

BORCHE

All information in the brochures is general ones, which is not contractual contents.
Borche reserves the right of any change without prior notice.



Mar 2021

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



Website



Wechat

Brand New Interconnected Bi Series

Inter-Connected IMM Redefines Innovation,
Science and Technology

BORCHE Bi

Advantage

1 Interconnected

2 Modular design

3 Rigidity enhancement

4 Performance upgrade

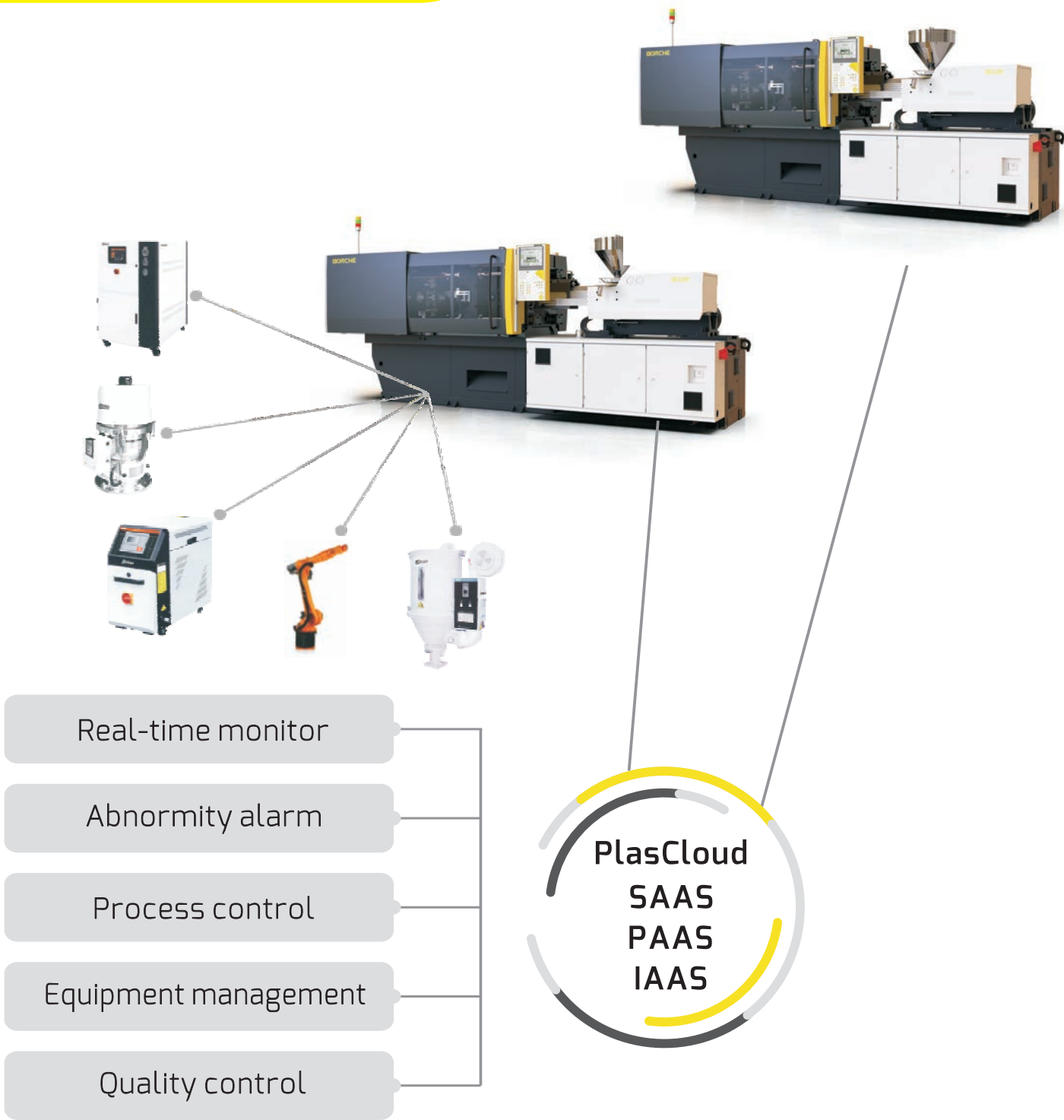


Technology patent certification

One type double layer movable platen structure
One type injection molding machine frame base
One type adjustable computer operating box structure
Injection molding machine and its machine toggle clamping mechanism
One type fixed platen of injection molding machine
One type anti oil leakage structure for mold adjustment hydraulic system
One type gap adjustment mechanism of injection molding machine
Mobile seat, mold locking device and injection molding machine

Patent No.: 201621204053.6
Patent No.: 201621302443.7
Patent No.: 201721251433.X
Patent No.: 201721926907.6
Patent No.: 201720275764.0
Patent No.: 201820099568.7
Patent No.: 201820098030.4
Patent No.: 201910842302.6

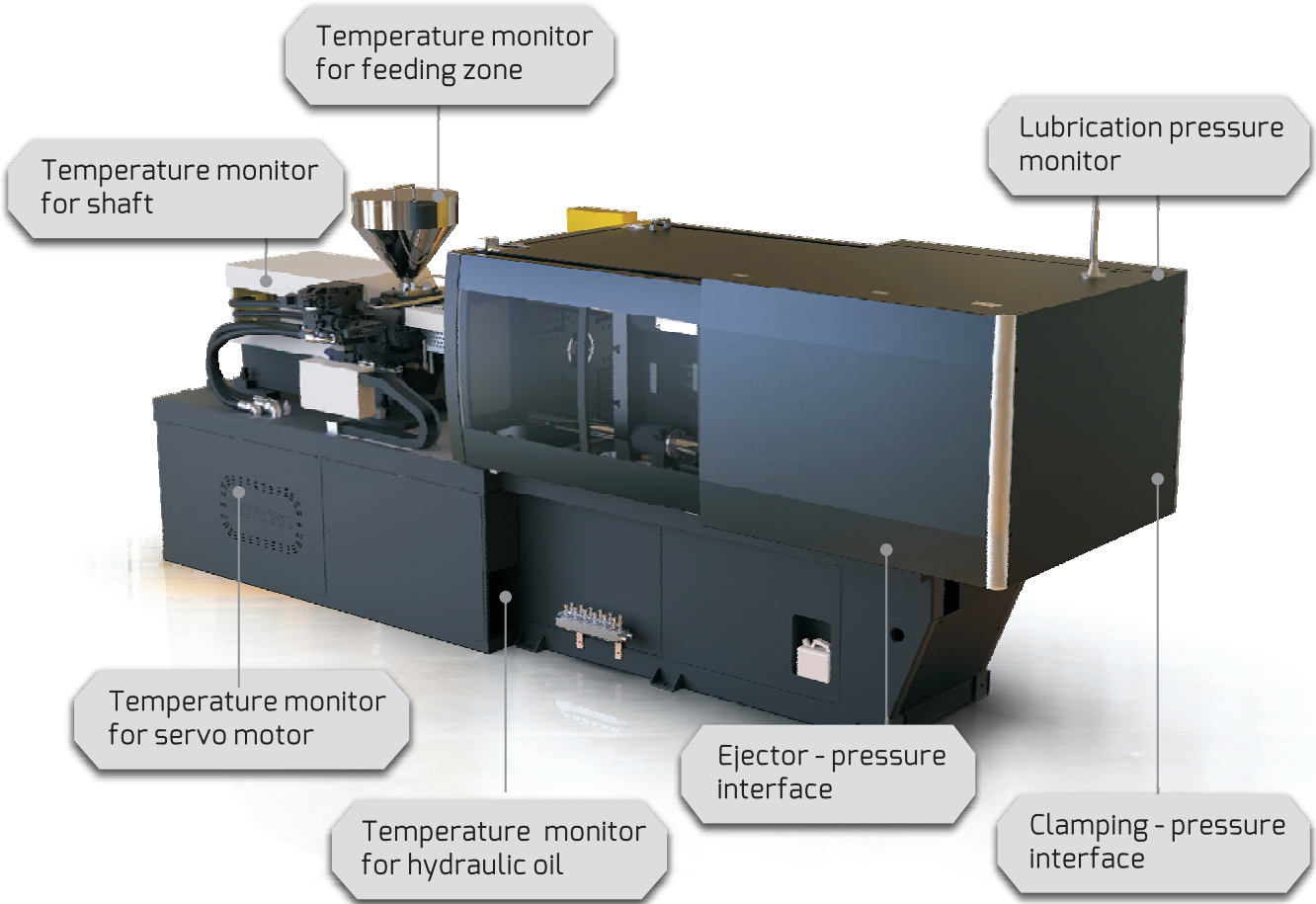
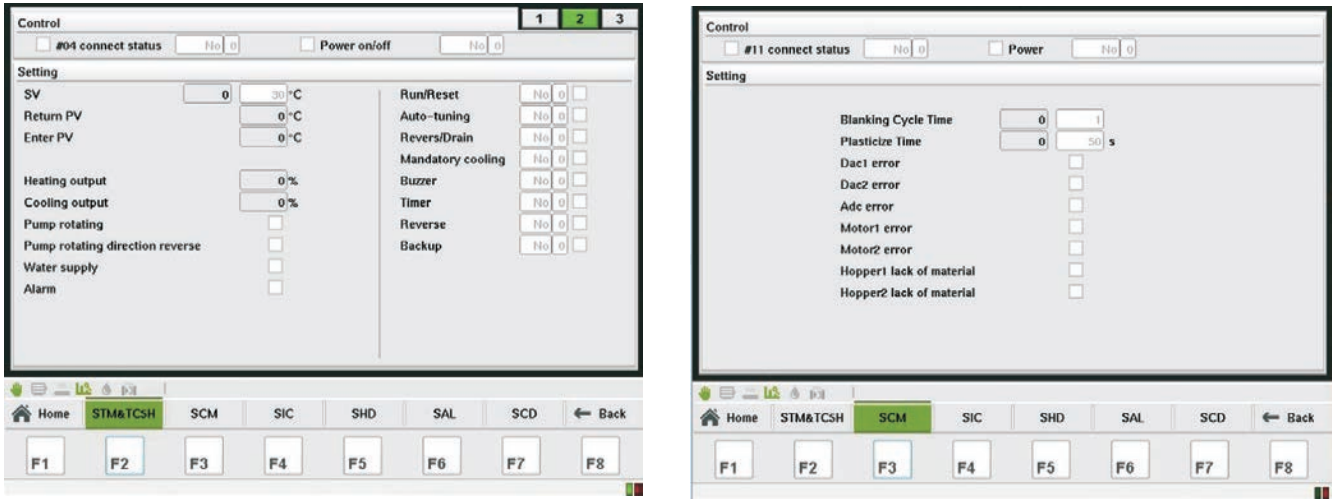




Bi series is able to connect peripheral equipment, and realize two-way data communication, which integrates the information of peripheral equipment into machine controller.

The machine is equipped with different interface for data collection and communication, uploading machine real status, technical parameters, and status of peripheral equipment to PlasCloud platform.

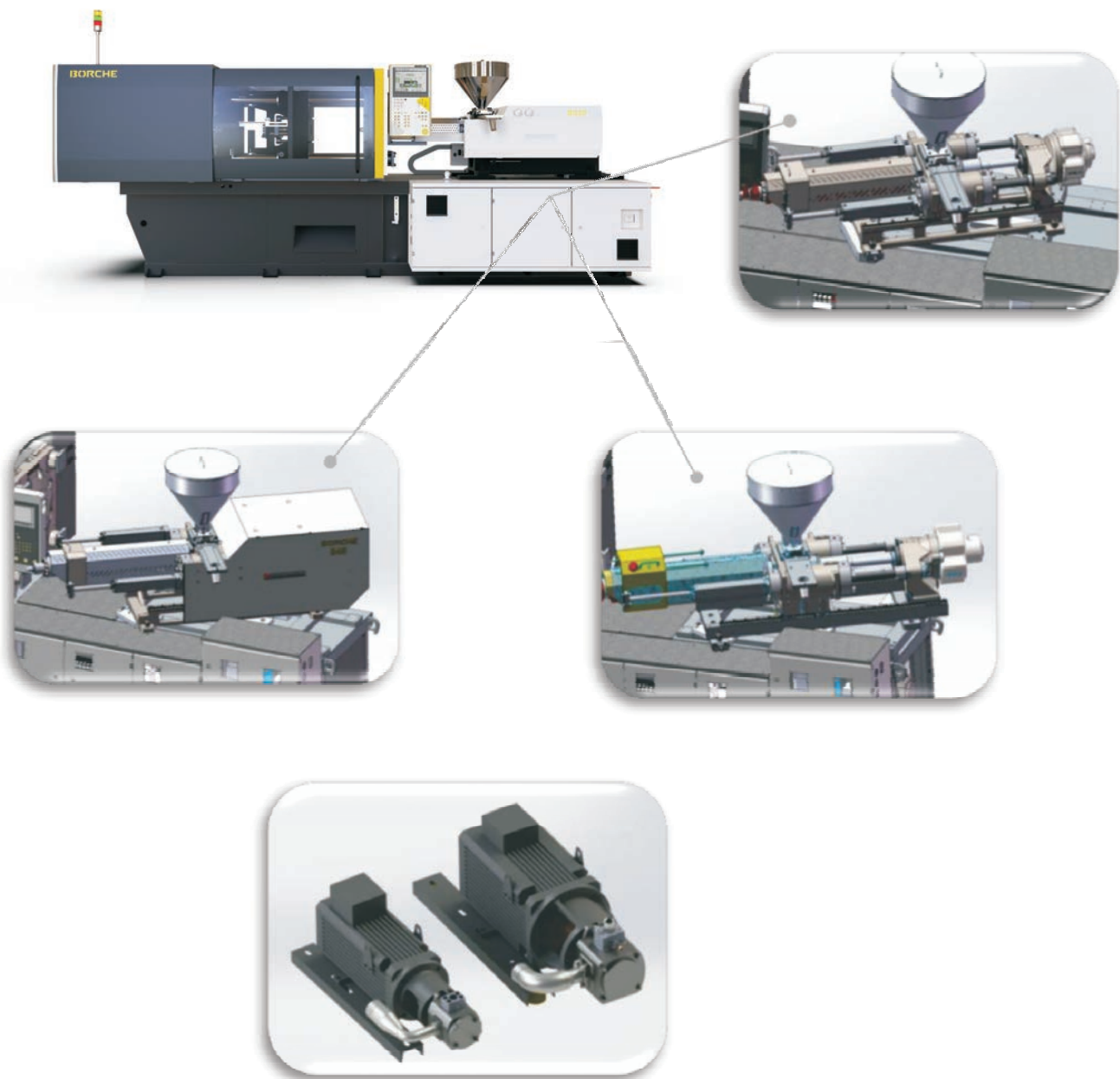
Peripheral equipment interface



Bi series is equipped with various sensors and interfaces. More can be updated.

Modular Design

BORCHE

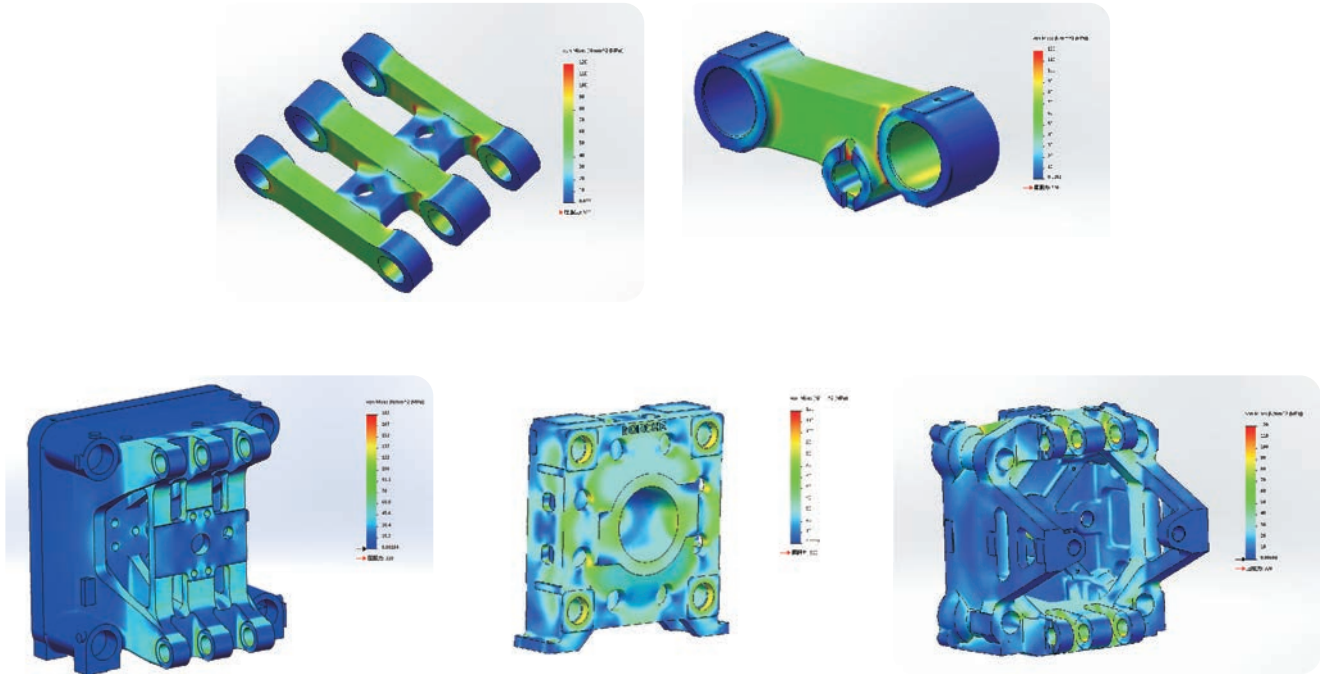
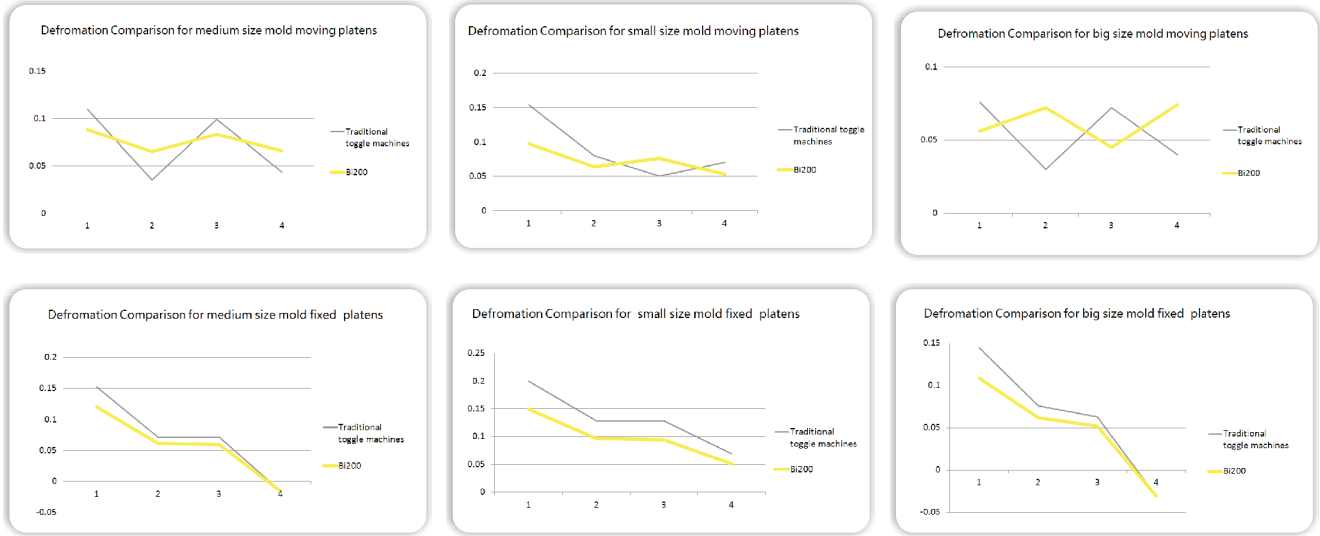


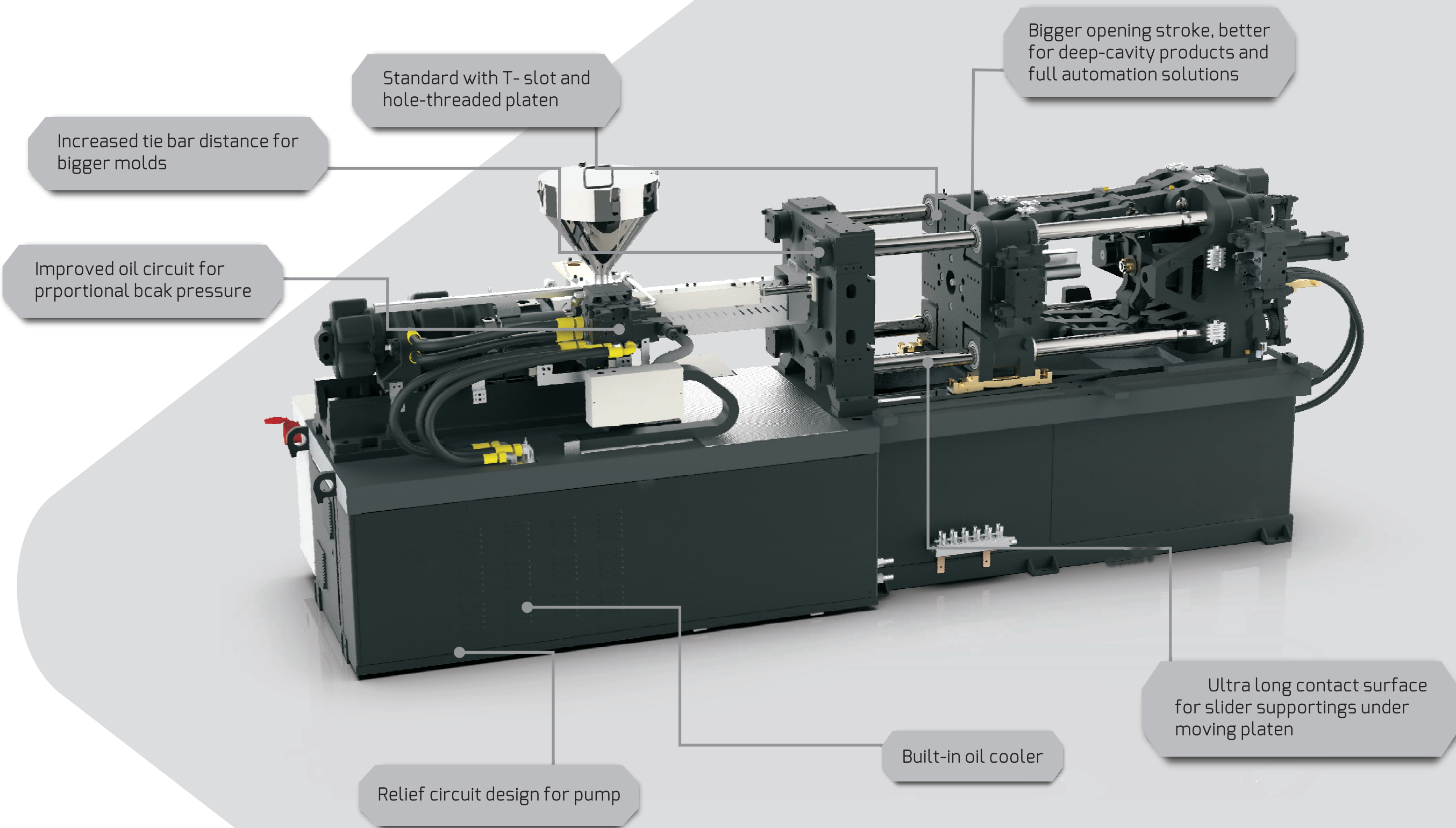
Machine with modular design, meet different needs flexibly;
Optional injection units to cover bigger range of injection volume;
Both standard power system and optional enlarged one stage power system are available;
Optional swing injection unit, for easier screw and barrel maintenance;
Spare installation places for sockets.

Improved Rigidity

BORCHE

Optimized clamping structure to strengthen clamping unit integral rigidity.





Description

BORCHE

Description International Class NO.	Unit	Bi90 255/90			Bi130 390/130			Bi160 630/160			Bi200 850/200			Bi260 1360/260				Bi320 2240/320				Bi400 3260/400				Bi500 3920/500			
INJECTION UNIT																													
Screw Diameter	mm	30	35	40	35	40	45	40	45	50	45	50	60	50	55	60	70	60	65	70	80	70	75	80	90	75	80	85	95
Shot Volume	cm³	120	163	213	182	238	302	270	341	422	389	481	692	589	712	848	1154	989	1161	1346	1759	1539	1767	2010	2544	1877	2136	2411	3012
Shot Weight(PS)	g	109	148	194	166	217	275	246	310	384	354	438	630	536	648	772	1050	900	1057	1225	1601	1400	1608	1829	2315	1708	1944	2194	2741
Shot rate(PS)	g/s	80	109	142	105	137	174	134	170	210	161	219	287	183	221	263	358	293	343	398	520	357	410	466	590	413	470	530	662
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	22.9	27.2	37.0	31.7	37.3	43.2	56.5	49.4	56.7	64.5	81.7	60.2	68.6	77.4	96.7
Injection Pressure	Mpa	252	185	142	240	183	145	235	185	150	218	176	123	232	191	161	118	226	193	166	127	212	184	162	128	209	184	163	130
Screw L/D Ratio	L/D	24	20.5	18	23.5	20.5	18	23	20.5	18.5	23	21	17	25	22.7	21	18	24.5	22.7	21	18.5	24	22.7	21	19	24	22.5	21	19
Injection Stroke	mm	170			190			215			245			300				350				400				425			
Injection Rotary Speed Max	rpm	265			240			265			190			185				185				165				165			
NozzleC ontact Force	KN	30			30			30			30			40				70				80				80			
Nozzle Stroke	mm	250			250			295			325			375				390				405				450			
CLAMPING UNIT																													
Clamping Force	KN	900			1300			1600			2000			2600				3200				4000				5000			
Opening Stroke	mm	330			370			430			510			550				650				710				820			
Platen Size	mm × mm	560 × 560			625 × 625			690 × 690			770 × 770			850 × 850				990 × 990				1080 × 1080				1240 × 1240			
Space btw. Tie Bars	mm × mm	360 × 360			410 × 410			470 × 470			530 × 530			580 × 580				680 × 680				730 × 730				840 × 840			
Daylight max	mm	730			820			950			1060			1160				1330				1440				1670			
Mold-Thickness(min-max)	mm	130- 400			145-450			160-520			180-550			200-610				250-680				260-730				300-850			
Ejection Stroke	mm	100			120			140			150			180				180				205				250			
Ejector Force	KN	34.4			34.4			42			49.5			77.3				77.3				111.3				111.3			
Ejector Pin Hole	unit	4+1			4+1			4+1			4+4+1			8+4+1				8+4+1				8+4+1				8+4+1			
POWERUNIT																													
System Pressure	Mpa	17. 5			17.5			17.5			17.5			17.5				17.5				17.5				17.5			
Pump Motor	KW	11			15			18.5			22			30				45				30+22				37+22			
Heating Capacity	KW	6.5			8.8			9.6			10.4			16.2				18.5				24.5				31.7			
No.of Heater Zones	unit	4			4			5			5			6				6				6				6			
GENERAL UNIT																													
Oil Tank Capacity	L	160			200			230			270			340				530				610				690			
Machine Dimensions	m × m × m	4.35×1.29×1.75			4.55×1.35×1.75			5.1×1.45×1.94			5.65×1.62×2			6.37×1.67 ×2.1				7.14×1.88×2.13				7.93×2×2.13				8.52×2.15×2.21			
Machine Weight	KG	3500			4000			5000			7000			8700				12000				15000				19000			

The specifcation above is only for reference. No further notice of any change in specifcation resulting from technical upgrading.

BORCHE

DESCRIPTION

International Class NO.	UNIT	Bi90
-------------------------	------	------

INJECTION UNIT		255/90		
Screw Diameter	mm	30	35	40
Shot Volume	cm ³	120	163	213
Shot Weight(PS)	g	109	148	194
Shot rate(PS)	g/s	80	109	142
Shot Weight(PS)	OZ	3.9	5.2	6.8
Injection Pressure	Mpa	252	185	142
Screw L/D Ratio	L/D	24	20.5	18
Injection Stroke	mm	170		
Injection Rotary Speed Max	rpm	265		
Nozzle Contact Force	KN	30		
Nozzle Stroke	mm	250		

CLAMPING UNIT

Clamping Force	KN	900
Opening Stroke	mm	330
Platen Size	mm × mm	560 × 560
Space btw. Tie Bars	mm × mm	360 × 360
Daylight max	mm	730
Mold-Thickness(min-max)	mm	130- 400
Ejection Stroke	mm	100
Ejector Force	KN	34.4
Ejector Pin Hole	unit	4+1

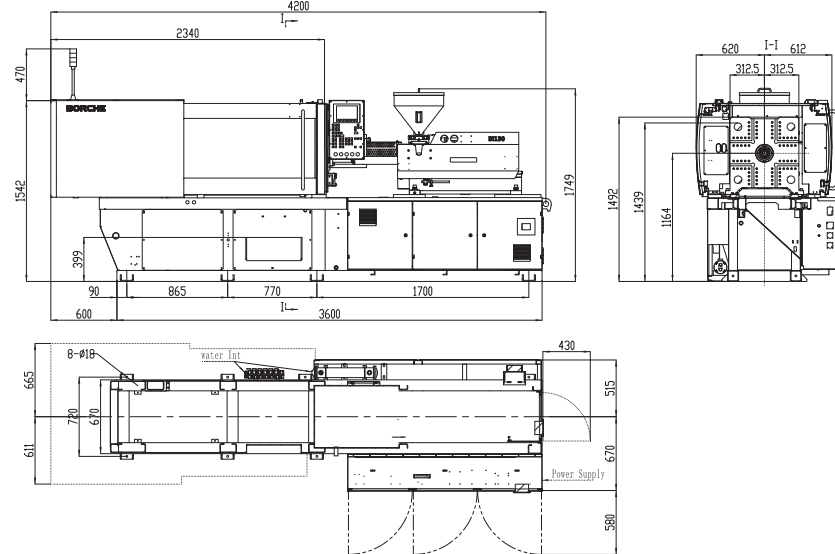
POWERUNIT

System Pressure	Mpa	17.5
Pump Motor	KW	11
Heating Capacity	KW	6.5
No. of Heater Zones	unit	4

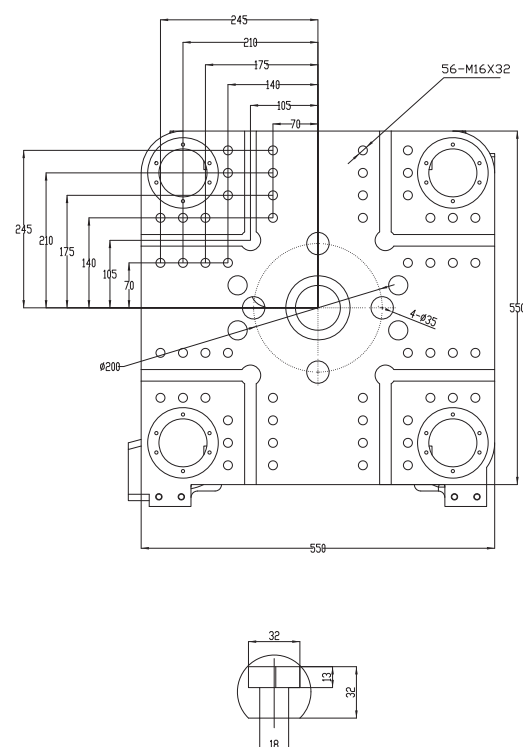
GENERAL UNIT

Oil Tank Capacity	L	160
Machine Dimensions	m × m × m	4.35×1.29×1.75
Machine Weight	KG	3500

Appearance and Installation Dimensions



Mold Platen Drawing



Bi130

BORCHE

DESCRIPTION

International Class NO. UNIT	Bi130
------------------------------	-------

INJECTION UNIT		390/130		
Screw Diameter	mm	35	40	45
Shot Volume	cm ³	182	238	302
Shot Weight(P5)	g	166	217	275
Shot rate(P5)	g/s	105	137	174
Shot Weight(P5)	OZ	5.8	7.6	9.7
Injection Pressure	Mpa	240	183	145
Screw L/D Ratio	L/D	23.5	20.5	18
Injection Stroke	mm	190		
Injection Rotary Speed Max	rpm	240		
Nozzle Contact Force	KN	30		
Nozzle Stroke	mm	250		

CLAMPING UNIT

Clamping Force	KN	1300
Opening Stroke	mm	370
Platen Size	mm × mm	625 × 625
Space btw. Tie Bars	mm × mm	410 × 410
Daylight max	mm	820
Mold-Thickness(min-max)	mm	145-450
Ejection Stroke	mm	120
Ejector Force	KN	34.4
Ejector Pin Hole	unit	4+1

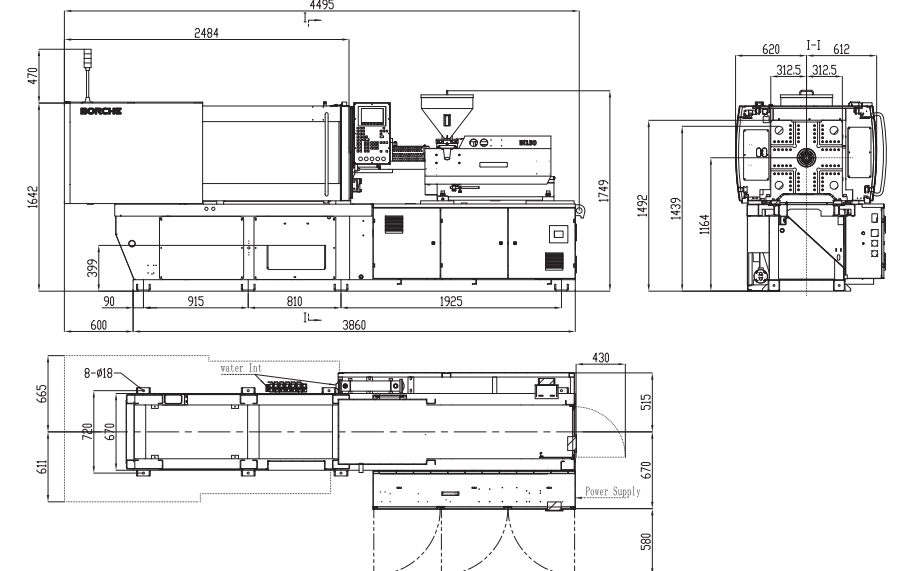
POWERUNIT

System Pressure	Mpa	17.5
Pump Motor	KW	15
Heating Capacity	KW	8.8
No.of Heater Zones	unit	4

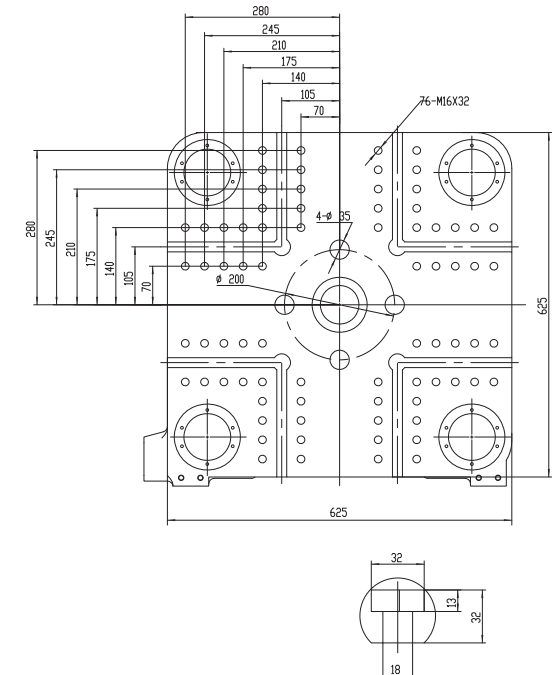
GENERAL UNIT

Oil Tank Capacity	L	200
Machine Dimensions	m × m × m	4.55×1.35×1.75
Machine Weight	KG	4000

Appearance and Installation Dimensions



Mold Platen Drawing



BORCHE

DESCRIPTION

International Class NO.	UNIT	Bi160
-------------------------	------	-------

INJECTION UNIT		630/160		
Screw Diameter	mm	40	45	50
Shot Volume	cm ³	270	341	422
Shot Weight(PS)	g	246	310	384
Shot rate(PS)	g/s	134	170	210
Shot Weight(PS)	OZ	8.7	10.9	13.5
Injection Pressure	Mpa	235	185	150
Screw L/D Ratio	L/D	23	20.5	18.5
Injection Stroke	mm	215		
Injection Rotary Speed Max	rpm	265		
Nozzle Contact Force	KN	30		
Nozzle Stroke	mm	295		

CLAMPING UNIT

Clamping Force	KN	1600
Opening Stroke	mm	430
Platen Size	mm × mm	690 × 690
Space btw. Tie Bars	mm × mm	470 × 470
Daylight max	mm	950
Mold-Thickness(min-max)	mm	160-520
Ejection Stroke	mm	140
Ejector Force	KN	42
Ejector Pin Hole	unit	4+1

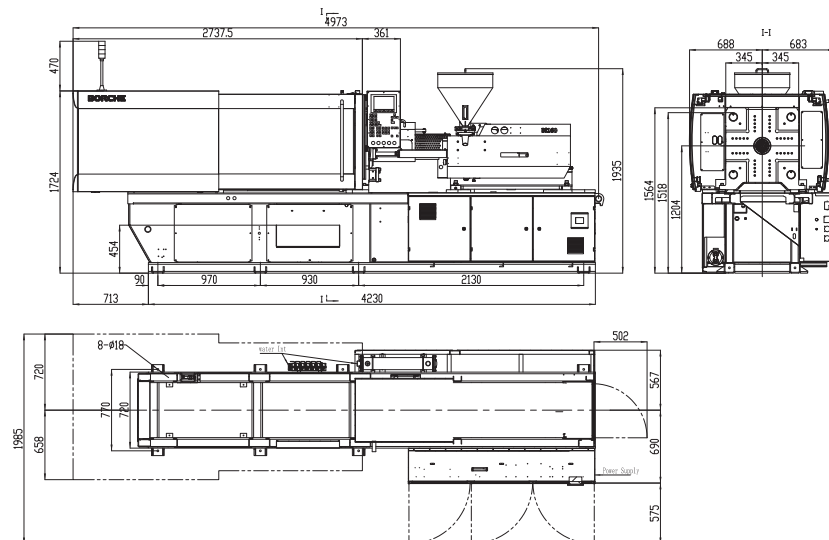
POWERUNIT

System Pressure	Mpa	17.5
Pump Motor	KW	18.5
Heating Capacity	KW	9.6
No.of Heater Zones	unit	5

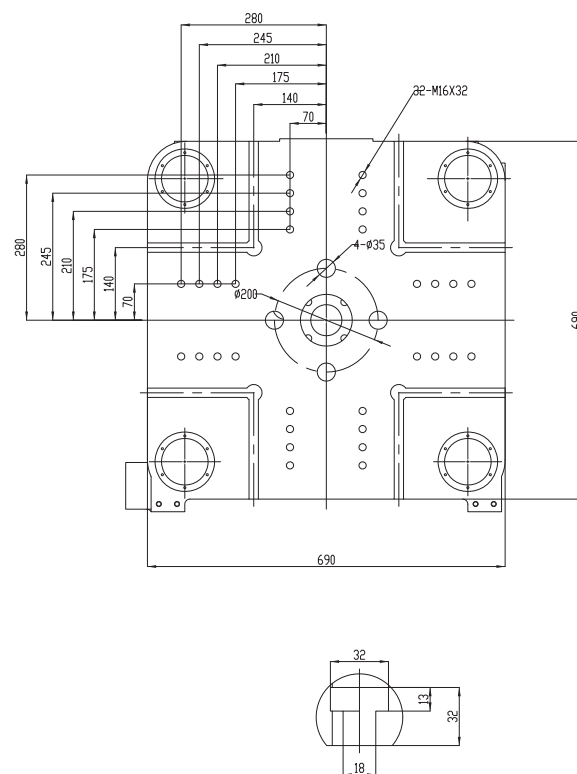
GENERAL UNIT

Oil Tank Capacity	L	230
Machine Dimensions	m × m × m	5.1×1.45×1.94
Machine Weight	KG	5000

Appearance and Installation Dimensions



Mold Platen Drawing



Bi200

BORCHE

DESCRIPTION

International Class NO.	UNIT	Bi200
-------------------------	------	-------

INJECTION UNIT		850/200		
Screw Diameter	mm	45	50	60
Shot Volume	cm ³	389	481	692
Shot Weight(PS)	g	354	438	630
Shot rate(PS)	g/s	161	219	287
Shot Weight(PS)	OZ	12.5	15.4	22.2
Injection Pressure	Mpa	218	176	123
Screw L/D Ratio	L/D	23	21	17
Injection Stroke	mm	245		
Injection Rotary Speed Max	rpm	190		
NozzleC ontact Force	KN	30		
Nozzle Stroke	mm	325		

CLAMPING UNIT

Clamping Force	KN	2000
Opening Stroke	mm	510
Platen Size	mm × mm	770 × 770
Space btw. Tie Bars	mm × mm	530 × 530
Daylight max	mm	1060
Mold-Thickness(min-max)	mm	180-550
Ejection Stroke	mm	150
Ejector Force	KN	49.5
Ejector Pin Hole	unit	4+4+1

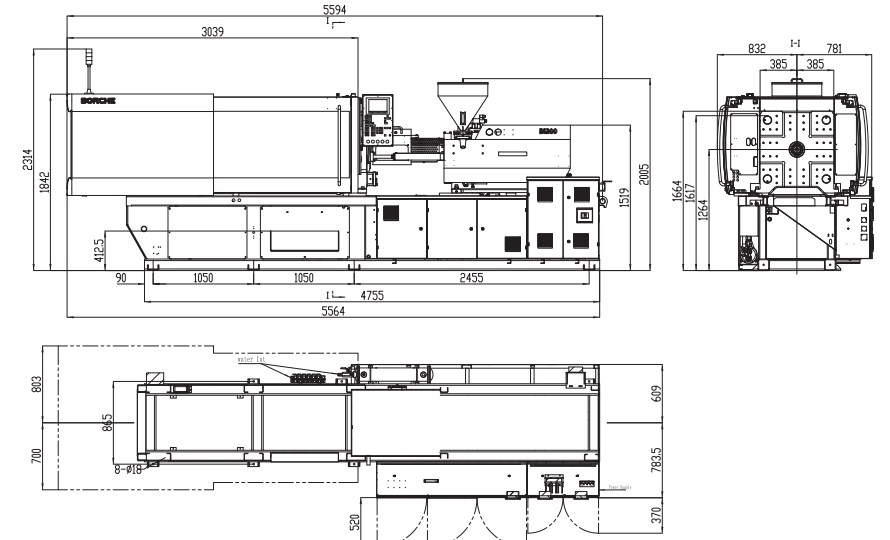
POWERUNIT

System Pressure	Mpa	17.5
Pump Motor	KW	22
Heating Capacity	KW	10.4
No.of Heater Zones	unit	5

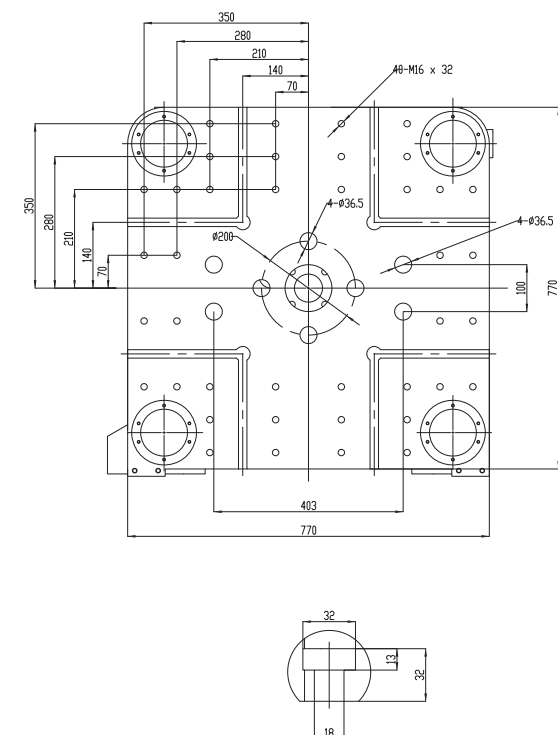
GENERAL UNIT

Oil Tank Capacity	L	270
Machine Dimensions	m × m × m	5.65×1.62×2
Machine Weight	KG	7000

Appearance and Installation Dimensions



Mold Platen Drawing



Bi260

BORCHE

Bi320

BORCHE

DESCRIPTION

International Class NO. UNIT Bi260

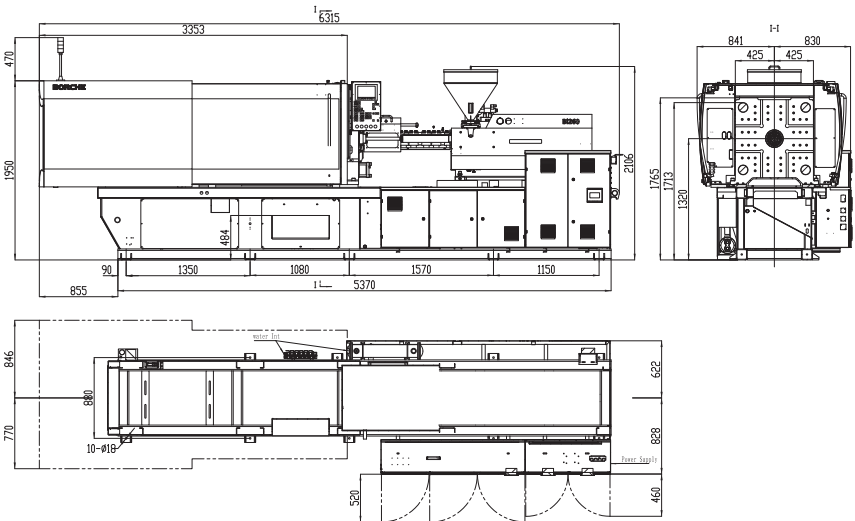
INJECTION UNIT		1360/260				
Screw Diameter	mm	50	55	60	70	
Shot Volume	cm ³	589	712	848	1154	
Shot Weight(PS)	g	536	648	772	1050	
Shot rate(PS)	g/s	183	221	263	358	
Shot Weight(PS)	OZ	18.9	22.9	27.2	37.0	
Injection Pressure	Mpa	232	191	161	118	
Screw L/D Ratio	L/D	25	22.7	21	18	
Injection Stroke	mm	300				
Injection Rotary Speed Max	rpm	185				
NozzleC ontact Force	KN	40				
Nozzle Stroke	mm	375				

CLAMPING UNIT			
Clamping Force	KN	2600	
Opening Stroke	mm	550	
Platen Size	mm × mm	850 × 850	
Space btw. Tie Bars	mm × mm	580 × 580	
Daylight max	mm	1160	
Mold-Thickness(min-max)	mm	200-610	
Ejection Stroke	mm	180	
Ejector Force	KN	77.3	
Ejector Pin Hole	unit	8+4+1	

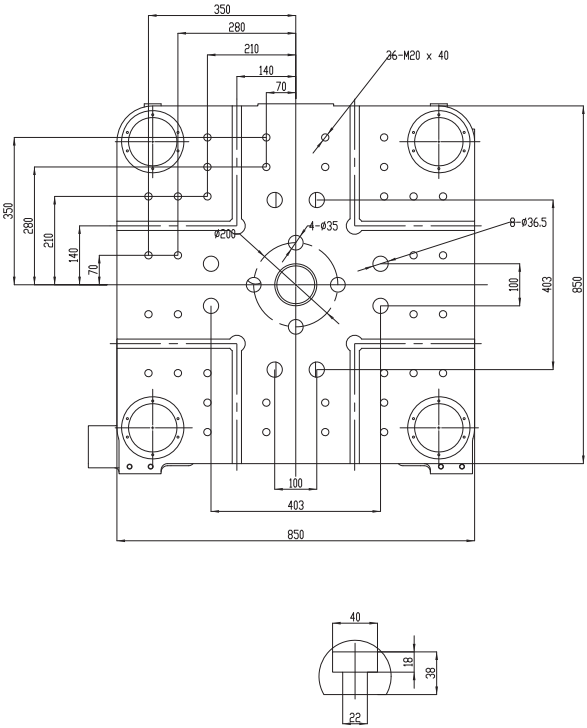
POWERUNIT			
System Pressure	Mpa	17.5	
Pump Motor	KW	30	
Heating Capacity	KW	16.2	
No.of Heater Zones	unit	6	

GENERAL UNIT			
Oil Tank Capacity	L	340	
Machine Dimensions	m × m × m	6.37×1.67 ×2.1	
Machine Weight	KG	8700	

Appearance and Installation Dimensions



Mold Platen Drawing



DESCRIPTION

International Class NO. UNIT Bi320

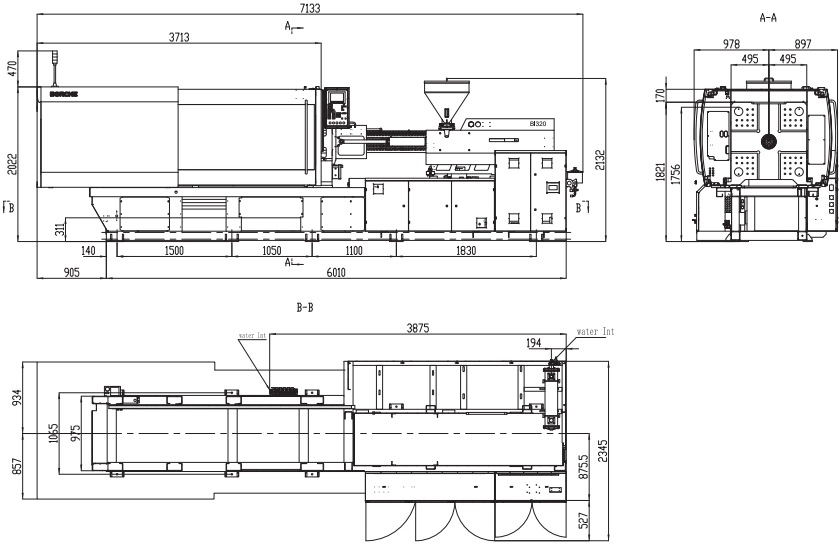
INJECTION UNIT		2240/320				
Screw Diameter	mm	60	65	70	80	
Shot Volume	cm ³	989	1161	1346	1759	
Shot Weight(PS)	g	900	1057	1225	1601	
Shot rate(PS)	g/s	293	343	398	520	
Shot Weight(PS)	OZ	31.7	37.3	43.2	56.5	
Injection Pressure	Mpa	226	193	166	127	
Screw L/D Ratio	L/D	24.5	22.7	21	18.5	
Injection Stroke	mm	350				
Injection Rotary Speed Max	rpm	185				
NozzleC ontact Force	KN	70				
Nozzle Stroke	mm	390				

CLAMPING UNIT			
Clamping Force	KN	3200	
Opening Stroke	mm	650	
Platen Size	mm × mm	990 × 990	
Space btw. Tie Bars	mm × mm	680 × 680	
Daylight max	mm	1330	
Mold-Thickness(min-max)	mm	250-680	
Ejection Stroke	mm	180	
Ejector Force	KN	77.3	
Ejector Pin Hole	unit	8+4+1	

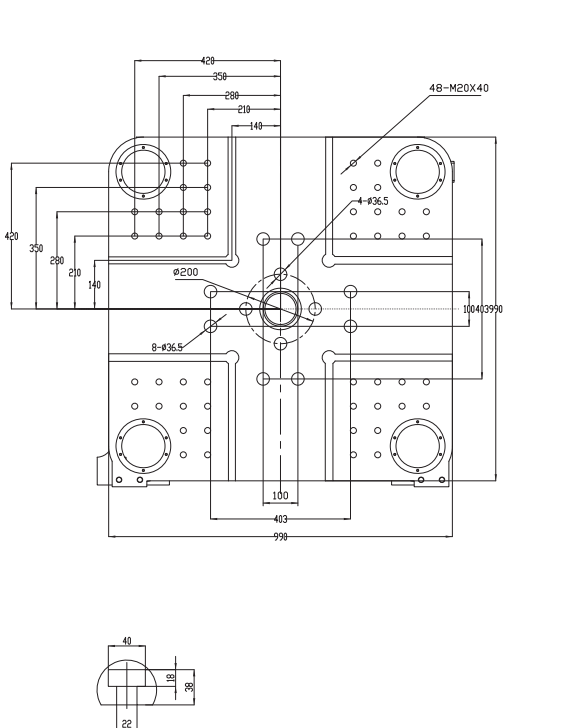
POWERUNIT			
System Pressure	Mpa	17.5	
Pump Motor	KW	45	
Heating Capacity	KW	18.5	
No.of Heater Zones	unit	6	

GENERAL UNIT			
Oil Tank Capacity	L	530	
Machine Dimensions	m × m × m	7.14×1.88×2.13	
Machine Weight	KG	12000	

Appearance and Installation Dimensions



Mold Platen Drawing



DESCRIPTION

International Class NO. UNIT Bi400

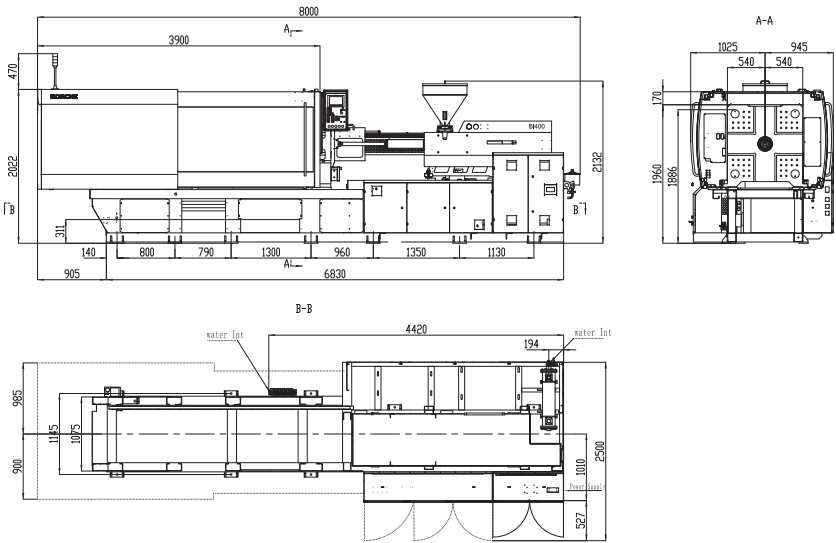
INJECTION UNIT		3260/400				
Screw Diameter	mm	70	75	80	90	
Shot Volume	cm ³	1539	1767	2010	2544	
Shot Weight(PS)	g	1400	1608	1829	2315	
Shot rate(PS)	g/s	357	410	466	590	
Shot Weight(PS)	OZ	49.4	56.7	64.5	81.7	
Injection Pressure	Mpa	212	184	162	128	
Screw L/D Ratio	L/D	24	22.7	21	19	
Injection Stroke	mm	400				
Injection Rotary Speed Max	rpm	165				
NozzleC ontact Force	KN	80				
Nozzle Stroke	mm	405				

CLAMPING UNIT			
Clamping Force	KN	4000	
Opening Stroke	mm	710	
Platen Size	mm × mm	1080 × 1080	
Space btw. Tie Bars	mm × mm	730 × 730	
Daylight max	mm	1440	
Mold-Thickness(min-max)	mm	260-730	
Ejection Stroke	mm	205	
Ejector Force	KN	111.3	
Ejector Pin Hole	unit	8+4+1	

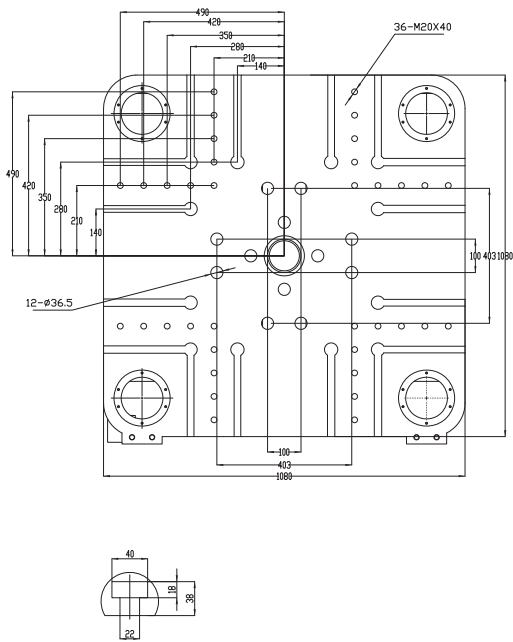
POWERUNIT			
System Pressure	Mpa	17.5	
Pump Motor	KW	30+22	
Heating Capacity	KW	24.5	
No.of Heater Zones	unit	6	

GENERAL UNIT			
Oil Tank Capacity	L	610	
Machine Dimensions	m × m × m	7.93×2×2.13	
Machine Weight	KG	15000	

Appearance and Installation Dimensions



Mold Platen Drawing



DESCRIPTION

International Class NO. UNIT Bi500

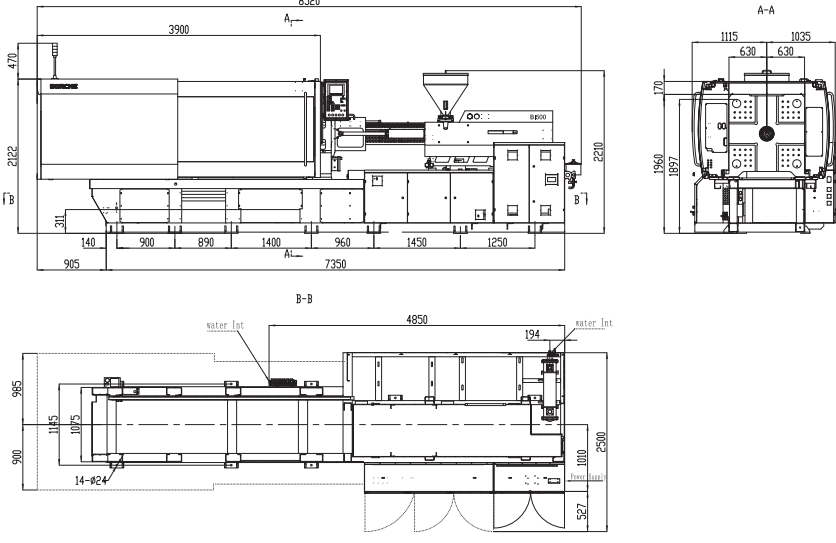
INJECTION UNIT		3920/500				
Screw Diameter	mm	75	80	85	95	
Shot Volume	cm ³	1877	2136	2411	3012	
Shot Weight(PS)	g	1708	1944	2194	2741	
Shot rate(PS)	g/s	413	470	530	662	
Shot Weight(PS)	OZ	60.2	68.6	77.4	96.7	
Injection Pressure	Mpa	209	184	163	130	
Screw L/D Ratio	L/D	24	22.5	21	19	
Injection Stroke	mm	425				
Injection Rotary Speed Max	rpm	165				
NozzleC ontact Force	KN	80				
Nozzle Stroke	mm	450				

CLAMPING UNIT			
Clamping Force	KN	5000	
Opening Stroke	mm	820	
Platen Size	mm × mm	1240 × 1240	
Space btw. Tie Bars	mm × mm	840 × 840	
Daylight max	mm	1670	
Mold-Thickness(min-max)	mm	300-850	
Ejection Stroke	mm	250	
Ejector Force	KN	111.3	
Ejector Pin Hole	unit	8+4+1	

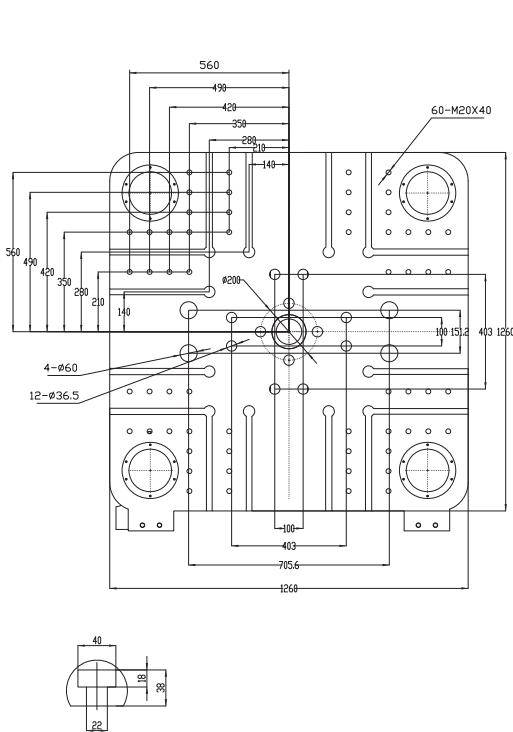
POWERUNIT			
System Pressure	Mpa	17.5	
Pump Motor	KW	37+22	
Heating Capacity	KW	31.7	
No.of Heater Zones	unit	6	

GENERAL UNIT			
Oil Tank Capacity	L	690	
Machine Dimensions	m × m × m	8.52×2.15×2.21	
Machine Weight	KG	19000	

Appearance and Installation Dimensions



Mold Platen Drawing



Clamping Unit Dimension

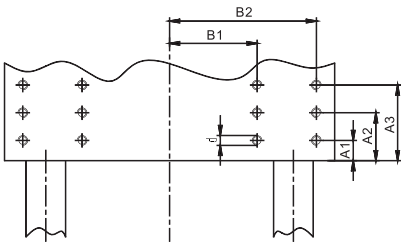
	Bi90	Bi130	Bi160	Bi200	Bi260	Bi320	Bi400	Bi500
A1	17.5	35	35	35	35	35	35	35
A2	52.5	105	105	105	175	175	175	175
A3	—	—	—	—	—	—	—	—
B1	140	175	175	175	210	280	350	350
B2	210	280	280	280	350	420	490	490
d	M12	M16	M16	M16	M20	M20	M20	M20

	Bi90	Bi130	Bi160	Bi200	Bi260	Bi320	Bi400	Bi500
A/mm	80	80	90	90	110	110	130	130
B/mm	80	80	95	95	110	110	130	130
C/mm	M8	M8	M8	M8	M10	M10	M10	M10
D/mm	50	50	50	60	70	80	90	90

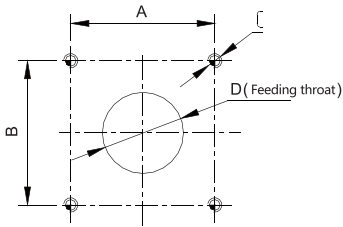
	Bi90	Bi130	Bi160	Bi200	Bi260	Bi320	Bi400	Bi500
A (Opening stroke)	330	370	430	510	550	650	710	820
B (Max mold thickness)	400	450	520	550	340	680	730	850
C (Max mold thickness)	130	145	160	180	200	250	260	300
D (The distance of nozzle extension form fixed platen)	35	35	45	45	45	45	45	50
E (Dia of nozzle hole)	3	3	3	4	4	4	4	5
F (Radius of nozzle tip)	10	10	10	10	10	10	10	10
G Dia of locaing ring	100	125	125	125	160	160	160	160

* : No locating ring available

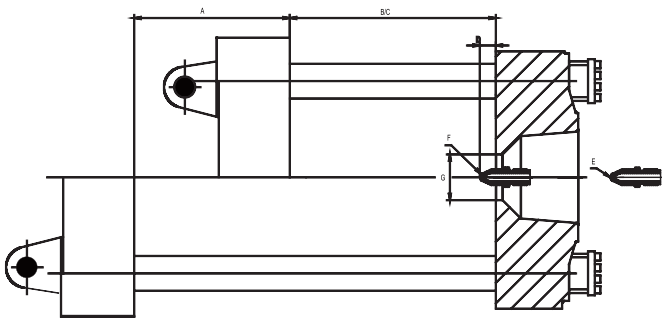
BORCHE



Robot Installation Dimension



Hopper Dryer Installation Dimension



Clamping Unit Schematic Drawing

Features Configuration

BORCHE

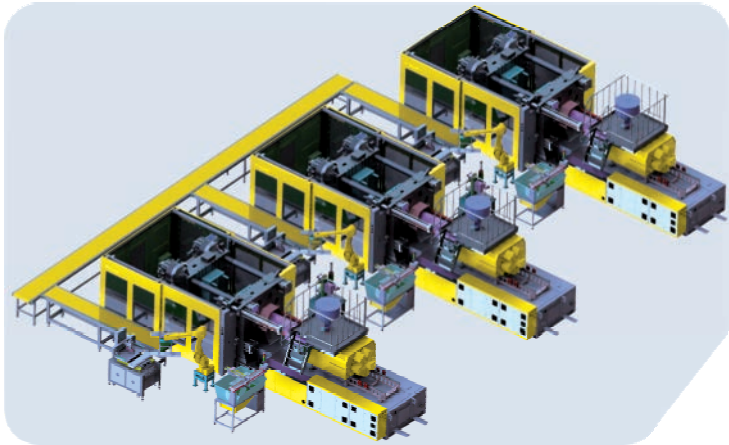
Standard Features

SAFTY UNIT		
1	hydraulic safety lock, China New standard	●
2	full covered design	●
3	double emergency button	●
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	electric lock on nozzle cover	●
7	protection cover on heater band	●
8	liner guide for injection and carriage	●
9	3sizes of screw/barrel available(ABC)	●
10	leakage protection when suckback	●
11	screw RPM sensor	●
12	screw cold start proection	●
13	high torque hydraulic motor	●
14	6 stages of injection, pressure/spspeed ajustable	●
15	6 stages of pressure holding, pressure/spspeed ajustable	●
16	5 stages of plasticizing, pressure/spspeed ajustable	●
17	temp. sensor on hopper throat	●
18	temp. sensor on transmission shaft	●
19	high pressure/temperature tube for cooling ring on hopper throat	●
20	nonslip embossed aluminum sheet	●
21	4 ways of carriage backward	●
CLAMPING UNIT		
1	5points dobule toggle design	●
2	T-slot together with mounting hole	●
3	independent location ring for fixing platen	●
4	strong chrome plated tiebar	●
5	with robot mounting hole	●
6	5 stages of closing, pressure/spspeed ajustable	●
7	5 stages of opening, pressure/spspeed ajustable	●
8	toggle auto grease with end sensor	●
9	with topcover on clamping area (≤260T)	●
10	adjustable mounting feet for moving platen	●
11	abrasion resistance strip	●
12	multi ejection function	●
13	with adjustable ejector backward confirmation switch	●
14	with oil collector on moving platen	●
15	clamping force auto adjustment	●
16	integrated oil sunk with outlet	●
17	mold adjustment by hydraulic motor driven gear	●
18	controller height adjustable	●
19	with hopper (≤260T)	●

HYDRAULIC UNIT		
1	servo motor power	●
2	low pressure protection	●
3	digital back pressure	●
4	pump with oil release function	●
5	one way valve for carriage	●
6	boost clamping	●
7	temperature sensor on servo motor	●
8	oil level indicator and alarm	●
9	efficient hydraulic oil cooler	●
10	oil temp. sensor	●
11	inlet oil net filter (≤260T)	●
12	with inlet ball valve (≤260T)	●
13	inbuilt oil return filter	●
14	self close inlet oil filter (≥320T)	●
15	filter cartridge block alarm (≥320T)	●
16	bypass oil filter (≥320T)	●
17	anti-explosion high pressure tube	●
CONTROL UNIT		
1	Keba controller	●
2	internet connection port	●
3	multi language available	●
4	self diagnosis system	●
5	with SPC function	●
6	process parameter quick setting	●
7	robot interface	●
8	auto purge	●
9	timer heating function	●
10	electric heating proection by fuse or auto switch	●
11	PID programmable barrel heating	●
12	precise position sensor	●
13	with 2G CF card, capable for 200sets of parameter	●
14	parameter lock	●
15	Solid relay temperature setting	●
INTERCONNECTED UNIT		
1	Temporary authorization of OPC-UA/DA	●
2	PlasCloud App, basic version	●
3	Machine Kanban: status, cycle and output,etc.	●
4	Remote view: process parameter, SPC, machine setup	●
5	Machine management: spot check, maintenance, repair	●
6	Report: daily report, monthly report	●
OTHER UNIT		
1	Borche standard VI	●
2	backup socket	●
3	adjustable level pad	●
4	without hopper	●
5	with hopper slide	●
6	with standard tool kit	●
7	with standard spare parts set	●

Optional Functions Of Intelligent Manufacturing:	
1	With Industry 4.0 on IMM, three mold change ways can be realized with mold change platform: one-stop automatic mold change, semi-automatic mold change and manual mold change. IMM can automatically identify mold and acquire parameter of mold change, technique and peripherals. The hole of IMM should be tailored to suit that of the mold change platform and hydraulic clamp. IMM will evaluate the safety of above holes. Safety lock is active when matching signal received. IMM plays a responsible role in mold change platform and hydraulic clamp.
2	IMM controller can display all machines'(peripherals included)operation condition and malfunction alarm. There are eight malfunction alarm interfaces for following peripherals: one robot, two mould temperature controllers, one water cooler, one dryer and all-in-one compact dryer. The communication and alarm function of other peripherals are connected to IMM through external connection cabinet so that intelligent interconnection of IMM and peripherals is built.
3	Plug and play, intelligently inter-connected water cooler operated and controlled in IMM with close-loop connection Intelligent interconnection of IMM and chiller can be operated and controlled by IMM controller. Data is close-loop interconnection.
4	Intelligent interconnection of IMM and mould temperature controller can be operated and controlled by IMM controller. All data is close-loop interconnection.
5	Intelligent interconnection of IMM and all-in-one compact dryer can be operated and controlled by IMM controller. All data is close-loop interconnection.
6	Compression injection molding technique
7	High speed proportional valve for mold open and close and non-contact maglev linear transducer realize real-time monitor
8	Robot connects with IMM in real-time, which reduce the interference of robot, IMM and mold. Robot can be fixed on the top or side of fixed platen according to parts pick requirements
9	Automation system of IMM and peripherals interact with MES management system 1) Order Monitor 2) CProduction Status Display 3) Alarm Monitor 4) Technique Parameter Management 5) Equipment Management 6) Production Report
10	iPHM, IMM Prognoties and Health Management (Equipment Online Doctor) 1) Safe and reliable bidirectional terminal is equipped with built-in firewall and remote VPN connection; various networking is available. Cloud platform connects IMM controller in real-time 2) Data of equipment operation, malfunction alarm and worker operation is collected in real time.IMM data visualization on Cloud Platform is realized. 3) Self diagnose module of failure and performance based one the dynamic data, can reduce the malfunction rate, and improve the equipment performance. 4) Operation and maintenance system connects the on-line management platform of after-sales service. It realizes remote on-line program upgrading, and improves the maintenance efficiency and quality. 5) IMM condition and performance report can be checked through mobile terminal; After-sales service request can be reported via WeChat.
11	Mold Visual Monitor 1) Low pressure mold protection for higher precision and efficiency 2) CAccurate checkup 3) Self-adaption to exterior light change 4) Self-adaption to inaccurate mold open position 5) Real-time record
12	Visual Detective System for surface quality checking 1) Fast detection, detection precision reaches to 0.001mm 2) Defectives check of contamination, color difference, flake, and short injection. 3) Wide application
13	Vision-induced System 1) Accurate positioning 2) Sensitive identification 3) Wide application

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

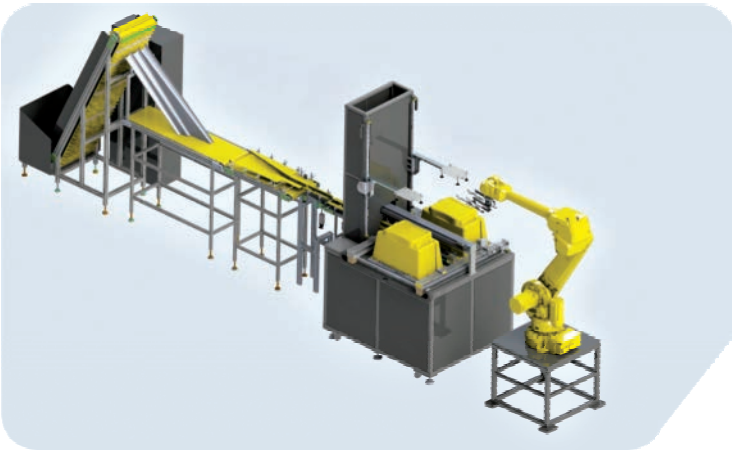


02 Flexible Automation -360° visual detection, robot operation, automatic assembling, parts insert, polishing and deburring...

Visual Detective System



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



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

