



High-end Multi-component Injection Molding Machine

Stability + Customization

YIZUMI Precision Molding Technology Co., Ltd.

Address: No.12 Shunchang Road, Shunde, Foshan, Guangdong 528300, China TEL: 86-757-2921 9764 86-757-2921 9001(overseas) Email: imm@yizumi.com www.yizumi.com

[DISCLAIMER]

- [1] YIZUMI reserves the right to modify the product description in the catalogue. Specification might be changed without prior notice.
- [2] The picture in the catalogue is for reference only. The real object should be considered as final.
- [3] The data in the catalogue is obtained from internal testing in YIZUMI laboratory. Please refer to the actual machine for the final data. YIZUMI reserves the right of final interpretation upon disputes and ambiguities.











THINK TECH FORWARD

PRODUCT DETAILS

PRODUCT DETAILS



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

Packaging



Building materials



Tovs



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.

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.

Excellent injection stability

Current mature injection unit ensures injection precision and stability.

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.

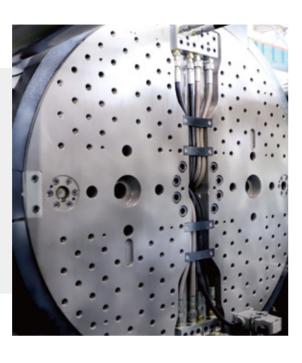
Different standard adjustable ranges of different tonnages to meet the use requirements of molds with various center distances.



CLAMPING UNIT

Reliable and stable, accurate turntable positioning

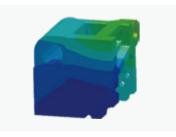
The clamping unit of the W series can be combined either with the turntable or rotary shaft module to meet the process requirement for mold rotation or mold core rotation. When the turntable or the rotary shaft unit is not in use, the machine can get more mold height for a wider range of applications.



High-rigidity T-slot platen

High-rigidity platen design of all series machines increases the overall rigidity of clamping unit by 30%.

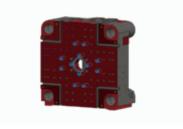
High-rigidity T-slot platen brings convenience for installation and removal of mold, reduces the wear of thread due to long-term use of screw hole and extends the life of platen.



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.

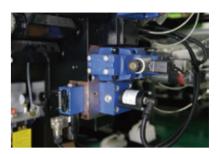


EU 2 ejector pin hole arrangement

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.



**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.

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.



^{**}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.

CONTROL SYSTEM



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

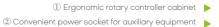
◀ Standard computer KEBA

- 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.

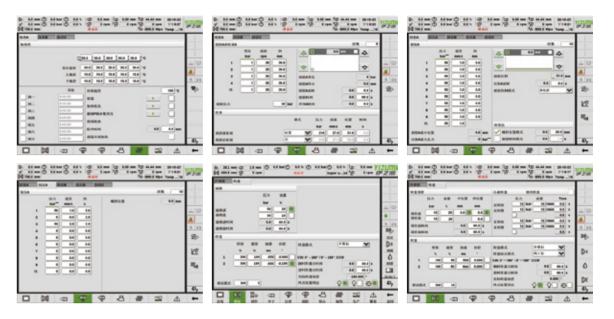
User-friendly design

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







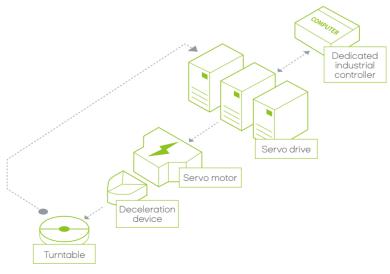


KEBA industrial controller interface lacktriangle

Turntable servo control principle

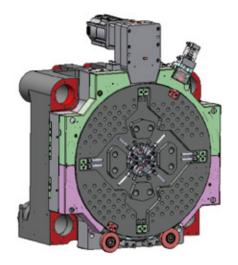
The electric turntable servo control system consists of the industrial controller for multi-component injection molding machine, servo drive, servo motor, deceleration device, high-resolution accuracy inspection device and turntable. The controller offers the control plan to the servo drive which then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

▼ Diagrammatic sketch of turntable servo control

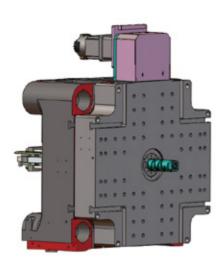


**Data above come from YIZUMI lab, available for reference.
Pictures and descriptions of this catalogue takes UN220C-NTW as an example, technology specification is applicable for C-W series machines of all tonnage.

YRT INDEPENDENT ROTARY TURNTABLE /YRS INDEPENDENT ROTARY SHAFT







▲ Independent Rotary Shaft Module

Independent turntable specification

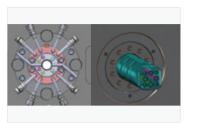
Turntable model	YRT-480	YRT-580	YRT-680	YRT-780	YRT-880	YRT-980	YRT-1100	YRT-1150	YRT-1200	YRT-1300	YRT-1400
Turntable diameter /mm	D480	D580	D680	D780	D880	D980	D1100	D1150	D1200	D1300	D1400
Minimum space between tie bars /mm	410×410	460×460	530×530	610×570	710×670	760×710	830×810 (850×810)	910×830	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					
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 brakir						
Ton	UN120A5	UN160A5	UN200A5	UN260A5	UN320A5	UN400A5	UN480A5/	UN500D1	UN650A5	UN800A5	UN1000A5/

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.



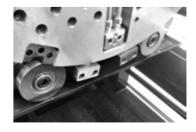
DCPC positioning

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 YIZU-MI'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
- $\textcircled{4} \ \ \text{Independent industrial controller}$



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.



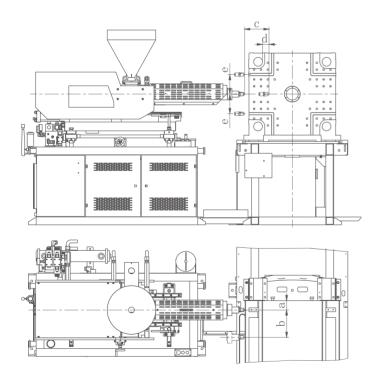
Optional hot runner

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

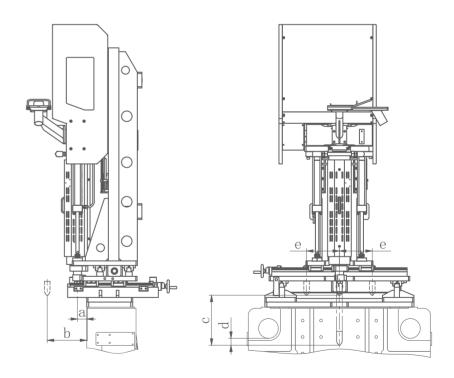
L-type injection unit configuration

Specifications	a/mm	b/mm	c/mm	d/mm	e/mm
IU190L	70	Standard 100 Optional 300	120A5S:250	120A5S:50	
IU295L	80	Note: when the mold thickness	160A5S:250	160A5S:60	
		is too small, close to the mini-	200A5S:250	200A5S:60	
IU420L	80	mum mold thickness of the corre-	260A5S:250	260A5S:70	
IU604L	80	sponding tonnage, b will make	320A5S:250	320A5S:80	±5
10004L		adjustments according to	400A5S:350	400A5S:80	
IU895L	110	customer needs.	480A5S:350	480A5S:90	
IU1269L	110		560A5S:350	560A5S:90	
IU1885L	120				



V-type injection unit configuration

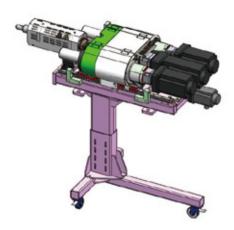
Specifications	a/mm	b/mm	c/mm	d/mm	e/mm
IU190V	70	220 Note: when the mold thickness	120A5S:250 160A5S:250	120A5S:50 160A5S:60	
IU295V	80	is too small, close to the minimum mold thickness of the correspond-	200A5S:250 260A5S:250	200A5S:60 260A5S:60	
IU420V	80	ing tonnage, b will make adjust- ments according to customer	320A5S:250 400A5S:350	320A5S:70 400A5S:70	±5
IU604V	80	needs to avoid collision between nozzle and movable platen.	480A5S:350 560A5S:350	480A5S:90 560A5S:90	
IU895V	95				



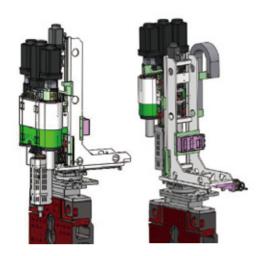
^{**1.}Data above come from YIZUMI factory, please refer to actual customized equipment.
2.The product pictures and description in the above pages are only for illustration.
The effect of the real product (including but not limited to appearance, color and size) may be slightly different. Please refer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

18

INDEPENDENT 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 ton-nages and different brands with low cost in operation.

Specifications of the independent electrical injection unit

Description	UNIT	Е	IU2-5	0	ŀ	EIU3	-140	כ	E	IU4	-35	0	EIL	J2-50	HS	EI	U2-	140ŀ	HS	EI	U2-:	350H	4S
International specifications			50			14	10			3	50			50			14	10			35	50	
											INJE	СТІ	ON U	NIT									
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	I		12	20			12	20			250			24	40			20	00	
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)		0~4	400			0~;	300			0~500)		0~4	400			0~3	300	
Screw Stroke	mm		75			10	00			14	10			75			10	00			14	10	
Nozzle contact force	kN		20			3	0			3	5			20			3	0			3	5	
											PC	WE	R UN	T									
Injection Servo motor	kW		3×2			4:	×2			5.5	i×2			4×2			5.5	i×2			7.5	i×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			4	4			2	4	

UN160C-NTW Specifications

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

Description							UN1600	C-NTW					
								ON UNIT					
International specifications	UNIT		895H			604H			295W			190W	
		А	В	С	А	В	С	А	В	С	А	В	С
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	ı		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	
							CLAMPI	NG UNIT					
Clamping force	kN							00					
Opening stroke	mm							90					
Mold thickness	mm							-550					
Max. turning diameter	mm					784(Turntable		680)				
Turntable bearing capacity	t							.7					
Distance between centers of mold locating holes	mm							-130					
Space between tie bars	mm							×530					
Ejector stroke	mm							50					
Ejector force	kN							19					
j								ERAL					
Max. system pressure	MPa							7.5					
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				I		6.3×2	2×2.9			1		
Machine Weight	t							.5					
Hopper Capacity	kg		25			25			25			25	
Oil Tank Capacity	L				l		40	00					
Platen dimensions	215 210 130 140 180	0₹40 <u>\$</u> <u>\$</u> <u>\$</u> <u>\$</u>	280 245 210 175 140 105 70 177 177 177 177 177 178 177 177	0680 0784	USE VALUE VA	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	350 280 210 140 70 533 778		1179		155 88 82 88 8 8 8 8 8 8 8 8 8 8 8 8 8 8		100-130

UN220C-NTW Specifications

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

Description									U	V220	C- <u>N</u> T	W							
										JECTI									
International specifications	UNIT		895H			604H			420H			420W			295W			190W	
		А	В	С	А	В	С	А	В	С	А	В	С	А	В	С	А	В	С
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	
										LAMPI	NG U								
Clamping force	kN	Т									200								
Opening stroke	mm										30								
Mold thickness	mm										-610								
Max. turning diameter	mm							872	2(Turr	ntable		eter 7	(80)						
Furntable bearing capacity	t							0.2	,		.9		/						
Distance between centers of mold locating holes	mm										-160								
Space between tie bars	mm										×570								
Ejector stroke	mm										50								
Ejector force	kN										7								
Ljester reres	10.1										IERAL								
Max. system pressure	MPa	П									7.5								
Motor power	kW		30			30			30			20			15			15	
Heating power	kW	14	1.4/16	8	11	0.9/12	1		9/10.1			9/10.1			6.9/7.	8		4.8/5.	5
Machine Dimensions	m		, .0			0177 12		<u> </u>	,,		L 2×2.9	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			0177 71			1107 01	
(L×W×H) Machine Weight	t										.5								
Hopper Capacity	kg		25			25			25			25			25			25	
Oil Tank Capacity	L									<u>Δ</u> ()O								
Platen dimensions	280 245 210 175	M20▼80 \$\frac{1}{2} = 035		0	0780 087	177.8	012 012 cuits water	!	₩20¥40 ₩100 Ø120		-	A-A 38	570 (°° 337)	- <u>-</u> -		155	50 SR10 SR10 50 50	345	- 100

UN280C-NTW Specifications

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

Description									U	N280	C-NT	W							
									_	JECTI	_	_							
International specifications	UNIT		1885H			1269H			895H	02011		420W			295W	,		190W	,
		А	В	С	А	В	С	А	В	С	А	В	С	А	В	С	А	В	С
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	cm3	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	
									С	LAMP	ING UN	NIT.							
Clamping force	kN									28	00								
Opening stroke	mm									64	40								
Mold thickness	mm									220	-660								
Max. turning diameter	mm							10)16(Tur	ntable	diame	eter 88	(O)						
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									17	70								
Ejector force	kN									7	7								
										GEN	ERAL								
Max. system pressure	MPa									17	7.5								
Motor power	kW		51			51			51			20			15			15	
Heating power	kW	2	2.2/24	.6		16.6/19	7	1	4.4/16.	8		9/10.1			6.9/7.8	3		4.8/5.	5
Machine Dimensions (L×W×H)	m									7.23×2	2.11×3.1								
Machine Weight	t									13	3.5								
Hopper Capacity	kg		50			50			25			25			25			25	
Oil Tank Capacity	L									50	00								
Platen dimensions	76-M207 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	140		0 5 40 05 Ø		9101		76-M2(Ø1	_ /₌	420 350 2		A-A 338	140 670 37	£		22(50 SR10 SR10 50 50		130-160

UN350C-NTW Specifications

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

Screw Diameter Screw L/D Ratio Theorectical shot volume Shot weight (PS) Injection pressure Injection speed Injection rate Screw Stroke Clamping force Opening stroke Mold thickness Max. turning diameter Turntable bearing capacity Distance between centers of mold locating holes Space between tie bars Ejector stroke Ejector force		A 68 22.3 1198		C 84 20 1828 1682 147	A 60 22.6	B 68 20 1071 985 176 1114 379 249 295	C 76 20 1338 1231 141 474	A 53 22.6	1269H B 60 20 749 689 169 152 395 311 265	C 68 20 962 885 132	A 48 22 425 391 211 148	B 53 20 518 477 173 89 181 194 235			B 48 20 371 341 163 99 165 250	C 53 20 452 416 134 201	A 35 24 163 150 257	420W B 43 20 247 227 170 94 126 228	C 48 20 307 283 137	A 30 24 117 107 253	295W B 35 20 159 146 186 107 95 219	C 40 20 207 191 1422
Screw Diameter Screw L/D Ratio Theorectical shot volume Shot weight (PS) Injection pressure Injection speed Injection rate Screw speed Screw Stroke Clamping force Opening stroke Mold thickness Max. turning diameter Turntable bearing capacity Distance between centers of mold locating holes Space between tie bars Ejector stroke	mm L/D cm3 gram MPa mm/s g/s rpm mm kN mm mm t mm	A 68 22.3 1198 1102 225	B 76 20 1496 1377 180 89 371	C 84 20 1828 1682 147	A 60 22.6 834 767 226	B 68 20 1071 985 176 114 379 249	C 76 20 1338 1231 141	A 53 22.6 584 538 217	B 60 20 749 689 169 152 395 311	C 68 20 962 885 132	A 48 22 425 391 211 148	B 53 20 518 477 173 89 181	C 60 20 664 611 135	A 43 22.3 298 274 203	B 48 20 371 341 163 99 165 250	C 53 20 452 416 134	A 35 24 163 150 257	B 43 20 247 227 170 94 126	C 48 20 307 283 137	A 30 24 117 107 253	B 35 20 159 146 186 107 95 219	C 40 20 207 191 142
Screw L/D Ratio Theorectical shot volume Shot weight (PS) Injection pressure Injection speed Injection rate Screw speed Screw Stroke Clamping force Opening stroke Mold thickness Max. turning diameter Turntable bearing capacity Distance between centers of mold locating holes Space between tie bars Ejector stroke	L/D cm3 gram MPa mm/s g/s rpm mm kN mm mm t mm	68 22.3 1198 1102 225	76 20 1496 1377 180 89 371	84 20 1828 1682 147	60 22.6 834 767 226	68 20 1071 985 176 114 379 249	76 20 1338 1231 141	53 22.6 584 538 217	60 20 749 689 169 152 395 311	68 20 962 885 132 507	48 22 425 391 211 148	53 20 518 477 173 89 181 194	60 20 664 611 135	43 22.3 298 274 203	48 20 371 341 163 99 165 250	53 20 452 416 134	35 24 163 150 257	43 20 247 227 170 94 126	48 20 307 283 137	30 24 117 107 253	35 20 159 146 186 107 95 219	40 20 20 19 142
Screw L/D Ratio Theorectical shot volume Shot weight (PS) Injection pressure Injection speed Injection rate Screw speed Screw Stroke Clamping force Opening stroke Mold thickness Max. turning diameter Turntable bearing capacity Distance between centers of mold locating holes Space between tie bars Ejector stroke	L/D cm3 gram MPa mm/s g/s rpm mm kN mm mm t mm	22.3 1198 1102 225	20 1496 1377 180 89 371 156	20 1828 1682 147	22.6 834 767 226	20 1071 985 176 114 379 249	20 1338 1231 141	22.6 584 538 217	20 749 689 169 152 395 311	20 962 885 132 507	22 425 391 211 148	20 518 477 173 89 181	20 664 611 135	22.3 298 274 203	20 371 341 163 99 165 250	20 452 416 134	24 163 150 257	20 247 227 170 94 126	20 307 283 137	24 117 107 253	20 159 146 186 107 95 219	20 20 19 14:
Theorectical shot volume Shot weight (PS) Injection pressure Injection speed Injection rate Screw speed Screw Stroke Clamping force Opening stroke Mold thickness Max. turning diameter Turntable bearing capacity Distance between centers of mold locating holes Space between tie bars Ejector stroke	cm3 gram MPa mm/s g/s rpm mm kN mm mm t mm	1198 1102 225	1496 1377 180 89 371 156	1828 1682 147	834 767 226	1071 985 176 114 379 249	1338 1231 141	584 538 217	749 689 169 152 395 311	962 885 132 507	425 391 211 148	20 518 477 173 89 181	664 611 135	298 274 203	371 341 163 99 165 250	452 416 134	24 163 150 257	20 247 227 170 94 126	307 283 137	117 107 253	159 146 186 107 95 219	20 19 14:
Shot weight (PS) Injection pressure Injection speed Injection rate Screw speed Screw Stroke Clamping force Opening stroke Mold thickness Max. turning diameter Furntable bearing capacity Distance between centers of mold locating holes Space between tie bars Ejector stroke	gram MPa mm/s g/s rpm mm kN mm mm t mm	1198 1102 225	1496 1377 180 89 371 156	1828 1682 147	834 767 226	1071 985 176 114 379 249	1338 1231 141	584 538 217	749 689 169 152 395 311	962 885 132 507	425 391 211 148	518 477 173 89 181 194	664 611 135	298 274 203	371 341 163 99 165 250	452 416 134	163 150 257	247 227 170 94 126	307 283 137	117 107 253	159 146 186 107 95 219	20 19 14:
Injection pressure Injection speed Injection rate Screw speed Screw Stroke Clamping force Opening stroke Mold thickness Max. turning diameter Furntable bearing capacity Distance between centers of mold locating holes Space between tie bars Ejector stroke	MPa mm/s g/s rpm mm kN mm mm t mm	225	1377 180 89 371 156	1682 147	767 226	985 176 114 379 249	1231 141	538 217	689 169 152 395 311	885 132 507	391 211 148	477 173 89 181 194	135	274 203	341 163 99 165 250	416	150 257	170 94 126	283 137	253	186 107 95 219	14:
Injection speed Injection rate Screw speed Screw Stroke Clamping force Opening stroke Mold thickness Max. turning diameter Furntable bearing capacity Distance between centers of mold locating holes Space between tie bars Ejector stroke	MPa mm/s g/s rpm mm kN mm mm t mm	225	180 89 371 156	147		114 379 249	141		152 395 311	132 507	211 148	173 89 181 194		203	99 165 250	134	257	170 94 126	137		186 107 95 219	
Injection rate Screw speed Screw Stroke Clamping force Opening stroke Mold thickness Max. turning diameter Furntable bearing capacity Distance between centers of mold locating holes Space between tie bars Ejector stroke	g/s rpm mm kN mm mm t mm	297	371 156	454	295	379 249	474		152 395 311	507	148	89 181 194			99 165 250			94 126			107 95 219	12
Screw speed Screw Stroke Clamping force Opening stroke Mold thickness Max. turning diameter Furntable bearing capacity Distance between centers of mold locating holes Space between tie bars Ejector stroke	rpm mm kN mm mm mm t	297	156	454	295	249	474	308	311			194	232	132	250	201	83		157	70	219	12
Screw speed Screw Stroke Clamping force Opening stroke Mold thickness Max. turning diameter Furntable bearing capacity Distance between centers of mold locating holes Space between tie bars Ejector stroke	rpm mm kN mm mm mm t		156									194			250						219	
Screw Stroke Clamping force Opening stroke Mold thickness Max. turning diameter Furntable bearing capacity Distance between centers of mold locating holes Space between tie bars Ejector stroke	kN mm mm t mm																					
Opening stroke Mold thickness Max. turning diameter Furntable bearing capacity Distance between centers of mold locating holes Space between tie bars Ejector stroke	mm mm mm t					270			200						205			170			165	
Opening stroke Mold thickness Max. turning diameter Furntable bearing capacity Distance between centers of mold locating holes Space between tie bars Ejector stroke	mm mm mm t										CLAM	1PING	UNIT		200			170			100	
Opening stroke Mold thickness Max. turning diameter Furntable bearing capacity Distance between centers of mold locating holes Space between tie bars Ejector stroke	mm mm mm t					3500																_
Mold thickness Max. turning diameter Furntable bearing capacity Distance between centers of mold locating holes Space between tie bars Ejector stroke	mm mm t											700										
Max. turning diameter Furntable bearing capacity Distance between centers of mold locating holes Space between tie bars Ejector stroke	mm t mm			240-730 1088(Turntable diameter 980)																		
Furntable bearing capacity Distance between centers of mold locating holes Space between tie bars Ejector stroke	t mm								1	088(T				er 980))							
Distance between centers of mold locating holes Space between tie bars Ejector stroke	mm											1.8										
Space between tie bars Ejector stroke											15	50-20	Ω									
Ejector stroke												60×71										
	mm											210										
	kN											110										
	KIY										GF	ENER	ΔI									
Max. system pressure	MPa											17.5										
Motor power	kW		60			60			60			25			25			20			15	
Heating power	kW	26	.4/30	1 9	22	2.2/24	1.6		16.6/19	,	14	1.4/16	8	10	0.9/12	1		9/10.1		,	5.9/7.8	
Machine Dimensions	m		, 1700	.,			1.0		10.071	,		(2.32)		- 10	J. // 12	• •	l	77 10.1			<i>.,,,,</i>	
(L×W×H) Machine Weight	t										0.20	16										
Hopper Capacity	kg		100			50			50			25			25			25			25	
Oil Tank Capacity	L		100			50			50			700			20			25			20	
Platen dimensions	986 2 15 2 101-102	120		120 335 350 315 2280 245 210 175 140 107 107 107 107 107 107 107 10	8 8	01088		0011 0028 ts water	1422	\text{\tiny{\text{\tiny{\text{\texit}\\ \text{\text{\text{\text{\text{\text{\text{\text{\text{\texit}\xi}\\ \text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texitinx}\\ \text{\tinit}\\ \text{\tetx}\text{\ti}\}\tittithtt{\text{\text{\text{\text{\texi}\tint{\text{\text{\text{\text{\text{\text{\texi}\text{\text{\texi}\tinttititt{\text{\text{\texi}\text{\text{\texi}\text{\texit{\text{				A-A 33 38 38 ₩ 40	100			· · · · · · · · · · · · · · · · · · ·	220	\$\frac{50}{50}\$	420	00-061

UN420C-NTW Specifications

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

Description											UN4	20C-	NTW	,								
										_	INJEC	_	_	_								
International specifications	UNIT	:	2693F	1		1885H	1		1269H		_	895W			604W	/		420W	/		295W	/
		А	В	С	А	В	С	А	В	С	А	В	С	Α	В	С	А	В	С	Α	В	С
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	
											CLAN	MPING	UNIT									
Clamping force	kN											4200										
Opening stroke	mm											780										
Mold thickness	mm										2	260-81	10									
Max. turning diameter	mm								1:	212(Tu	urntak	ble did	amete	er 1100))							
Turntable bearing capacity	t											2.5										
Distance between centers of mold locating holes	mm										15	50-20	0									
Space between tie bars	mm										8	30×81	10									
Ejector stroke	mm											210										
Ejector force	kN											110										
											G	ENER	AL									
Max. system pressure	MPa											17.5										
Motor power	kW		70			70			70			25			25			20			15	
Heating power	kW	26	5.4/30).9	22	2.2/24	1.6	1	16.6/19	9	14	4.4/16	.8	10	0.9/12	2.1		9/10.1	1	(5.9/7.8	8
Machine Dimensions (L×W×H)	m										9>	×2.6×2	2.9									
Machine Weight	t											20.5										
Hopper Capacity	kg		100			50			50			25			25			25			25	
Oil Tank Capacity	L							•			•	1000										
Platen dimensions	92-1121)	81100				490 401 380 380	S S S S S S S S S S S S S S S S S S S				A-A	16	111111111111111111111111111111111111111)	行程之		\$\frac{50}{\$\$\sqrt{8}\$10}\$\$\$\$\frac{\$\$\sqrt{8}\$15}{\$50}\$	461	150-200

UN480C-NTW Specifications

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

Description											UN48	30C-	NTW	1								
										_	INJEC	_	_	_								
nternational specifications	UNIT		3330F	1	2	2693H	1		1885H			895W			604W	/		420W	/		295W	/
		А	В	С	А	В	С	Α	В	С	А	В	С	Α	В	С	А	В	С	А	В	С
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	+	2049		-	1496	1828		1071	1338		518	664	298	371	452	163	247	307	117	159	20
Shot weight (PS)	gram	-	1885		-	1377	1682	767	985	1231	391	477	611	274	341	416	150	227	283	107	146	19
Injection pressure	MPa	199	163	136	225	180	147	226	176	141	211	173	135	203	163	134	257	170	137	253	186	14:
Injection speed	mm/s	1	91	.00	220	100		220	128		211	89	100	200	99	101	207	94	107	200	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	12
Screw speed	rpm	000	140	557	000	176	512	000	281	505	140	194	202	102	250	201	00	228	107	70	219	12
Screw Stroke	mm		370			330			295			235			205			170			165	
ocrow otroko			370			330			273		CLAM		TIMIT		203			170			105	
Clamping force	kN											4800										
Opening stroke	mm											850										
Mold thickness	mm										3	30-85	50									
Max. turning diameter	mm								1	220/T	urntal			or 1100))							
Furntable bearing capacity	t								1.	230(1)	urritai	2.5	arriete	91 1100	JI							
Distance between centers of	mm										21	00-30	10									
mold locating holes Space between tie bars																						
	mm										8	50×81	IU									
Ejector stroke	mm											220										
Ejector force	kN											166										
											G	ENER	AL									
Max. system pressure	MPa											17.5										
Motor power	kW		70			70			70			25			25			20			15	
Heating power Machine Dimensions	kW	3	33.1/4	3	26	.4/30).9	22	2.2/24	6		1.4/16		1	0.9/12	2.1		9/10.1	l		5.9/7.8	8
(L×W×H)	m										9.0	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	92-M244 92-M244 92-M244 92-M244 92-M244 92-M244 92-M244 93-			5	Ø1100	9 101 9	152.4 406.4 810	940 1707	490 350	082 017 0FI	- A	490 420 350 280 211 1		A-A 38	91 37	1185	7-7		268	50 SR10 SR15	461	

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 A5S



Two stacking injection unit



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



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					l l	njection uni	t				
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	Н										
0111000-11177	W										
UN220C-NTW	Н										
0112200-11177	W										
UN280C-NTW	Н										
0112000 1111	W										
UN350C-NTW	Н										
0110300 11177	W										
UN420C-NTW	Н										
0114200 1111	W										
UN480C-NTW	Н										
0144000-11177	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 "O": Optional

Description	Standard	Option
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		0
10-pin electrical connector for turntable		0
Multiple sets of air blow		0
Magnetic platen		0
Mold thermal insulation		0
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		
1	•	
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		0
(TPE/TPU/PC/PMMA, etc.)		0
Feed port temperature detection		0
Ceramic heater band		0
Infrared heater band		0
Injection unit for silicone		0
Electrical injection unit		0
Gas assisted injection		0
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		0

Description	Standard	Optional
Injection with proportional valve control		0
High-response servo injection system with accumulator		0
Larger plasticizing motor		0
Independent hydraulic sequential valve		0
Pneumatic sequential valve		0
Multi-set hydraulic core-pull on movable platen (or fixed platen)		0
Core-pull with check valve and provides core-pull pressure relief function		0
Self-sealing suction filter		0
Mold opening parallel to plasticizing		0
Stronger power		0
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		0
Integrated hot runner control		0
Air-assisted injection device		0
Display of machine energy consumption statistics		0
Central (networking) monitoring system		0
Protective light grid of safety gates		0
Changing power supply voltage		0
15" HD display		0
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		0
Auto loader		0
Dryer		0

THINK TECH FORWARD