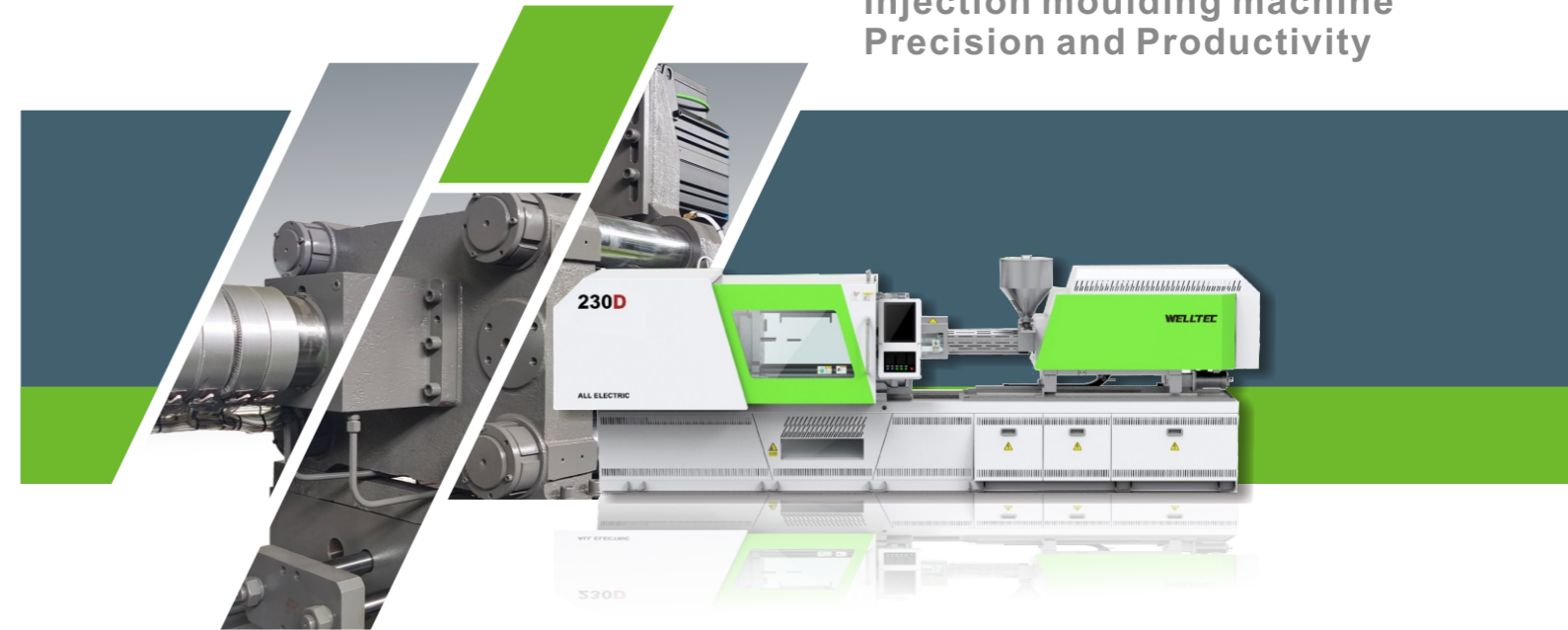


D series

All-electric (90-800Ton)

Injection moulding machine
Precision and Productivity



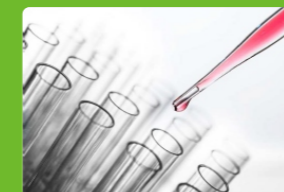
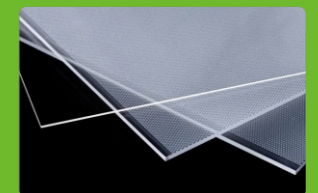
Welltec Machinery Ltd



The Electric machine to showcase precision, performance and energy efficiency



- Facing the challenge of high energy cost, every manufacturer is trying to lower the costs. The efficient all-electric machine will be a solution that works perfectly to meet your production needs.
- Our new generation of electric machine is dynamic and resourceful to allow broad applications ranging from industry-specific parts, thin-walled parts, optical articles to sophisticated medical components.
- With sophisticated drive and screw technology, we enable a highly accurate and stable movement even under high pressure and speed.



Highlights



**LOWER CONSUMPTION
BETTER PERFORMANCE**

- Self-locking 5 points toggle clamping structure, remarkably high rigidity clamping unit.
- Ball screw driven by servo motor to achieve smooth and accurate clamping movements.
- State-of-art motor drive control system to ensure repeatability of $\pm 0.01\text{mm}$.
- Key components supplied by internationally well-known brands to achieve high machine stability.
- Save energy and lower your CO2 footprint.

The Advantages

Reduce energy costs

Low energy consumption and high productivity come at the same time. Compared to the traditional hydraulic machines, our electric machines can enable an energy saving reaching up to **25%**

Fit for precision and high-end applications

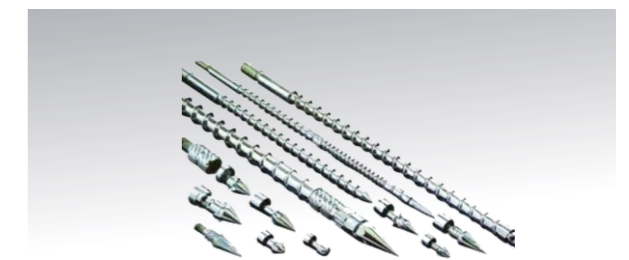
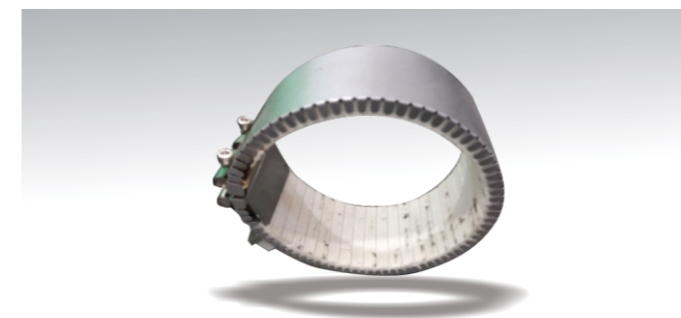
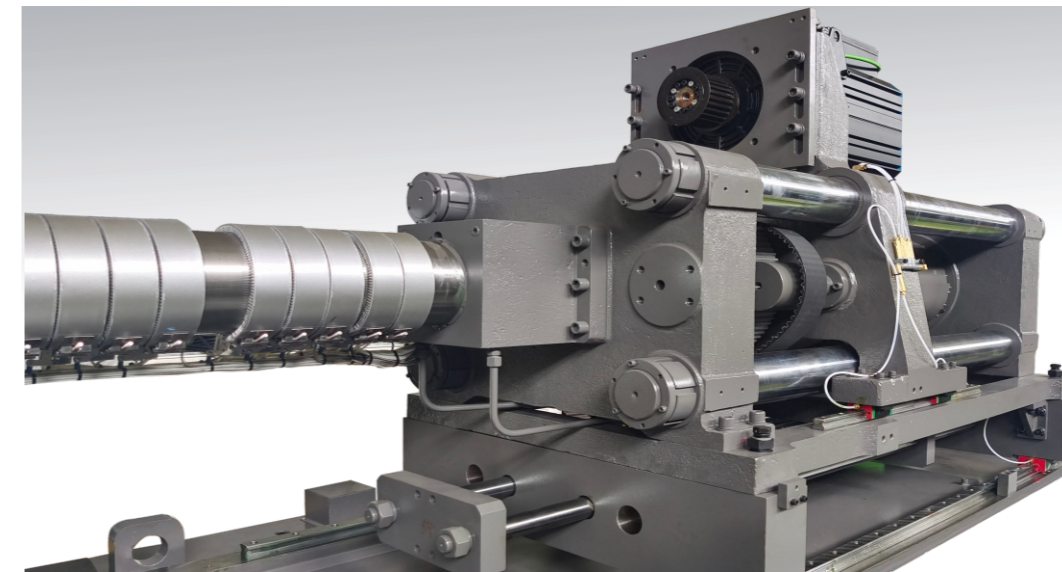
The state-of-art injection units of high rigidity, coupled with ceramic heating bands, bimetallic screw to inject products with excellent flow length ratio.



HIGH PRECISION

Injection unit

- High performance plasticizing unit including bi-metallic screw to achieve resistance to abrasive resins
- Low friction linear guide rail
- Standardized with bi-metallic screw and ceramic heating bands
- Improved plasticizing motor torque
- Double layer designs enable flexible injection unit upsize or downsize

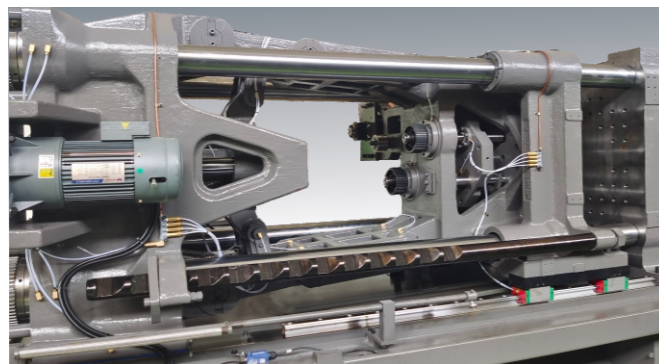
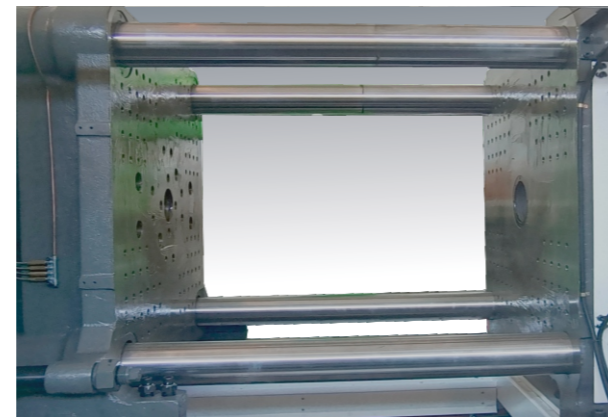
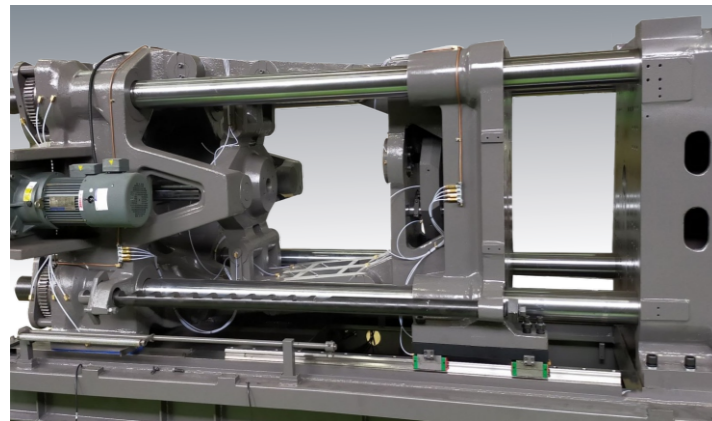


Clamping unit

- Wide tie bar distance and extra long stroke
- Precise mold height adjustment
- Rigid clamping structure to reinforce precision molding
- Sensitive mold protection
- Smooth platen acceleration and deceleration
- Accredited with 10 national patented design



**EXCELLENT PARALLELISM
MOLD PROTECTION**



Control system

- 15" touch screen display
- User-friendly interface
- Seamless connection among control system, servo motor and servo drive unanimously powered by Inovance



EP-700 control system



ES 810 Servo Driver

- Better prevention to overloading
- High performance even under high pressure and high speed
- Low speed long pressure holding
- Instant high torque start up

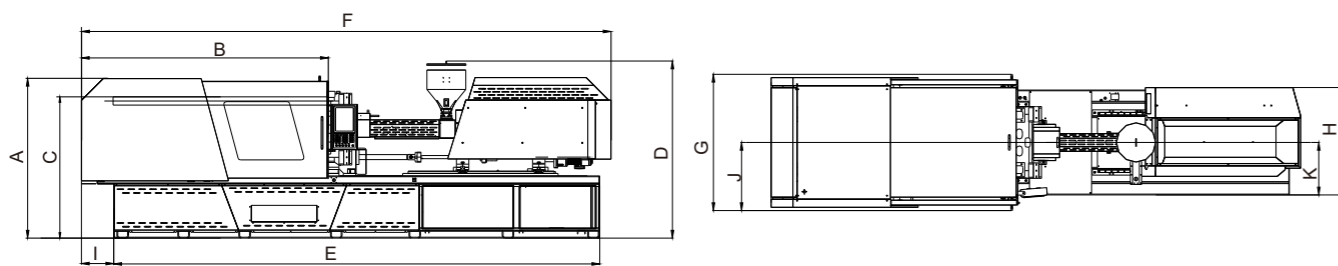
Specifications

ITEM	UNIT	90D			120D			150D			190D		
IU		204/204h			204/204h			428/428h			636/636h		
INJECTION UNIT													
Screw diameter	mm	25	28	32	25	28	32	36	40	45	40	45	50
Theoretical shot volume	cm ³	61	77	101	61	77	101	173	214	270	251	318	393
Shot weight (PS)	g	56	70	91	56	70	91	157	194	246	229	289	357
Length/Diameter ratio	L/D	22	20	18	22	20	18	22	20	18	23	20	18
Injection pressure	MPa	332	265	203	332	265	203	247	200	158	253	200	162
Holding pressure	MPa	266	212	162	266	212	162	198	160	126	203	160	130
Injection speed	mm/s	240/400			240/400			240/350			240/350		
Injection rate	cm ³ /sec	118	148	193	118	148	193	244	302	382	302	382	471
Injection stroke	mm	125			125			170			200		
Max. screw speed	rpm	350			350			350			320		
Plasticizing capacity (PS)	g/s	7.4	9.3	15.1	7.4	9.3	15.1	22.2	26.3	38.3	24.0	35.0	43.5
Injection unit force	Ton	2.5			2.5			3			4		
CLAMPING UNIT													
Clamping force	Ton	90			120			150			190		
Max. daylight	mm	730			840			940			1020		
Clamping stroke	mm	320			360			420			470		
Distance btwn. tie bars	mm	420x420			470x470			520x520			570x570		
Min. mould size	mm	295x295			330x330			365x365			400x400		
Mould thickness range	mm	150-410			150-480			180-520			200-550		
Ejector force	Ton	3			3			3.5			5		
Ejector stroke	mm	80			100			120			150		
POWER UNIT													
No. of heating zones	unit	3+1			3+1			4+1			5+1		
Heating power	kW	8.77			8.77			14.73			18.55		
Electrical power	KVA	41.1/48.4			41.1/48.4			51.1/64.7			62.6/75.5		
Total current	A	69.4/81.8			69.4/81.8			86.3/109.2			105.7/127.5		
Machine weight	Ton	6/6.2			6.7/6.9			10.2/10.5			10.9/11.3		

■ We are always working on improvement and reserve the rights to change design and specifications without prior notice

Machine Dimensions

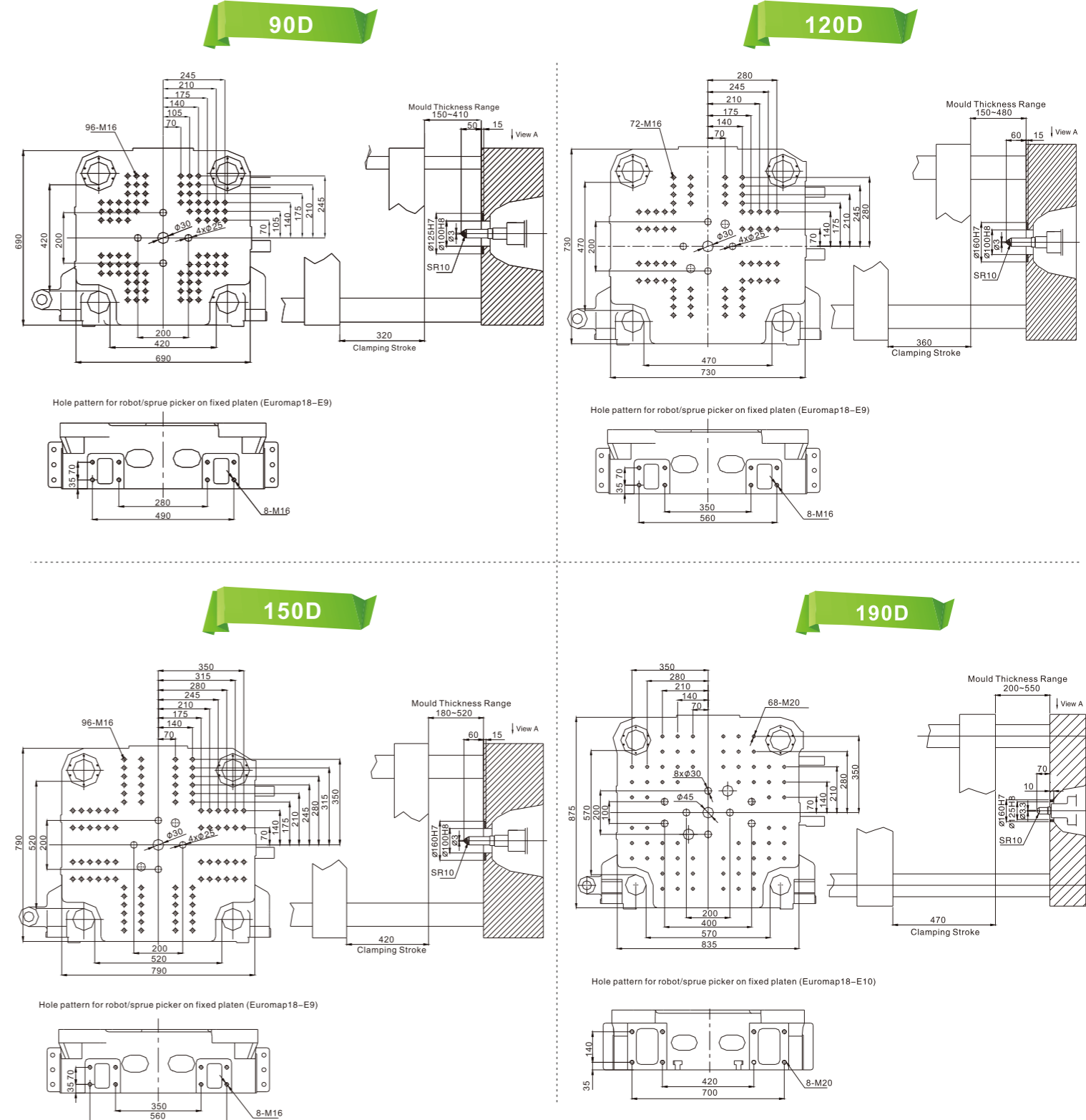
[90D ~ 190D]



Model	A	B	C	D	E	F	G	H	I	J	K
90D	1784	2262	1545	2090	4478	4833	1483	1187	355	680	520
120D	1784	2462	1580	2090	4678	5033	1483	1187	355	680	520
150D	1874	2638	1658	2075	5140	5596	1583	1282	378	733	570
190D	1974	2838	1733	2224	5945	6210	1653	1331	355	826	625

Remark: C-hopper height for reference only

Platen/Nozzle Dimensions



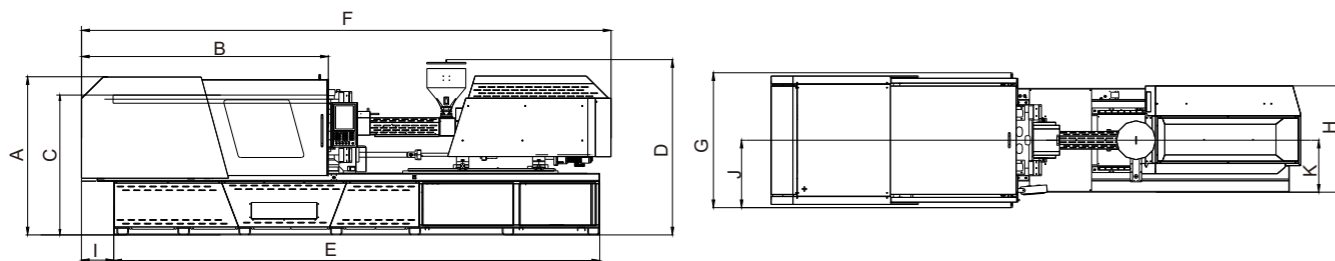
Specifications

ITEM	UNIT	230D			300HD			360HD		
IU		904/904h			1728/1728h			1728/1728h		
INJECTION UNIT										
Screw diameter	mm	45	50	55	60	65	70	60	65	70
Theoretical shot volume	cm ³	366	452	546	792	929	1078	792	929	1078
Shot weight (PS)	g	333	411	497	720	846	981	720	846	981
Length/Diameter ratio	L/D	22	20	18.6	22	20	18.6	22	20	18.6
Injection pressure	MPa	247	200	165	218	186	160	218	186	160
Holding pressure	MPa	198	160	132	175	149	128	175	149	128
Injection speed	mm/s	240/350			230/350			230/350		
Injection rate	cm ³ /sec	382	471	570	650	763	885	650	763	885
Injection stroke	mm	230			280			280		
Max. screw speed	rpm	320			250			250		
Plasticizing capacity (PS)	g/s	35.0	43.5	61.2	61.1	76.5	94.4	61.1	76.5	94.4
Injection unit force	Ton	5			11			11		
CLAMPING UNIT										
Clamping force	Ton	230			300			360		
Max. daylight	mm	1150			1250			1440		
Clamping stroke	mm	550			600			730		
Distance btwn. tie bars	mm	620x620			730x730			820x820		
Min. mould size	mm	420x420			510x510			575x575		
Mould thickness range	mm	220-610			240-650			250-710		
Ejector force	Ton	5			6			6		
Ejector stroke	mm	150			160			160		
POWER UNIT										
No. of heating zones	unit	5+1			5+1			5+1		
Heating power	kW	22.7			32.49			32.49		
Electrical power	KVA	69.6/77.2			97.4/120			97.4/120		
Total current	A	117.5/130.3			164.5/202.6			164.5/202.6		
Machine weight	Ton	13.1/13.4			17.6/17.8			20/20.2		

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Machine Dimensions

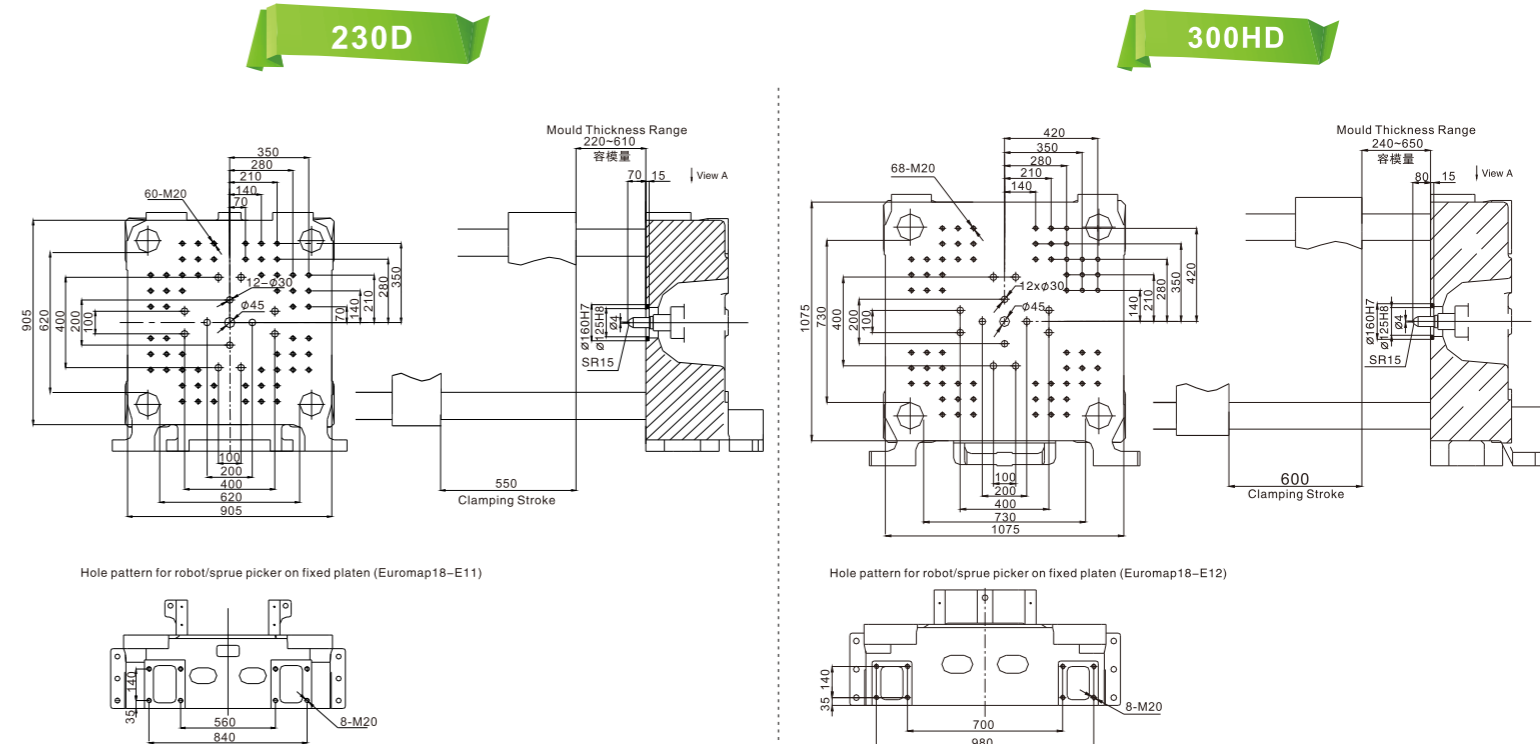
【 230D ~ 360HD 】



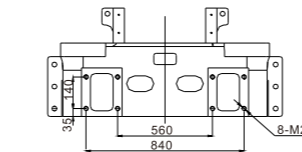
Model	A	B	C	D	E	F	G	H	I	J	K
230D	2055	3177	1817	2278	6356	6815	1753	1381	405	876	675
300HD	2130	3335	1915	2295	7102	7602	1892	1690	237	946	730
360HD	2180	3675	1970	2295	7492	7957	1992	1690	192	996	730

Remark: C-hopper height for reference only

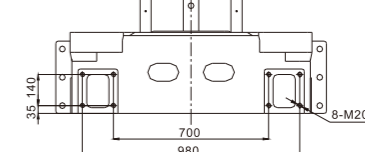
Platen/Nozzle Dimensions



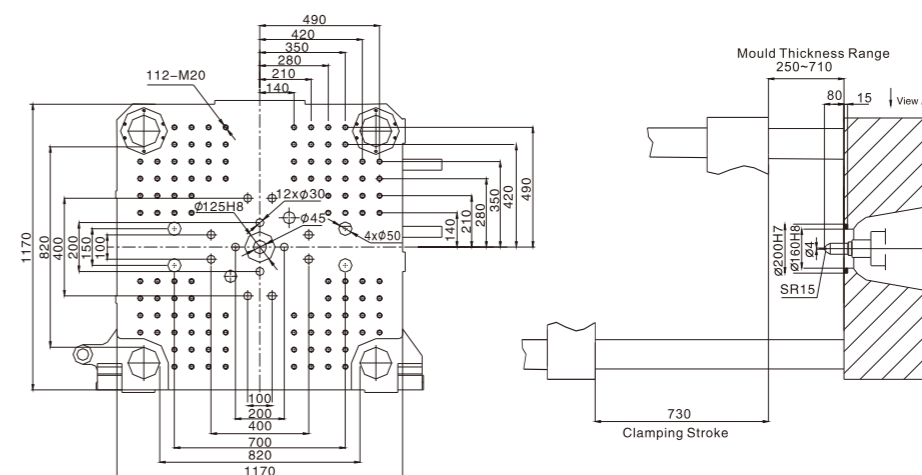
Hole pattern for robot/sprue picker on fixed platen (Euromap18-E11)



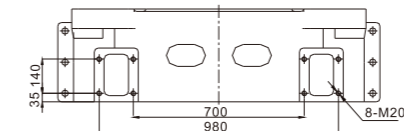
Hole pattern for robot/sprue picker on fixed platen (Euromap18-E12)



360HD



Hole pattern for robot/sprue picker on fixed platen (Euromap18-E13)



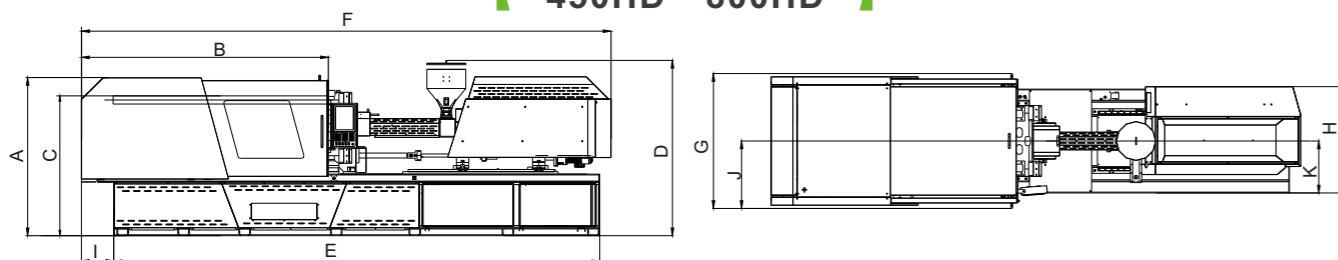
Specifications

ITEM	UNIT	450HD		550HD		650HD		800HD					
IU		2250		3350		3350		3350					
INJECTION UNIT													
Screw diameter	mm	65	70	80	70	80	90	70	80	90	70	80	90
Theoretical shot volume	cm ³	1078	1251	1634	1424	1860	2354	1424	1860	2354	1424	1860	2354
Shot weight (PS)	g	981	1138	1487	1296	1692	2142	1296	1692	2142	1296	1692	2142
Length/Diameter ratio	L/D	23	21	18.4	24	21	18.7	24	21.2	18.8	24	21	18.7
Injection pressure	MPa	209	180	138	235	180	142	235	180	142	235	180	142
Holding pressure	MPa	167	144	110	188	144	114	188	144	114	188	144	114
Injection speed	mm/s	160		160		160		160					
Injection rate	cm ³ /sec	531	616	804	616	804	1018	616	804	1018	616	804	1018
Injection stroke	mm	325		370		370		370					
Max. screw speed	rpm	210		185		185		185					
Plasticizing capacity (PS)	g/s	64.3	79.3	110.1	69.8	97.0	113.2	69.8	97.0	113.2	75.5	104.9	122.3
Injection unit force	Ton	11		11		11		11					
CLAMPING UNIT													
Clamping force	Ton	450		550		650		800					
Max. daylight	mm	1610		1780		2000		2000					
Clamping stroke	mm	800		900		1000		1000					
Distance btwn. tie bars	mm	920x920		970x970		1090x1090		1080X1080					
Min. mould size	mm	600x600		630x630		700x700		700X700					
Mould thickness range	mm	350-810		380-880		420-1000		420-1000					
Ejector force	Ton	11		15.7		22.3		20					
Ejector stroke	mm	180		180		200		200					
POWER UNIT													
No. of heating zones	unit	5+1		5+1		5+1		5+1					
Heating power	kW	33.5		43.3		43.3		43.3					
Electrical power	KVA	116.4		121.7		129.3		140					
Total current	A	196.7		205.7		218.5		218.5					
Oil filling capacity	L	160		160		200		235.0					
Machine weight	Ton	26		34.3		42.8		42.8					

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Machine Dimensions

450HD ~ 800HD



Model	A	B	C	D	E	F	G	H	I	J	K
450HD	2240	4006	2005	2421	8023	7913	2332	1980	392	1140	865
550HD	2302	4348	2039	2426	8303	8925	2407	1980	487	1178	865
650HD	2398	4785	2150	2485	9540	9875	2618	2110	580	1228	995
800HD	2398	4785	2150	2515	9540	10035	2618	2110	580	1228	995

Remark: C-hopper height for reference only

Platen/Nozzle Dimensions

