

#### High-stability TF technology

Non-contact tie bars permit fast and stable mold opening and closing and significantly reduces energy consumption, causing no pollution to the production environment.

#### Highly-stable LS technology

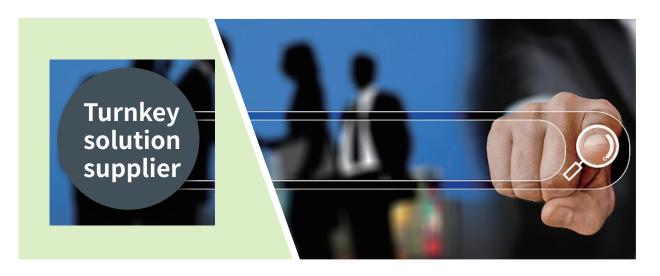
High accuracy linear guide supports notably reduce the friction force on the plasticizing unit and increase the stability of plasticizing and injection pressure, resulting in stable part quality.

#### High-resolution sensor technology

The use of the world's top position sensor which produces 2 million counts per revolution delivers incredible stability in position and speed control.

#### • Fully automatic lubrication system

The lubricating grease is like the blood of injection molding machine. The automatic maintenance-free lubrication system plays an important role in ensuring longlasting stability of the machine.



As the focus is shifted from a single machine to customer's core value demands process, Yizumi has assembled professionals in the fields of mold, process, material and automation, built R&D centers in China and Germany and carried out in-depth cooperation with customers to create more value and achieve win-win.

## **About Yizumi**

2015 2002 Founded in Shunde, China in 2002, Yizumi was China's first molding equip-Yizumi is a leading company in the Yizumi is dedicated to becoming a ment manufacturer that was listed on the field of molding equipment techworld-class enterprise in its field. Shenzhen A share market in 2015. nology and provides professional equipment solutions for customers through the global reach. 300000mGlobal roduction ases cover an area of 300,000 sqm

#### FF series

- Widely used general-purpose all-electric injection molding machines
- Fully meet customer's needs of high efficiency and stability and effectively help customers with transformation and upgrade
- Facilitate the optimization of cost structure and create the best-value user experience

# **FE** series

For customers who require high precision of the molded parts and stable production, the FE series which is compatible with the industry standards is the optimum solution for precision small parts, such as 3C and electronic products, medical devices, optical devices and auto parts.

#### **GUANGDONG YIZUMI PRECISION MACHINERY CO., LTD.**

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# FF Series Electric Injection Molding Machine

Product Upgrade • Efficiency Upgrade • Automation Upgrade





### Double injection speed

Compared with tradition machines, double injection speed not only shortens the injection time but also brings more possibilities of variety of plastic part design. Customers enjoy more flexibility in the design of wall thickness, gate size and precision of the molded parts.

#### 50% higher plasticizing speed

The increase in plasticizing speed reduces cycle time and enhances the stability of parts produced.

#### • 50% faster mold open and mold close

Dry cycle time is definitely important to customers. Faster dry cycle means higher production efficiency.

#### Multi-axis simultaneous movements

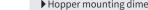
As mold opening and closing, injection and plasticizing are driven by individual motors, any kind of movement synchronization can be easily achieved in the case of no technical and safety violation.

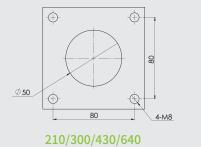


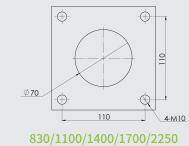
Yizumi applies its own SDC (servo direct control) technology to movement control, so that the control system has nearly 20 times faster response time. The SDC technology also ensures the stability in injection, plasticizing and mold opening and closing accuracy.

YIZUMI伊之密 \_\_\_\_\_\_ Precison · Stable · Efficient · Energy-saving \_\_\_\_\_ we walk along side the world \_\_\_\_\_\_ we walk along side the world \_\_\_\_\_\_ we walk along side the world \_\_\_\_\_\_ we walk along side the world \_\_\_\_\_\_\_ we walk along side the world \_\_\_\_\_\_\_ we walk along side the world \_\_\_\_\_\_\_ we walk along side the world \_\_\_\_\_\_\_\_ we walk along side the world \_\_\_\_\_\_\_\_ we walk along side the world \_\_\_\_\_\_\_\_ we walk along side the world \_\_\_\_\_\_\_\_\_ we walk along side the world \_\_\_\_\_\_\_\_\_ we walk along side the world \_\_\_\_\_\_\_\_\_\_\_ we walk along side the world \_\_\_\_\_\_\_\_ we walk along side the world \_

DESCRIPTION		FF120	FF160	FF200	FF240	FF300	FF380	FF460			
INJECTION UNIT											
IU		210 320 500	320 500 680	500 680 950	680 950 1500	950 1500 2000	1500 2000 2800	2000 2800 3600			
		A B C A B C A B C	A B C A B C A B C	A B C A B C A B C	A B C A B C A B	C A B C A B C A B C	A B C A B C A B C	A B C A B C A B C			
screw diameter	mm	26 30 35 30 35 43 35 43 48	30 35 43 35 43 48 43 48 53	35 43 48 43 48 53 48 53 60	43 48 53 48 53 60 53 60 6	68 48 53 60 53 60 68 60 68 76	5 53 60 68 60 68 76 68 76 84	60 68 76 68 76 84 76 84 92			
injection capacity	cm³	74 99 135 122 165 250 185 279 34	7 122 165 250 185 279 347 308 384 468	185 279 347 308 384 468 434 529 679	308 384 468 434 529 679 600 769 98	88 434 529 679 600 769 988 860 1104 137	9 600 769 988 860 1104 1379 1220 1524 1862	2 860 1104 1379 1220 1524 1862 1669 2039 2446			
shot weight	g	68 90 123 111 151 227 168 254 31	6         111         151         227         168         254         316         280         349         426	168         254         316         280         349         426         395         482         618	280 349 426 395 482 618 546 700 89	99 395 482 618 546 700 899 782 1005 125	5 546 700 899 782 1005 1255 1110 1387 1694	782 1005 1255 1110 1387 1694 1519 1856 2226			
plasticiting capacity	g/s	10.4   15.6   20.1   15.6   20.1   28.9   20.1   28.9   35.	3   15.6   20.1   28.9   20.1   28.9   35.3   28.9   35.3   43.7	20.1 28.9 35.3 28.9 35.3 43.7 35.3 43.7 54.4	28.9 35.3 43.7 35.3 43.7 54.4 43.7 54.4 66	6.3 35.3 43.7 54.4 43.7 54.4 66.3 54.4 66.3 80.8	8 43.7 54.4 66.3 54.4 66.3 80.8 66.3 80.8 89.7	54.4 66.3 80.8 66.3 80.8 89.7 80.8 89.7 111.0			
injection speed std./opt.	mm/s	200/120 200/120 200/120	200/120 200/120 160/100	200/120 160/100 160/100	160/100 160/100 160/100	160/100 160/100 160/100	160/100 160/100 160/100	160/100 160/100 160/100			
injection pressure	MPa	266 200 147 272 200 133 272 180 14-	4 272 200 133 272 180 144 224 180 148	272         180         144         224         180         148         219         180         140	224 180 148 219 180 140 231 180 1	40 219 180 140 231 180 140 231 180 144	4 231 180 140 231 180 144 225 180 147	231 180 144 225 180 147 220 180 150			
holding pressure	MPa	213   160   118   218   160   106   217   144   110	5 218 160 106 217 144 116 179 144 118	217   144   116   179   144   118   176   144   112	179   144   118   176   144   112   185   144   1.	12 176 144 112 185 144 112 185 144 115	5   185   144   112   185   144   115   180   144   118	185   144   115   180   144   118   176   144   120			
nozzle contact force	kN	20 30 40	30 40 40	40 40 60	40 60 60	60 60 60	60 60 100	60 100 100			
				CLAMPII							
clamping force	kN	1200	1600	2000	2400	3000	3800	4600			
mold opening stroke	mm	370	430	480	530	610	710	810			
distance between tie-bars	mm	480x480	530x530	580x580	630x630	720x720	820x820	920x920			
mold thickness	mm	150-480	175-520	200-560	220-600	250-650	290-720	330-810			
electric ejector stroke	mm	100	125	125	150	150	200	200			
electric ejector force	kN	30	40	40	50	50	60	60			
Platen dimentions (front view)		A-A T-slot  270 220 170 120 30 12 70 44-M16 32 480 650	A.A.T-slot  270 220 170 125 70 30 12 30 4-028 000 000 000 000 000 000 000 000 000	310 250 190 140 90 140 90 140 90 140 90 140 90 140 90 140 90 140 90 140 90 140 90 140 90 140 90 140 90 140 90 90 90 90 90 90 90 90 90 9	390 320 220 230 380 380 380 380 380 380 380 3	390 320 200 150 38 6 88 88 88 88 88 88 88 88 88 88 88 88 88	470 400 300 250 250 250 250 100 38 16 38 16 38 16 38 16 100 100 100 100 100 100 100	500 AAT-Job 400 300 16 100 16			
Platen dimentions (side view)		50 50 8 22 SR 10 12 370 150-480	50 50 SR 10 12 430 175-520	50 50 8 8 10 12 880 220-600	50 50 SR 10 12	50 50 50 50 50 50 5R 10 12	50 5	50 50 50 30 50			
Robot base mounting dimension	าร	8-M16潔32 175 175 99 99 99 99 99 99 99 99 99 99 99 99 99	350 350 8-M20\(\frac{2}{2}\)10 210 20	350 350 8-M20深40 210 210 58	8-M20 #420 8-M20 #40 9 0 0 0	8-M20740 490 490 521	8-M20\(\)\(\frac{490}{0}\) \(\frac{490}{0}\) \(\frac{350}{0}\) \(\frac{350}{0}\) \(\frac{350}{0}\) \(\frac{3}{0}\) \(\frac{3}(0)\) \(\frac{3}\) \(\frac{3}{0}\) \(\frac{3}(0)\) \(\frac{3}{0}\	8-M20;#40 420 420 560 560 560 560 560 560 560 560 560 56			







# ▶ Standard & Optional Features

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	Standard	Optional
Control & Monitoring Unit		l
- 10.4-inch color display, micro switch	•	
- Memory of molding conditions	•	
- Alarm record	•	
- Operation modification record	•	
- Operator panel with a set of USB interface	•	
- Real-time display of injection and plasticizing curves	•	
- Electrical control circuit for robot	•	
- Multiple languages (Chinese and English)	•	
- Metric and English unit conversions	•	
- I/O check displaying function	•	
- Printer interface (USBI7)	•	
- Cycle time monitoring	•	
- Production management function	•	
- Real-time display of injection molding data (200 items displayed, 5000 items saved)	•	
displayed, 5000 items saved) - PDP data and charts	•	
- Injection quality inspection	•	
- Product quality monitoring	•	
- Cycle counter	•	
- Low-pressure mold protection curve checking	•	
- Molding temperature monitoring	•	
- Three-color alarm light	•	
- Alarm buzzer	•	
- Injection pressure protection	•	
- Highly-sensitive 12-inch color touch screen		0
- EUROMAP 12/67 electrical interface for manipulator		0
- Other system languages		0
Clamping Unit		
- 5-stage mold opening and closing control	•	
- Low-pressure mold protection (Ai highly-sensitive mold protection)	•	
- Low-speed, low pressure mold open/close in mold adjustment mode	•	
- Injection compression (clamping synchronized with injection)	•	
- Ejector movement during mold close	_	
	•	
- Automatic mold height adjustment	•	
- Automatic mold height adjustment - Four modes for ejector backward	•	
- Four modes for ejector backward	•	
- Four modes for ejector backward - 3-stage control of ejector backward	•	
- Four modes for ejector backward - 3-stage control of ejector backward - Ejector backward delay	•	
- Four modes for ejector backward - 3-stage control of ejector backward - Ejector backward delay - Ejector backward time monitoring	•	
- Four modes for ejector backward  - 3-stage control of ejector backward  - Ejector backward delay  - Ejector backward time monitoring  - Change of ejector backward zero point	•	
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	Standard	Optional
- Core unscrewing device		0
- Needle valve/gate device		0
- Air blast device		0
- Different locating rings		0
- Hopper		0
- Heat insulating plate of mold		0
<ul><li>Plasticizing &amp; Injection Unit</li></ul>		
-Dedicated wear-resistant screw component (open nozzle)	•	
- Injection safety device (detector switch)	•	
- 5-stage injection control	•	
- 3-stage holding control	•	
- 3-stage plasticizing control	•	
- 3-stage back pressure control (accuracy of 0.1MPa)	•	
- Suck-back before or after plasticizing	•	
- Injection and plasticizing delay (time controlled)	•	
- Six modes for switchover to holding phase	•	
- Injection speed response setting	•	
- Multi-stage injection pressure control	•	
- Multi-stage holding pressure control	•	
- Multi-stage speed setting for holding	•	
- Multi-stage time setting for holding (0.01s as the minimum)	•	
- Multi-stage screw position setting (accuracy of 0.01mm)	•	
- Multi-stage plasticizing speed setting	•	
- Mold open during plasticizing	•	
- Closed-loop control of molding temperature	•	
- Temperature holding	•	
- Temperature optimization	•	
- Synchronized temperature rise	•	
- Appointed temperature rise	•	
- Synchronous temperature rise	•	
- Remaining resin prevention	•	
- Cold start protection	•	
- Automatic material purge	•	
- Calibration of injection pressure zero point	•	
- Real-time display of plasticizing speed	•	
- Real-time display of plasticizing back pressure	•	
- Swiveling injection unit		0
- Energy-saving barrel heat-retaining device		0
- Dedicated barrel and screw assembly		0
- Spring shut-off nozzle		0
- Extended nozzle		0
- Ceramic heater band		0
• Other		
- Color of FF series all-electric IMM	•	
- Closed safety door	•	
- Adjustable vibration-damping wedge mount	•	
- Reserved socket (220V/380V)	•	
- Hopper (max.load of 50kg)	•	
- Hopper sliding device	•	
- Tool kit	•	
- Auxiliary electrical cabinet		0
- Vacuum air evacuation device		0
- Glass tube flowmeter		0
- Added cooling water circuit		0