THINK TECH FORWARD

Designed by YIZUMI, January 2025

YIZUMI

C-W

High-end Multi-component Injection Molding Machine

Stability + Customization

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PRODUCT DETAILS

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Make Life More Colorful

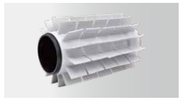
C Series Multi-component Injection Molding Machine

YIZUMI C series multi-component injection molding machine is created to meet the increasing demand for higher quality of life and customization. Based on advanced technology introduced from European R&D center and expected to provide the core value-stability and customization-to customers, the C series is committed to making our life more colorful.

3C products

Auto parts

Daily necessities



Household appliance accessories

Protective layers of tools

Packaging

Building materials

Toys

Triple-color cup

C-W series piggyback injection molding machine

Flexible modular combination

W series injection molding machine is compatible with single or dual color injection. Adjustable nozzle center distance can meet the production need of mold with different center distance. With multiple universal interfaces, independent rotary turntable module or independent rotary shaft module can be used according to actual requirement. Dual color molding is available by robot movement or in-mold core withdrawal. Program function integration and flexible modular combination can meet a variety of application needs.

Small floor space

Due to vertical arrangement, W series injection molding machine compared to L-type dual-color injection machine has advantages of small occupied area and high plant utilization. Comparing with V-type dual-color injection machine, W series injection molding machine reserves robot install location to provide space for automation equipment installation.

Advanced turntable control technology

With the digital closed-loop positioning technology, turntable positioning is more accurate and stable.

Excellent injection stability

Current mature injection unit ensures injection precision and stability.

Custom design

Modular combinations of different injection units and power units according to different processes requirements and the free programming function enable customization to become increasing mature.

User-friendly interface

The user-friendly and operating interface design with the user habits fully considered makes the control system more easy to use.

±0.3

High mold-open stability

Mold opening and closing is controlled by proportional valve, taking mold-open position repeatability to ±0.3mm.

Flexible independent rotary turntable design

The clamping unit of the W series can be combined either with the turntable or rotary shaft module to meet the process requirement for mold rotation or mold core rotation. When the turntable or the rotary shaft unit is not in use, the machine can get more mold height for a wider range of applications.

Adjustable nozzle center distance

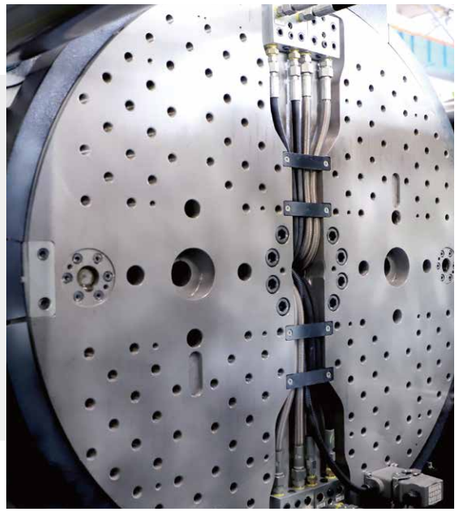
The stacking injection unit design allows to adjust the minimum distance of nozzles between the injection units.
Different standard adjustable ranges of different tonnages to meet the use requirements of molds with various center distances.

※Data above come from YIZUMI lab, available for reference.
Pictures and descriptions of this catalogue takes UN220C-NTW as an example, technology specification is applicable for C-W series machines of all tonnage.

CLAMPING UNIT

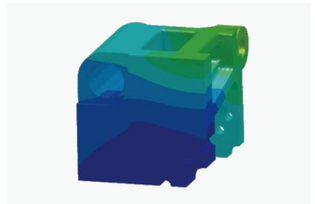
Reliable and stable, accurate turntable positioning

The clamping unit of the W series can be combined either with the turntable or rotary shaft module to meet the process requirement for mold rotation or mold core rotation.When the turntable or the rotary shaft unit is not in use, the machine can get more mold height for a wider range of applications.



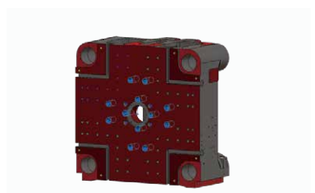
High-rigidity T-slot platen

High-rigidity platen design of all series machines increases the overall rigidity of clamping unit by 30%.
High-rigidity T-slot platen brings convenience for installation and removal of mold, reduces the wear of thread due to long-term use of screw hole and extends the life of platen.



Uniform-stress molding technology

The clamping force is evenly distributed with little deformation of platen.
No injection molding defect will be caused when the same part is produced under lower clamping force, which protects the platen and mold.

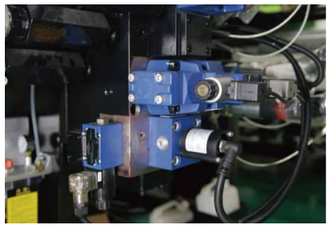


EU 2 ejector pin hole arrangement

Ejector pin hole arrangement of movable platen.

Mold opening and closing with proportional valves

Improve the repeatability of mold opening and stability of low-pressure mold protection

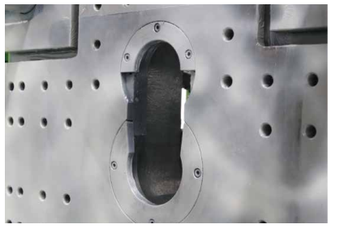


Ejector/Core pulling on the fly

The synchronous ejection or synchronous core-pull function is standard on the machine and can be selected through the computer to create conditions for productivity improvement.

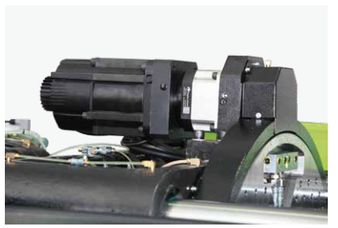
Adjustable distance between molds positioning centers

To meet the use requirements of different distances between molds positioning centers and broaden the application range.



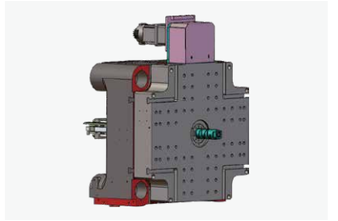
Digital closed-loop positioning control technology

The DCPC technology enables turntable to rotate smoothly without impact and position accurately.



Optional rotary shaft module

For NTW series, movable platen can be combined with the rotary shaft module to meet the process requirement for mold core rotation of dual-color products.



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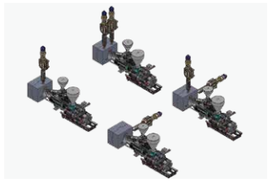
INJECTION UNIT

Stable injection precision
Enhanced plasticizing and color mixing effect

The W series stacking injection units take a structure that allows one unit seated on the top of another. The primary nozzle takes the platen center position and can be used in a single color process when the secondary injection unit is not in use. It offers a simply solution to serve the molding needs of both single and dual-color molds.

Adjustable nozzle center distance

The stacking injection unit design allows to adjust the minimum distance of nozzles between the injection units.
Different standard adjustable ranges of different tonnages to meet the use requirements of molds with various center distances.

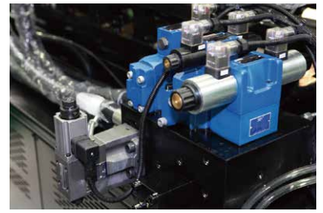


Modular injection unit combination

With a modular injection unit design, customers can select different injection unit combinations according to the needs in actual applications and meet a variety of process requirements;

Standard numerically controlled proportional back pressure

To provide the necessary conditions for the optimal plasticizing state of plastic melt;

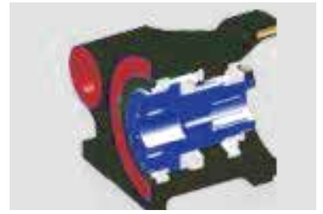


Integrated linear guide rail structure

The injection unit is equipped with the one-piece supporting base which is integrated with linear guide rails, which minimizes the friction to motion, increases injection accuracy and enhances plasticizing efficiency.

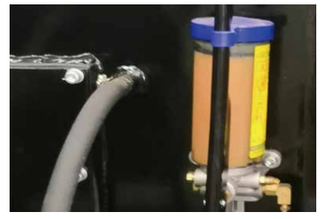
High-rigidity injection platen

Optimized injection unit provides improved injection rigidity to ensure that the force in the direction of the unit movement is concentric with the force applied on injection to reduce friction and increase injection stability and accuracy.



Standard manual lubricating pumps

To provide a convenient and reliable way to lubricate the injection unit.



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CONTROL SYSTEM

◀ Standard computer KEBA

Powerful, responsive, user-friendly HMI

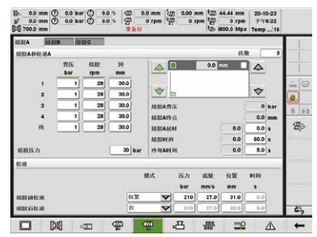
The Austrian KEBA2980 computer is characterized by user friendly interface and fast response. The powerful functions offered by KEBA system are ideal for the various molding process solutions of multi-component machines

- With dual-CPU control and 1ms scan cycle, it offers excellent reliability and ensures that the computing time for each movement of the injection unit is less than 1ms.
- Using synchronous communication technology and servo closed-loop positioning technology to achieve high accuracy of turntable control.
- Closed-loop temperature control for better accuracy of temperature control.
- 12-inch HD color touchscreen display with clear and neat screen layout.
- Remote control and operation in real time
- Unlimited mold parameter storage via USB. Easy and simple operation.
- Simultaneous quality statistical process control (SPC) of multiple injection units.
- Multi-level user access authentication provides data protection and data safety.
- Planning and tracking of key curves.
- Expandable I/O modules allow the integration of more functions, such as built-in hot runner control and sequential valve.
- Interfaces for printer, auxiliary devices, and automation communication, such as expandable OPC/UA communication port.

User-friendly design

The ergonomic rotary controller cabinet, foolproof design and clear, simple operating interface make the operation of system more comfortable and convenient.

① Ergonomic rotary controller cabinet ▶
② Convenient power socket for auxiliary equipment ▶

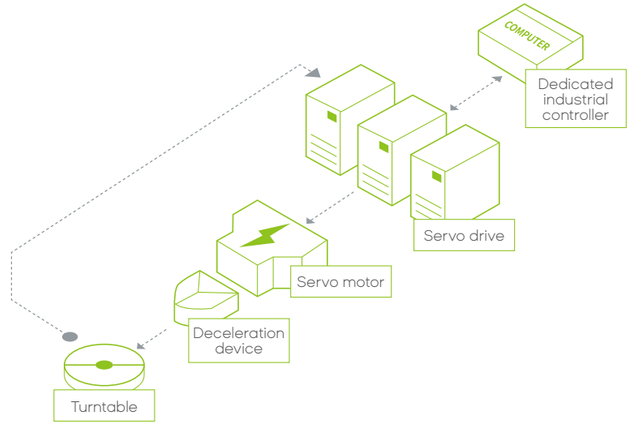


KEBA industrial controller interface ▲

Turntable servo control principle

The electric turntable servo control system consists of the industrial controller for multi-component injection molding machine, servo drive, servo motor, deceleration device, high-resolution accuracy inspection device and turntable. The controller offers the control plan to the servo drive which then performs closed-loop positioning control. The turntable has smooth movements and accurate positioning.

▼ Diagrammatic sketch of turntable servo control



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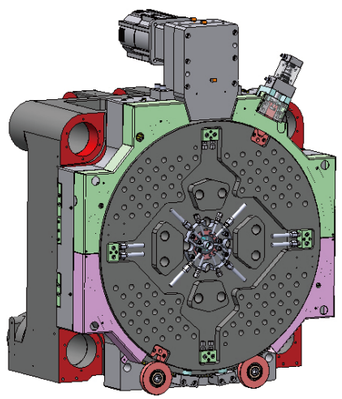
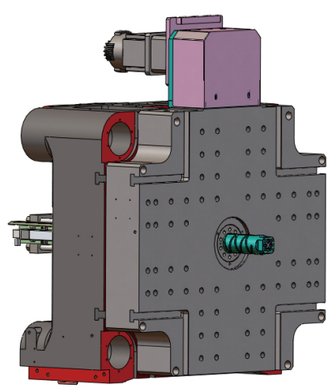
YRT INDEPENDENT ROTARY TURNTABLE /YRS INDEPENDENT ROTARY SHAFT



▲ Independent Rotary Turntable Module



▲ Independent Rotary Shaft Module

Independent turntable specification

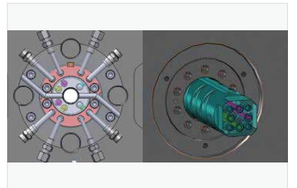
Turntable model	YRT-480	YRT-580	YRT-680	YRT-780	YRT-880	YRT-980	YRT-1100	YRT-1150	YRT-1200	YRT-1300	YRT-1400
Turntable diameter /mm	D480	D580	D680	D780	D880	D980	D1100	D1150	D1200	D1300	D1400
Minimum space between tie bars /mm	410×410	460×460	530×530	610×570	710×670	760×710	830×810 (850×810)	910×830	930×930	1000×1000	1100×960 (1160×1160)
Installation height /mm	150	150	155	155	220	220	268	268	268	268	268
Turntable weight /t	0.35	0.45	0.8	0.95	1.55	1.75	2.75	3.05	3.35	3.9	4.3
Turntable bearing capacity /t	0.35	0.5	0.7	0.9	1.2	1.8	2.5	3	3	3.5	4
No. of water channel /set	2 (Tube)	2 (Tube)	2	2	2	2	4	4	4	4	4
No. of oil channel /set	Select 2 sets	Select 2 sets	Select 2 sets	Select 2 sets	2	2	2	2	2	2	2
No. of blowers /set	Select 1 set	Select 1 set	Select 1 set	Select 1 set	Select 1 set	Select 1 set	Select 1 set	Select 1 set	Select 1 set	Select 1 set	Select 1 set
No. of electrical plugs	0	0	0	0	10-Pin x 1	10-Pin x 1	10-Pin x 1	10-Pin x 1	10-Pin x 1	10-Pin x 1	10-Pin x 1
Drive	Electrical servo	Electrical servo	Electrical servo	Electrical servo	Electrical servo	Electrical servo	Electrical servo	Electrical servo	Electrical servo	Electrical servo	Electrical servo
Brake				Permanent magnetic braking	Permanent magnetic braking	Permanent magnetic braking	Permanent magnetic braking	Permanent magnetic braking	Permanent magnetic braking	Permanent magnetic braking	Permanent magnetic braking
Ton	UN120A5	UN160A5	UN200A5	UN260A5	UN320A5	UN400A5	UN480A5/ UN560A5	UN500D1	UN650A5	UN800A5	UN1000A5/ UN700D1

Independent rotary shaft specification

Rotary shaft model	YRS-150	YRS-300	YRS-500
Installation height /mm	140	140	180
Rotary shaft bearing capacity /kg	150	300	500/700
Rotary shaft stroke /mm	120	150	150/200
Rotary shaft ejector force /kN	49	77	77/110
Water channe /set	1	2	2
Drive	Electrical servo	Electrical servo	Electrical servo
Brake	Permanent magnetic braking	Permanent magnetic braking	Permanent magnetic braking
Ton	160-200T	260-320T	360-560T

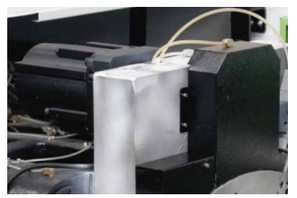
Anti-corrosion pintle valve

Enhance the corrosion resistance of the water manifold pintle valve through special process treatment.



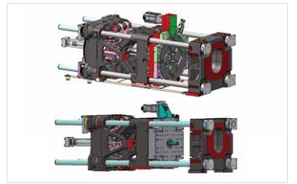
Memory holding on power outage

In the event that the turntable/rotary shaft loses power during the process or the machine has power outage, the control system provides position memory and position locking mechanism to ensure that the machine can continue normally without zeroing after the power comes back on.



Use of modular design

Both the turntable and rotary shaft mechanism adopt independent modular design. Customers can replace or switch to a different turntable or rotary shaft module according to the actual process needs. Multi component injection molding is also available by robot movement or in-mold core withdrawal, instead of using turntable and rotary shaft.

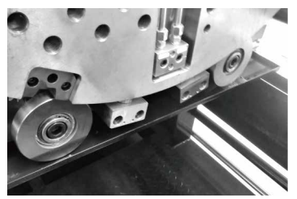


DCPC positioning

Digital closed loop positioning technology is applied for the entire series. The positioning accuracy of turntable or rotary shaft is more accurate.

Standard turntable parallelism correction

The turntable parallelism adjustment mechanism maintains the turntable in the optimum operating range after long period of use and makes simple correction when it falls out of the range.



L/V INDEPENDENT INJECTION UNIT

Flexible combination for wider range of applications

Meet the combination needs of injection molding machines of different tonnages and different brands through modular design. Quickly build a dual-component injection molding machine.

Independent V injection unit

Independent V-type injection unit adopt independent modular design to meet the combination needs of injection molding machines of different tonnages. With YIZUMI's optimization design, the removal of the injection unit provides more mold height for convenient installation and disassembly of molds.

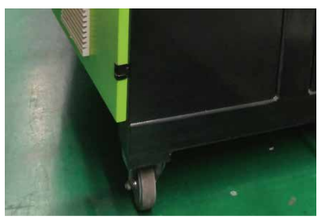
Independent L injection unit

Independent L-type injection unit adopt independent modular design to meet the combination needs of injection molding machines of different tonnages and different brands. Flexible injection unit is convenient for using, providing series functions including core pulling, sequential valve, hot runner and synchronous action.

User-friendly design for ease of use

The computer operating platform uses a detachable design that allow customer to determine the operating position flexibly according to user habits.
Adjust the application range of the independent injection unit using the hand wheel to accommodate molds of different sizes.

① Independent V injection unit
② Independent electric injection unit
③ Independent L injection unit
④ Independent industrial controller
⑤ Adjustable handwheel of independent injection unit



Compact design for easy storage

The independent injection unit can be equipped with the optional roller for easy migration and storage of the injection unit.

Optional needle valve control

The independent injection unit can render needle valve control to either the primary injection element or the secondary injection unit to compensate inadequate configuration of the main unit.

Optional hydraulic core-pull function (for hydraulic injection unit)

The core-pull and control effect for mold control driven by the independent injection unit is the same as the control effect provided by a main unit that comes with core-pull.

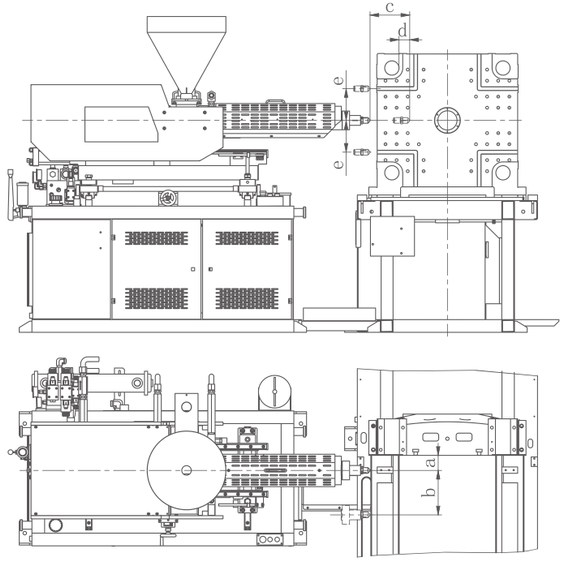
Optional hot runner

The independent injection unit is equipped with a computer that can help to achieve extended control over 6-32 sets of hot runners to meet the molding needs of multiple hot runners.

L/V INDEPENDENT INJECTION UNIT

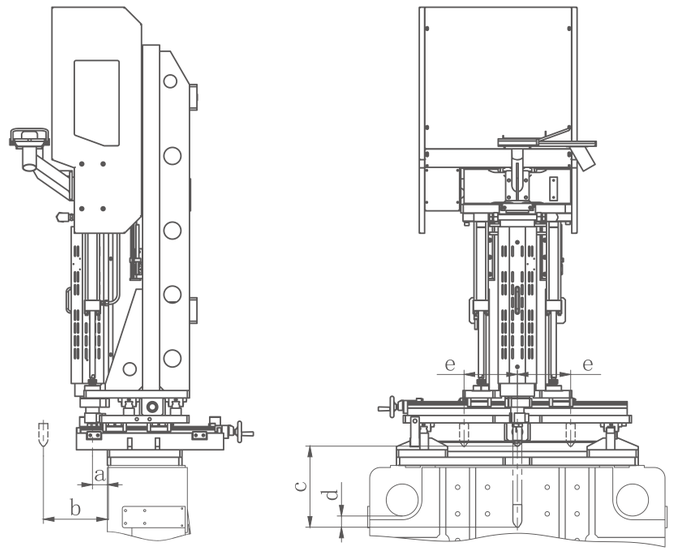
L-type injection unit configuration

Specifications	a/mm	b/mm	c/mm	d/mm	e/mm
IU190L	70	Standard 100 Optional 300 Note: when the mold thickness is too small, close to the minimum mold thickness of the corresponding tonnage, b will make adjustments according to customer needs.	120A5: 250 160A5: 250 200A5: 250 260A5: 250 320A5: 250 400A5: 350 480A5: 350 560A5: 350	120A5: 50 160A5: 60 200A5: 60 260A5: 70 320A5: 80 400A5: 80 480A5: 90 560A5: 90	±5
IU295L	80				
IU420L	80				
IU604L	80				
IU895L	110				
IU1269L	110				
IU1885L	120				



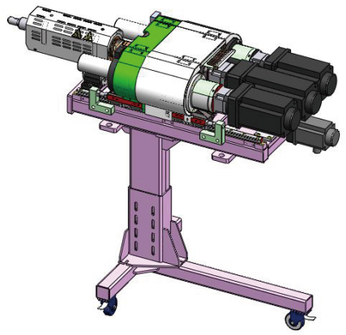
V-type injection unit configuration

Specifications	a/mm	b/mm	c/mm	d/mm	e/mm
IU190V	70	220 Note: when the mold thickness is too small, close to the minimum mold thickness of the corresponding tonnage, b will make adjustments according to customer needs to avoid collision between nozzle and movable platen.	120A5: 250 160A5: 250 200A5: 250 260A5: 250 320A5: 250 400A5: 350 480A5: 350 560A5: 350	120A5: 50 160A5: 60 200A5: 60 260A5: 60 320A5: 70 400A5: 70 480A5: 90 560A5: 90	±5
IU295V	80				
IU420V	80				
IU604V	80				
IU895V	95				

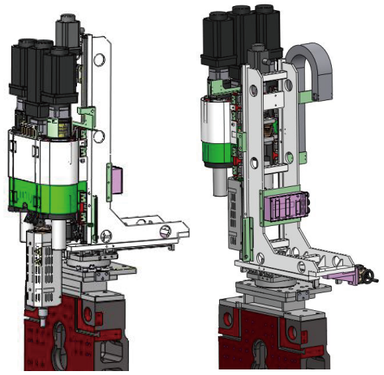


※1.Data above come from YIZUMI factory, please refer to actual customized equipment.
2.The product pictures and description in the above pages are only for illustration.
The effect of the real product (including but not limited to appearance, color and size) may be slightly different. Please refer to the real machine.

INDEPENDENT ELECTRICAL INJECTION UNIT



▲ Independent L-type Electrical Injection Unit



▲ Independent V-type Electrical Injection Unit

Independent modular design

Due to modular design, electrical injection unit can combining with hydraulic machine to build hybrid gasoline-electric dual-color machine, or with all-electric machine to all-electric dual-color machine. By flexible combination method, L-type/V-type electrical injection unit are also available.

Note: The specific structure is subject to the actual design, base rotation is optional.

Compact design for easy storage

Injection, plasticizing and carriage are under all-electric control. With compact design, electrical injection unit is easy for storage.

All servo-motor driven

High injection repeatability accuracy, rapid response and stable molding

Flexible combination

Used as L-type or V-type injection unit to meet different mold production.

Optional base rotation

To provide more space for mold replacement and maintenance through base rotation, and meet the process requirement for across molding by rotating 180°.

Clean and environmentally friendly

All-electric control is more clean and low consuming of energy than hydraulic control, especially suitable for the highly required production environment.

Strong compatibility

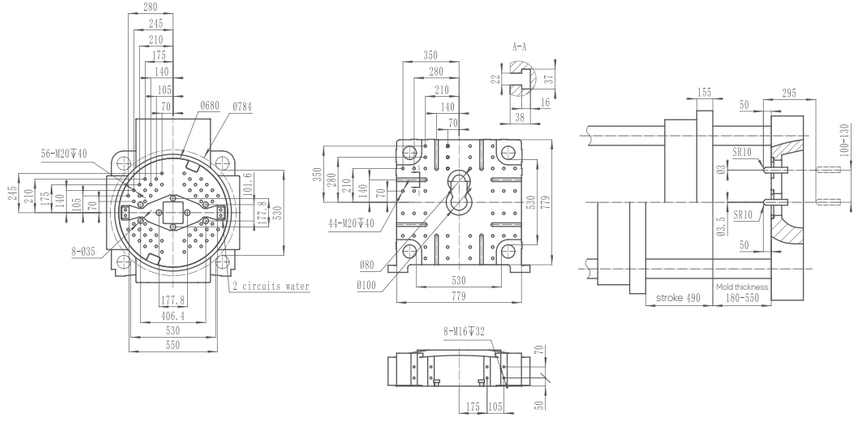
Meet dual and multi-color molding combination of injection molding machines of different tonnages and different brands with low cost in operation.

Specifications of the independent electrical injection unit

Description	UNIT	EIU2-50			EIU3-140				EIU4-350				EIU2-50HS			EIU3-140HS				EIU4-350HS			
International specifications		50			140				350				50			140				350			
INJECTION UNIT																							
Screw diameter	mm	19	22	26	22	26	30	35	30	35	40	48	19	22	26	22	26	30	35	30	35	40	48
Screw L/D ratio	L/D	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Theorectical shot volume	cm^3	21.3	28.5	39.8	38.0	53.1	70.7	96.2	99.0	134.7	175.9	253.3	21.3	28.5	39.8	38.0	53.1	70.7	96.2	99.0	134.7	175.9	253.3
Shot weight (PS)	gram	20	26	37	35	49	65	89	91	124	162	233	20	26	37	35	49	65	89	91	124	162	233
Injection pressure	MPa	250	186	134	250	266	200	147	250	260	200	139	250	186	134	372	266	200	147	250	260	200	139
Injection speed	mm/s	150			120				120				250			240				200			
Injection rate	g/s	43	57	80	46	64	85	115	85	115	151	217	71	95	133	91	127	170	231	141	192	251	362
Screw speed	r/min	0~400			0~400				0~300				0~500			0~400				0~300			
Screw stroke	mm	75			100				140				75			100				140			
Nozzle contact force	kN	20			30				35				20			30				35			
POWER UNIT																							
Injection servo motor	kW	3×2			4×2				5.5×2				4×2			5.5×2				7.5×2			
Plasticizing servo motor	kW	5.5			7.5				7.5				5.5			7.5				7.5			
Carriage deceleration motor	kW	0.75			0.75				0.75				0.75			0.75				0.75			
Heating capacity	kW	3.5	4.5	5.5	5.5	5.5	6	7	6	7	8	10	3.5	4	5.5	4	5.2	6	7	6	7	8	10
Number of temperature control zones	-	4			4				4				4			4				4			

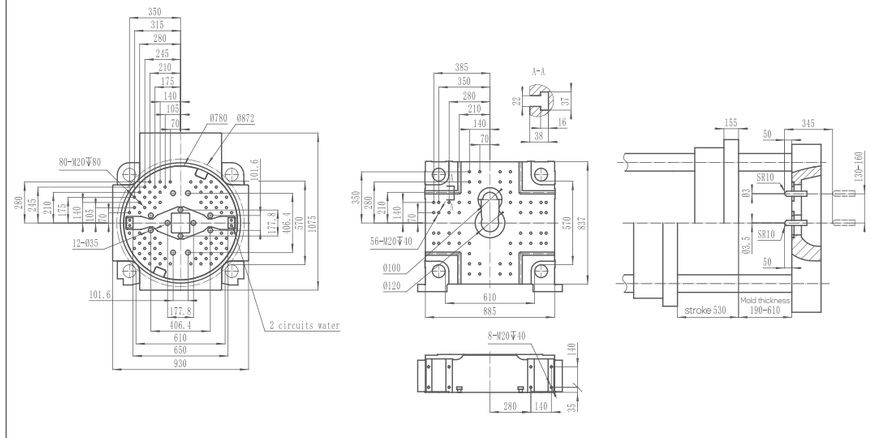
UN160C-NTW Specifications

NTW: Narrow Platen + Vertical Turntable + W-Shaped Injection Unit

Description		UN160C-NTW											
INJECTION UNIT													
International specifications	UNIT	895H			604H			295W			190W		
		A	B	C	A	B	C	A	B	C	A	B	C
Screw diameter	mm	48	53	60	43	48	53	30	35	40	22	26	30
Screw L/D ratio	L/D	22	20	20	22.3	20	20	24	20	20	20	20	18
Theorectical shot volume	cm^3	425	518	664	298	371	452	117	159	207	51	72	95
Shot weight (PS)	gram	391	477	611	274	341	416	107	146	191	47	66	88
Injection pressure	MPa	211	173	135	203	163	134	253	186	142	373	267	201
Injection speed	mm/s	89			115			107			124		
Injection rate	g/s	148	181	232	154	192	234	70	95	124	43	60	80
Screw speed	rpm	194			290			219			243		
Screw stroke	mm	235			205			165			135		
CLAMPING UNIT													
Clamping force	kN	1600											
Opening stroke	mm	490											
Mold thickness	mm	180-550											
Max. turning diameter	mm	784(Turntable diameter 680)											
Turntable bearing capacity	t	0.7											
Distance between centers of mold locating holes	mm	100-130											
Space between tie bars	mm	530×530											
Ejector stroke	mm	150											
Ejector force	kN	49											
GENERAL													
Max. system pressure	MPa	17.5											
Motor power	kW	25			25			25			15		
Heating power	kW	14.4/16.8			10.9/12.1			6.9/7.8			4.8/5.5		
Machine dimensions (L×W×H)	m	6.3×2×2.9											
Machine weight	t	6.5											
Hopper capacity	kg	25			25			25			25		
Oil Tank capacity	L	400											
Platen dimensions													

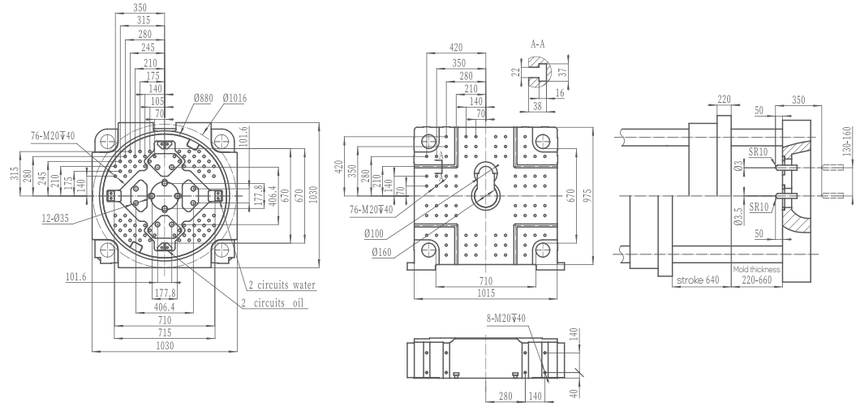
UN220C-NTW Specifications

NTW: Narrow Platen + Vertical Turntable + W-Shaped Injection Unit

Description		UN220C-NTW																	
INJECTION UNIT																			
International specifications	UNIT	895H			604H			420H			420W			295W			190W		
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Screw diameter	mm	48	53	60	43	48	53	35	43	48	35	43	48	30	35	40	22	26	30
Screw L/D ratio	L/D	22	20	20	22.3	20	20	24	20	20	24	20	20	24	20	20	20	20	18
Theorectical shot volume	cm^3	425	518	664	298	371	452	163	247	307	163	247	307	117	159	207	51	72	95
Shot weight (PS)	gram	391	477	611	274	341	416	150	227	283	150	227	283	107	146	191	47	66	88
Injection pressure	MPa	211	173	135	203	163	134	257	170	137	257	170	137	253	186	142	373	267	201
Injection speed	mm/s	99			128			153			94			107			124		
Injection rate	g/s	165	201	258	171	213	260	134	201	251	83	126	157	70	95	124	43	60	80
Screw speed	rpm	216			324			371			228			219			243		
Screw stroke	mm	235			205			170			170			165			135		
CLAMPING UNIT																			
Clamping force	kN	2200																	
Opening stroke	mm	530																	
Mold thickness	mm	195-610																	
Max. turning diameter	mm	872(Turntable diameter 780)																	
Turntable bearing capacity	t	0.9																	
Distance between centers of mold locating holes	mm	130-160																	
Space between tie bars	mm	610×570																	
Ejector stroke	mm	160																	
Ejector force	kN	77																	
GENERAL																			
Max. system pressure	MPa	17.5																	
Motor power	kW	30			30			30			20			15			15		
Heating power	kW	14.4/16.8			10.9/12.1			9/10.1			9/10.1			6.9/7.8			4.8/5.5		
Machine dimensions (L×W×H)	m	6.6×2×2.9																	
Machine weight	t	8.5																	
Hopper capacity	kg	25			25			25			25			25			25		
Oil Tank capacity	L	400																	
Platen dimensions																			

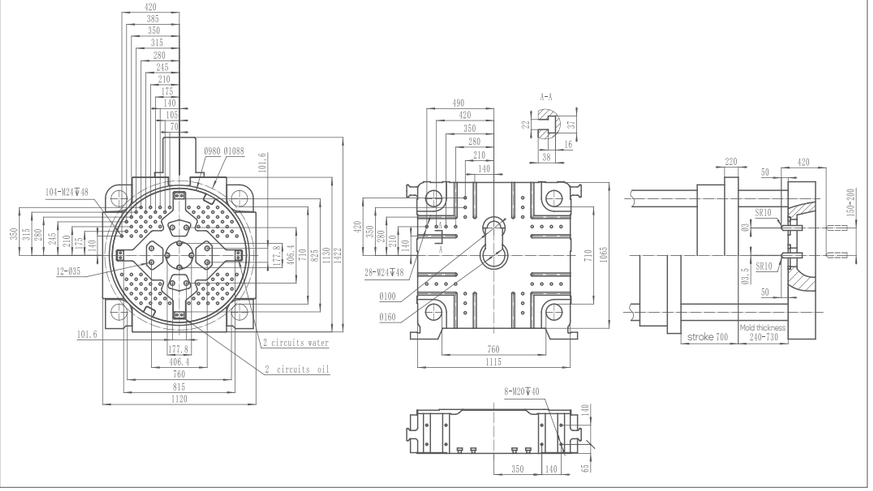
UN280C-NTW Specifications

NTW: Narrow Platen + Vertical Turntable + W-Shaped Injection Unit

Description		UN280C-NTW																	
INJECTION UNIT																			
International specifications	UNIT	1885H			1269H			895H			420W			295W			190W		
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Screw diameter	mm	60	68	76	53	60	68	48	53	60	35	43	48	30	35	40	22	26	30
Screw L/D ratio	L/D	22.6	20	20	22.6	20	20	22	20	20	24	20	20	24	20	20	20	20	18
Theorectical shot volume	cm^3	834	1071	1338	584	749	962	425	518	664	163	247	307	117	159	207	51	72	95
Shot weight (PS)	gram	767	985	1231	538	689	885	391	477	611	150	227	283	107	146	191	47	66	88
Injection pressure	MPa	226	176	141	217	169	132	211	173	135	257	170	137	253	186	142	373	267	201
Injection speed	mm/s	91			122			153			94			107			124		
Injection rate	g/s	239	307	383	247	316	406	254	310	397	83	126	157	70	95	124	43	60	80
Screw speed	rpm	200			250			333			228			219			243		
Screw stroke	mm	295			265			235			170			165			135		
CLAMPING UNIT																			
Clamping force	kN	2800																	
Opening stroke	mm	640																	
Mold thickness	mm	220-660																	
Max. turning diameter	mm	1016(Turntable diameter 880)																	
Turntable bearing capacity	t	1.5																	
Distance between centers of mold locating holes	mm	130-160																	
Space between tie bars	mm	710×670																	
Ejector stroke	mm	170																	
Ejector force	kN	77																	
GENERAL																			
Max. system pressure	MPa	17.5																	
Motor power	kW	51			51			51			20			15			15		
Heating power	kW	22.2/24.6			16.6/19			14.4/16.8			9/10.1			6.9/7.8			4.8/5.5		
Machine dimensions (L×W×H)	m	7.23×2.11×3.1																	
Machine weight	t	13.5																	
Hopper capacity	kg	50			50			25			25			25			25		
Oil Tank capacity	L	500																	
Platen dimensions																			

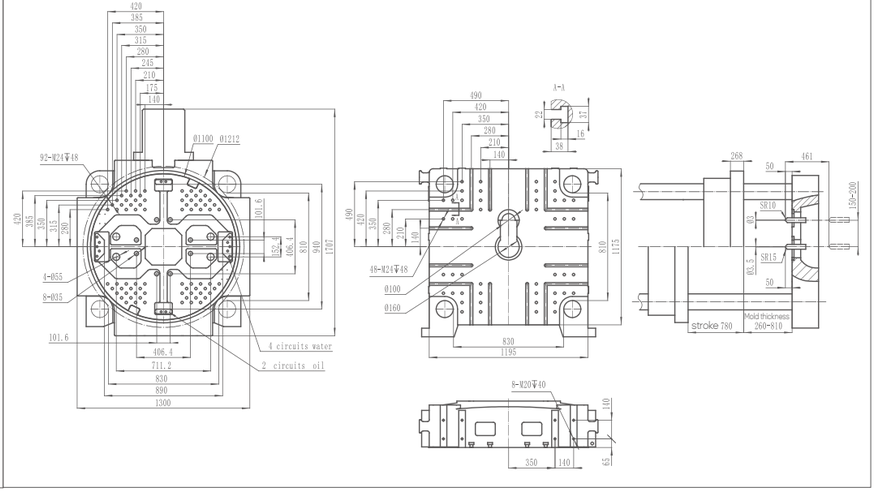
UN350C-NTW Specifications

NTW: Narrow Platen + Vertical Turntable + W-Shaped Injection Unit

Description		UN350C-NTW																					
INJECTION UNIT																							
International specifications	UNIT	2693H			1885H			1269H			895W			604W			420W			295W		
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Screw diameter	mm	68	76	84	60	68	76	53	60	68	48	53	60	43	48	53	35	43	48	30	35	40
Screw L/D ratio	L/D	22.3	20	20	22.6	20	20	22.6	20	20	22	20	20	22.3	20	20	24	20	20	24	20	20
Theorectical shot volume	cm^3	1198	1496	1828	834	1071	1338	584	749	962	425	518	664	298	371	452	163	247	307	117	159	207
Shot weight (PS)	gram	1102	1377	1682	767	985	1231	538	689	885	391	477	611	274	341	416	150	227	283	107	146	191
Injection pressure	MPa	225	180	147	226	176	141	217	169	132	211	173	135	203	163	134	257	170	137	253	186	142
Injection speed	mm/s	89			114			152			89			99			94			107		
Injection rate	g/s	297	371	454	295	379	474	308	395	507	148	181	232	132	165	201	83	126	157	70	95	124
Screw speed	rpm	156			249			311			194			250			228			219		
Screw stroke	mm	330			295			265			235			205			170			165		
CLAMPING UNIT																							
Clamping force	kN	3500																					
Opening stroke	mm	700																					
Mold thickness	mm	240-730																					
Max. turning diameter	mm	1088(Turntable diameter 980)																					
Turntable bearing capacity	t	1.8																					
Distance between centers of mold locating holes	mm	150-200																					
Space between tie bars	mm	760×710																					
Ejector stroke	mm	210																					
Ejector force	kN	110																					
GENERAL																							
Max. system pressure	MPa	17.5																					
Motor power	kW	60			60			60			25			25			20			15		
Heating power	kW	26.4/30.9			22.2/24.6			16.6/19			14.4/16.8			10.9/12.1			9/10.1			6.9/7.8		
Machine dimensions (L×W×H)	m	8.25×2.32×2.78																					
Machine weight	t	16																					
Hopper capacity	kg	100			50			50			25			25			25			25		
Oil Tank capacity	L	700																					
Platen dimensions																							

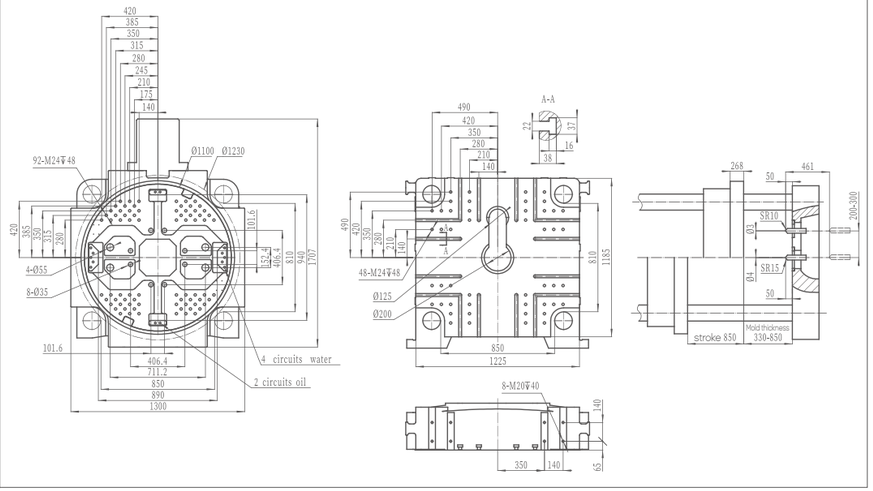
UN420C-NTW Specifications

NTW: Narrow Platen + Vertical Turntable + W-Shaped Injection Unit

Description		UN420C-NTW																					
INJECTION UNIT																							
International specifications	UNIT	2693H			1885H			1269H			895W			604W			420W			295W		
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Screw diameter	mm	68	76	84	60	68	76	53	60	68	48	53	60	43	48	53	35	43	48	30	35	40
Screw L/D ratio	L/D	22.3	20	20	22.6	20	20	22.6	20	20	22	20	20	22.3	20	20	24	20	20	24	20	20
Theorectical shot volume	cm^3	1198	1496	1828	834	1071	1338	584	749	962	425	518	664	298	371	452	163	247	307	117	159	207
Shot weight (PS)	gram	1102	1377	1682	767	985	1231	538	689	885	391	477	611	274	341	416	150	227	283	107	146	191
Injection pressure	MPa	225	180	147	226	176	141	217	169	132	211	173	135	203	163	134	257	170	137	253	186	142
Injection speed	mm/s	100			128			171			89			99			94			107		
Injection rate	g/s	336	419	512	333	428	535	347	445	572	148	181	232	132	165	201	83	126	157	70	95	124
Screw speed	rpm	176			281			351			194			250			228			219		
Screw stroke	mm	330			295			265			235			205			170			165		
CLAMPING UNIT																							
Clamping force	kN	4200																					
Opening stroke	mm	780																					
Mold thickness	mm	260-810																					
Max. turning diameter	mm	1212(Turntable diameter 1100)																					
Turntable bearing capacity	t	2.5																					
Distance between centers of mold locating holes	mm	150-200																					
Space between tie bars	mm	830×810																					
Ejector stroke	mm	210																					
Ejector force	kN	110																					
GENERAL																							
Max. system pressure	MPa	17.5																					
Motor power	kW	70			70			70			25			25			20			15		
Heating power	kW	26.4/30.9			22.2/24.6			16.6/19			14.4/16.8			10.9/12.1			9/10.1			6.9/7.8		
Machine dimensions (L×W×H)	m	9×2.6×2.9																					
Machine weight	t	20.5																					
Hopper capacity	kg	100			50			50			25			25			25			25		
Oil Tank capacity	L	1000																					
Platen dimensions																							

UN480C-NTW Specifications

NTW: Narrow Platen + Vertical Turntable + W-Shaped Injection Unit

Description		UN480C-NTW																					
INJECTION UNIT																							
International specifications	UNIT	3330H			2693H			1885H			895W			604W			420W			295W		
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Screw diameter	mm	76	84	92	68	76	84	60	68	76	48	53	60	43	48	53	35	43	48	30	35	40
Screw L/D ratio	L/D	22.3	20	20	22.3	20	20	22.6	20	20	22	20	20	22.3	20	20	24	20	20	24	20	20
Theorectical shot volume	cm^3	1678	2049	2458	1198	1496	1828	834	1071	1338	425	518	664	298	371	452	163	247	307	117	159	207
Shot weight (PS)	gram	1543	1885	2262	1102	1377	1682	767	985	1231	391	477	611	274	341	416	150	227	283	107	146	191
Injection pressure	MPa	199	163	136	225	180	147	226	176	141	211	173	135	203	163	134	257	170	137	253	186	142
Injection speed	mm/s	91			100			128			89			99			94			107		
Injection rate	g/s	380	464	557	336	419	512	333	428	535	148	181	232	132	165	201	83	126	157	70	95	124
Screw speed	rpm	140			176			281			194			250			228			219		
Screw stroke	mm	370			330			295			235			205			170			165		
CLAMPING UNIT																							
Clamping force	kN	4800																					
Opening stroke	mm	850																					
Mold thickness	mm	330-850																					
Max. turning diameter	mm	1230(Turntable diameter 1100)																					
Turntable bearing capacity	t	2.5																					
Distance between centers of mold locating holes	mm	200-300																					
Space between tie bars	mm	850×810																					
Ejector stroke	mm	220																					
Ejector force	kN	166																					
GENERAL																							
Max. system pressure	MPa	17.5																					
Motor power	kW	70			70			70			25			25			20			15		
Heating power	kW	33.1/43			26.4/30.9			22.2/24.6			14.4/16.8			10.9/12.1			9/10.1			6.9/7.8		
Machine dimensions (L×W×H)	m	9.3×2.6×3																					
Machine weight	t	21.5																					
Hopper capacity	kg	100			100			50			25			25			25			25		
Oil Tank capacity	L	1000																					
Platen dimensions																							

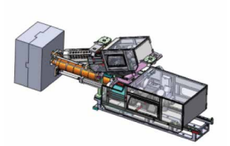
Diversified combinations of modular injection units

W Series

IMM: NTW series

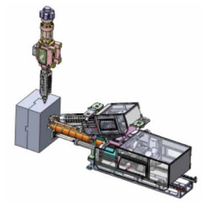
Combinations: NTW/V、NTW/L、NTW/L/V

※ Note: Specifications of L/V Independent injection unit, please refer to A5



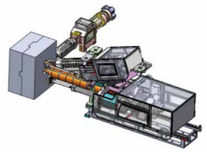
W

Two stacking injection unit



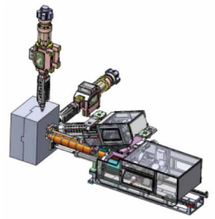
W/V

Two stacking injection unit
+ V-type injection unit
at the top of fixed platen



W/L

Two stacking injection unit
+ L-type injection unit
at back door side



W/L/V

Two stacking injection unit
+ V-type injection unit
at the top of fixed platen
+ L-type injection unit
at back door side

Injection unit configuration

P configuration		Injection unit									
Model	UNIT	190	295	420	604	895	1269	1885	2693	3330	4820
Screw diameter	mm	22/26/30	30/35/40	35/43/48	43/48/53	48/53/60	53/60/68	60/68/76	68/76/84	76/84/92	84/92/108
UN160C-NTW	H				■	■					
	W	■	■								
UN220C-NTW	H			■	■	■					
	W	■	■	■							
UN280C-NTW	H					■	■	■			
	W	■	■	■							
UN350C-NTW	H						■	■	■		
	W		■	■	■	■					
UN420C-NTW	H						■	■	■		
	W		■	■	■	■					
UN480C-NTW	H							■	■	■	
	W		■	■	■	■					

Note: (1) In the table above, the boxes in green represent the injection units available for each machine model, recommending H injection unit is two or more levels larger than W injection unit;
(2) Injection unit not available as an option can be specially engineered according to actual needs;
(3) The specific structure is subject to the actual design.

Standard and Optional Features

Note: "●": Standard
"○": Optional

Description	Standard	Optional
Clamping unit		
Electrical servo turntable	●	
2-Set turntable water channel (160T-350T)	●	
4-Set turntable water channel (420T-580T)	●	
Euromap 18 robot mounting hole (on the top of fixed platen)	●	
EU standard ejection hole arrangement	●	
Mechanical / electrical safety devices	●	
Adjustment free mechanical safety lock	●	
Automatic centralized lubrication system	●	
Low-pressure mold protection	●	
One-button automatic mold height adjustment	●	
Platen parallelism adjustment	●	
Safety edges for machine gates	●	
Wear-resistant manganese steel supporting tracks for movable platen	●	
Electric safety door		○
10-pin electrical connector for turntable		○
Multiple sets of air blow		○
Magnetic platen		○
Mold thermal insulation		○
Injection unit		
Combination of multiple modular injection units	●	
Barrel heat-retaining energy-saving device (Insulation cover)	●	
Nozzle and multi-stage PID temperature control	●	
Screw cold start prevention	●	
Automatic purging	●	
Movable or rolling hopper device	●	
Screw speed detection	●	
Linear guide rail for carriage	●	
Manual centralized lubrication for injection unit	●	
Carriage transducer check	●	
Adjustable nozzle center distance	●	
Three-component and multi-component injection molding		○
Dedicated barrel and screw assembly (TPE/TPU/PC/PMMA, etc.)		○
Feed port temperature detection		○
Ceramic heater band		○
Infrared heater band		○
Injection unit for silicone		○
Electrical injection unit		○
Gas assisted injection		○
Hydraulic system		
Servo pump system	●	
Low noise energy-saving hydraulic circuit	●	
High-precision real-time bypass oil filter	●	
Imported branded hydraulic valve	●	
Imported branded hydraulic seal	●	
Differential fast mold closing device	●	
Hydraulic oil temperature/level detection and alarm	●	
Oil temperature closed loop control	●	
Safety retention device for exposed HP hydraulic hose	●	
Oil preheating	●	
2 sets of core-pull on turntable (280T-580T)	●	
Mold opening parallel to core pull/ejection	●	
Mold opening with proportional valve control		○

Description	Standard	Optional
Injection with proportional valve control		○
High-response servo injection system with accumulator		○
Larger plasticizing motor		○
Independent hydraulic sequential valve		○
Pneumatic sequential valve		○
Multi-set hydraulic core-pull on movable platen (or fixed platen)		○
Core-pull with check valve and provides core-pull pressure relief function		○
Self-sealing suction filter		○
Mold opening parallel to plasticizing		○
Stronger power		○
Control system		
Turntable digital closed-loop positioning control (DCPC technology)	●	
Turntable protection against power outage	●	
Non-return-to-zero turntable	●	
Logic control of multiple injection units	●	
Compulsory barrel heating protection	●	
Automatic heat preservation and heating preseting	●	
Data upload and download via USB	●	
Rat-proof electric wire	●	
Multi-level software password authentication for data protection	●	
Interlock for turntable and safety door	●	
Emergency stop of front and rear safety doors	●	
Nozzle protective cover with electrical interlock	●	
PDP interface	●	
Statistical process control (SPC)	●	
Switchover from injection to holding controlled by time, position, time + position or pressure	●	
Process parameter modification history	●	
Synchronous injection signal	●	
Color mixing signal and EU standard plugs	●	
Multiple operating languages	●	
12" TFT true color LED HD display (KEBA i2980)	●	
Triple-color alarm light	●	
Three-phase power outlet 2×32A+2×16A (120T-280T)	●	
Three-phase power outlet 3×32A+1×16A (350T-580T)	●	
EU67 robot plug with 1 x 32A three-phase power outlet	●	
Power distribution IT system (including barrel heater and hot runner temperature control)	●	
Core pull and ejector setting in controller		○
Integrated hot runner control		○
Air-assisted injection device		○
Display of machine energy consumption statistics		○
Central (networking) monitoring system		○
Protective light grid of safety gates		○
Changing power supply voltage		○
15" HD display		○
Other		
Operation manual	●	
Leveling pad	●	
A tool kit and a precise filter element	●	
Mold clamp	●	
Glass tube flowmeter (6 sets for 480T and below; 10 sets for 580T)	●	
Stainless steel hopper		○
Auto loader		○
Dryer		○

THINK
TECH FORWARD