

Epioneer Series Technical Parameters



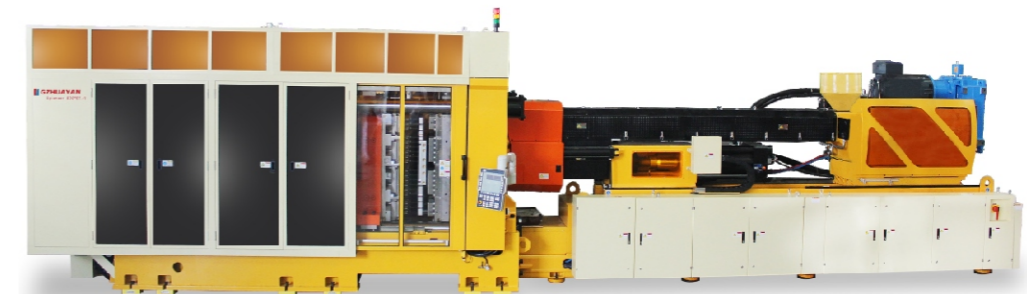
Epioneer Series			Epioneer-400			Epioneer-400			Epioneer-460			Epioneer-460			Epioneer-500			Epioneer-500		
Injection Unit	Screw Diameter	mm	120			140			120			140			120			140		
	Plunger Diameter	mm	100	110	120	110	120	130	100	110	120	110	120	130	100	110	120	110	120	130
	Screw L/D ratio	L/D	27.5			28.5			27.5			28.5			27.5			28.5		
	Shot volume(max.)	cm ³	2748	3324	3956	4179	4974	5837	2748	3324	3956	4179	4974	5837	2748	3324	3956	4179	4974	5837
	Shot weight	g	3297	3989	4748	5015	5969	7005	3297	3989	4748	5015	5969	7005	3297	3989	4748	5015	5969	7005
		oz	116	140	167	177	210	247	116	140	167	177	210	247	116	140	167	177	210	247
	Injection pressure	kgf/cm ²	1620	13388	1125	15233	1280	10907	1620	13388	1125	15233	1280	10907	1620	13388	1125	15233	1280	10907
Machine size (L*W*H)	m	13.5*8.5*3			14.5*8.5*3			13.5*8.5*3			14.5*8.5*3			15*8.5*3.4			15*8.5*3.4			
Clamping Unit	Clamping Force	Ton	400	400	400	400	400	400	460	460	460	460	460	460	500	500	500	500	500	500
	Clamping stroke	mm	680	680	680	680	680	680	680	680	680	680	680	680	760	760	760	760	760	760
	Mold thickness (Min/max)	mm	500-1000			500-1000			500-1050			500-1050			600-1200			600-1200		
	Tiebar spacing (W*H)	mm	930*930			930*930			930*1180			930*1180			1024*1340			1024*1340		
	Ejector stroke	mm	200			200			200			200			200			200		
	Ejector force	Ton	65	65	65	65	65	65	65	65	65	65	65	65	87	87	87	87	87	87
	Ejector pins	Piece	7	7	7	7	7	7	9	9	9	9	9	9	13	13	13	13	13	13
System Pressure(max.)	kg/cm ²	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	
Preform Mold	Cavitation(max.)	Piece	96	96	96	96	96	96	128	128	96	128	128	128	144	144	96	144	144	144
	Preform length(max.)	mm	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200
	Max. Neck Ring Diameter	mm	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
	Max. Preform Weight	g	12	25	35	12	42	55	12	16	35	12	28	35	12	16	35	12	28	35
	Hot-runner		Pneumatic valve-gated hot runner mold																	
Electrical System	Pump motor power	KW	110+122+2.8			110(番)/154(伺)+154+2.8			110+122+2.8			110(番)/154(伺)+154+2.8			110+122+2.8			110(番)/154(伺)+154+2.8		
	Robot power	KW	48.15	48.15	48.15	48.15	48.15	48.15	51.28	51.28	51.28	51.28	51.28	51.28	101	101	101	101	101	101
	Mold heating	KW	89	89	89	89	89	89	115	115	115	115	115	115	139	139	139	139	139	139
	Machine heating	KW	108	108	108	140	140	140	108	108	108	140	140	140	142	142	142	142	142	142
Robot	Robot Vacuum Sucker	Piece	96	96	96	96	96	96	128	128	96	128	128	128	144	144	96	144	144	144
	Preform Cooling Device	Piece	384	384	384	384	384	384	512	512	384	512	512	512	576	576	384	576	576	576
General Requirements	Pump motor power (3 phase 4 line)	V	380			380			380			380			380			380		
		KW	480			545/590			510			574/618			617			649/693		
	Chilling water	°C	8-12			8-12			8-12			8-12			8-12			8-12		
		Mpa	0.8			0.8			0.8			0.8			0.8			0.8		
		L/min	1200			1200			1200			1200			1200			1200		
	Cooling water	°C	<25			<25			<25			<25			<25			<25		
		Mpa	0.3			0.3			0.3			0.3			0.3			0.3		
L/min		400			400			400			400			400			400			

Remark: Items marked with ① means that either ordinary 3-phase electric motor or servo electric motor can be adopted. Due to the reason of continuous technical innovation, Huayan reserves the right to alter the above parameters without prior notice.

Epioneer

Direct-clamping Injection Molding System with Electric Plasticization

Adopt with 96/128/144cav. Preform Moulds



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General Introduction of Epioneer Series Injection Molding Systems



Epioneer series machines enjoys the following typical features:

- Enhanced plasticizing capacity with electrical servo motor drive lowers down energy consumption costs to the maximum;
- Fully intelligent control system with operator-friendly machine interface leads to better SPC control and optimized process settings, which results in higher running stability and better product quality consistency;
- Simplified program together with easy operation & maintenance process enables users to produce preforms at the lowest costs.

High Production Capacity

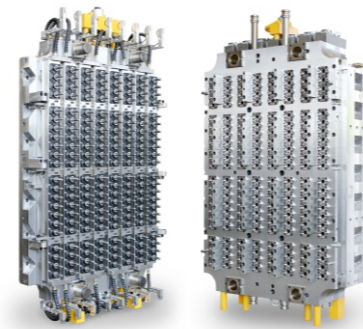
- The machine is able to either adopt max. 144-cav molds from Huayan or run 128cav molds from world leading suppliers;
- 4-position take out plate with independent preform transfer station (3-position blowing & 1 position sucking) increases preform cooling efficiency by 35%;
- Production cycle time equals to world leading supplier of same PET preform systems;
- Highly reliable direct central clamping unit gives better protection to preform molds;
- Optimize designed preform molds with maximized cavitation leads to highest productivity;

Low Operation Cost

- BAUMUELLER electric servo motor is used for plasticization;
- 144 cavity mold to put on injection machine of only 500T clamping force;
- Energy recycling function is adopted for robot servo control system;
- Energy consumption of the machine plus drying system is less than 0.35KWH/1kg resin;

Intelligent Machine Operation System

- Advanced Beckhoff industrial computer control system using ETHERCAT communication ensures overall system stability; Windows operation system based interface gives great convenience to easy machine operation, problem diagnosis and system monitoring as well as providing comprehensive maintenance records;
- Live screen pictures reflect obvious on-site running process; operator-friendly system makes process adjustment easy;



176cav

Individual servo-driven 4-position robot
Individual servo-driven 4-position robot device leads to fast and accurate preform pick up and transfer.

Direct central clamping
Direct central clamping system enables uniform clamping force distribution, which prolongs mold service life.

Double-stage injection unit
Double-stage injection unit with optimized screw L/D ratio increases plasticization capacity as well as lowering down preform AA value and IV drop.

Beckhoff control system
Precise Beckhoff industrial computer control system coordinates all production units in an intelligent way, which enhances overall system stability.

Fully electric servo plasticizing
Fully electric servo plasticization unit enhances resin melting quality and gives result of energy saving.

