	1460x1360					
Max. mold height	mm	1400					
Min. mold height	mm	630					
Eject stroke	mm	300					
Eject force	kN	182					
No. of ejector pins	piece	13					
Max. daylight	mm	2950					
Min. mold dimension	mm	1022x952					
Platen dimensions (HxV)	mm	1980x1900					
Distance bet. molds positing centers	mm	710					
Diameter of rotary platen	mm	2000					
Max. rotary diameter of mold	mm	2080					
Bearing capacity of rotary platen	t	13					
Injection unit	Unit	Type 1		Type 2		Type 3	
		m2500	m1100	m3700	m1100	m3700	m1500
Screw diameter	mm	65	50	75	50	75	55
Shot size (theoretical)	cm ³	1161	497	1784	497	1784	655
Injection weight (PS)	g	1057	452	1623	452	1623	596
Injection pressure	MPa	219.1	226.8	210.3	226.8	210.3	231.4
Injection rate into air	g/s	506	245	623	289	623	283
screw speed	rpm	220	240	220	240	220	250
Max. injection speed	mm/s	168	137	155	162	155	131
Injection stroke	mm	350	253	404	253	404	276
Others	Unit	m2500	m1100	m3700	m1100	m3700	m1500
Max. pump pressure	MPa	17.5		17.5		17.5	
Pump motor power	kW	40x2+40+16		51x2+51+16		51x2+51+16	
Heater power	kW	33.0	20.0	46.0	20.0	46.0	24.0
Hopper capacity	kg	50	50	50	50	50	50
Oil tank volume	L	1500		1800		1800	
Machine weight	t	73		74		74	
Machine dimension (LxWxH)	m	10.5x4.1x3.1		10.5x4.1x3.1		10.5x4.1x3.1	

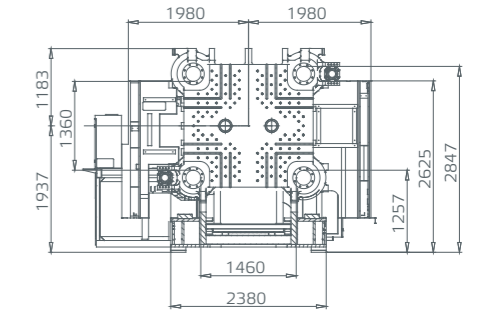
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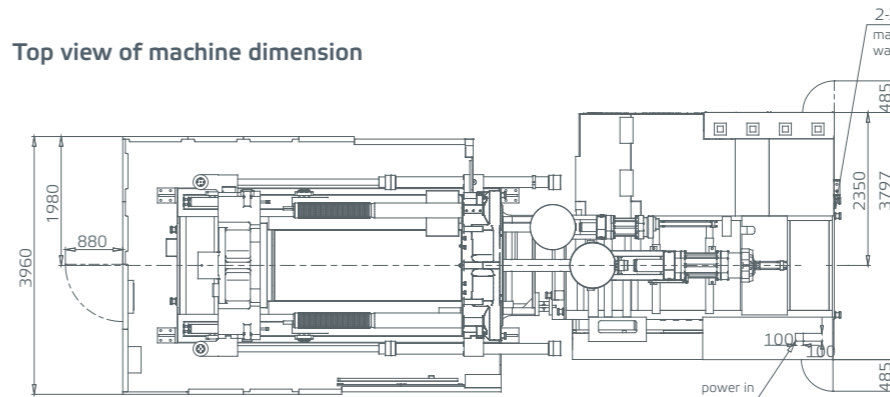
Front view of machine dimension



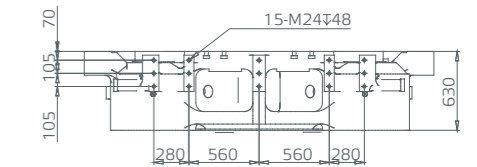
Robot installation dimension



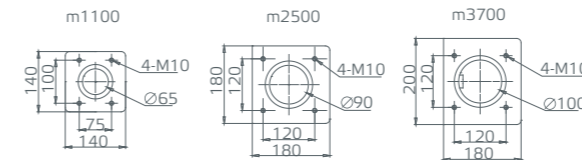
Top view of machine dimension



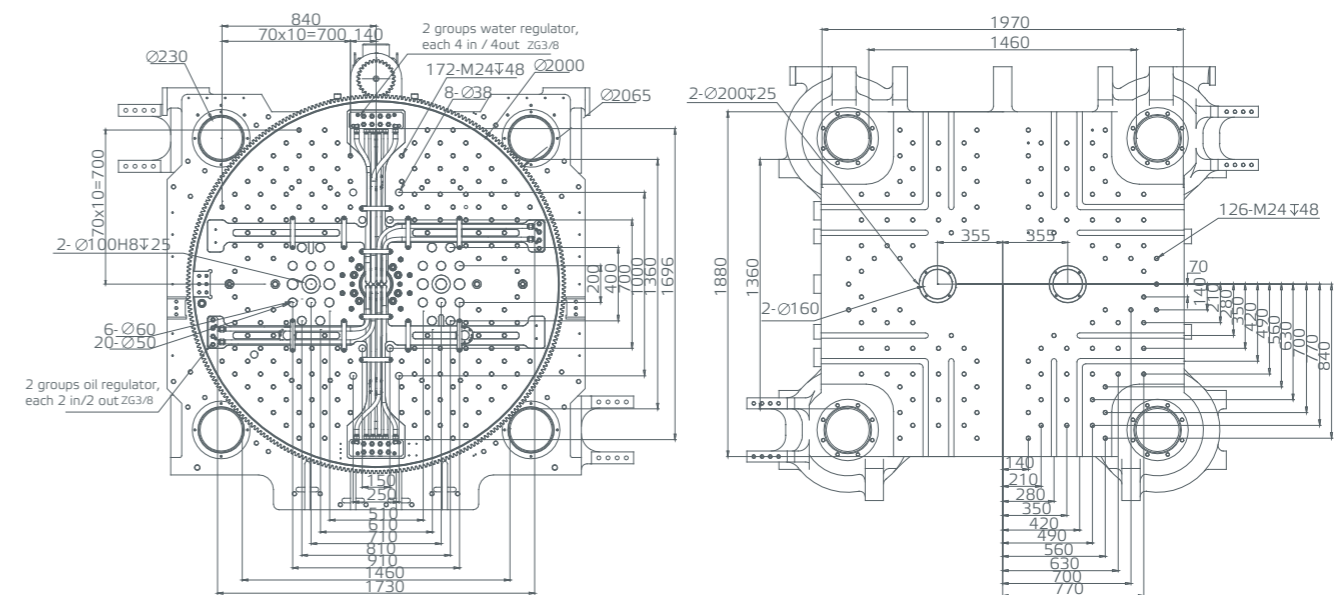
Robot fixed platen dimension



Feeding port dimensions



Front moving platen and rotary table dimension



Unit:mm

NEO-M

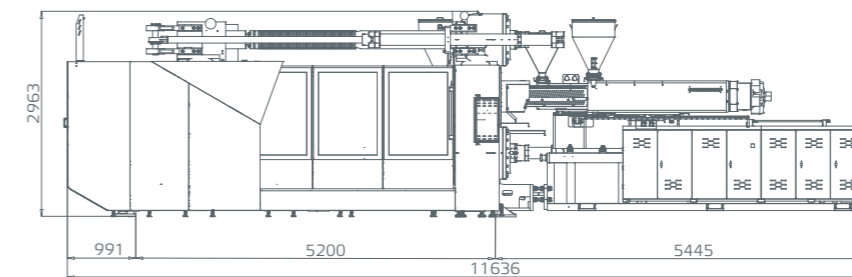
NEO-Mv Parameters

Clamping unit	Unit	NEO-M1720v	
Clamping force	kN	17200	
Clamping stroke	mm	1650	
Space between tie bar	mm	1570x1380	
Max. mold height	mm	1600	
Min. mold height	mm	700	
Eject stroke	mm	200	
Eject force	kN	182	
No. of ejector pins	piece	13	
Max. daylight	mm	3250	
Min. mold dimension	mm	1099x1029	
Platen dimensions (HxV)	mm	2290x2190	
Distance bet. molds positing centers	mm	710	
Diameter of rotary platen	mm	2000	
Max. rotary diameter of mold	mm	2230	
Bearing capacity of rotary platen	t	13	
Injection unit	Unit	Type 1	
		m3700	m1100
Screw diameter	mm	75	50
Shot size (theoretical)	cm ³	1784	497
Injection weight (PS)	g	1623	452
Injection pressure	Mpa	210.3	226.8
Injection rate into air	g/s	623	289
screw speed	rpm	220	240
Max. injection speed	mm/s	155	162
Injection stroke	mm	404	253
Others	Unit	m3700	m1100
Max. pump pressure	MPa	17.5	
Pump motor power	kW	51x2+51+16	
Heater power	kW	46.0	20.0
Hopper capacity	kg	50	50
Oil tank volume	L	1800	
Machine weight	t	85	
Machine dimension (LxWxH)	m	11.6x4.1x3.1	

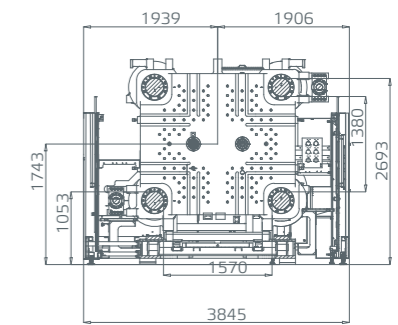
Remarks:
 Theoretical capacity is the calculated volume of injection, equals the cross-sectional area of the screw or cylinder plunger x rated injection stroke;
 The injection weight (PS) is the theoretical value converted from the injection volume x the melting density of polystyrene.
 The screw speed is the theoretical maximum screw speed.

Due to continuous improvements, we reserve the right to modify any aspect of the specification without prior notice.

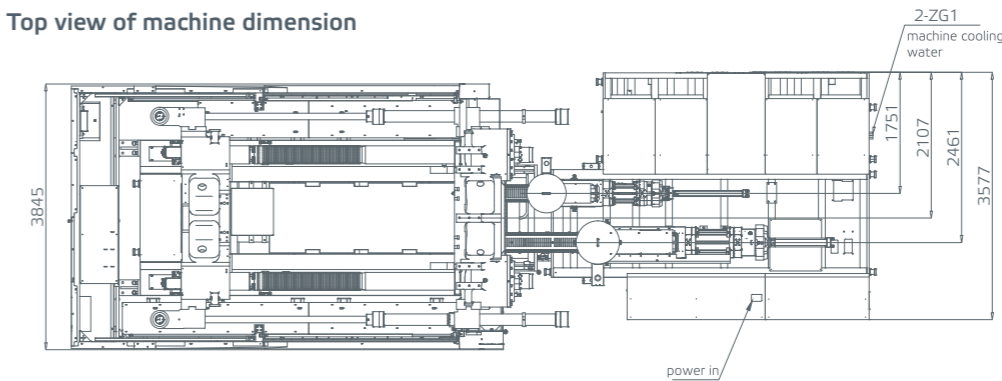
Front view of machine dimension



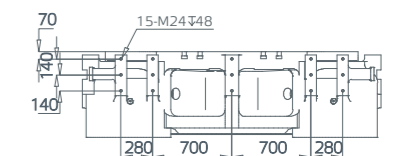
Robot installation dimension



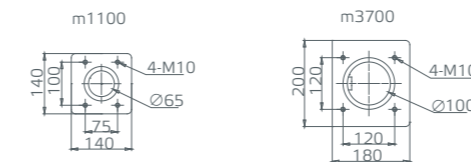
Top view of machine dimension



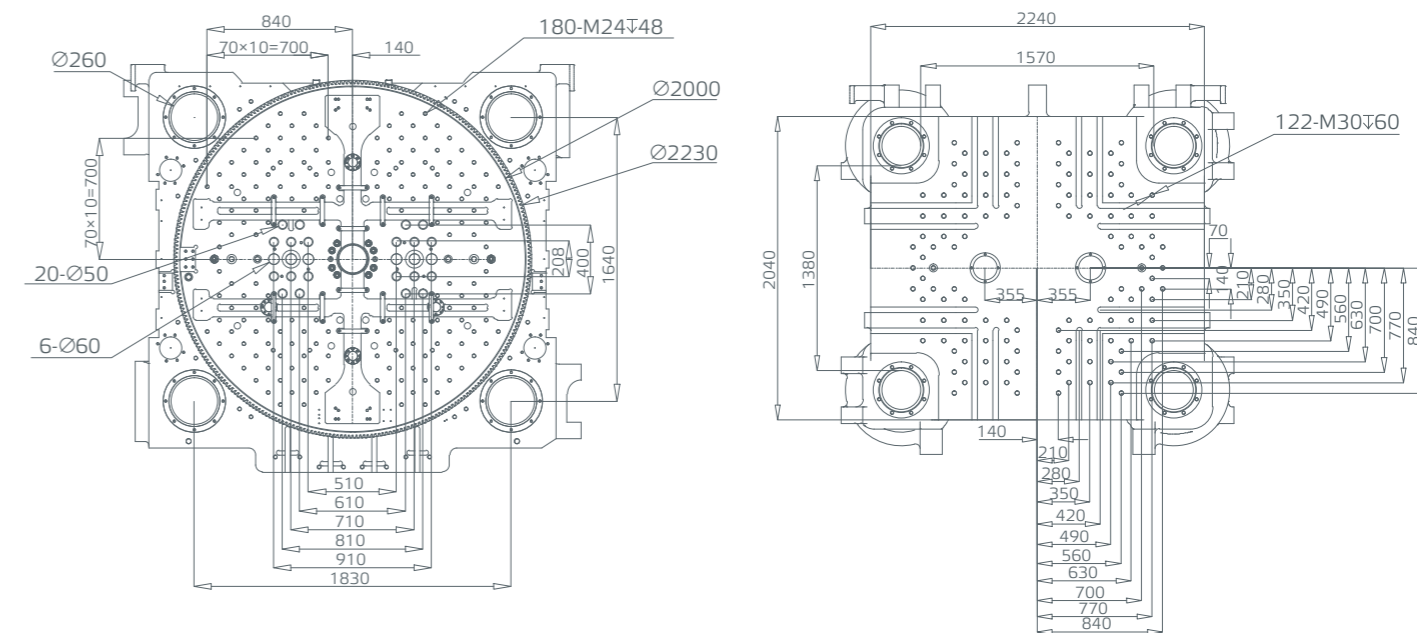
Robot fixed platen dimension



Feeding port dimensions



Front moving platen and rotary table dimension



Unit:mm

For clamping

Function description / Clamping force	NEO-M1120v-NEO-M1920v
Platen with tapped holes	●
Platen with T slots(front platen)	●
Platen (according to EUROMAP2)	○
High rigid two-platen clamping unit	●
Mechanical safety	○
Electrical safety	●
Hydraulic safety	●
Auto-mold height adjustment function	●
Mold open, closing and mold adjusting are controlled by transducer	●
Fix-quantity type auto central lubrication system	●
Adjustable support for moving platen	●
High rigidity steel wear strips for moving platen	●
Auto safety door	●
EUROMAP 18 robot mechanical interface	●
Magnetic platen	○
Hydraulic/electrical unscrew device	○
Widened door and covers	○
Safety pressure plate under mold area	●
Two water regulation manifolds	●
Quick coupling for water regulator	●
Two air blow circuits	●
Four air blow circuits	○
Glass water flow regulators	○
Self-lock valve for locking	●
Buffer lock brake control	●
Drive by rotary servo motor	●

● Standard ○ Optional

For injection

Function description/ Injection unit	m1100-m5800
Standard screw	●
Special screw	○
Shut off nozzle	○
Single cylinder injection	●
Electric injector	○
Double cylinder injection	○
Single carriage cylinders	●
Transducer control for carriage cylinder	●
Screw rotating speed display	●
Plasticizing with hydraulic motor	●
Proportional injection valve	●
Proportional back pressure control	●
Temp-monitoring for material feeding throat	●
Barrel Insulation cover	●
Nozzle cover	●
Self-lock valve for carriage forward	●
Material loading platform	○
Carriage central manual lubrication device	●
Carriage central auto lubrication device	○
Stainless heater bands	○
Ceramic heater band	●
Electrical plasticizing	○
Screw mobile feed hopper	○
Gas-assisted injection interface	○
Foam moulding	○
Hopper dryer	○
Stainless hopper	●
Barrel Insulation device	○
Stock pan	●

● Standard ○ Optional

For electric

Function description/ Injection unit	NEO-M1120v-NEO-M1920v
KEBA Controller	●
KEBA 15-inch touch screen	●
Memory with 200 sets of mold parameters	●
All action instant monitoring	●
Production monitoring	●
Failure alarm display	●
Changeover from injection fill to hold by injection pressure	○
I/O monitoring display	●
3 color light	●
Motor overload protection	●
Front/back door emergency stop switch	●
5 pins socket of 380V/32A, two groups 5 pins socket of 380V/16A, one groups 5 pins socket of 220V/16A, one groups	●
Transformer for servomotor system	○
EUROMAP 13 neutron connection	●
EUROMAP 12 robot interface	●
EUROMAP 67 robot interface	○
Double protection for heating	●
Safety relay monitoring	●
SSR heating control	●
Hot runner control system & interface	○
Instant power consumption monitoring	○
Instant clamping force monitoring	●
230V/10A Industrial plug	●
Electrical cabinet lighting device	●
Remote control	○
Close-loop control for mold open/close	●
Inspection of repair door	●

● Standard ○ Optional

For hydraulic

Function description/ Injection unit	m1100-m5800
Servo motor pump	●
Increased motor-pump unit	○
upgrade hydraulic charging motor	○
Independent cooling system	●
Independent filtration system	●
Changeover from injection fill to hold by injection pressure	○
Function-multiple sets of injection sequently	○
Carrier self-lock valve	●
Injection proportional valve	●
Injection servo valve	○
Oil temp. detector	●
Oil level alarm	●
Anti-explosive chain	●
Self-lock suction oil filter	●
Cooling water valve	●
Function description/ Injection unit	NEO-M1120v-NEO-M1920v
Two core pull circuit on moving platen, two core pull circuit on fixed	●
Quick clamping device	●
Mold open differential device	●
Low pressure mold protection	●
Hydraulic safety device	●
Ejector on-the-fly	●
Plasticize on-the-fly	○
Plasticizing & ejector on the fly	○
Proportional valve control for clamp open and close	●

● Standard ○ Optional

For other

Function description/ Other	NEO-M1120v-NEO-M1920v
Tederic standard color	●
Shock-proof pad	●
Foundation steel plate, foundation anchor bolts	○
Spare parts box, tools, mould clamps, easy broken parts, extended nozzle, operation manual	●
Robot	○
Magnet (for hopper dryer)	○
Chiller	○
Mould temp controller	○
Dehumidifier	○
Autoloader	○
Fumigated wooden packaging	○
With full-tank hydraulic oil	○
Products fetching platform	○

● Standard ○ Optional