

technical parameters

NEO • T

Toggle Clamp
Injection Molding Machine

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t.NEO-T.202107.02

tederic
SMART INJECTION

NEO-T

Parameters

Clamping unit	Unit	NEO-T90		
Clamping force	kN	900		
Clamping stroke	mm	340		
Space between tie bars	mm	360×360		
Max. mold height	mm	390		
Min. mold height	mm	150		
Ejector stroke	mm	120		
Ejector force	kN	34		
No. of ejector pins	piece	5		
Max. daylight	mm	730		
Min. mold dimension	mm	252x252		
Platen dimensions (HxV)	mm	530x530		
Injection unit	Unit	i380		
		A	B	C
Screw diameter	mm	35	38	42
Screw L/D ratio	L/D	21.7	20.0	18.1
Shot size (theoretical)	cm³	168	199	243
Injection weight (PS)	g	153	181	221
Injection pressure	MPa	228.0	193.0	158.0
Injection rate into air	g/s	106	125	153
Screw speed	rpm	250		
Max. injection speed	mm/s	121		
Injection stroke	mm	175		
Others	Unit	i380		
Max. pump pressure	MPa	17.5		
Pump motor power	kW	16		
Heater power	kW	6.6		
Hopper capacity	kg	25		
Oil tank volume	L	120		
Total machine weight	t	3.3		
Machine dimension (LxWxH)	m	4.34x1.3x2.0		

Remarks:

The bearing weight by moving platen is 2/3 of the maximum mold weight.

Theoretical capacity is the calculated volume of injection produced by the cross-sectional area of the screw/plunger and the injection stroke

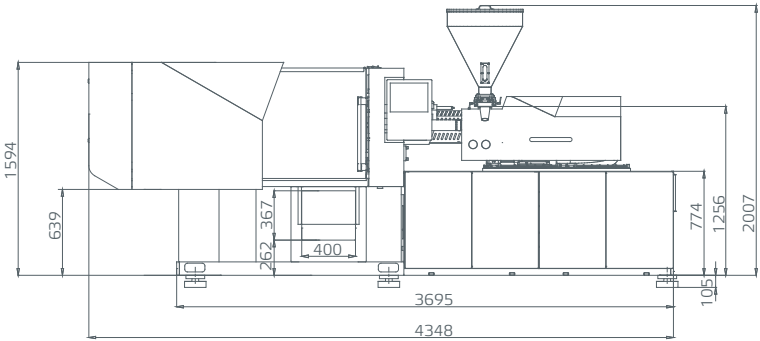
The injection weight (PS) is the theoretical value derived form the injection volume and the typical melt density of polystyrene

The screw speed is the theoretical maximum screw speed.

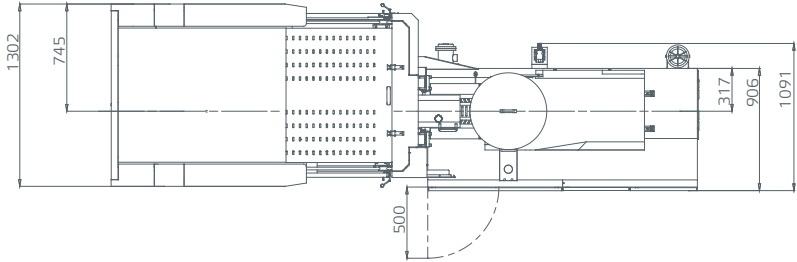
Please inform us if you have requirement for engineering material like PVC, PMMA or some special requirement.

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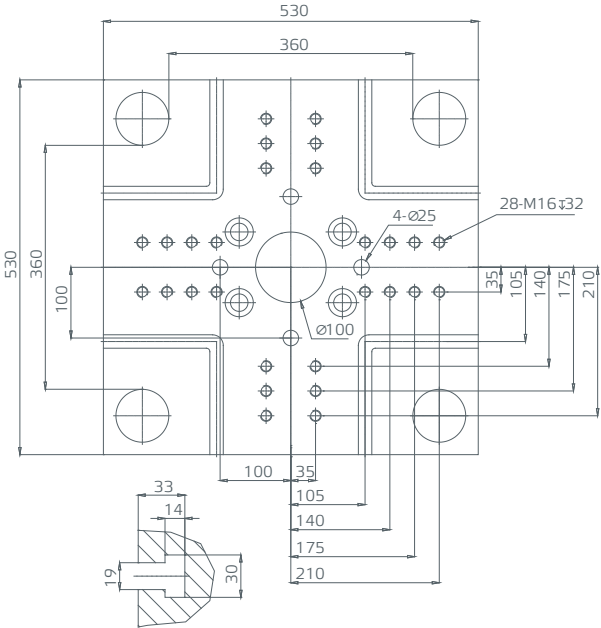
Front view of machine dimension



Top view of machine dimension

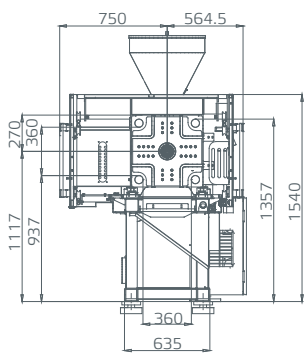


Moving platen dimension

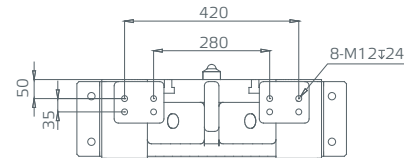


Unit:mm

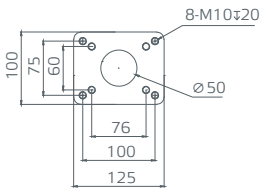
Robot installation dimension



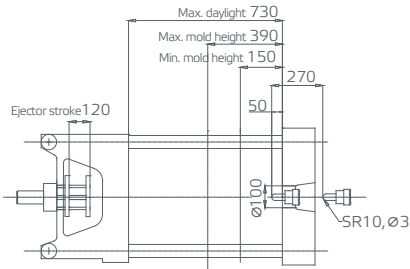
Robot fixed platen dimension



Feeding port dimensions



Clamping unit



NEO-T

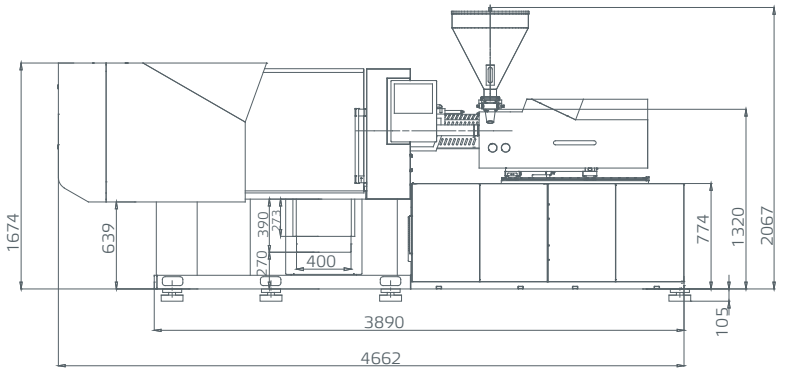
Parameters

Clamping unit	Unit	NEO-T120		
Clamping force	kN	1200		
Clamping stroke	mm	360		
Space between tie bars	mm	410×410		
Max. mold height	mm	450		
Min. mold height	mm	150		
Ejector stroke	mm	120		
Ejector force	kN	34		
No. of ejector pins	piece	5		
Max. daylight	mm	810		
Min. mold dimension	mm	287×287		
Platen dimensions (HxV)	mm	610×610		
Injection unit	Unit	i510		
		A	B	C
Screw diameter	mm	38	42	45
Screw L/D ratio	L/D	22.1	20.0	18.7
Shot size (theoretical)	cm ³	222	270	310
Injection weight (PS)	g	202	246	282
Injection pressure	MPa	233.0	190.0	166.0
Injection rate into air	g/s	130	159	182
Screw speed	rpm	250		
Max. injection speed	mm/s	126		
Injection stroke	mm	195		
Others	Unit	i510		
Max. pump pressure	MPa	17.5		
Pump motor power	kW	20		
Heater power	kW	9.5		
Hopper capacity	kg	25		
Oil tank volume	L	140		
Total machine weight	t	4.4		
Machine dimension (LxWxH)	m	4.66x1.45x2.07		

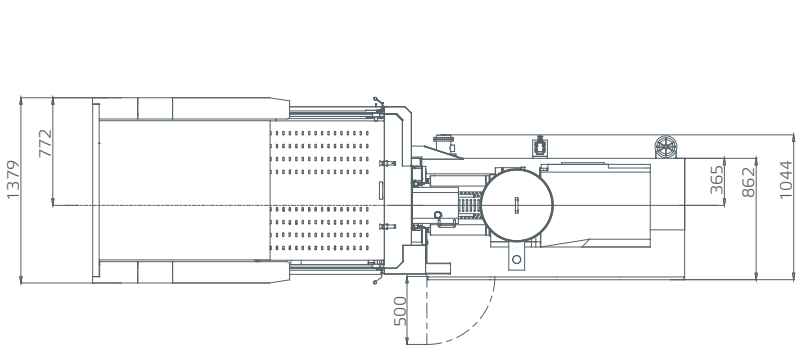
Remarks:
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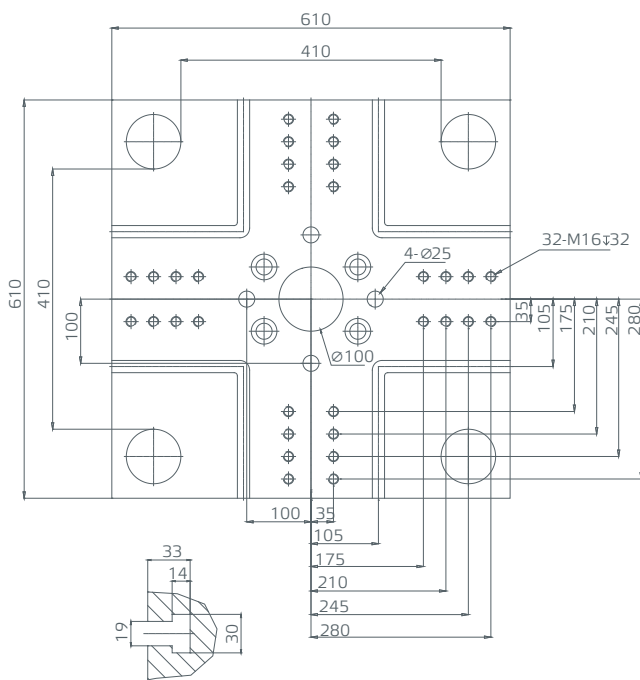
Front view of machine dimension



Top view of machine dimension

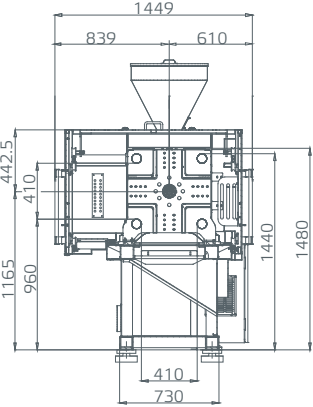


Moving platen dimension

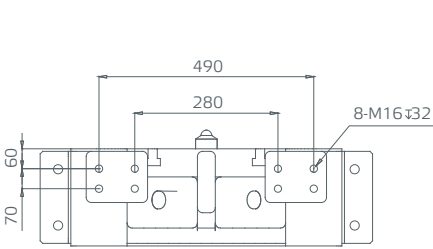


Unit:mm

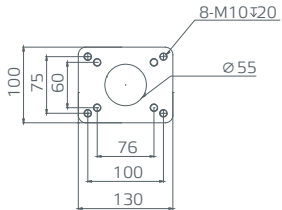
Robot installation dimension



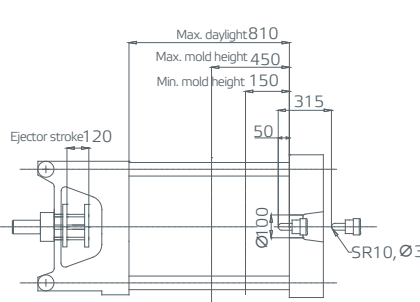
Robot fixed platen dimension



Feeding port dimensions



Clamping unit



NEO-T

Parameters

Clamping unit	Unit	NEO-T160		
Clamping force	kN	1600		
Clamping stroke	mm	450		
Space between tie bars	mm	470×470		
Max. mold height	mm	530		
Min. mold height	mm	180		
Ejector stroke	mm	150		
Ejector force	kN	49		
No. of ejector pins	piece	5		
Max. daylight	mm	980		
Min. mold dimension	mm	329×329		
Platen dimensions (HxV)	mm	700×700		
Injection unit	Unit	i600		
		A	B	C
Screw diameter	mm	42	45	50
Screw L/D ratio	L/D	21.4	20.0	18.0
Shot size (theoretical)	cm³	312	358	442
Injection weight (PS)	g	284	326	402
Injection pressure	MPa	223.5	194.7	157.7
Injection rate into air	g/s	135	155	192
Screw speed	rpm	238		
Max. injection speed	mm/s	107		
Injection stroke	mm	225		
Others	Unit	i600		
Max. pump pressure	MPa	17.5		
Pump motor power	kW	20		
Heater power	kW	10.4		
Hopper capacity	kg	50		
Oil tank volume	L	190		
Total machine weight	t	5.6		
Machine dimension (LxWxH)	m	4.98x1.44x2.11		

Remarks:

The bearing weight by moving platen is 2/3 of the maximum mold weight.

Theoretical capacity is the calculated volume of injection produced by the cross-sectional area of the screw/plunger and the injection stroke

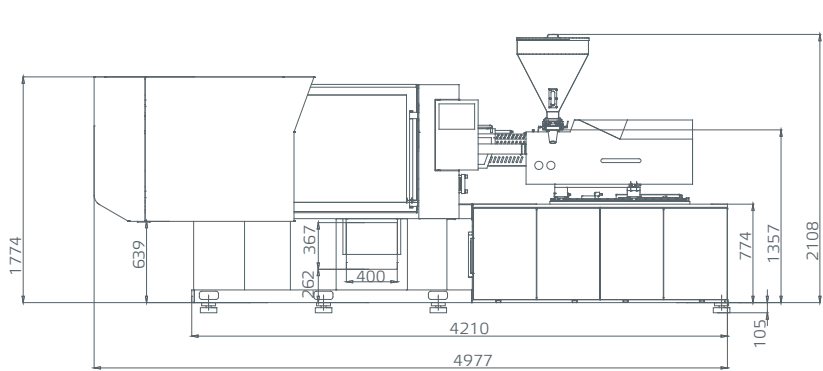
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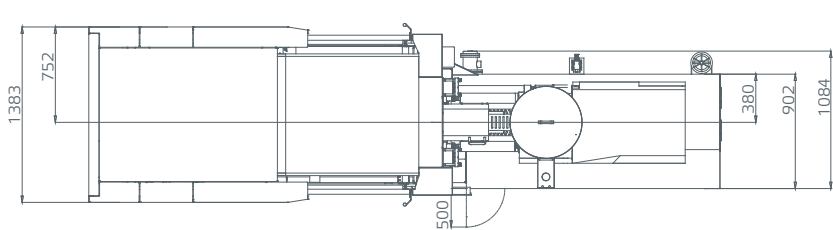
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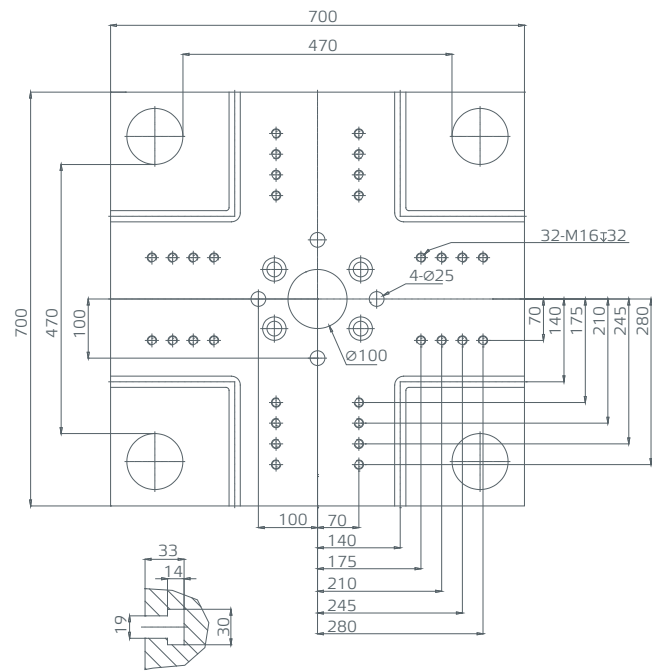
Front view of machine dimension



Top view of machine dimension

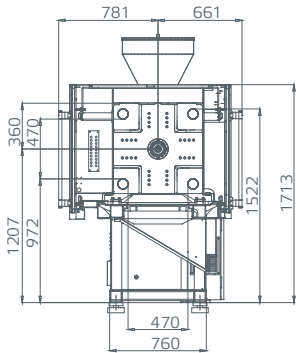


Moving platen dimension

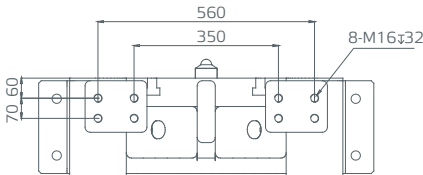


Unit:mm

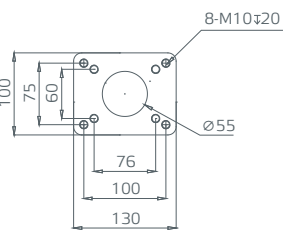
Robot installation dimension



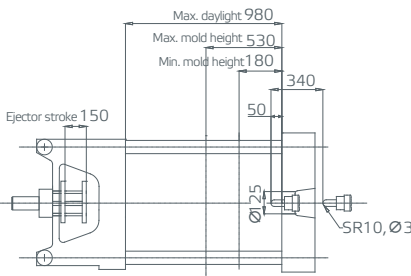
Robot fixed platen dimension



Feeding port dimensions



Clamping unit



NEO-T

Parameters

Clamping unit	Unit	NEO-T200		
Clamping force	kN	2000		
Clamping stroke	mm	510		
Space between tie bars	mm	530×530		
Max. mold height	mm	560		
Min. mold height	mm	200		
Ejector stroke	mm	150		
Ejector force	kN	67		
No. of ejector pins	piece	9		
Max. daylight	mm	1070		
Min. mold dimension	mm	371×371		
Platen dimensions (HxV)	mm	800×800		
Injection unit	Unit	i850		
		A	B	C
Screw diameter	mm	45	50	55
Screw L/D ratio	L/D	22.2	20.0	18.2
Shot size (theoretical)	cm³	374	461	558
Injection weight (PS)	g	340	420	508
Injection pressure	MPa	229.9	186.2	153.9
Injection rate into air	g/s	164	203	246
Screw speed	rpm	230		
Max. injection speed	mm/s	114		
Injection stroke	mm	235		
Others	Unit	i850		
Max. pump pressure	MPa	17.5		
Pump motor power	kW	25		
Heater power	kW	13.0		
Hopper capacity	kg	50		
Oil tank volume	L	210		
Total machine weight	t	7.2		
Machine dimension (LxWxH)	m	5.26x1.68x2.17		

Remarks:

The bearing weight by moving platen is 2/3 of the maximum mold weight.

Theoretical capacity is the calculated volume of injection produced by the cross-sectional area of the screw/plunger and the injection stroke

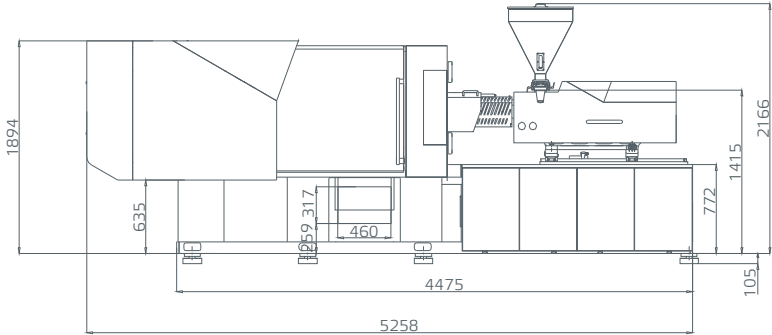
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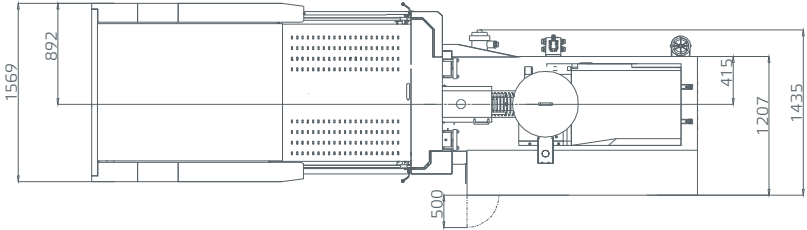
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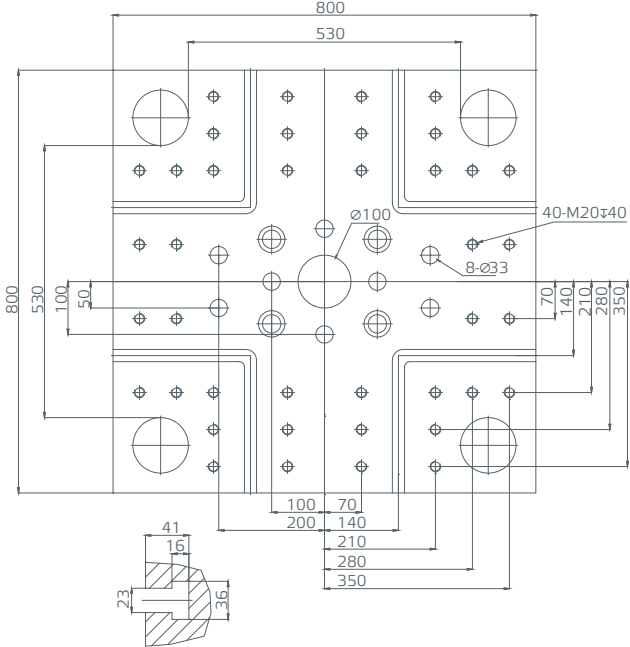
Front view of machine dimension



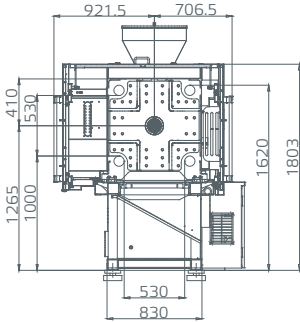
Top view of machine dimension



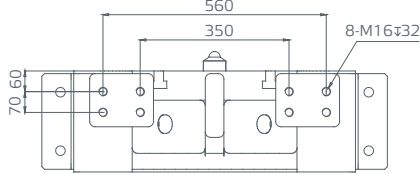
Moving platen dimension



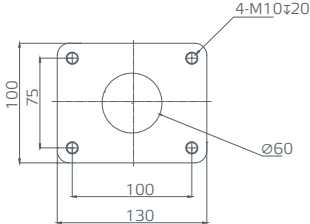
Robot installation dimension



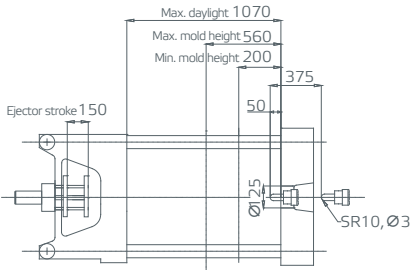
Robot fixed platen dimension



Feeding port dimensions



Clamping unit



Unit:mm

NEO-T

Parameters

Clamping unit	Unit	NEO-T260		
Clamping force	kN	2600		
Clamping stroke	mm	550		
Space between tie bars	mm	610×570		
Max. mold height	mm	600		
Min. mold height	mm	220		
Ejector stroke	mm	160		
Ejector force	kN	67		
No. of ejector pins	piece	13		
Max. daylight	mm	1150		
Min. mold dimension	mm	427×427		
Platen dimensions (HxV)	mm	890x850		
Injection unit	Unit	i1100		
		A	B	C
Screw diameter	mm	50	55	60
Screw L/D ratio	L/D	22.0	20.0	18.3
Shot size (theoretical)	cm³	522	632	752
Injection weight (PS)	g	475	571	684
Injection pressure	MPa	235.2	194.4	163.3
Injection rate into air	g/s	197	238	284
Screw speed	rpm	220		
Max. injection speed	mm/s	110		
Injection stroke	mm	266		
Others	Unit	i1100		
Max. pump pressure	MPa	17.5		
Pump motor power	kW	32		
Heater power	kW	16.0		
Hopper capacity	kg	50		
Oil tank volume	L	255		
Total machine weight	t	8.4		
Machine dimension (LxWxH)	m	5.45x1.63x2.20		

Remarks:

The bearing weight by moving platen is 2/3 of the maximum mold weight.

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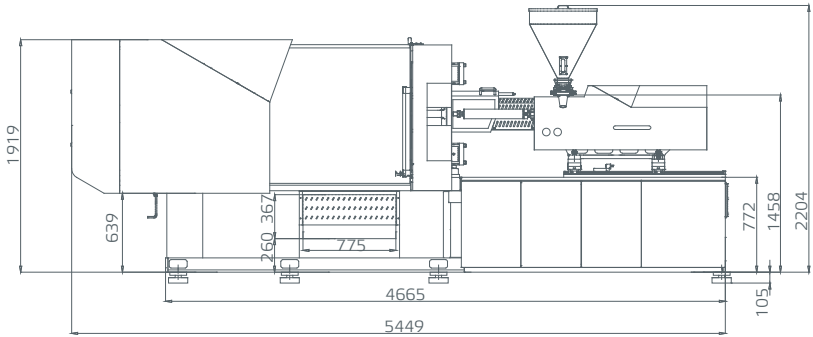
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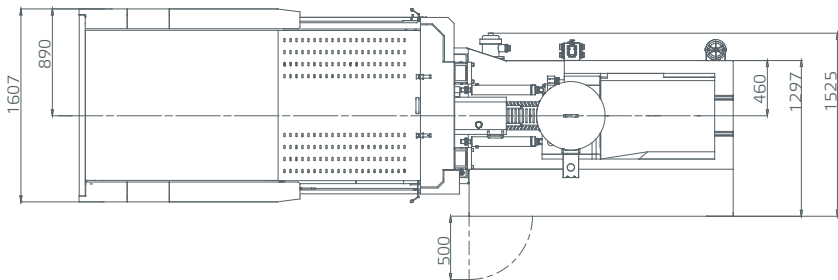
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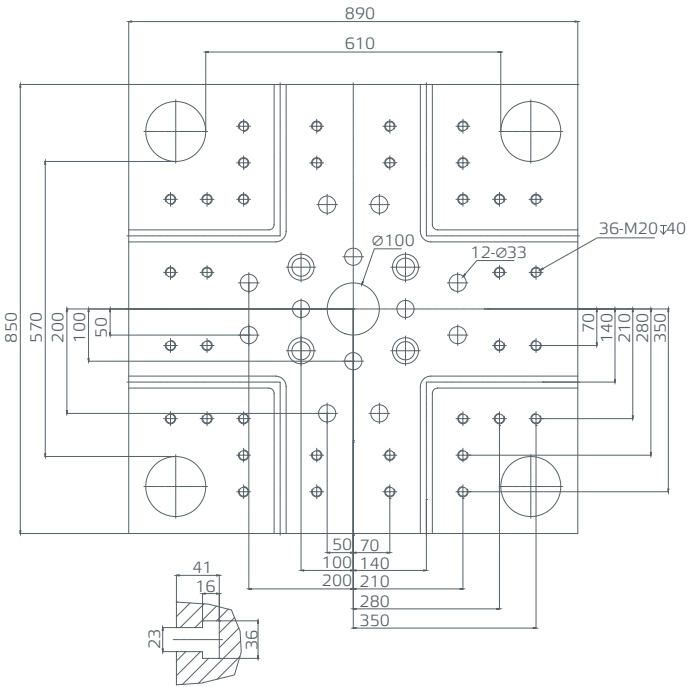
Front view of machine dimension



Top view of machine dimension

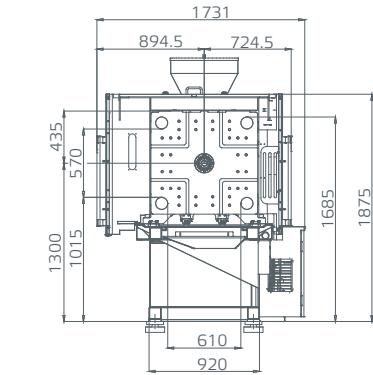


Moving platen dimension

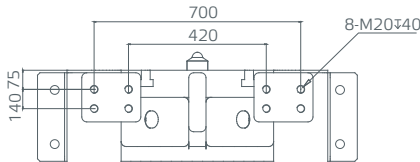


Unit:mm

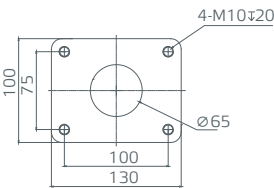
Robot installation dimension



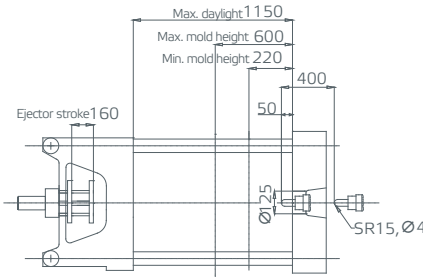
Robot fixed platen dimension



Feeding port dimensions



Clamping unit



NEO-T

Parameters

Clamping unit	Unit	NEO-T320		
Clamping force	kN	3200		
Clamping stroke	mm	650		
Space between tie bars	mm	710×670		
Max. mold height	mm	685		
Min. mold height	mm	250		
Ejector stroke	mm	160		
Ejector force	kN	67		
No. of ejector pins	piece	13		
Max. daylight	mm	1335		
Min. mold dimension	mm	497×497		
Platen dimensions (HxV)	mm	1035×1005		
Injection unit	Unit	i1900		
		A	B	C
Screw diameter	mm	60	65	70
Screw L/D ratio	L/D	21.7	20.0	18.6
Shot size (theoretical)	cm³	845	992	1151
Injection weight (PS)	g	769	903	1047
Injection pressure	MPa	218.8	186.4	160.7
Injection rate into air	g/s	299	352	408
Screw speed	rpm	210		
Max. injection speed	mm/s	117		
Injection stroke	mm	299		
Others	Unit	i1900		
Max. pump pressure	MPa	17.5		
Pump motor power	kW	51		
Heater power	kW	25.0		
Hopper capacity	kg	50		
Oil tank volume	L	445		
Total machine weight	t	11.5		
Machine dimension (LxWxH)	m	6.56x1.89x2.31		

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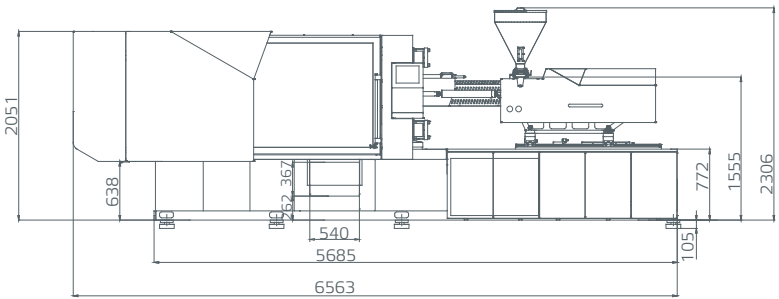
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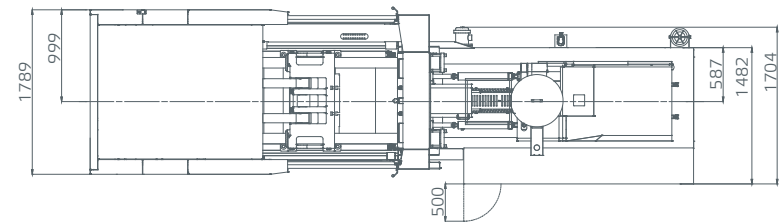
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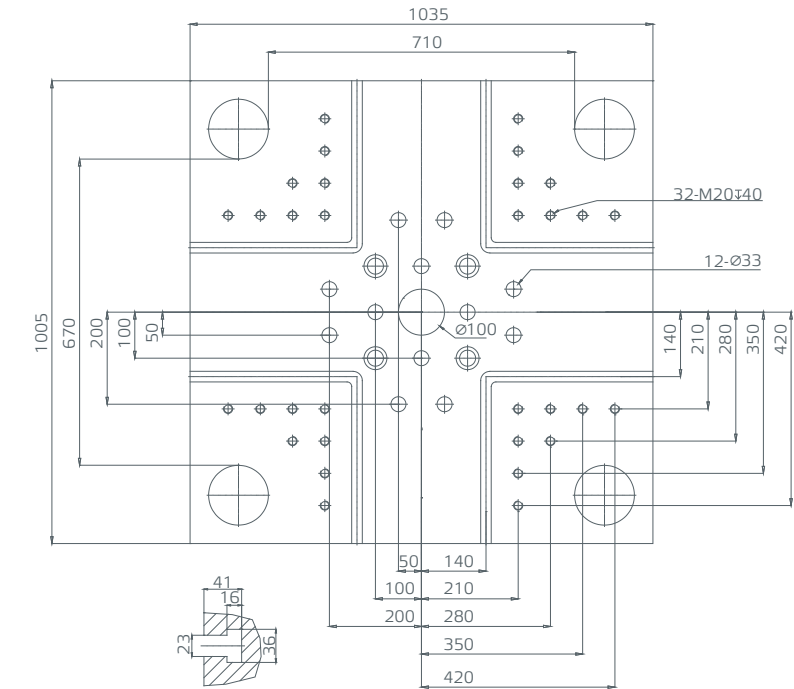
Front view of machine dimension



Top view of machine dimension

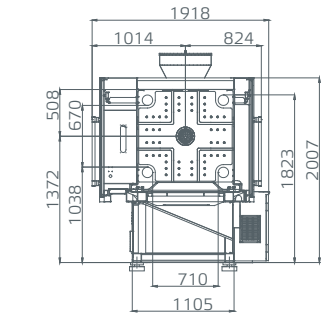


Moving platen dimension

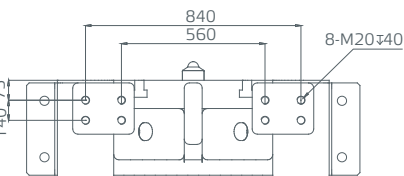


Unit:mm

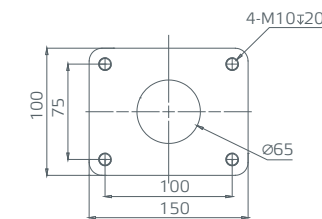
Robot installation dimension



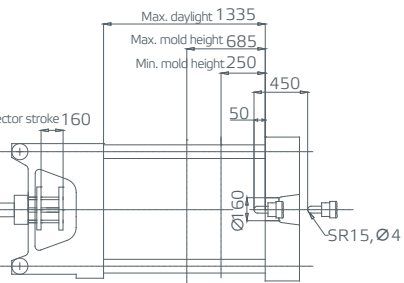
Robot fixed platen dimension



Feeding port dimensions



Clamping unit



NEO-T

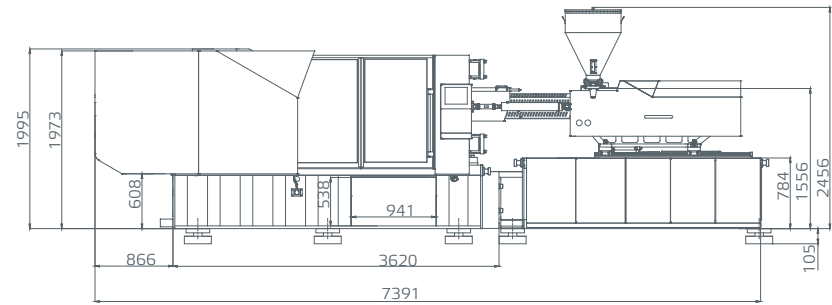
Parameters

Clamping unit	Unit	NEO-T400		
Clamping force	kN	4000		
Clamping stroke	mm	720		
Space between tie bars	mm	760×710		
Max. mold height	mm	750		
Min. mold height	mm	280		
Ejector stroke	mm	200		
Ejector force	kN	124		
No. of ejector pins	piece	13		
Max. daylight	mm	1470		
Min. mold dimension	mm	532x532		
Platen dimensions (HxV)	mm	1100x1050		
Injection unit	Unit	i2500		
		A	B	C
Screw diameter	mm	65	70	75
Screw L/D ratio	L/D	23.7	22.0	20.5
Shot size (theoretical)	cm³	1161	1347	1546
Injection weight (PS)	g	1057	1226	1407
Injection pressure	MPa	215.4	185.7	161.8
Injection rate into air	g/s	375	434	499
Screw speed	rpm	185		
Max. injection speed	mm/s	124		
Injection stroke	mm	350		
Others	Unit	i2500		
Max. pump pressure	MPa	17.5		
Pump motor power	kW	61		
Heater power	kW	26.0		
Hopper capacity	kg	50		
Oil tank volume	L	535		
Total machine weight	t	15.5		
Machine dimension (LxWxH)	m	7.40x2.11x2.46		

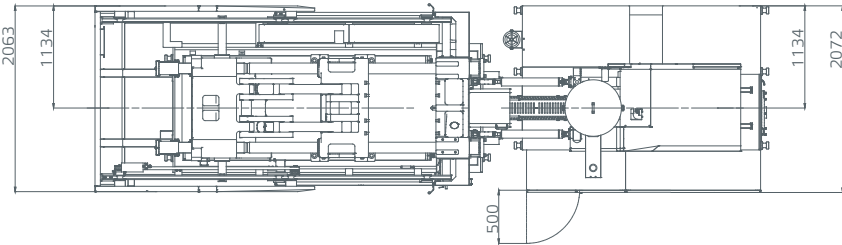
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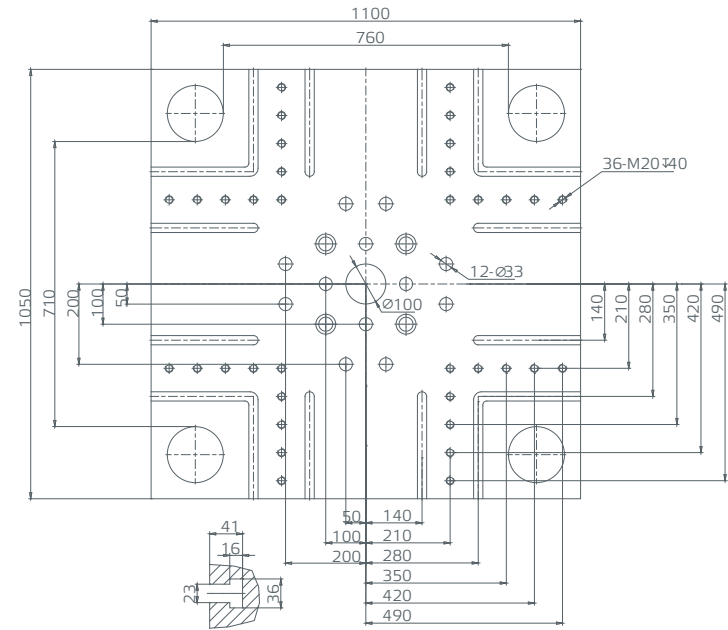
Front view of machine dimension



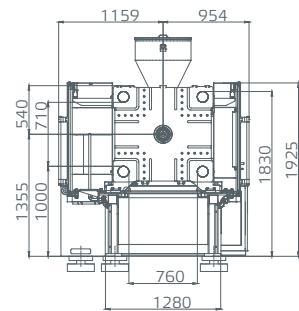
Top view of machine dimension



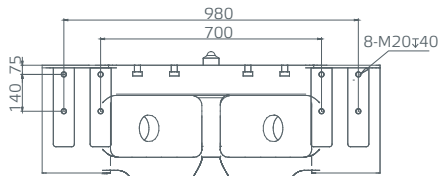
Moving platen dimension



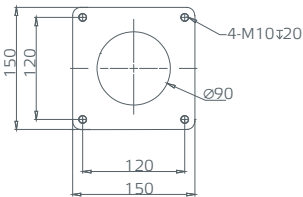
Robot installation dimension



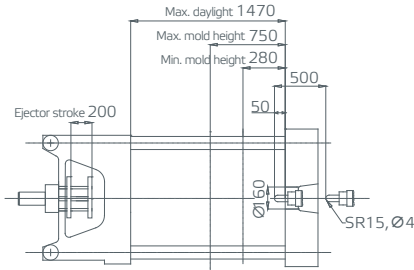
Robot fixed platen dimension



Feeding port dimensions



Clamping unit



Unit:mm

Clamping unit	Unit	NEO-T500		
Clamping force	kN	5000		
Clamping stroke	mm	800		
Space between tie bars	mm	820×820		
Max. mold height	mm	800		
Min. mold height	mm	320		
Ejector stroke	mm	200		
Ejector force	kN	124		
No. of ejector pins	piece	17		
Max. daylight	mm	1600		
Min. mold dimension	mm	574x574		
Platen dimensions (HxV)	mm	1205x1205		
Injection unit	Unit	i3800		
		A	B	C
Screw diameter	mm	75	80	85
Screw L/D ratio	L/D	23.5	22.0	20.7
Shot size (theoretical)	cm³	1785	2031	2293
Injection weight (PS)	g	1624	1848	2086
Injection pressure	MPa	205.3	180.5	159.9
Injection rate into air	g/s	452	514	580
Screw speed	rpm	165		
Max. injection speed	mm/s	112		
Injection stroke	mm	404		
Others	Unit	i3800		
Max. pump pressure	MPa	17.5		
Pump motor power	kW	32+32		
Heater power	kW	37.0		
Hopper capacity	kg	50		
Oil tank volume	L	590		
Total machine weight	t	19.8		
Machine dimension (LxWxH)	m	8.1x2.17x2.65		

Remarks:

The bearing weight by moving platen is 2/3 of the maximum mold weight.

Theoretical capacity is the calculated volume of injection produced by the cross-sectional area of the screw/plunger and the injection stroke

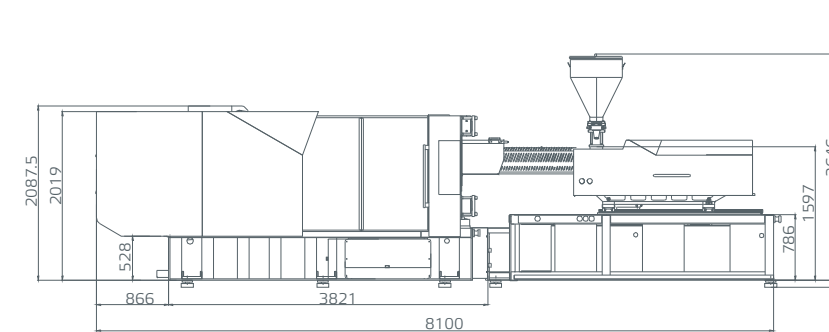
The injection weight (PS) is the theoretical value derived from the injection volume and the typical melt density of polystyrene

The screw speed is the theoretical maximum screw speed.

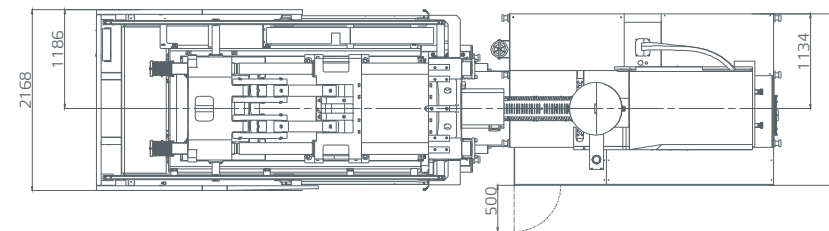
Please inform us if you have requirement for engineering material like PVC, PMMA or some special requirement.

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

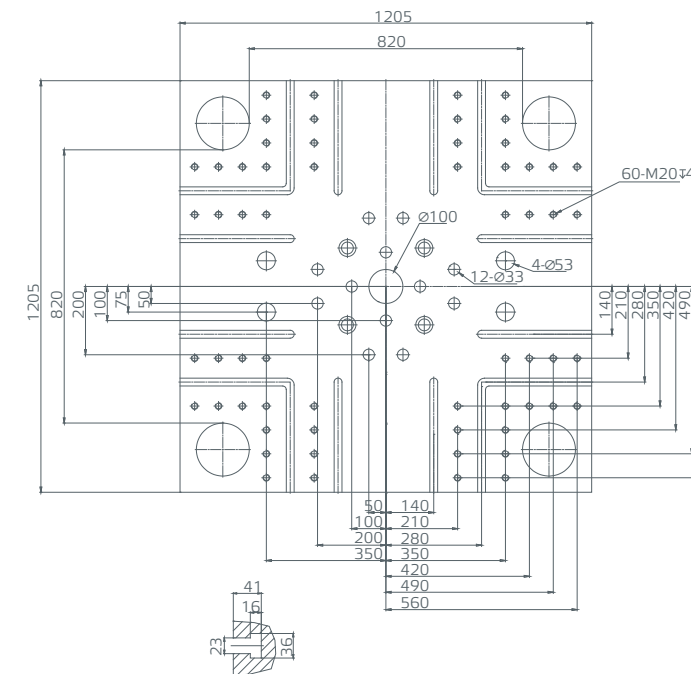
Front view of machine dimension



Top view of machine dimension

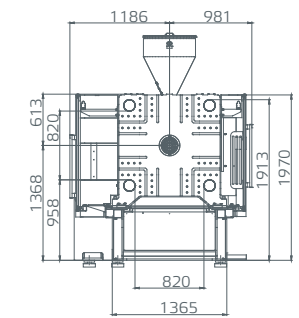


Moving platen dimension

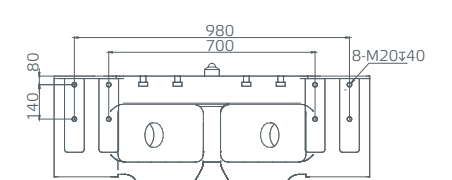


Unit:mm

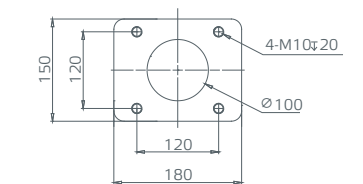
Robot installation dimension



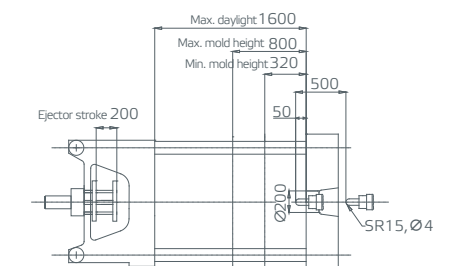
Robot fixed platen dimension



Feeding port dimensions



Clamping unit



NEO-T

Components & functions list

For clamping

Function description / Clamping unit	NEO-T90-NEO-T500
High rigidity 5 points-doubt toggle structure	●
Screw platen	○
T-slot platen+Screw platen	●
Platen Euromap 2 size	○
Locating ring on moving platen	●
Michanical,electric and hydraulic safety	●
Automatic central lubricating system for toggle, platen shoe and bush	●
Central lubrication system for mould adjust	●
Various eject function	●
Low pressure mold protection	●
One button automatic mold adjustment	●
Self-lock mold adjust motor	●
Compulsory ejector -back function	●
Quick change of central eject pin	●
Transducer on moving platen	●
Adjustable supporting feet for moving platen	●
High rigidity sliding belt for moving platen	●
Euromap 18 robot interface	●
Mechanical position limitation for moving platen	○
Fast connecting water regulator	●
2 groups of core pulling valve	●
2 groups of air blaster valve	●
Glass water regulation	○
Proportional mold open/close valve	○

For injection

Function description/ Injection unit	i380-i3800
Standard nitriding screw and barrel	●
Specialized screw and barrel	○
Double injection cylinder structer	●
Double carriage cylinder injection unit	●
Double stage linear guid injection structure	●
Carriage transducer	●
Screw ratation speed display	●
Proportional injection valve	○
Hydraulic plasticizing	●
Proportional back pressure control	●
Cold start protection	●
Material self- cleaning function	●
Temprature monitor for feeding throat	○
Feeding throad temprature close loop control	○
Barrel overheating protection	●
Nozzle cover	●
Self-lock valve for carraige	●
Swivel injection unit	●
Manual central lubricating device for carriage	●
Mica heating band	●
Ceramic heating band	○
Nano infrared heating band	○
Wheel sliding hopper	●
Stainless hopper	●

For electric

Function description/ Injection unit	i380-i3800
Techmation conroller 12 screen	●
KEBA controller	○
Real time running monitoring function	●
Production monitoring function	●
Alarm display	●
Time/Position control for the injection to pressure hold	●
Pressure control from injection to pressure hold	○
I/O monitoring display	●
Tri-color alarm	●
Motor overload protection	●
Emergency stop on front/rear door	●
380V/16A 5 pin socket *1	○
380V/16A 5 pin socket *2 220V/16A 3 pin socket *1	●
380V/32A 5 pin socket *2 380V/16A 5 pin socket *1 220V/16A 3 pin socket *1	○
Transformer for servomotor system	○
Euromap 12 robot interface	○
Euromap 67 robot interface	○
Euromap 13 core pulling interface	○
Double protection for heating	●
Safety relay monitoring	●
SSR heating control	●
Network centralized control system	○
Instant power consumption display	○
Instant clamping force display	○

For hydraulic

Function description / Clamping unit	NEO-T90-NEO-T500
Fast response servo system	●
Upgrade screw motor	○
Bi-pass oil filter	●
Hydraulic safety device	●
Carriage self lock valve	●
Self lock motor	●
Mold close control valve	●
Low pressure mold protection function	●
Mold open shock mitigation device	●
Injection pressure relief device	●
Pressure control for Injection to hold on pressure	○
Programmable injection sequence	○
Independent oil tank	●
Cooling water valve	○
Non-welding hydraulic pipe	●
Temprature monitering	●
Oil level alarm	●
Oil self -suction filter	●
Protective link for hoses	●
Proportional injection valve	○
Injection servo valve	○
Proportional valve for mould open/ close	○
2 groups of core pulling	●
2 groups pf air balster	●

For other

Function description / Other	NEO-T90-NEO-T320	NEO-T400-NEO-T500
Standard tederic color	●	●
Leveling pad	●	●
Spare parts, regular tools, mold clamper, extended nozzle, operation manual	●	●
Robot	○	○
Magnetic grate	○	○
Chiller	○	○
Mold temprature controller	○	○
Dehumidifyer	○	○
Auto loader	○	○
Fumigation wood frame	○	○
Hydraulic oil	○	○
Product platform		○

● Standard ○ Optional

● Standard ○ Optional