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BORCH MACHINERY CO., LTD.

No.9 Xinxiang Road, Zengcheng Economic & Technological
Development District, Guangzhou, Guangdong Province, P.R.C.
www.borche.cn 400-655-9488



Website



Wechat

Universal Type Interconnected IMM Bi-M Series

21 Years' Dedication to Upgrade a Classic Intelligent IMM

Bi-M



High Versatility

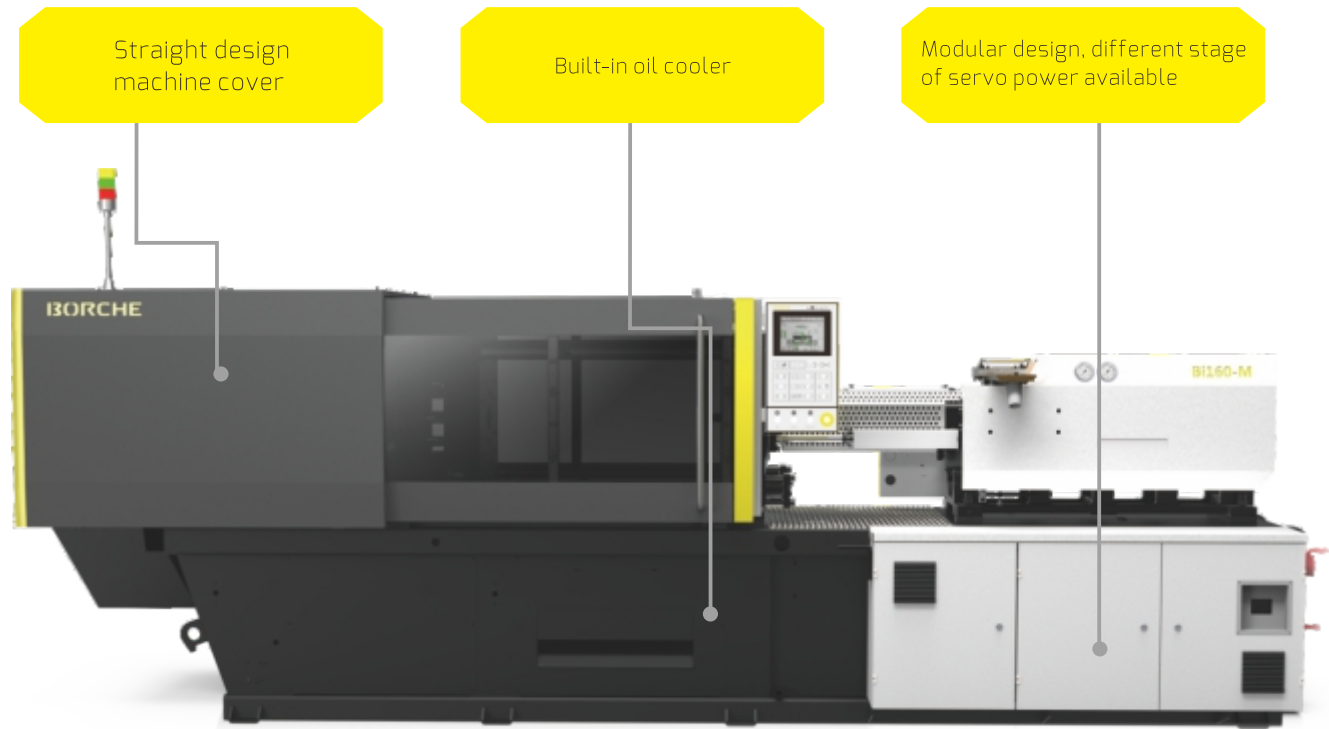
Modular Design

Interconnected

Upgraded Performance

High Versatility

Bi-M series originates from Borsche 20 year's intelligent IMM technology and innovation. It has advantages of strong power, precise control, stable performance, high versatility to meet different production requirements.



Modular Design

- ☒ Modular design to meet different needs flexibly
- ☒ Different size injection units to cover bigger range of injection volume
- ☒ Optional swing injection unit for easy maintenance of screw and barrel set
- ☒ Spare installation places for sockets

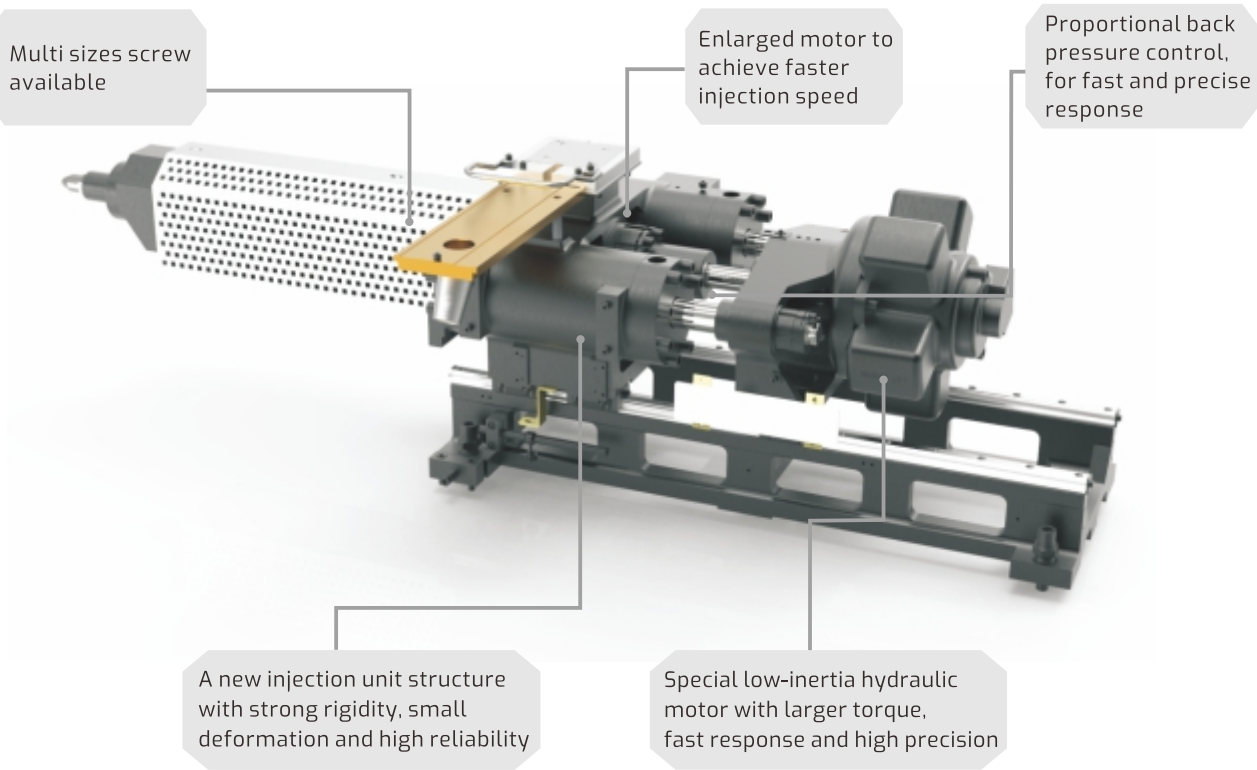
		1	2	3	4	5	6	7	8	9
		255	435	630	850	1360	2240	3260	3920	1830
Clamping Unit	90									
	130									
	160									
	200									
	260									
	320									
	400									
	500									

Interconnected

- ☒ Intelligent & professional control system with user-friendly operation page. compatible with international standard interface, to meet customers' needs of factory digitization.
- ☒ The built-in intelligent management system can monitor the working state of key parts of injection molding machine in real-time, and realize equipment health self-diagnosis.



Upgraded Performance



Model	UNIT	Bi90-M			Bi130-M			Bi160-M			Bi200-M			Bi260-M			Bi320-M			Bi400-M			Bi500-M					
International Class No.		300/90			435/130			630/160			850/200			1360/260			2240/320			3260/400			3920/500					
INJECTION UNIT																												
Screw Diameter	mm	30	35	40	35	40	45	40	45	50	45	50	60	50	60	70	60	70	80	70	80	90	75	85	95			
Theoretical Shot Volume	cm³	120	163	213	182	238	302	270	341	422	389	481	692	589	848	1154	989	1346	1759	1539	2010	2544	1877	2411	3012			
Theoretical Shot Weight(PS)	g	109	148	193	165	216	274	245	310	384	353	437	629	535	771	1050	899	1224	1600	1400	1829	2315	1708	2194	2740			
Theoretical Shot Weight(PS)	OZ	3.9	5.2	6.8	5.8	7.6	9.7	8.7	10.9	13.5	12.5	15.4	22.2	18.9	27.2	37	31.7	43.2	56.5	49.4	64.5	81.7	60.2	77.4	96.7			
Theoretical Injection Pressure	Mpa	252	185	142	240	183	145	235	185	150	218	176	123	232	161	118	226	166	127	212	162	128	209	163	130			
Screw L/D Ratio	L/d	24	20.4	18	23.2	20.3	18	22.7	20.2	18	23	20.5	16.9	25.7	21.2	18.1	24.8	21.3	18.6	24.3	21.3	18.7	24	21	18.8			
Injection Stroke	mm	170			190			215			245			300			350			400			425					
Screw Rotary Speed Max	rpm	225			250			265			176			172			165			135			152					
Nozzle Contact Force	kN	30			30			30			30			40			70			80			80					
Nozzle Stroke	mm	250			250			250			280			350			360			405			450					
CLAMPING UNIT																												
Theoretical Clamping Force	kN	900			1300			1600			2000			2600			3200			4000			5000					
Mould Opening Stroke	mm	320			340			410			465			520			580			655			755					
Platen Size	mmxmm	540x540			610x610			670x670			750x750			835x835			940x940			1060x1030			1175x1145					
Space Between Tine Bars	mmxmm	360x360			410x410			460x460			510x510			575x575			670x670			730x700			830x800					
Daylight Max.	mm	680			790			910			1015			1120			1235			1375			1555					
Mold Thickness(min-max.)	mm	130-360			145-450			160-500			180-550			195-600			220-655			245-720			265-800					
Enjector Storke	mm	100			100			130			150			180			180			205			250					
Theoretical Ejector Force	kN	34.4			34.4			49.5			49.5			77.3			77.3			111.3			111.3					
Ejector Pin	unit	4+1			4+1			4+1			4+1			8+4+1			8+4+1			8+4+1			8+4+1					
POWER UNIT																												
System pressure	Mpa	17.5			17.5			17.5			17.5			17.5			17.5			17.5			17.5					
Pump Motor	kW	15			18.5			22			30			37			45			55			65					
Heating Capacity	kw	6.5			8.8			9.6			12.9			16.2			22			30.6			39					
NO.of Heater Zones	unit	4			4			5			5			6			6			6			6					
GENERAL UNIT																												
Oil Tank Capacity	L	120			155			190			220			280			360			440			550					
Machine Dimensions(LxWxH)	m*m*m	4.23x1.24x1.88			4.5x1.27x1.94			4.96x1.37x1.99			5.53x1.52x2.09			6.37x1.64x2.22			7.03x1.8x2.18			7.84x1.91x2.32			8.47x2.04x2.36					
Theoretical Machine Weight	k g	3050			3450			4150			5600			7500			9800			13700			16300					

The specification above is theoretical data for reference.Borche reserves the right of change in specification resulting from technical upgrading

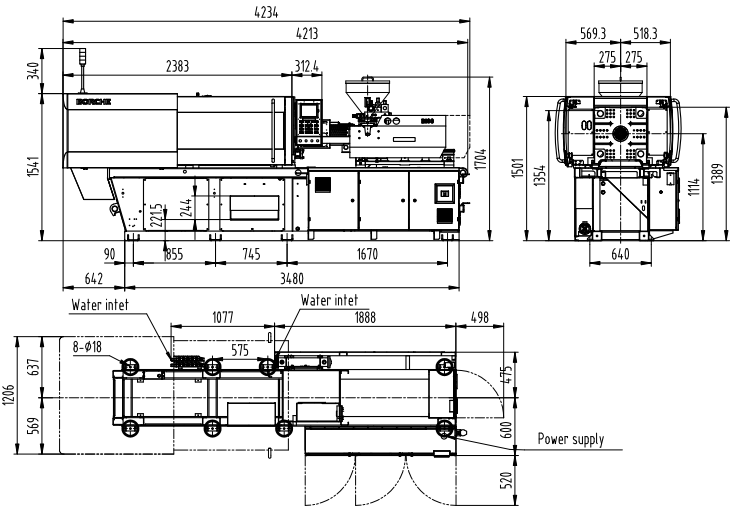
Model	UNIT	Bi560-M			Bi650-M			Bi800-M			Bi1000-M			Bi1300-M			Bi1600-M			Bi1800-M		
International Class No.		4156/560			4453/650			5700/800			7550/1000			11500/1300			13500/1600			16600/1800		
INJECTION UNIT																						
Screw Diameter	mm	80	85	95	80	90	100	90	100	105	100	105	115	105	115	130	115	130	140	130	140	150
Theoretical Shot Volume	cm³	2261	2553	3189	2261	2862	3534	3180	3926	4329	4123	4545	5453	5195	6232	7963	6751	8627	10005	9291	10775	12370
Theoretical Shot Weight(PS)	g	2057	2323	2901	2057	2604	3215	2893	3572	3939	3751	4135	4962	4727	5671	7246	6143	7850	9104	8454	9805	11256
Theoretical Shot Weight(PS)	OZ	72.6	81.9	102.4	72.6	91.9	113.4	102.1	126	139	132.3	145.9	175	166.8	200	255.6	216.7	276.9	321.2	298.2	345.9	397.1
Theoretical Injection Pressure	Mpa	184	163	130	197	156	126	181	147	133	180	163	136	222	185	145	200	156	135	191	164	143
Screw L/D Ratio	L/d	22.3	21	19	23.5	21	19	25	22.5	21.4	23	22	20	24	22	19.5	25	22	20.4	24	22	20
Injection Stroke	mm	450			450			500			525			600			650			700		
Screw Rotary Speed Max	rpm	152			126			113			108			122			104			85		
Nozzle Contact Force	kN	80			80			200			200			200			200			200		
Nozzle Stroke	mm	450			510			560			560			750			750			920		
CLAMPING UNIT																						
Theoretical Clamping Force	kN	5600			6500			8000			10000			13000			16000			18000		
Mould Opening Stroke	mm	820			880			1025			1150			1300			1550			1650		
Platen Size	mmxmm	1250x1220			1310x1280			1470x1470			1680x1620			1760x1760			2140x2040			2220x2100		
Space Between Tine Bars	mmxmm	880x850			930x900			1010x1010			1160x1100			1250x1250			1480x1380			1600x1480		
Daylight Max.	mm	1670			1750			2000			2250			2550			2950			3150		
Mold Thickness(min-max.)	mm	300-850			300-870			380-975			450-1100			600-1250			700-1400			800-1500		
Enjector Storke	mm	280			280			300			350			380			380			380		
Theoretical Ejector Force	kN	137.4			137.4			275			275			303			303			303		
Ejector Pin	unit	8+8+4+1			8+8+4+1			8+8+4+1			8+8+4+1			8+8+4+1			8+8+8+4+1			8+8+8+4+1		
POWER UNIT																						
System pressure	Mpa	17.5			17.5			17.5			17.5			17.5			17.5			17.5		
Pump Motor	kW	65			70			75			45x2			70+65			70x2			75+70		
Heating Capacity	kw	39			42.7			44			53.6			67.9			78.9			81.2		
NO.of Heater Zones	unit	6			6			8			8			9			9			9		
GENERAL UNIT																						
Oil Tank Capacity	L	550			640			740			900			1200			1300			1400		
Machine Dimensions(LxWxH)	m*m*m	9.19x2.18x2.33			9.51x2.23x2.35			10.57x2.4x3.03			11.28x2.65x3.13			12.72x2.79x3.1			14.2x3.11x3.36			15.33x3.2x3.42		
Theoretical Machine Weight	k g	20000			23200			35500			42900			62000			87000			90600		

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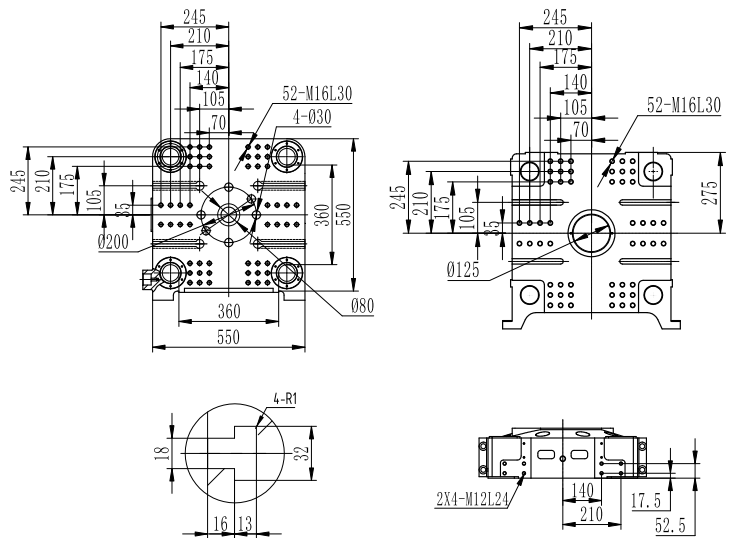
Specifcation

Model	UNIT	Bi90-M		
INJECTION UNIT		300/90		
Screw Diameter	mm	30	35	40
Shot Volume	cm³	120	163	213
Shot Weight(PS)	g	109	148	193
Shot Weight(PS)	OZ	3.9	5.2	6.8
Injection Pressure	Mpa	252	185	142
Screw L/D Ratio	L/d	24	20.4	18
Injection Stroke	mm	170		
Screw Rotary Speed Max	rpm	225		
Nozzle Contact Force	kN	30		
Nozzle Stroke	mm	250		
CLAMPING UNIT				
Clamping Force	kN	900		
Mould Opening Stroke	mm	320		
Platen Size	mmxmm	540x540		
Space Between Tine Bars	mmxmm	360x360		
Daylight Max.	mm	680		
Mold Thickness(min-max.)	mm	130-360		
Enjector Storke	mm	100		
Theoretical Ejector Force	kN	34.4		
Ejector Pin	unit	4+1		
POWER UNIT				
System pressure	Mpa	17.5		
Pump Motor	kW	15		
Heating Capacity	kw	6.5		
NO.of Heater Zones	unit	4		
GENERAL UNIT				
Oil Tank Capacity	L	120		
Machine Dimensions	m*m*m	4.23x1.24x1.88		
Machine Weight	kg	3050		

AppearanceandInstallation Dimensions



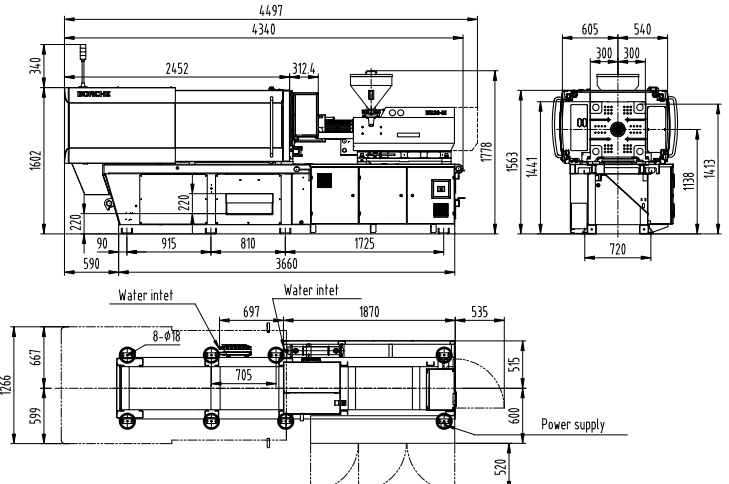
Mold Platen Drawing



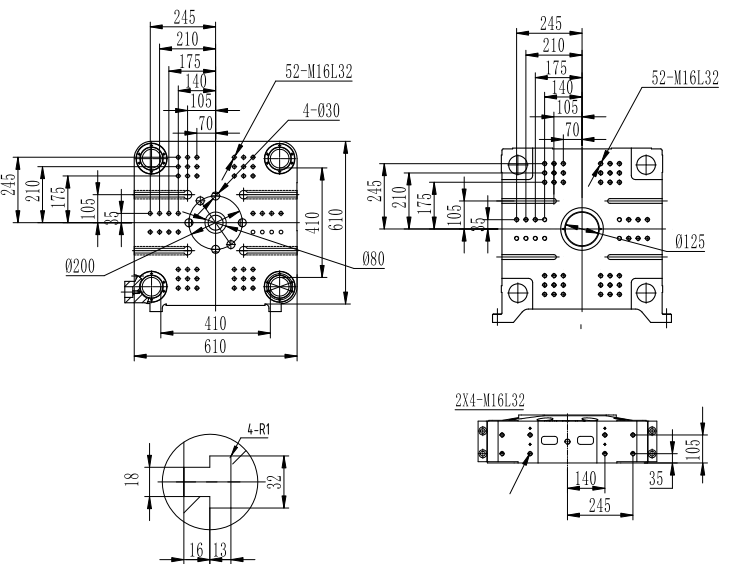
Specifcation

Model	UNIT	Bi130-M		
INJECTION UNIT		435/130		
Screw Diameter	mm	35	40	45
Shot Volume	cm³	182	238	302
Shot Weight(PS)	g	165	216	274
Shot Weight(PS)	OZ	5.8	7.6	9.7
Injection Pressure	Mpa	240	183	145
Screw L/D Ratio	L/d	23.2	20.3	18
Injection Stroke	mm	190		
Screw Rotary Speed Max	rpm	250		
Nozzle Contact Force	kN	30		
Nozzle Stroke	mm	250		
CLAMPING UNIT				
Clamping Force	kN	1300		
Mould Opening Stroke	mm	340		
Platen Size	mmxmm	610x610		
Space Between Tine Bars	mmxmm	410x410		
Daylight Max.	mm	790		
Mold Thickness(min-max.)	mm	145-450		
Enjector Storke	mm	100		
Theoretical Ejector Force	kN	34.4		
Ejector Pin	unit	4+1		
POWER UNIT				
System pressure	Mpa	17.5		
Pump Motor	kW	18.5		
Heating Capacity	kw	8.8		
NO.of Heater Zones	unit	4		
GENERAL UNIT				
Oil Tank Capacity	L	155		
Machine Dimensions	m*m*m	4.5x1.27x1.94		
Machine Weight	kg	3450		

AppearanceandInstallation Dimensions



Mold Platen Drawing



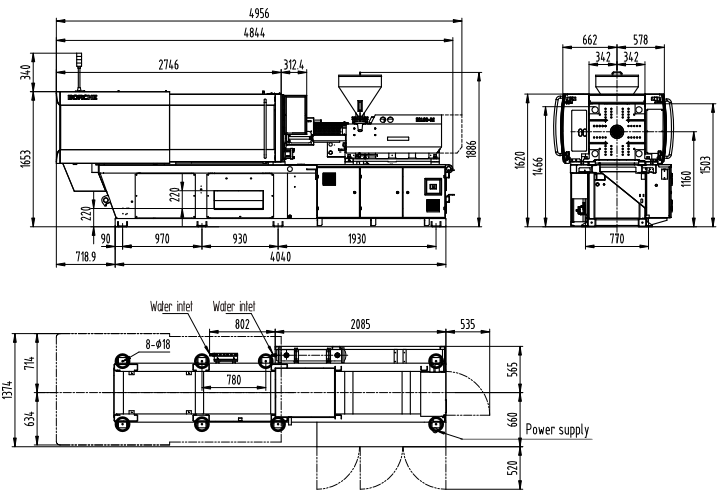
Bi160-M



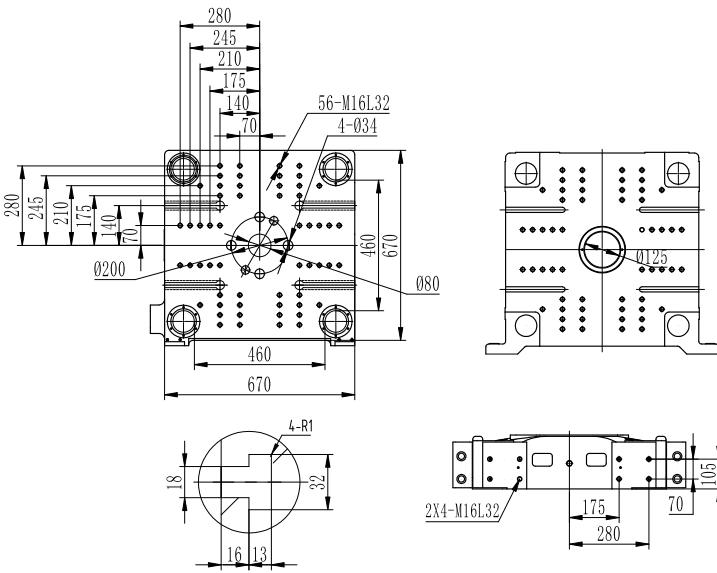
Specifcation

Model	UNIT	Bi160-M		
INJECTION UNIT		630/160		
Screw Diameter	mm	40	45	50
Shot Volume	cm³	270	341	422
Shot Weight(PS)	g	245	310	384
Shot Weight(PS)	OZ	8.7	10.9	13.5
Injection Pressure	Mpa	235	185	150
Screw L/D Ratio	L/d	22.7	20.2	18
Injection Stroke	mm	215		
Screw Rotary Speed Max	rpm	265		
Nozzle Contact Force	kN	30		
Nozzle Stroke	mm	250		
CLAMPING UNIT				
Clamping Force	kN	1600		
Mould Opening Stroke	mm	410		
Platen Size	mmxmm	670x670		
Space Between Tine Bars	mmxmm	460x460		
Daylight Max.	mm	910		
Mold Thickness(min-max.)	mm	160-500		
Enjector Storke	mm	130		
Theoretical Ejector Force	kN	49.5		
Ejector Pin	unit	4+1		
POWER UNIT				
System pressure	Mpa	17.5		
Pump Motor	kW	22		
Heating Capacity	kw	9.6		
NO.of Heater Zones	unit	5		
GENERAL UNIT				
Oil Tank Capacity	L	190		
Machine Dimensions	m*m*m	4.96x1.37x1.99		
Machine Weight	k g	4150		

AppearanceandInstallation Dimensions



Mold Platen Drawing



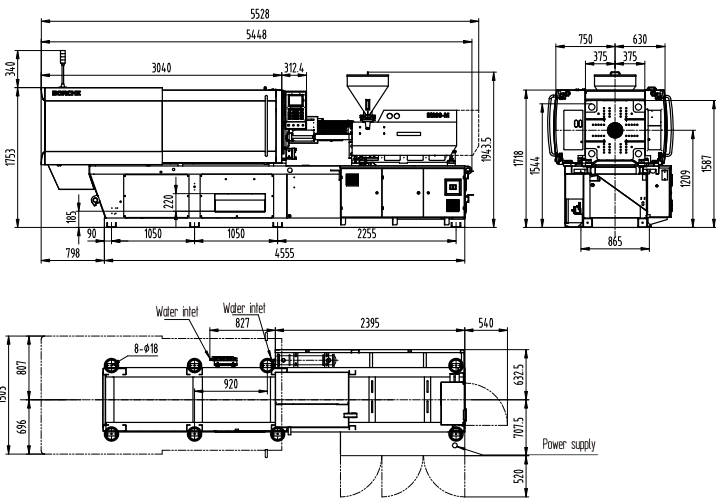
Bi200-M



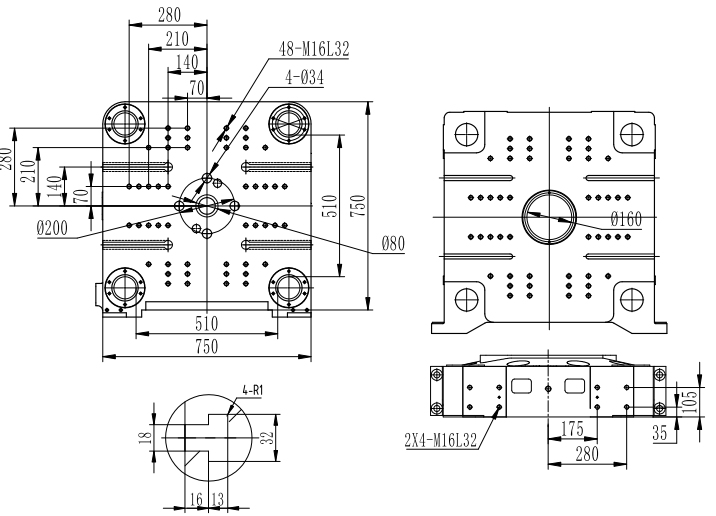
Specifcation

Model	UNIT	Bi200-M		
INJECTION UNIT		850/200		
Screw Diameter	mm	45	50	60
Shot Volume	cm³	389	481	692
Shot Weight(PS)	g	353	437	629
Shot Weight(PS)	OZ	12.5	15.4	22.2
Injection Pressure	Mpa	218	176	123
Screw L/D Ratio	L/d	23	20.5	16.9
Injection Stroke	mm	245		
Screw Rotary Speed Max	rpm	176		
Nozzle Contact Force	kN	30		
Nozzle Stroke	mm	280		
CLAMPING UNIT				
Clamping Force	kN	2000		
Mould Opening Stroke	mm	465		
Platen Size	mmxmm	750x750		
Space Between Tine Bars	mmxmm	510x510		
Daylight Max.	mm	1015		
Mold Thickness(min-max.)	mm	180-550		
Enjector Storke	mm	150		
Theoretical Ejector Force	kN	49.5		
Ejector Pin	unit	4+1		
POWER UNIT				
System pressure	Mpa	17.5		
Pump Motor	kW	30		
Heating Capacity	kw	12.9		
NO.of Heater Zones	unit	5		
GENERAL UNIT				
Oil Tank Capacity	L	220		
Machine Dimensions	m*m*m	5.53x1.52x2.09		
Machine Weight	k g	5600		

AppearanceandInstallation Dimensions



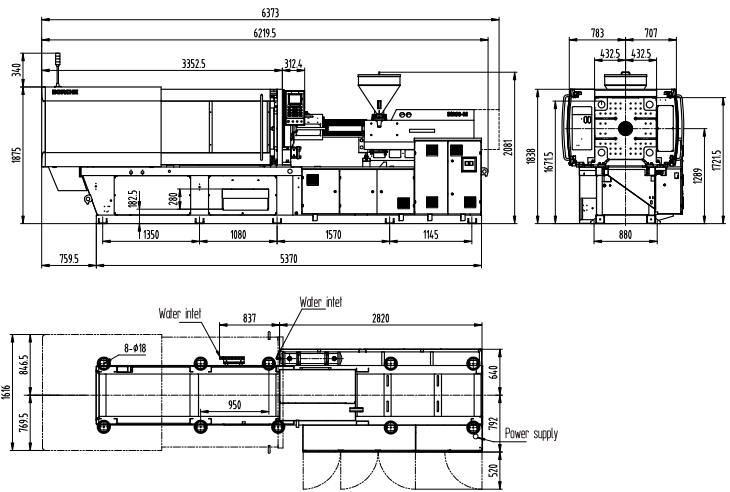
Mold Platen Drawing



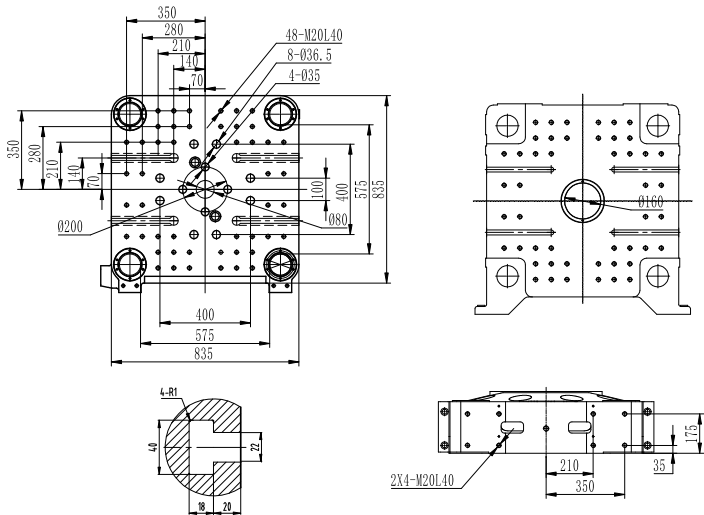
Specifcation

Model	UNIT	Bi260-M		
INJECTION UNIT		1360/260		
Screw Diameter	mm	50	60	70
Shot Volume	cm³	589	848	1154
Shot Weight(PS)	g	535	771	1050
Shot Weight(PS)	OZ	18.9	27.2	37
Injection Pressure	Mpa	232	161	118
Screw L/D Ratio	L/d	25.7	21.2	18.1
Injection Stroke	mm	300		
Screw Rotary Speed Max	rpm	172		
Nozzle Contact Force	kN	40		
Nozzle Stroke	mm	350		
CLAMPING UNIT				
Clamping Force	kN	2600		
Mould Opening Stroke	mm	520		
Platen Size	mmxmm	835x835		
Space Between Tine Bars	mmxmm	575x575		
Daylight Max.	mm	1120		
Mold Thickness(min-max.)	mm	195-600		
Enjector Storke	mm	180		
Theoretical Ejector Force	kN	77.3		
Ejector Pin	unit	8+4+1		
POWER UNIT				
System pressure	Mpa	17.5		
Pump Motor	kW	37		
Heating Capacity	kw	16.2		
NO.of Heater Zones	unit	6		
GENERAL UNIT				
Oil Tank Capacity	L	280		
Machine Dimensions	m*m*m	6.37x1.64x2.22		
Machine Weight	k g	7500		

AppearanceandInstallation Dimensions



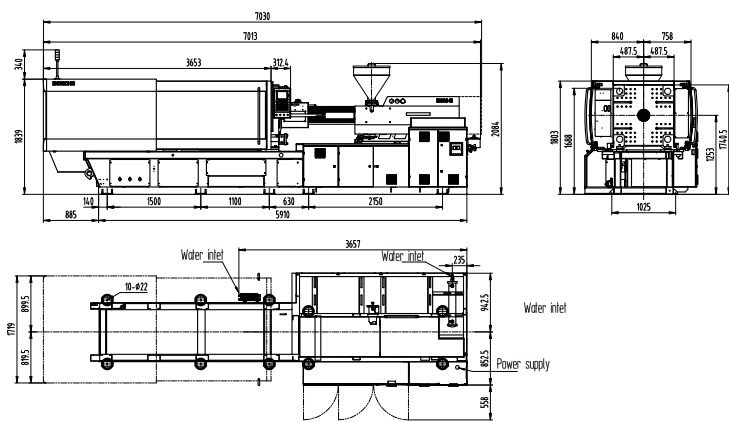
Mold Platen Drawing



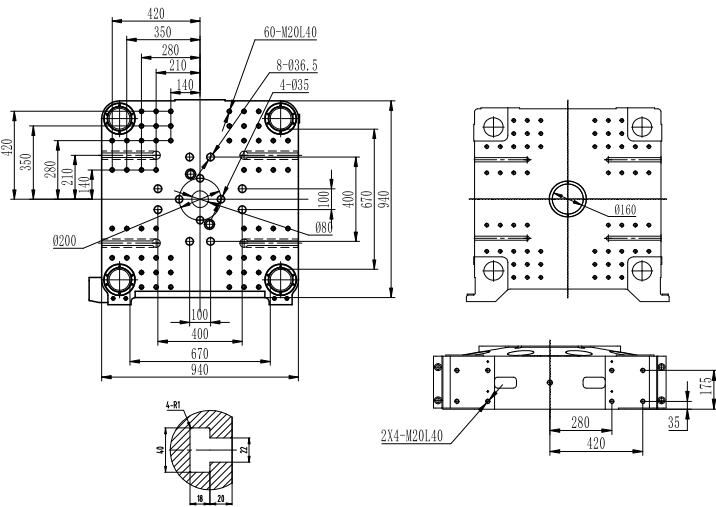
Specifcation

Model	UNIT	Bi320-M		
INJECTION UNIT		2240/320		
Screw Diameter	mm	60	70	80
Shot Volume	cm³	989	1346	1759
Shot Weight(PS)	g	899	1224	1600
Shot Weight(PS)	OZ	31.7	43.2	56.5
Injection Pressure	Mpa	226	166	127
Screw L/D Ratio	L/d	24.8	21.3	18.6
Injection Stroke	mm	350		
Screw Rotary Speed Max	rpm	165		
Nozzle Contact Force	kN	70		
Nozzle Stroke	mm	360		
CLAMPING UNIT				
Clamping Force	kN	3200		
Mould Opening Stroke	mm	580		
Platen Size	mmxmm	940x940		
Space Between Tine Bars	mmxmm	670x670		
Daylight Max.	mm	1235		
Mold Thickness(min-max.)	mm	220-655		
Enjector Storke	mm	180		
Theoretical Ejector Force	kN	77.3		
Ejector Pin	unit	8+4+1		
POWER UNIT				
System pressure	Mpa	17.5		
Pump Motor	kW	45		
Heating Capacity	kw	22		
NO.of Heater Zones	unit	6		
GENERAL UNIT				
Oil Tank Capacity	L	360		
Machine Dimensions	m*m*m	7.03x1.8x2.18		
Machine Weight	k g	9800		

AppearanceandInstallation Dimensions



Mold Platen Drawing



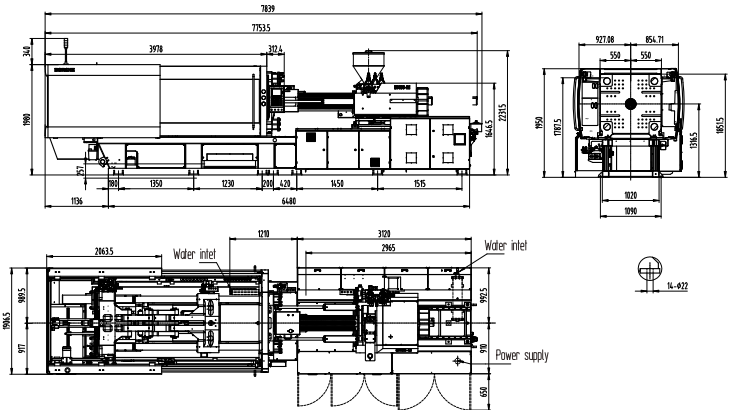
Bi400-M



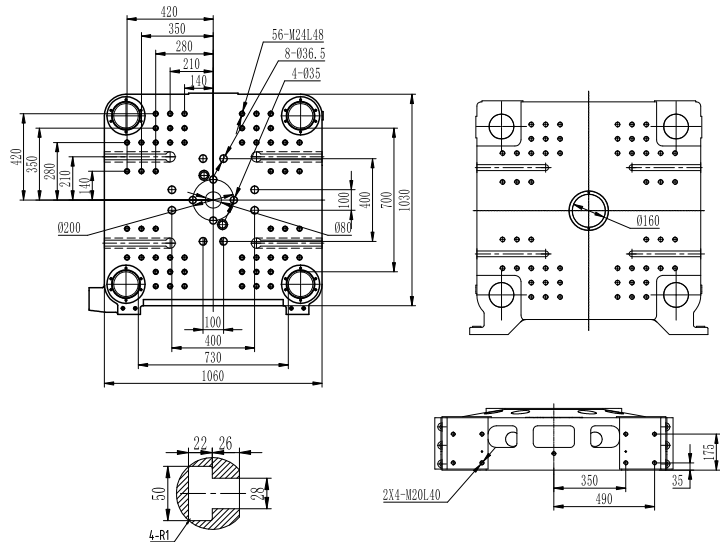
Specifcation

Model	UNIT	Bi400-M		
INJECTION UNIT		3260/400		
Screw Diameter	mm	70	80	90
Shot Volume	cm³	1539	2010	2544
Shot Weight(PS)	g	1400	1829	2315
Shot Weight(PS)	OZ	49.4	64.5	81.7
Injection Pressure	Mpa	212	162	128
Screw L/D Ratio	L/d	24.3	21.3	18.7
Injection Stroke	mm	400		
Screw Rotary Speed Max	rpm	135		
Nozzle Contact Force	kN	80		
Nozzle Stroke	mm	405		
CLAMPING UNIT				
Clamping Force	kN	4000		
Mould Opening Stroke	mm	655		
Platen Size	mmxmm	1060x1030		
Space Between Tine Bars	mmxmm	730x700		
Daylight Max.	mm	1375		
Mold Thickness(min-max.)	mm	245-720		
Enjector Storke	mm	205		
Theoretical Ejector Force	kN	111.3		
Ejector Pin	unit	8+4+1		
POWER UNIT				
System pressure	Mpa	17.5		
Pump Motor	kW	55		
Heating Capacity	kw	30.6		
NO.of Heater Zones	unit	6		
GENERAL UNIT				
Oil Tank Capacity	L	440		
Machine Dimensions	m*m*m	7.84x1.91x2.32		
Machine Weight	k g	13700		

AppearanceandInstallation Dimensions



Mold Platen Drawing



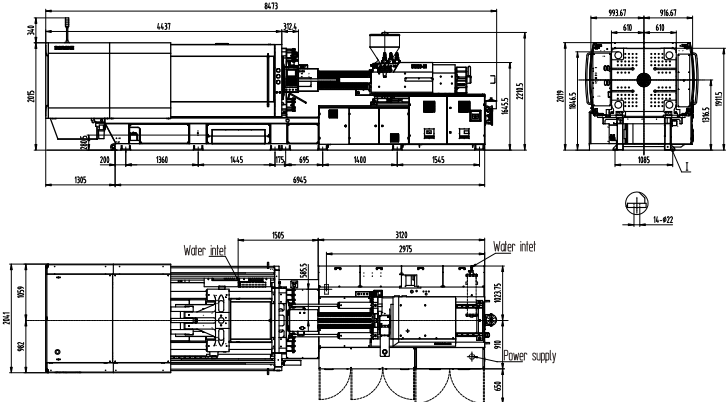
Bi500-M



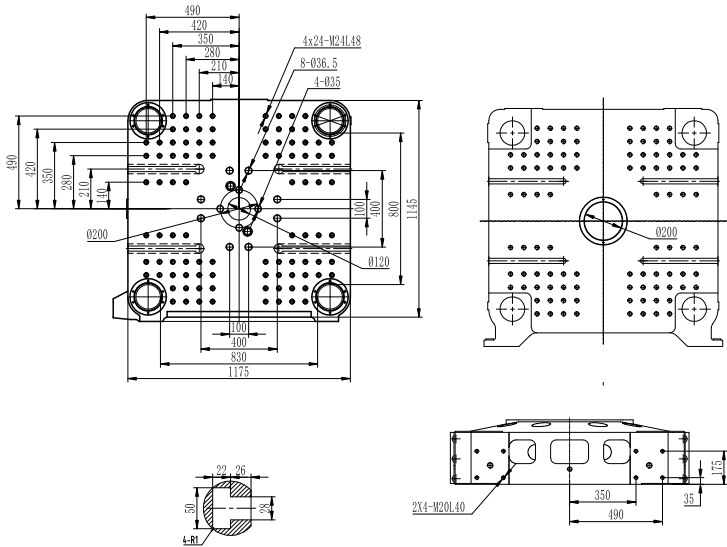
Specifcation

Model	UNIT	Bi500-M		
INJECTION UNIT		3920/500		
Screw Diameter	mm	75	85	95
Shot Volume	cm³	1877	2411	3012
Shot Weight(PS)	g	1708	2194	2740
Shot Weight(PS)	OZ	60.2	77.4	96.7
Injection Pressure	Mpa	209	163	130
Screw L/D Ratio	L/d	24	21	18.8
Injection Stroke	mm	425		
Screw Rotary Speed Max	rpm	152		
Nozzle Contact Force	kN	80		
Nozzle Stroke	mm	450		
CLAMPING UNIT				
Clamping Force	kN	5000		
Mould Opening Stroke	mm	755		
Platen Size	mmxmm	1175x1145		
Space Between Tine Bars	mmxmm	830x800		
Daylight Max.	mm	1555		
Mold Thickness(min-max.)	mm	265-800		
Enjector Storke	mm	250		
Theoretical Ejector Force	kN	111.3		
Ejector Pin	unit	8+4+1		
POWER UNIT				
System pressure	Mpa	17.5		
Pump Motor	kW	65		
Heating Capacity	kw	39		
NO.of Heater Zones	unit	6		
GENERAL UNIT				
Oil Tank Capacity	L	550		
Machine Dimensions	m*m*m	8.47x2.04x2.36		
Machine Weight	k g	16300		

AppearanceandInstallation Dimensions



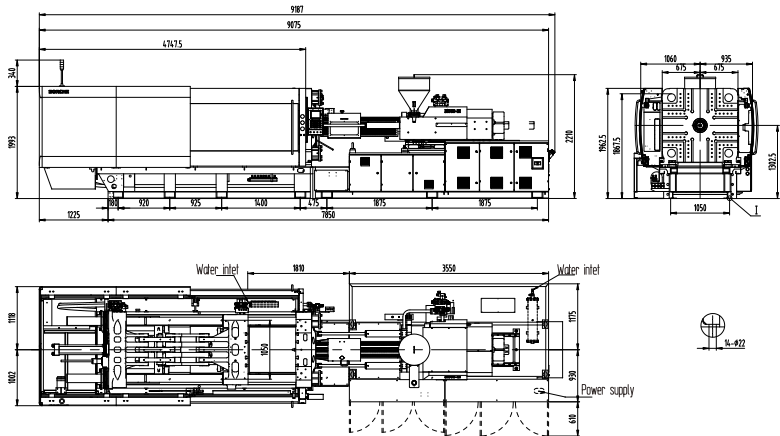
Mold Platen Drawing



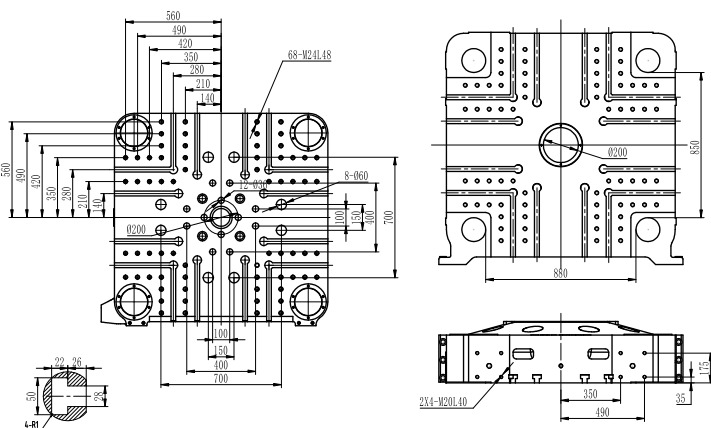
Specifcation

Model	UNIT	Bi560-M		
INJECTION UNIT		4156/560		
Screw Diameter	mm	80	85	95
Shot Volume	cm³	2261	2553	3189
Shot Weight(PS)	g	2057	2323	2901
Shot Weight(PS)	OZ	72.6	81.9	102.4
Injection Pressure	Mpa	184	163	130
Screw L/D Ratio	L/d	22.3	21	19
Injection Stroke	mm	450		
Screw Rotary Speed Max	rpm	152		
Nozzle Contact Force	kN	80		
Nozzle Stroke	mm	450		
CLAMPING UNIT				
Clamping Force	kN	5600		
Mould Opening Stroke	mm	820		
Platen Size	mmxmm	1250x1220		
Space Between Tine Bars	mmxmm	880x850		
Daylight Max.	mm	1670		
Mold Thickness(min-max.)	mm	300-850		
Enjector Storke	mm	280		
Theoretical Ejector Force	kN	137.4		
Ejector Pin	unit	8+8+4+1		
POWER UNIT				
System pressure	Mpa	17.5		
Pump Motor	kW	65		
Heating Capacity	kw	39		
NO.of Heater Zones	unit	6		
GENERAL UNIT				
Oil Tank Capacity	L	550		
Machine Dimensions	m*m*m	9.19x2.18x2.33		
Machine Weight	k g	20000		

AppearanceandInstallation Dimensions



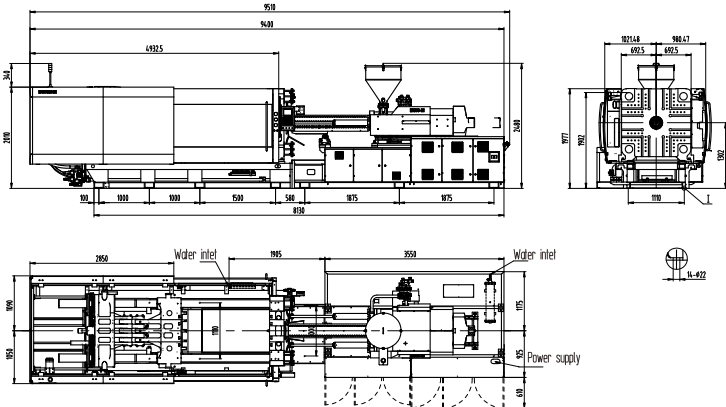
Mold Platen Drawing



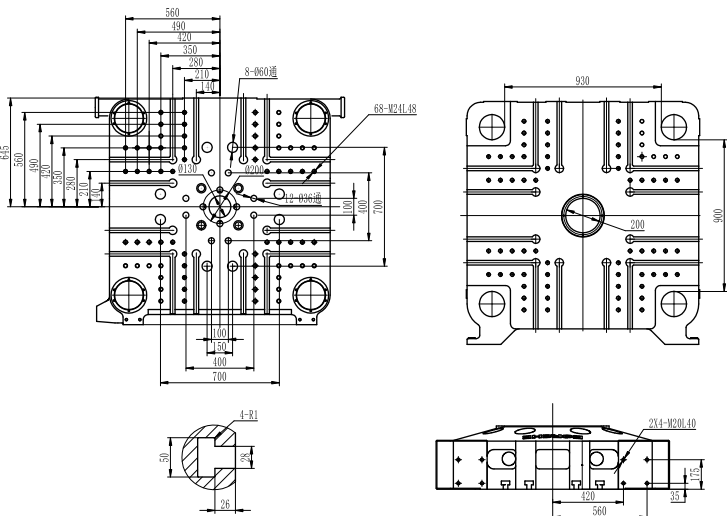
Specifcation

Model	UNIT	Bi650-M		
INJECTION UNIT		4453/650		
Screw Diameter	mm	80	90	100
Shot Volume	cm³	2261	2862	3534
Shot Weight(PS)	g	2057	2604	3215
Shot Weight(PS)	OZ	72.6	91.9	113.4
Injection Pressure	Mpa	197	156	126
Screw L/D Ratio	L/d	23.5	21	19
Injection Stroke	mm	450		
Screw Rotary Speed Max	rpm	126		
Nozzle Contact Force	kN	80		
Nozzle Stroke	mm	510		
CLAMPING UNIT				
Clamping Force	kN	6500		
Mould Opening Stroke	mm	880		
Platen Size	mmxmm	1310x1280		
Space Between Tine Bars	mmxmm	930x900		
Daylight Max.	mm	1750		
Mold Thickness(min-max.)	mm	300-870		
Enjector Storke	mm	280		
Theoretical Ejector Force	kN	137.4		
Ejector Pin	unit	8+8+4+1		
POWER UNIT				
System pressure	Mpa	17.5		
Pump Motor	kW	70		
Heating Capacity	kw	42.7		
NO.of Heater Zones	unit	6		
GENERAL UNIT				
Oil Tank Capacity	L	640		
Machine Dimensions	m*m*m	9.51x2.23x2.35		
Machine Weight	k g	23200		

AppearanceandInstallation Dimensions



Mold Platen Drawing



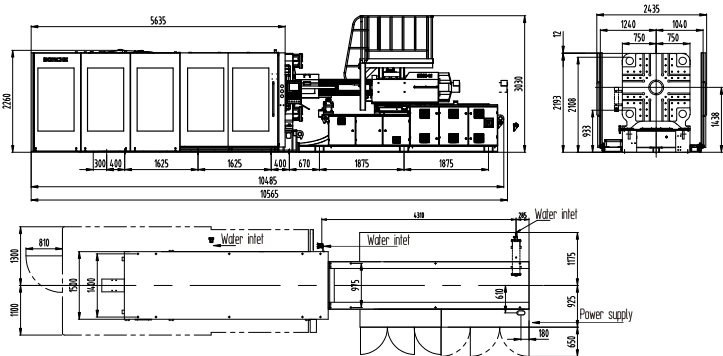
Bi800-M



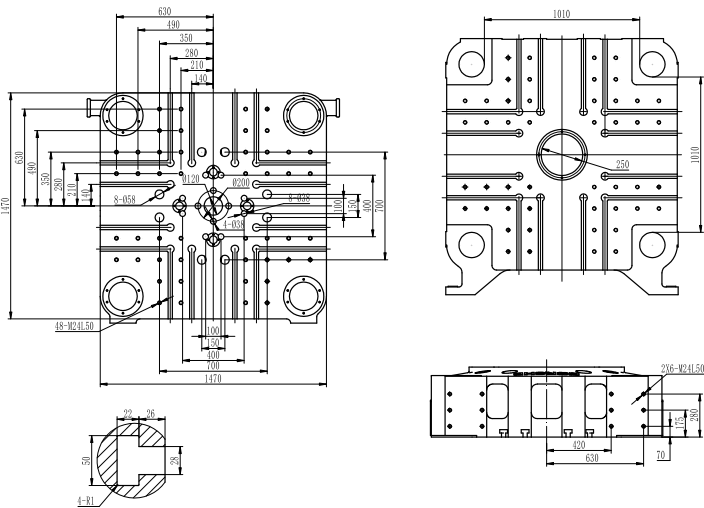
Specifcation

Model	UNIT	Bi800-M		
INJECTION UNIT		5700/800		
Screw Diameter	mm	90	100	105
Shot Volume	cm³	3180	3926	4329
Shot Weight(PS)	g	2893	3572	3939
Shot Weight(PS)	OZ	102.1	126	139
Injection Pressure	Mpa	181	147	133
Screw L/D Ratio	L/d	25	22.5	21.4
Injection Stroke	mm	500		
Screw Rotary Speed Max	rpm	113		
Nozzle Contact Force	kN	200		
Nozzle Stroke	mm	560		
CLAMPING UNIT				
Clamping Force	kN	8000		
Mould Opening Stroke	mm	1025		
Platen Size	mmxmm	1470x1470		
Space Between Tine Bars	mmxmm	1010x1010		
Daylight Max.	mm	2000		
Mold Thickness(min-max.)	mm	380-975		
Enjector Storke	mm	300		
Theoretical Ejector Force	kN	275		
Ejector Pin	unit	8+8+4+1		
POWER UNIT				
System pressure	Mpa	17.5		
Pump Motor	kW	75		
Heating Capacity	kw	44		
NO.of Heater Zones	unit	8		
GENERAL UNIT				
Oil Tank Capacity	L	740		
Machine Dimensions	m*m*m	10.57x2.4x3.03		
Machine Weight	k g	35500		

AppearanceandInstallation Dimensions



Mold Platen Drawing



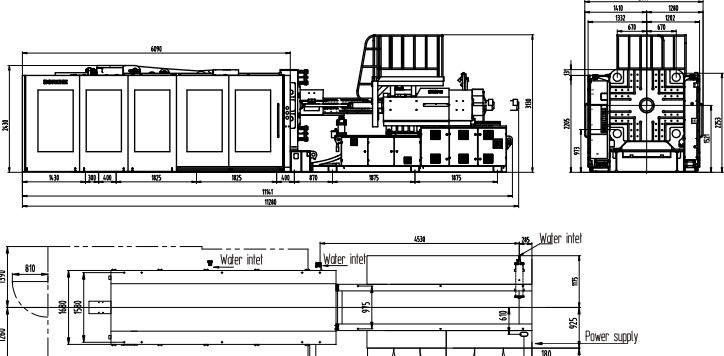
Bi1000-M



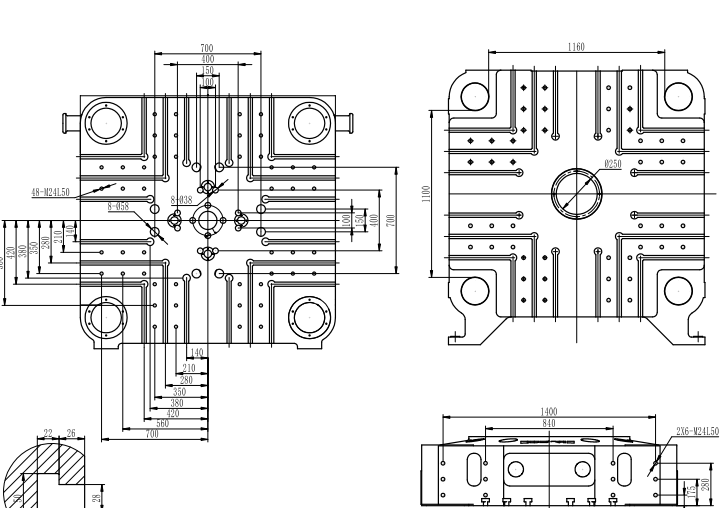
Specifcation

Model	UNIT	Bi1000-M		
INJECTION UNIT		7550/1000		
Screw Diameter	mm	100	105	115
Shot Volume	cm³	4123	4545	5453
Shot Weight(PS)	g	3751	4135	4962
Shot Weight(PS)	OZ	132.3	145.9	175
Injection Pressure	Mpa	180	163	136
Screw L/D Ratio	L/d	23	22	20
Injection Stroke	mm	525		
Screw Rotary Speed Max	rpm	108		
Nozzle Contact Force	kN	200		
Nozzle Stroke	mm	560		
CLAMPING UNIT				
Clamping Force	kN	10000		
Mould Opening Stroke	mm	1150		
Platen Size	mmxmm	1680x1620		
Space Between Tine Bars	mmxmm	1160x1100		
Daylight Max.	mm	2250		
Mold Thickness(min-max.)	mm	450-1100		
Enjector Storke	mm	350		
Theoretical Ejector Force	kN	275		
Ejector Pin	unit	8+8+4+1		
POWER UNIT				
System pressure	Mpa	17.5		
Pump Motor	kW	45x2		
Heating Capacity	kw	53.6		
NO.of Heater Zones	unit	8		
GENERAL UNIT				
Oil Tank Capacity	L	900		
Machine Dimensions	m*m*m	11.28x2.65x3.13		
Machine Weight	k g	42900		

AppearanceandInstallation Dimensions



Mold Platen Drawing



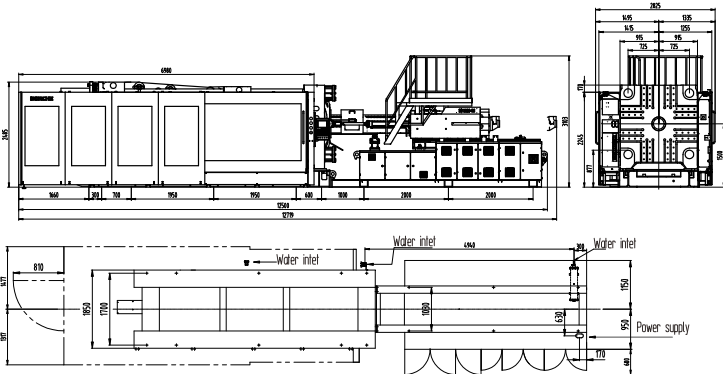
Bi1300-M



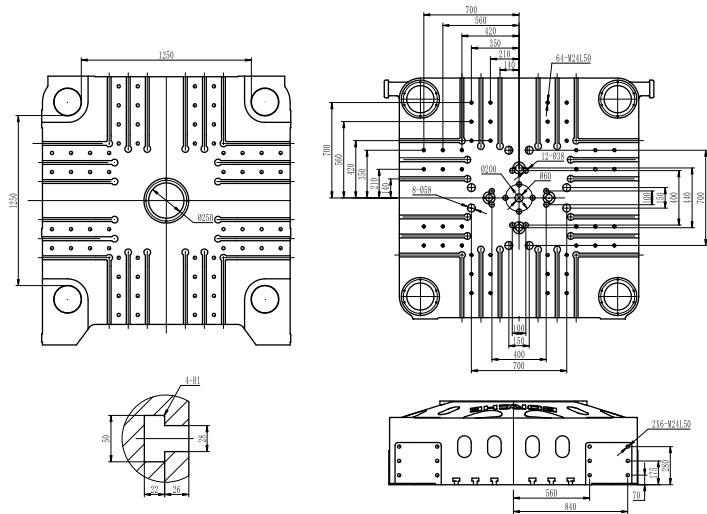
Specifcation

Model	UNIT	Bi1300-M		
INJECTION UNIT		11500/1300		
Screw Diameter	mm	105	115	130
Shot Volume	cm³	5195	6232	7963
Shot Weight(PS)	g	4727	5671	7246
Shot Weight(PS)	OZ	166.8	200	255.6
Injection Pressure	Mpa	222	185	145
Screw L/D Ratio	L/d	24	22	19.5
Injection Stroke	mm	600		
Screw Rotary Speed Max	rpm	122		
Nozzle Contact Force	kN	200		
Nozzle Stroke	mm	750		
CLAMPING UNIT				
Clamping Force	kN	13000		
Mould Opening Stroke	mm	1300		
Platen Size	mmxmm	1760x1760		
Space Between Tine Bars	mmxmm	1250x1250		
Daylight Max.	mm	2550		
Mold Thickness(min-max.)	mm	600-1250		
Enjector Storke	mm	380		
Theoretical Ejector Force	kN	303		
Ejector Pin	unit	8+8+4+1		
POWER UNIT				
System pressure	Mpa	17.5		
Pump Motor	kW	70+65		
Heating Capacity	kw	67.9		
NO.of Heater Zones	unit	9		
GENERAL UNIT				
Oil Tank Capacity	L	1200		
Machine Dimensions	m*m*m	12.72x2.79x3.1		
Machine Weight	k g	62000		

AppearanceandInstallation Dimensions



Mold Platen Drawing



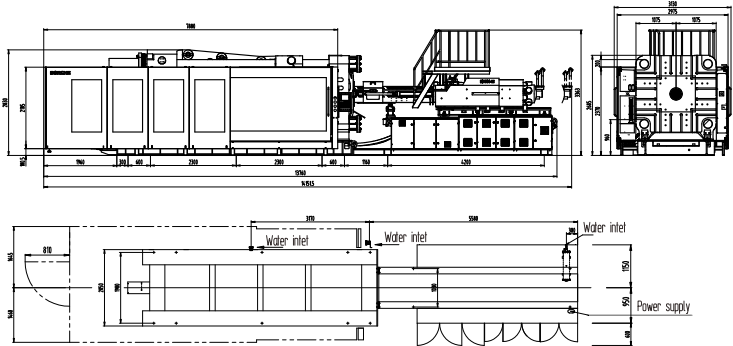
Bi1600-M



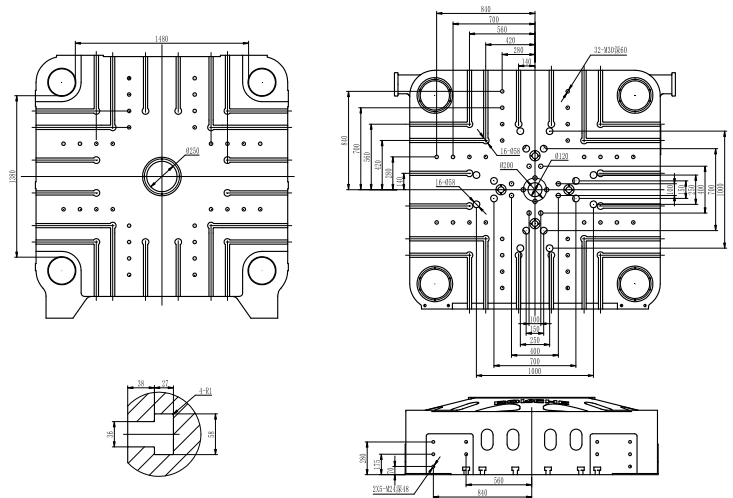
Specifcation

Model	UNIT	Bi1600-M		
INJECTION UNIT		13500/1600		
Screw Diameter	mm	115	130	140
Shot Volume	cm³	6751	8627	10005
Shot Weight(PS)	g	6143	7850	9104
Shot Weight(PS)	OZ	216.7	276.9	321.2
Injection Pressure	Mpa	200	156	135
Screw L/D Ratio	L/d	25	22	20.4
Injection Stroke	mm	650		
Screw Rotary Speed Max	rpm	104		
Nozzle Contact Force	kN	200		
Nozzle Stroke	mm	750		
CLAMPING UNIT				
Clamping Force	kN	16000		
Mould Opening Stroke	mm	1550		
Platen Size	mmxmm	2140x2040		
Space Between Tine Bars	mmxmm	1480x1380		
Daylight Max.	mm	2950		
Mold Thickness(min-max.)	mm	700-1400		
Enjector Storke	mm	380		
Theoretical Ejector Force	kN	303		
Ejector Pin	unit	8+8+8+4+1		
POWER UNIT				
System pressure	Mpa	17.5		
Pump Motor	kW	70x2		
Heating Capacity	kw	78.9		
NO.of Heater Zones	unit	9		
GENERAL UNIT				
Oil Tank Capacity	L	1300		
Machine Dimensions	m*m*m	14.2x3.11x3.36		
Machine Weight	k g	87000		

AppearanceandInstallation Dimensions



Mold Platen Drawing



Bi1800-M



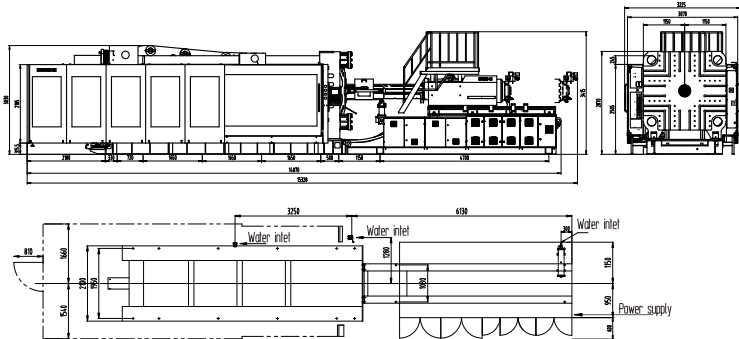
OTHER DIMENSION



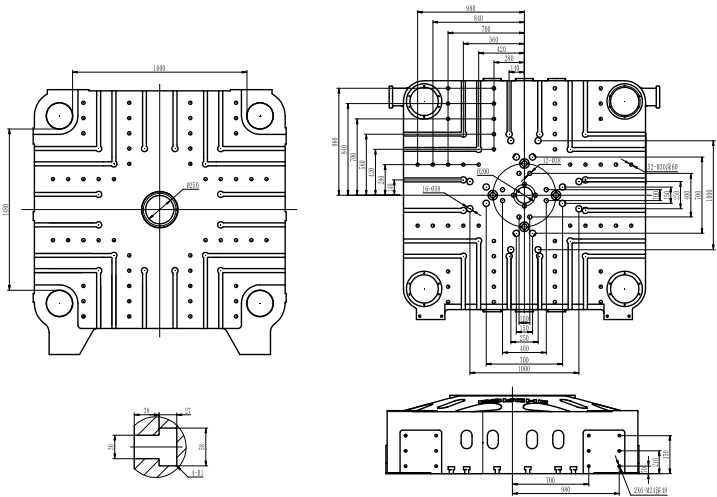
Specifcation

Model	UNIT	Bi1800-M		
INJECTION UNIT		16600/1800		
Screw Diameter	mm	130	140	150
Shot Volume	cm³	9291	10775	12370
Shot Weight(PS)	g	8454	9805	11256
Shot Weight(PS)	OZ	298.2	345.9	397.1
Injection Pressure	Mpa	191	164	143
Screw L/D Ratio	L/d	24	22	20
Injection Stroke	mm	700		
Screw Rotary Speed Max	rpm	85		
Nozzle Contact Force	kN	200		
Nozzle Stroke	mm	920		
CLAMPING UNIT				
Clamping Force	kN	18000		
Mould Opening Stroke	mm	1650		
Platen Size	mmxmm	2220x2100		
Space Between Tine Bars	mmxmm	1600x1480		
Daylight Max.	mm	3150		
Mold Thickness(min-max.)	mm	800-1500		
Enjector Storke	mm	380		
Theoretical Ejector Force	kN	303		
Ejector Pin	unit	8+8+8+4+1		
POWER UNIT				
System pressure	Mpa	17.5		
Pump Motor	kW	75+70		
Heating Capacity	kw	81.2		
NO.of Heater Zones	unit	9		
GENERAL UNIT				
Oil Tank Capacity	L	1400		
Machine Dimensions	m*m*m	15.33x3.2x3.42		
Machine Weight	kg	90600		

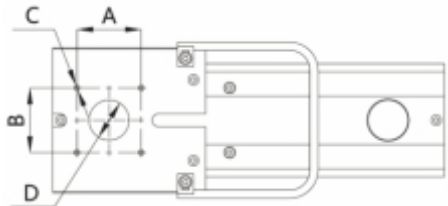
AppearanceandInstallation Dimensions



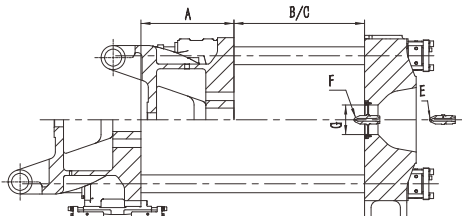
Mold Platen Drawing



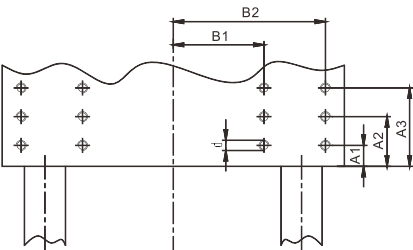
Hopper Dryer Installation Dimensions



Clamping Unit Schematic Drawing



Robot Installation Dimensions



	Bi90-M	Bi130-M	Bi160-M	Bi200-M	Bi260-M	Bi320-M	Bi400-M	Bi500-M	Bi560-M	Bi650-M	Bi800-M	Bi1000-M	Bi1300-M	Bi1600-M	Bi1800-M
A(mm)	80	80	90	90	110	110	130	130	130	130	160	160	214	214	214
B(mm)	80	80	95	95	110	110	130	130	130	130	160	160	214	214	214
C(mm)	M8	M8	M8	M8	M10	M10	M10	M10	M10	M10	M12	M12	M16	M16	M16
D(mm)	50	50	50	60	70	70	90	90	90	90	110	110	150	150	150

	Bi90-M	Bi130-M	Bi160-M	Bi200-M	Bi260-M	Bi320-M	Bi400-M	Bi500-M	Bi560-M	Bi650-M	Bi800-M	Bi1000-M	Bi1300-M	Bi1600-M	Bi1800-M
A(template stroke)	320	340	410	465	520	580	655	755	820	880	1025	1150	1300	1550	1650
B(maximum die thickness)	360	450	500	550	600	655	720	800	850	870	975	1100	1250	1400	1500
C(minimum die thickness)	130	145	160	180	195	220	245	265	300	300	380	450	600	700	800
D(nozzle extension distance)	35	35	45	45	45	45	45	50	50	50	50	50	50	50	50
E(diameter of nozzle hole)	3	3	3	3	3	3	5	5	5	5	5	5	6	6	8
F(ozzle spherical surface SR)	10	10	10	10	10	10	10	10	10	10	10	10	15	15	20
G(mold locating hole)	125	125	125	160	160	160	160	200	200	200	250	250	250	250	250

	Bi90-M	Bi130-M	Bi160-M	Bi200-M	Bi260-M	Bi320-M	Bi400-M	Bi500-M	Bi560-M	Bi650-M	Bi800-M	Bi1000-M	Bi1300-M	Bi1600-M	Bi1800-M
A1	17.5	35	35	35	35	35	35	35	35	35	70	70	70	70	70
A2	52.5	105	105	105	175	175	175	175	175	175	175	175	175	175	210
A3											280	280	280	280	350
B1	140	140	175	175	210	280	350	350	350	420	420	420	560	560	700
B2	210	245	280	280	350	420	490	490	490	560	630	700	840	840	980
d	M12	M16	M16	M16	M20	M20	M20	M20	M20	M20	M24	M24	M24	M24	M24

STANDARD FEATURES



SAFETY UNIT		
1	China New Safety Standard	•
2	Full guarding in accordance with the "European Machine Directive"	•
3	Double emergency button	•
4	Mechanical safety lock(≤200 T)	•
INJECTION UNIT		
1	Twin carriage structure	•
2	Balancing twin injection cylinder	•
3	Wear resistant screw and barrel	•
4	Chrome plated screw	•
5	Nozzle centering calibration	•
6	A/B/C size screw available	•
7	Double insulation cover for barrel	•
8	Linear guide for injection and carriage movement	•
9	Movable sliding rail	•
10	Ceramic heater band	•
11	Nozzle safety guard with electric lock	•
12	High pressure/temperature tube for cooling ring of hooper throat	•
13	Nonslip embossed aluminum sheet	•
14	High torque hydraulic motor	•
15	Screw RPM sensor	•
16	Screw cold start protection	•
17	Suck back function	•
18	5 stages of injection, pressure/speed adjustable	•
19	3 stages of pressure holding, pressure/speed adjustable	•
20	3 stages of plasticizing, pressure/speed adjustable	•
CLAMPING UNIT		
1	Balanced, double, five points toggle locking system	•
2	Hard chrome plated tie bar	•
3	Mold platen with T-solt and mounting holes	•
4	Independent location ring for fixing platen	•
5	Abrasion resistance strip	•
6	Automatic lubricating system for centralized thin oil, with end detection	•
7	Low pressure mold safety protection	•
8	Auto clamping force adjustment	•
9	Mold adjustment by hydraulic motor	•
10	Multi-ejector function	•
11	Quick change coupling for center platen	•
12	Robot mounting hole(EU18)	•
13	Controller height adjustable	•
14	Product drop chute(≤260T)	•

CONTROL UNIT		
1	Controller	•
2	Internet connection port	•
3	Three color alarm light (red/yellow/green)	•
4	Data protect lock	•
5	Electric heating protection by fuse or auto switch	•
6	Real-time display of injection and plasticize curve	•
7	Injection pressure protection	•
8	PID programmable barrel heating	•
9	Operation modification record	•
10	Alarm record	•
11	I/O status display function	•
12	Multi-language available(CN/EN standard)	•
13	Self-diagnosis system	•
14	SPC quality control	•
15	Process parameter quick setting	•
16	Auto purge function	•
17	Timing heating function	•

HYDRAULIC UNIT		
1	Servo energy saving hydraulic system	•
2	Low pressure protection	•
3	Boost clamping	•
4	Oil level indicator and oil temperature detection	•
5	Efficient hydraulic oil cooler	•
6	Charging digital ratio back pressure	•
7	Mightiness iron remover	•
8	Hydraulic mesh suction filter (≤260T)	•
9	Hydraulic suction filter clogging sensor (≥320T)	•
OTHER UNIT		
1	Borche standard VI color	•
2	Power socket	•
3	Adjustable level pads	•
4	Without hopper	•
5	With hopper slide	•
6	Tool box	•
7	Standard spare parts	•

OPTIONAL FEATURES

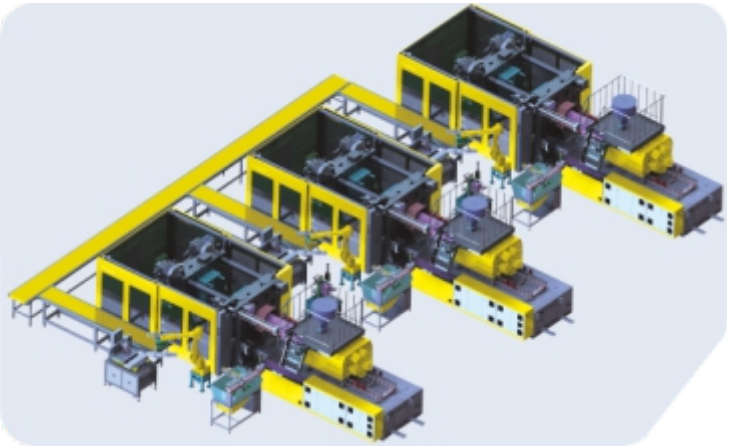
SAFETY UNIT		
1	CE Safety Standard	•
2	Main power switch with rotation handle	•
INJECTION UNIT		
1	Bi-metallic screw and barrel	•
2	PC screw	•
3	Extended nozzle	•
4	Self-seal shut-off nozzle (hydraulic/penumatic)	•
5	Spring type shut- off nozzle	•
6	Ceramic heater band	•
7	Temperature control of hooper feed throat	•
8	Carriage transducer	•
9	V/P switch for mold pressure	•
10	Stainless hopper	•
11	Intelligent ejection and anti-leakage function	•
CLAMPING UNIT		
1	Multiple sets of hydraulic core pulling	•
2	Multiple sets of penumatic core pulling	•
3	Hydraulic unscrewing	•
4	Electric unscrewing	•
5	Multiple sets of air blast	•
6	Enlarged mold thickness	•
7	Mold locking ring with tailored size	•
8	Graphite copper bush on moving platen	•
9	Photo sensor for product drop detector(≤320T)	•
10	Water manifold	•
11	Water distributor	•
12	Mold platen heat insulation board	•
13	Manual centralized lubrication for rear platen	•

CONTROL UNIT		
1	Hot runner control by program, comply with EU14	•
2	Robot interface, comply with EU12/EU67	•
3	Core pulling electric interface, comply with EU13	•
4	UPS power supply	•
5	Pneumatic-injection electrical interface	•
6	Cavity pressure detection electrical interface	•
7	Energy meter	•
8	Phase loss or phase failure protection for motor	•
9	Specified power and voltage	•
10	External voltage transformer	•
11	Heater band leakage detection	•
12	Four color alarm light	•
13	Extra sockets	•
14	Power stablizer	•
15	Mold ejector backward signal	•
INTELLIGENT EDGE TERMINAL(IMEC)		
1	Temporary authorization of PlasCloud App, basic version	•
2	Machine dashboard: status.cycle time and output, etc.	•
3	HMI: M2M & M2H interconnection	•
4	Process control: real-time setting, history setting	•
5	Remote support: process parameter, parameter setting	•
6	Machine health self-diagnosis	•

Intelligent Unmanned IMM Factory



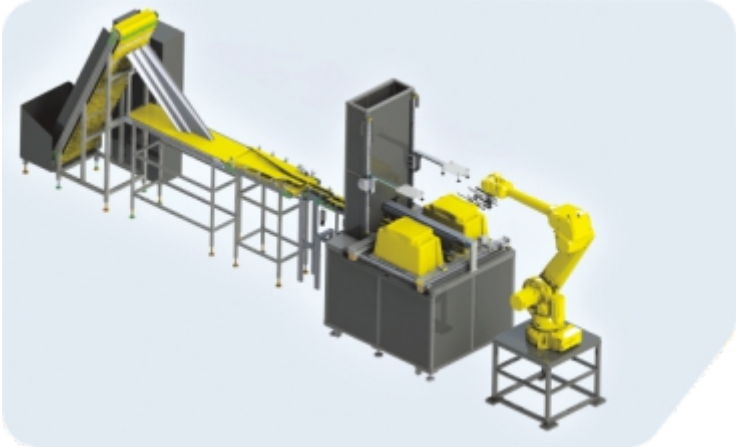
01 Factory Layout- Borche specializes in intelligent IMM factory design.Many intelligent factory cases are carried out worldwide in IMM industry.



02 Flexible Automation -360° visual detection, robot operation, automatic assembling, parts insert, polishing and deburring...

Visual Detective System

Robot Application (part pick-up, casting insert, assembling, stacking, deburring, degating)



03 Intelligent Logistics- AGV, rolling line, automatic packing, wrapper.

