

BOLE 伯乐

Injection Moulding Machine

BOLE 伯乐

BL4000EK



NINGBO SHUANGMA MACHINERY INDUSTRY CO.,LTD

PROLOP



Leave you deep impression, Highlighted our advantages

Ningbo Shuangma Machinery Industry Co., Ltd, a wholly-owned subsidiary company of Chenglu Group, is founded in 1998. The company devoted itself to creating the "Swift-horse" (BOLE, Best Machine) in China and even in the world. With more than 12 years struggle and development, Shuangma have become Chinese well-known injection molding machine professional manufacturer, which holds independent R&D ability and produces 30 series, over 100 models precision injection moulding, super-energy saving machines, high-speed machines, full-electric machines and special machines for special materials with the clamping force from 60ton--4000ton. The company undertakes the scientific research projects such as "National Important Torch Program" and "National Important New Product Project"; and designates "National High-Tech Enterprise" by the Chinese Ministry of Science and Technology. Now, the company have listed into "China Injection Molding Machine Special Industry Base", which only 3 key enterprises won this honor in Chinese Injection Molding Machine Industry. "Bole" brand has awarded "Zhejiang Province Well-known Brand", "Zhejiang Province Famous-Brand Product" and "China Export Famous Brand".

Shuangma always insists technological innovation. At present, the company have imported four sets net connected MAZATECH FH-8800 Horizontal Type Flexible Manufacturing System---the unique one in China by now, four sets Toshiba CNC machining centers and 2 sets Mitsubishi Machining Center from Japan. All the machining centers are the world top-class machining equipments. The company have established two provincial level engineering R&D centers, invested 30 million USD to build Shuangma industry zone in 2008 which covers 50,000 m² standard workshops, 20,000 m² modern office building. Through strong R&D strength and quick market response, the company have developing and creating dozens of advanced technology and new products every year. Furthermore, the company have established business strategy: "produce energy saving oriented injection molding machine, implement differentiation competition".

Mean-while, Shuangma has actively carried out ERP information management, 6"S" spot management system and passed ISO9001:2000 International Quality System. The company has established higher requirements as quality standards, set quality management responsibility system and carried out results checking assessment system. From the raw material purchasing to finished products delivery, the company is monitoring all levels and steps, so that achieves highly efficiently operation.

Shuangma company always adheres to the "human-oriented"philosophy, offering a broad development stage, attracting a large number of elites and Chinese best injection molding machine R & D team. They have rich experience of developing and designing a full range of plastic injection molding machines. The manufacture can be tailored to your specific high-end injection molding machines to meet your individual needs.

Strong financial strength supports the best R & D, manufacturing, service, marketing teams, which is committed to manufacturing the highest quality injection molding machines in China. "Creating value for customers" is the common dream and goal of unremitting struggle.



Shuangma Big Events

In 1998, Shuangma Machinery Industry Co.,Ltd. was established.

In 2002, Shuangma put to service the kilo-ton injection molding machine designed by its own R&D.

In 2003, Shuangma was honoured as "Chinese Special Industry Base in injection molding machine"

In 2004, Shuangma got the honour to carry on National High Technology Research and Development Programme 863, established provincial technical centre.

In 2005, Shuangma succeeded in servo energy-saving system with intellectual property, the first super energy-saving servo machine on line.

In 2006, Shuangma was known as "National High-Tech Enterprise" by the Ministry of Science and Technology of PRC.

In 2007, "BOLE" brand won "Zhejiang Well-Known Brand", "Zhejiang Famous-Brand Product"

In 2008, Shuangma industry park invested 2 million RMB was founded and put to running.

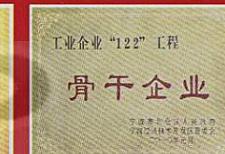
In 2009, Shuangma purchased the most advanced equipment in the world: MAZAK FMS,TOSHIBA , MITSUBISHI, and etc.

In 2009, Shuangma was honoured as "Chinese Top-Ten Plastic Injection Molding Machine Manufacturers"

In 2010, Shuangma issued the third generation super- energy saving servo system machine: EK series with high cost-effective, big technical parameters.

In 2010, Chinese Academy of Sciences and NUAA established at Shuangma Scientific Base specializing in servo system energy-saving program.

In 2011, Shuangma starts its brand year, fully brings in lean management, starts the EK new era, and faces changes of renewing itself.

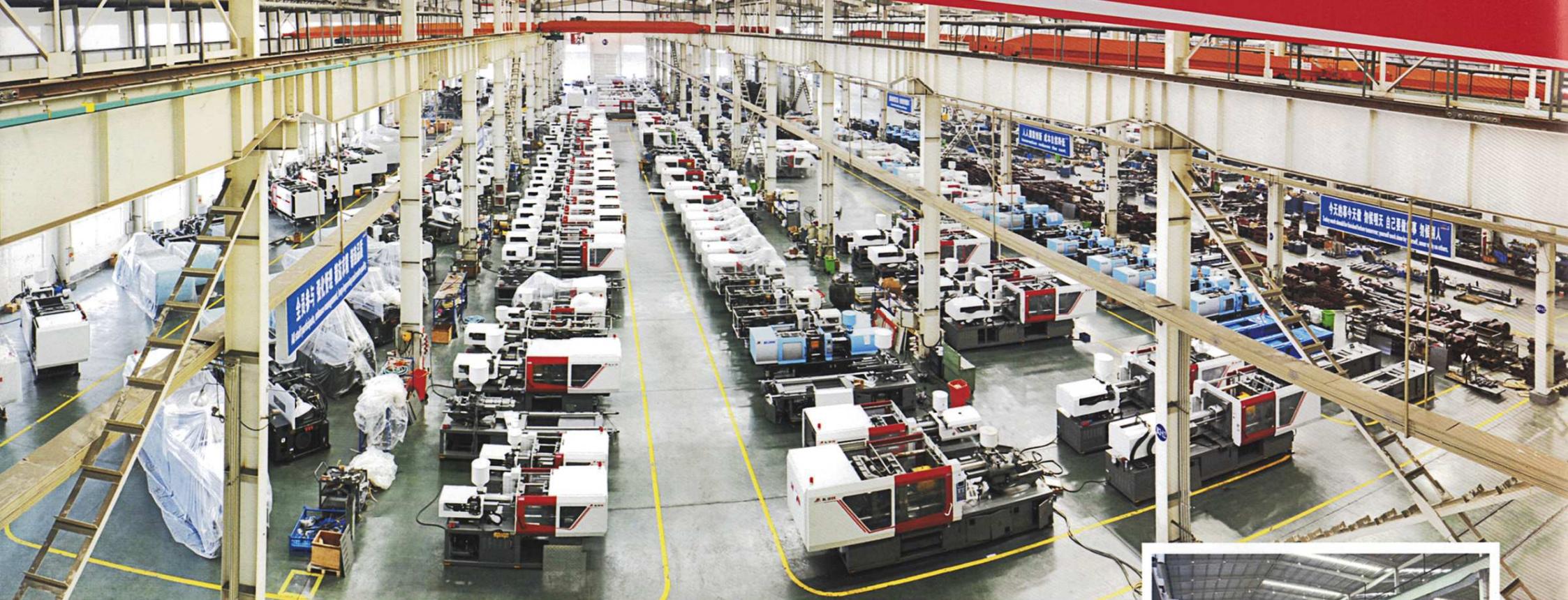




ROLOP
REINFORCED PLASTIC PIPELINE



ROLOP
塑料包装解决方案



MAZAK FMS



TOSHIBA CNC

With responsible production standard

Quality products need scientific and efficient management, the company long-term adherence to import ISO9001 international quality management system and on-site "6S" management model, from the processing and assembly to testing, each joint are meticulous, strict control.

Through systematic and meticulous, application procedures, standardization, data and information technology to assure each unit accuracy, efficiency, collaboration and continuous operation. Implementation of responsible management will assign specific production tasks, clarification. Each producer has duty. Company improve production efficiency, reduce costs, shorten the production cycle, saving the purchase cost, thus creating more value for customers.

PROLOP
PRODUCTION LINE OPTIMIZATION



Facility is an important part and one of the basic elements of productivity. It is an important tool and material wealth for whom to be survival and development. We know that, both the production equipment to the processing equipment, and the share of corporate assets, or content management, as well as the ability to reflect our competitiveness on the market, it plays a significant role.



Large gantry five-face machining center



Assembly plant for big model machines



Coordinate detector

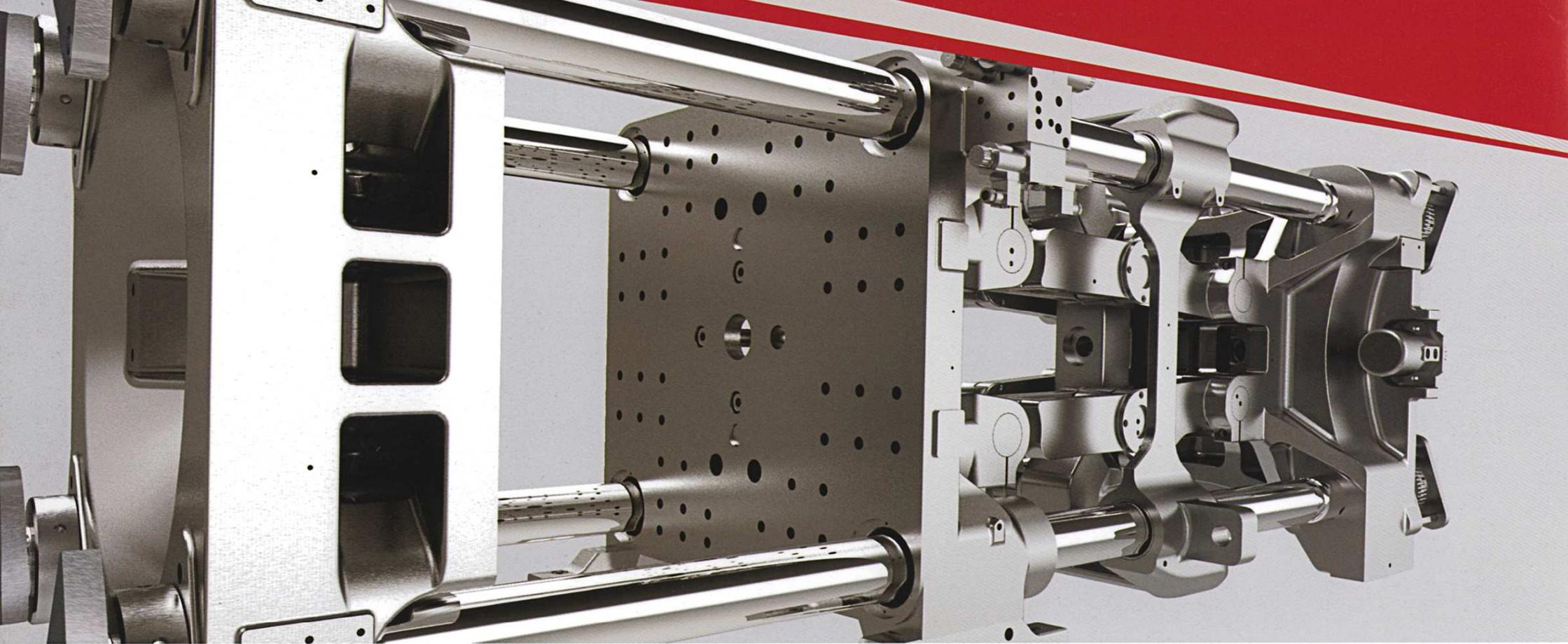


Optical microscopy



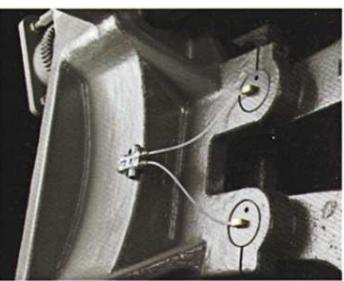
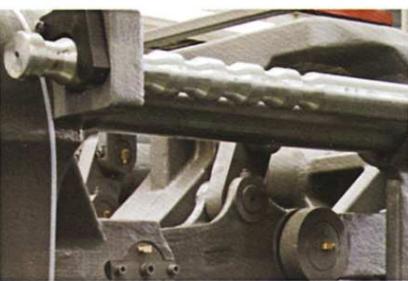
Power system integration testing station

In order to ensure compliance with the corresponding technical requirements and provide customers with high quality products, company have established cooperative relationships with domestic and foreign equipment manufacturers from Europe, Japan, such as: the original imported Japanese Mazak, Toshiba, Mitsubishi and other processing equipment to ensure production efficiency and product quality.

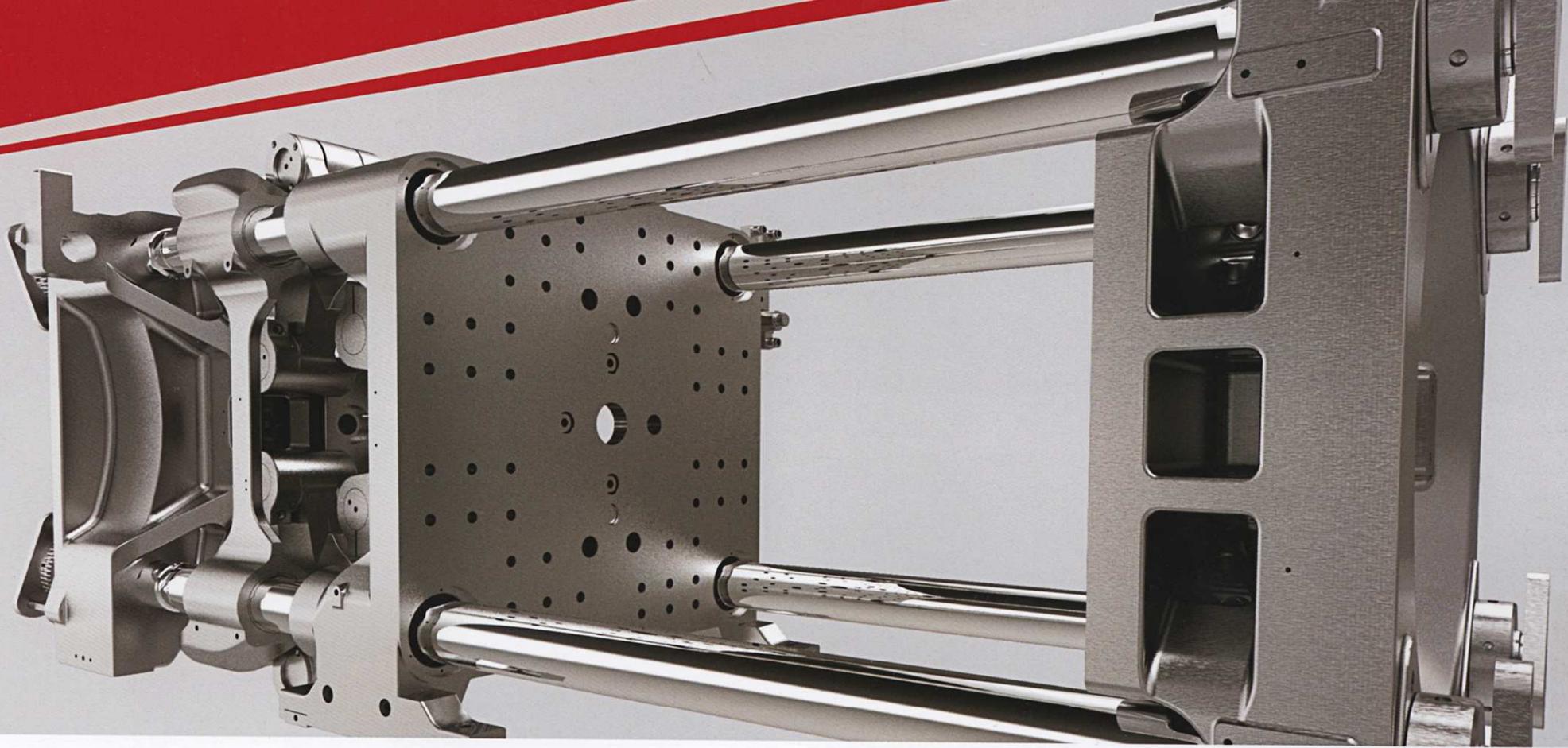


EK Machines Lead the Technological Revolution of Injection Molding Machine Industry

60 persons' R&D team, lasting for 3 years, 10 million RMB investment, 7 times failure, finally developed and created EK series injection molding machine with global initiative external bending clamping structure. EK machines have 4 patents, 8 advantages, which will certainly raise the technological revolution in injection molding machine industry.



ROLOP
INJECTION MOLDING MACHINES



■ Three Patents

- 1.Floating tie-bar fixed structure
- 2.Split pin fixed structure
- 3.Semi-flexible stationary template

■ Four Innovations

- 1.Wide template design
- 2.External bending clamping structure
- 3.High rigid guided supporting structure
- 4.European style ejector system

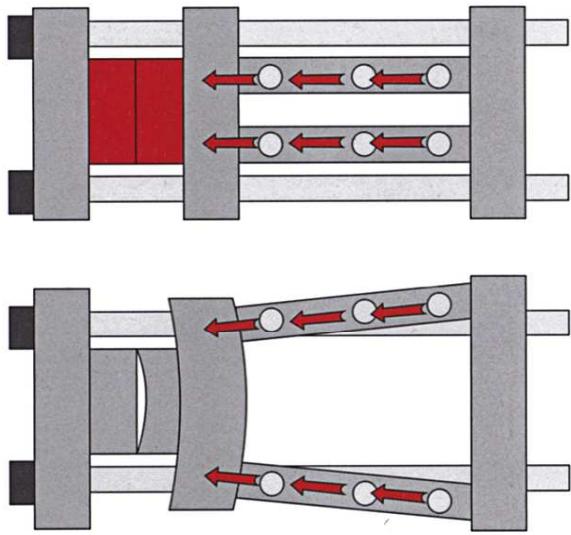
■ Five Advantages

- 1.Big space between tie-bars
- 2.Center Clamping
- 3.Bigger opening stroker,Longer ejector stroke
- 4.Stable injection
- 5.Full-servo,super energy saving,energy saving up to 80%

■ Solve Four Major Shortcomings of Traditional Machines

- 1.Big machine needed for the products with small grams,but large size
- 2.Both sides of platen are forced to deformation,causes the mould damage or bad deformation
- 3.Tie-bars broken easily
- 4.Heavy energy consumption

PROLOP
INJECTION MOLDING MACHINES



Features of External Bending Clamping Structure

- External bending and the forces are parallel: protect moulds, and improve accuracy
The forces are parallel to the centre of the mould: avoid product flash when small molds work in big machines
- Reduce pressure losses, reduce load on the pump, and achieve more energy saving
- Completely overcome the deformation of platens subject to the unbalanced forces
- Opening stroke increased by 20% or even more
- Ejector stroke is not limited by toggles, easier for installation and maintenance
- Convenient for installation & maintenance

Advantages of Floating Tie Bars

Less connection between tie bars and mold to make full spring deformation between tie bars and mold increases clamping precision, and protects platens and molds.

Advantages of Semi-flexible Platens

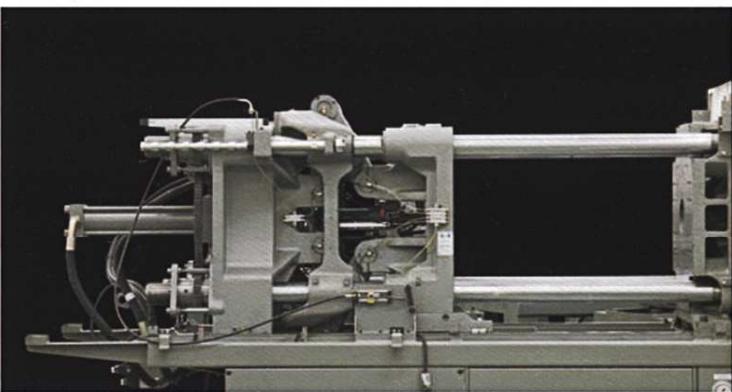
To distribute forces by means of platen spring deformation of the four angles to make average connection of molds, makes up deficiency of mold parallelness to some degree, increases processing precision of products, meanwhile, protects platens themselves, and extends life-span.



BOLE
BOLE MACHINERY CO., LTD.

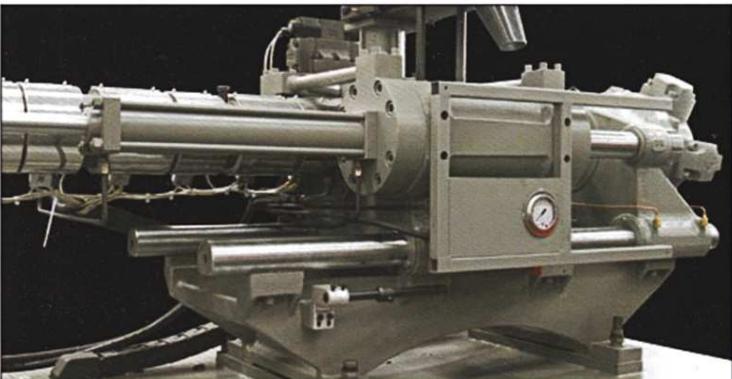
Four Advantages Data Identified by the United States Authorities

- High repeated precision, at 0.53%, v.s. the industry average level 3%
- High load sensitivity, KSP index 1.43%, v.s. the industry average level 5%
- Quick pressure response with 0.41s, v.s. the industry average level 2s
- High ratio of energy-saving, with BL120EK 1.6 kwh, v.s. the industry average level 3.2kwh (subject to different products)



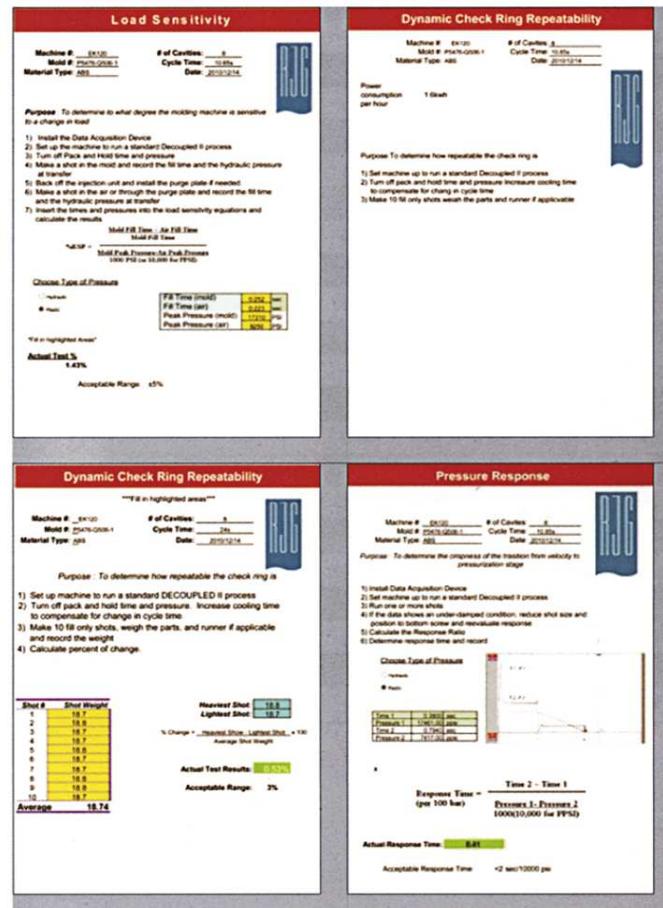
Longer Opening Stroke

The opening stroke of EK machines is bigger by 20% than that of traditional machines, and exceeds all toggle bending injection molding machines at home, especially fit for deep cavity products.



Bigger Injection Capacity

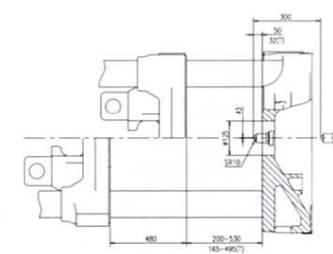
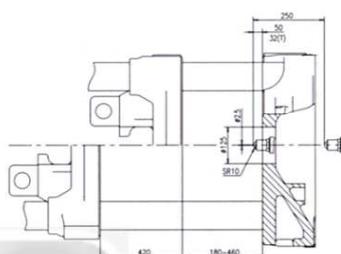
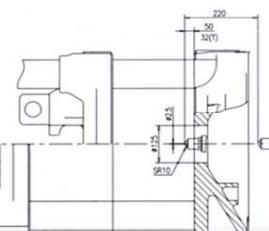
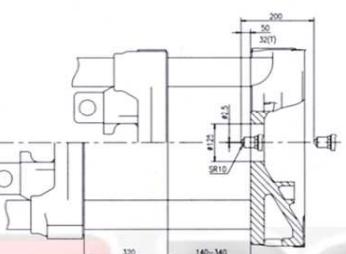
The Euromap of EK machines is bigger than that of Chinese competitors and some European standards, highly increasing the injection capacity.



BL60EK-BL500EK Series Technical Parameters

Items	Unit	BL60EK			BL90EK			BL120EK			BL160EK		
International Specification		160/600			320/900			430/1200			610/1600		
		A	B	C	A	B	C	A	B	C	A	B	C
Injection Unit													
Screw diameter	mm	25	28	32	32	36	40	36	40	45	40	45	50
Screw ratio		23	20	18	23	20	18	23	20	18	23	20	18
Theoretical injection capacity	cm ³	71	89	117	145	183	226	204	251	318	283	358	442
Shot weight(PS)	g	65	82	107	133	169	208	187	231	293	260	329	406
	oz	2.3	2.9	3.8	4.7	5.9	7.3	6.6	8.2	10.3	9.2	11.6	14.3
Injection rate into Air	cm ³ /s	62	78	102	80	102	126	106	131	166	131	165	204
Injection pressure	MPa	225	180	138	220	173	140	211	171	135	215	170	138
Injection stroke	mm	145			180			200			225		
Max. injection speed	mm/s	126			100			104			104		
Max. Screw speed	r/min	263			220			240			210		
Clamping Unit													
Clamping force	kN	600			900			1200			1600		
Opening stroke	mm	320			360			420			480		
Space between tie bar	mm × mm	360 × 330			410 × 360			460 × 410			510 × 460		
Min. mould height(T-slot)	mm	140(105)			160(125)			180(145)			200(165)		
Max. mould height(T-slot)	mm	340(305)			390(355)			460(425)			530(495)		
Max. distance Platen(T-slot)	mm	660(625)			750(715)			880(845)			1010(975)		
Ejector stroke	mm	70			100			130			150		
Ejector force forward	kN	31			31			45			45		
Ejector force back	kN	20			20			34			34		
Number of ejector bar	PC	5			5			5			5		
Driving System Power													
Sys. Pressure	MPa	16			16			16			16		
Pump Motor	kW	9			13			17			21		
Heater power	kW	4.4			6.2			8.15			11.85		
Number of temp. control zones		3+1			3+1			3+1			3+1		
Others													
Hoper capacity	kg	25			25			25			25		
Oil tank capacity	L	120			150			180			220		
Machine dimensions(L×W×H)	m × m × m	3.5 × 1.15 × 1.7			3.8 × 1.3 × 1.85			4.35 × 1.35 × 1.85			4.97 × 1.38 × 1.88		
Machine weight	Ton	2.4			3			3.5			4.8		

Platen
Side Size



BL200EK			BL260EK			BL320EK			BL400EK				BL500EK			
840/2000			1400/2600			1800/3200			2400/4000				3500/5000			
A	B	C	A	B	C	A	B	C	A	B	C	D	A	B	C	D
45	50	55	55	60	65	60	65	70	65	70	75	80	70	80	85	90
22.5	20	18	23	21	19.5	23	21	19.5	23	21	20	18.5	24	21	20	19
398	491	594	689	820	962	905	1062	1232	1211	1405	1613	1835	1597	2086	2355	2640
366	452	546	634	754	885	832	977	1133	1114	1292	1484	1688	1469	1919	2167	2429
12.9	15.9	19.3	22.4	26.6	31.2	29.4	34.5	40.0	39.3	45.6	52.3	59.5	51.8	67.7	76.4	85.7
167	207	250	224	267	313	282	331	384	355	412	473	538	357	467	527	591
211	171	141	200	168	143	200	170	146	197	170	148	130	220	168	149	133
250			290			320			365				415			
105			94			100			107				93			
220			210			175			188				163			
2000			2600			3200			4000				5000			
530			580			660			750				850			
560×510			660×610			710×660			760×710				860×800			
220(175)			240(195)			270(225)			300(255)				350(305)			
560(515)			610(565)			690(645)			750(705)				800(755)			
1090(1045)			1190(1145)			1350(1305)			1500(1455)				1650(1605)			
150			180			180			210				210			
62			62			62			113				113			
36			36			36			75				75			
9			13			13			13				13			
16			16			16			16				16			
25			30			37			47				17+37			
13.25			18.9			24.1			27.7				32.2			
4+1			4+1			4+1			4+1				5+1			
50			50			50			50				100			
280			350			480			600				750			
5.5×1.45×2.15			6.1×1.48×2.2			6.75×1.68×2.25			7.4×1.76×2.3				8.1×2.2×2.6			
6.0			8.0			10.8			14.5				18.5			

BL600-BL2100EK Series Technical Parameters

Items	Unit	BL600EK				BL700EK				BL800EK				BL900EK			
		4300/6000				5400/7000				7200/8000				7200/9000			
		A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
Injection Unit																	
Screw diameter	mm	80	85	90	100	85	90	100	110	90	100	110	120	90	100	110	120
Screw ratio		22.5	21	20	18	22	21	19	17	23	21	19	17.5	23	21	19	17.5
Theoretical injection capacity	cm ³	2287	2582	2895	3574	2837	3181	3927	4752	3467	4280	5179	6164	3467	4280	5179	6164
Shot weight(PS)	g	2104	2375	2663	3288	2610	2926	3613	4372	3190	3938	4765	5671	3190	3938	4765	5671
	oz	74.2	83.8	93.9	116.0	92.1	103.2	127.4	154.2	112.5	138.9	168.1	200.0	112.5	138.9	168.1	200.0
Injection rate into Air	cm ³ /s	484	546	612	756	595	667	823	996	608	750	908	1080	608	750	908	1080
Injection pressure	MPa	189	167	149	121	188	168	136	113	208	168	139	117	208	168	139	117
Injection stroke	mm	455				500				545				545			
Max. injection speed	mm/s	96				105				95				95			
Max. Screw speed	r/min	137				134				108				108			
Clamping Unit																	
Clamping force	kN	6000				7000				8000				9000			
Opening stroke	mm	950				1050				1100				1150			
Space between tie bar	mm x mm	960 × 860				1060 × 960				1120 × 1020				1160 × 1060			
Min. mould height(T-slot)	mm	400(355)				450				450				480			
Max. mould height(T-slot)	mm	900(855)				950				1000				1000			
Max. distance Platen(T-slot)	mm	1850(1805)				2000				2100				2150			
Ejector stroke	mm	240				270				300				300			
Ejector force forward	kN	152				152				212				227			
Ejector force back	kN	107				107				121				151			
Number of ejector bar	PC	21				21				21				21			
Driving System Power																	
Sys. Pressure	MPa	16				16				16				16			
Pump Motor	kW	25+37				37+37				37+47				37+47			
Heater power	kW	36.1				42.9				49.7				49.7			
Number of temp. control zones		5+1				5+1				5+1				5+1			
Others																	
Hoper capacity	kg	100				100				100				100			
Oil tank capacity	L	850				1000				1200				1200			
Machine dimensions(L×W×H)	m × m × m	8.8 × 2.22 × 2.7				9.6 × 2.65 × 2.7				10.2 × 2.7 × 2.9				10.9 × 2.75 × 2.9			
Machine weight	Ton	22				25				30				40			
Platen Side Size																	

DUE TO UPGRADING PRODUCT CONSTANTLY, OUR COMPANY RESERVES THE RIGHT TO ADJUST INDIVIDUAL PARAMETERS WITHOUT NOTICE.

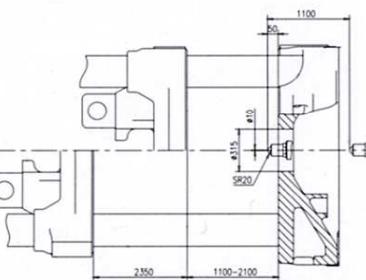
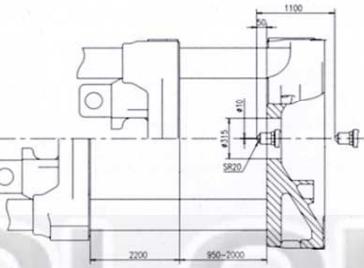
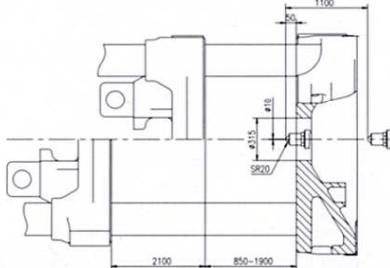
BL1100EK				BL1300EK				BL1500EK				BL1700EK				BL2100EK			
9600/11000				12000/13000				15000/15000				18500/17000				23000/21000			
A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
100	110	120	130	110	120	130	140	120	130	140	150	130	140	150	160	140	150	160	170
23	21	19	18	23	21	19.5	18	23	21	19.5	18	23	21	20	18.5	24	22	21	19
4673	5654	6729	7898	6082	7238	8495	9852	7691	9026	10468	12017	9623	11161	12812	14577	12084	13872	15783	17818
4299	5202	6191	7266	5596	6659	7815	9064	7075	8304	9630	11055	8853	10268	11787	13411	11117	12762	14521	16393
151.6	183.5	218.4	256.3	197.4	234.9	275.7	319.7	249.6	292.9	339.7	390.0	312.3	362.2	415.8	473.0	392.1	450.2	512.2	578.2
684	827	984	1155	854	1016	1193	1384	1016	1193	1383	1588	1093	1268	1455	1656	1296	1488	1693	1911
205	170	142	122	197	166	141	122	193	165	142	124	193	166	145	127	190	165	145	129
	595				640				680					725				785	
	87					90				90				82				84.2	
	93					84				74				63				56	
	11000				13000				15000					17000				21000	
	1320				1450				1550					1680				1850	
	1260 × 1120				1420 × 1220				1520 × 1320					1620 × 1420				1720 × 1520	
	500				580				680					750				750	
	1200				1300				1450					1550				1700	
	2520				2750				3000					3230				3550	
	350				350				400					400				450	
	227				227				332					332				425	
	151				151				256					256				334	
	21				29				29					29				25	
	16				16				16					16				16	
	47+47				37+37+37				37+47+47					47+47+47				25+47+47+47	
	56.5				71.9				74.3					87.3				113.9	
	6+1				6+1				6+1					6+1				8+1	
	200				200				200					200				400	
	1400				1650				2000					2250				2500	
	11.3 × 3.1 × 3.9				12.3 × 3.3 × 4.15				13.5 × 3.56 × 4.3					14.2 × 3.6 × 4.3				15.2 × 3.75 × 4.3	
	50				65				85					105				130	

DUE TO UPGRADING PRODUCT CONSTANTLY, OUR COMPANY RESERVES THE RIGHT TO ADJUST INDIVIDUAL PARAMETERS WITHOUT NOTICE.

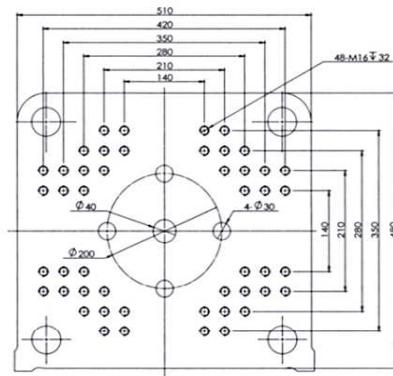
BL2100-BL4000EK Series Technical Parameters

Items	Unit	BL2100EK								BL2500EK							
		28000/21000				28000/25000				41000/25000				A	B	C	D
		A	B	C	D	A	B	C	D	A	B	C	D				
Injection Unit																	
Screw diameter	mm		150	160	170	180		150	160	170	180		170	185	200	220	
Screw ratio			23	22	21	20		23	22	21	20		24	22	20	19	
Theoretical injection capacity	cm ³		14756	16789	18953	21248		14756	16789	18953	21248		20996	24864	29060	35162	
Shot weight(PS)	g		13575	15446	17437	19548		13575	15446	17437	19548		19316	22875	26735	32349	
	oz		478.8	544.8	615.0	689.5		478.8	544.8	615.0	689.5		681.3	806.9	943.0	1141.1	
Injection rate into Air	cm ³ /s		1409	1603	1809	2028		1409	1603	1809	2028		1443	1709	1997	2416	
Injection pressure	MPa		189	166	147	132		189	166	147	132		194	164	141	116	
Injection stroke	mm		835					835					925				
Max. injection speed	mm/s		79.7					79.7					63.5				
Max. Screw speed	r/min		53					53					48				
Clamping Unit																	
Clamping force	kN		21000					25000					2000				
Opening stroke	mm		1850					1820 × 1620					800				
Space between tie bar	mm × mm		1720 × 1520					1700					1800				
Min. mould height(T-slot)	mm		750					3550					3800				
Max. mould height(T-slot)	mm		1700					450					500				
Max. distance Platen(T-slot)	mm		425					334					425				
Ejector stroke	mm		334					25					334				
Ejector force forward	kN		16					16					16				
Ejector force back	kN		37+47+47+47					37+47+47+47					47+47+47+47				
Number of ejector bar	PC		122.9					8+1					165.3				
Driving System Power																	
Sys. Pressure	MPa		400					400					400				
Pump Motor	kW		2750					2750					3000				
Heater power	kW		16.1 × 3.75 × 4.5					17.2 × 3.95 × 4.5					18.1 × 3.95 × 5.1				
Number of temp. control zones			18.1 × 3.95 × 5.1					170					170				
Others																	
Hoper capacity	kg		140					2000					800-1800				
Oil tank capacity	L		1850					151.4					950				
Machine dimensions(L×W×H)	m × m × m		1850-750-1700					950					151.4				
Machine weight	Ton		160					160					170				
Platen Side Size																	

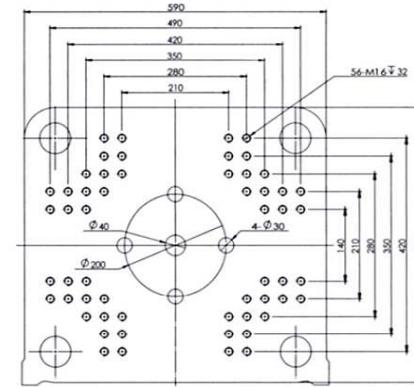
BL2800EK				BL3300EK				BL4000EK																			
41000/28000				70000/28000				70000/33000				90000/33000				90000/40000											
A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D								
170	185	200	220	200	220	230	240	200	220	230	240	230	240	250	260	230	240	250	260								
24	22	20	19	24	22	21	20	24	22	21	20	23	22	21	20	23	22	21	20								
20996	24864	29060	35162	36285	43905	47987	52251	36285	43905	47987	52251	53804	58584	63568	68755	53804	58584	63568	68755								
19316	22875	26735	32349	33383	40393	44148	48071	33383	40393	44148	48071	49500	53898	58483	63255	49500	53898	58483	63255								
681.3	806.9	943.0	1141.1	1177.5	1424.8	1557.3	1695.6	1177.5	1424.8	1557.3	1695.6	1746.0	1901.2	2062.9	2231.2	1746.0	1901.2	2062.9	2231.2								
1443	1709	1997	2416	1816	2197	2402	2615	1816	2197	2402	2615	2511	2734	2967	3209	2511	2734	2967	3209								
194	164	141	116	193	160	146	134	193	160	146	134	168	154	142	131	168	154	142	131								
925				1155				1155				1295				1295											
63.5				57.8				57.8				60.5				60.5											
48				54				54				57				57											
28000								33000								40000											
2100								2200								2350											
1920 × 1720								2110 × 1910								2420 × 2220											
850								950								1100											
1900								2000								2100											
4000								4200								4450											
500								550								600											
425								565								565											
334								442								442											
33								25								25											
16				16				16				16				16											
47+47+47+47				47+47+47+47+47				47+47+47+47+47				47+47+47+47+47+47				47+47+47+47+47+47											
165.3				225.9				225.9				252				252											
8+1				8+1				8+1				8+1				8+1											
400				400				400				400				400											
3000				3500				3500				4000				4000											
18.5 × 4.15 × 5.1				19.5 × 4.15 × 5.6				20.5 × 4.45 × 5.6				21.5 × 4.45 × 6.0				22.5 × 4.65 × 6.0											
100				210				255				290				215											



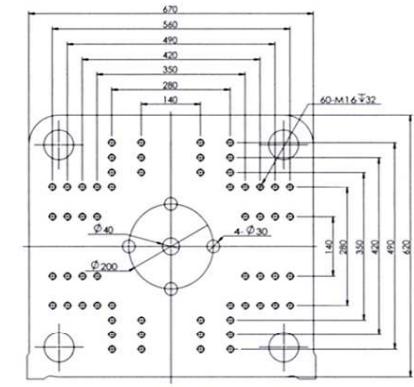
Platen Size



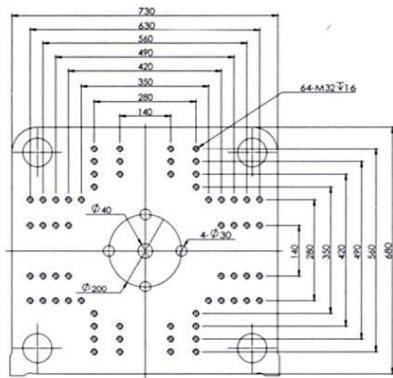
BL60EK



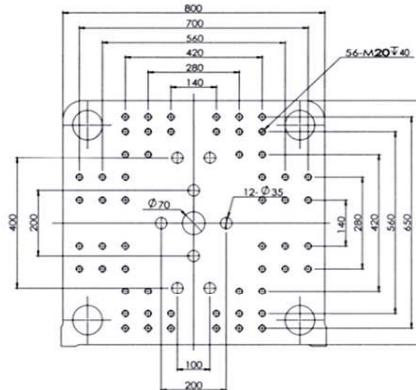
BL90EK



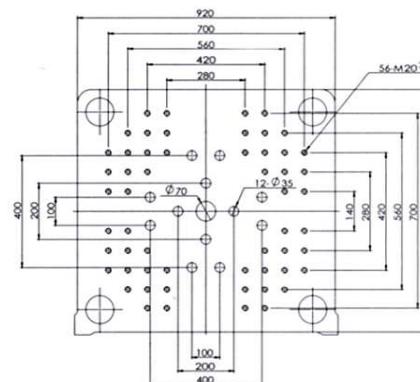
BL120EK



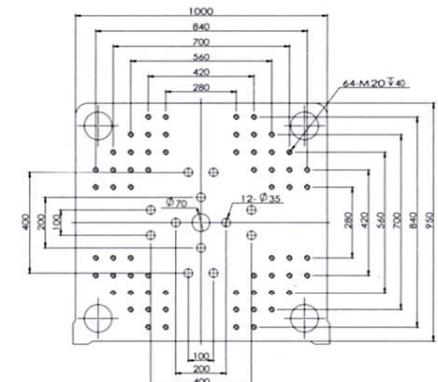
BL160EK



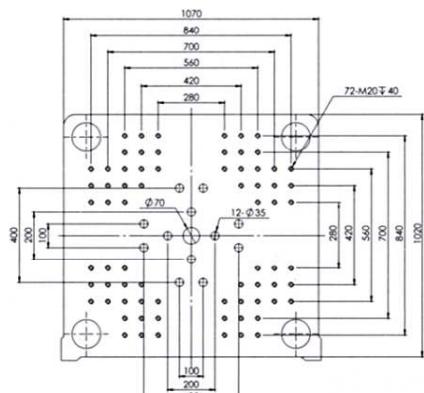
BL200EK



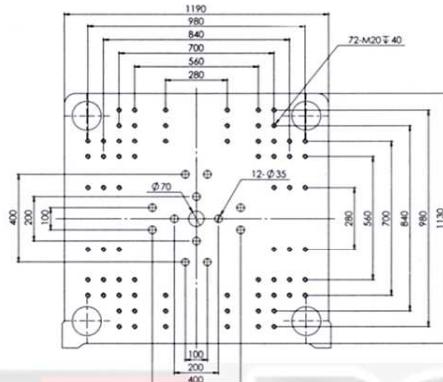
BL260EK



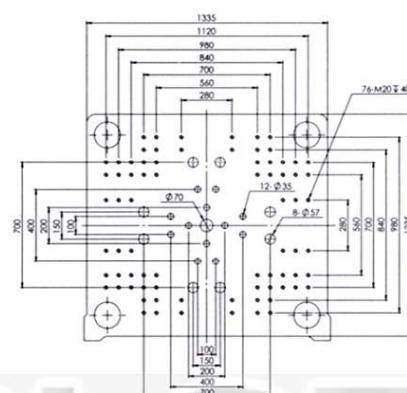
BL320EK



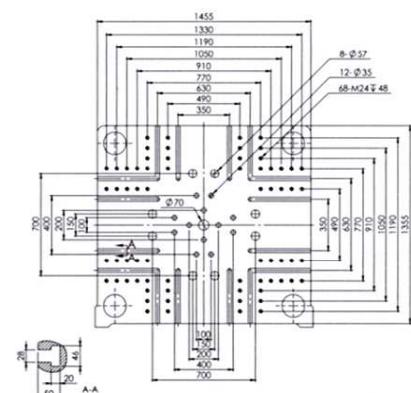
BL400EK



BL500EK

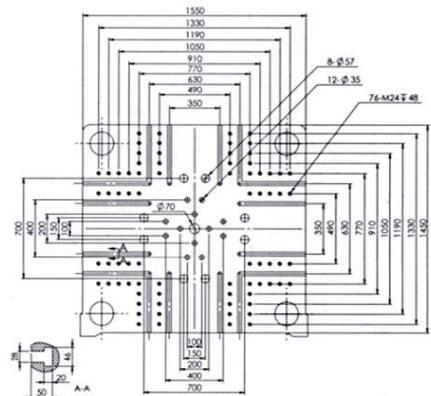


BL600EK

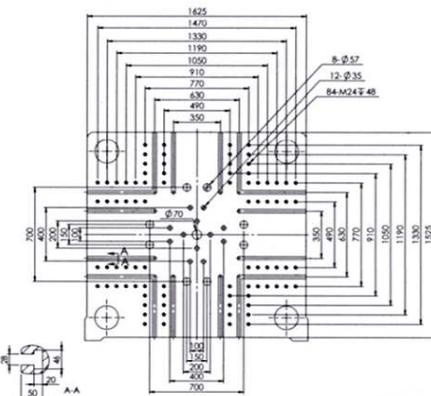


BL700EK

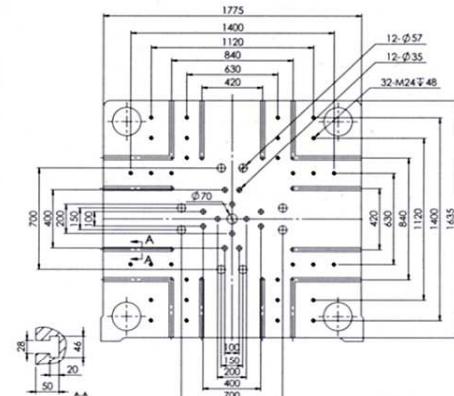
Platen Size



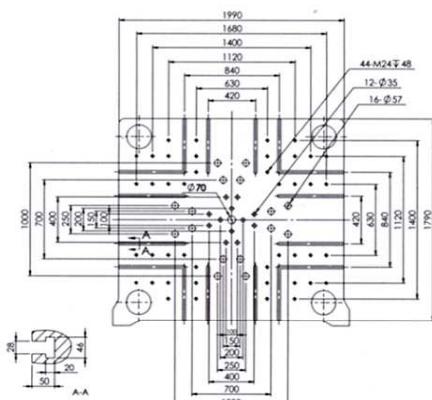
BL800EK



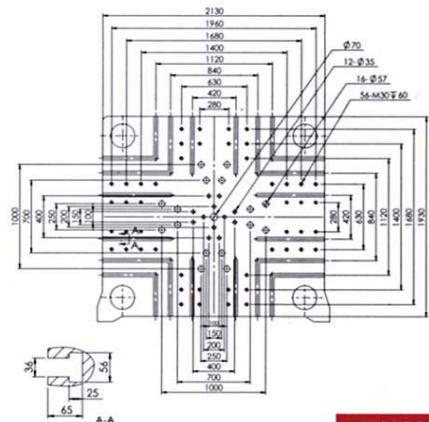
BL900EK



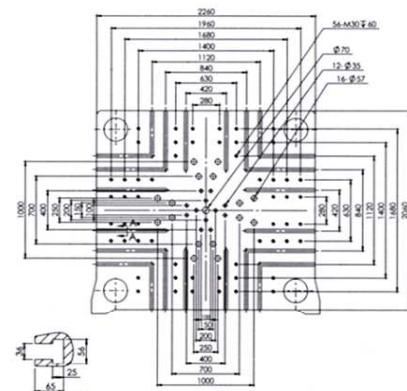
BL1100EK



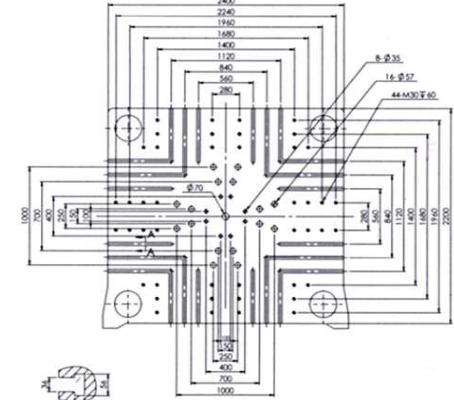
BL1300EK



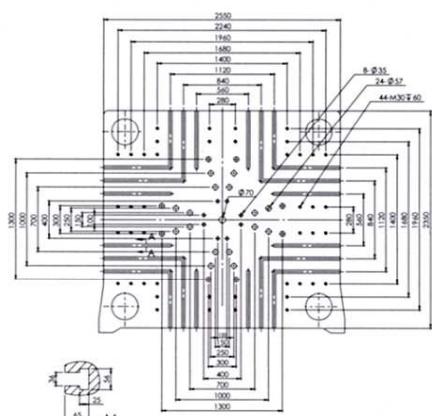
BL1500EK



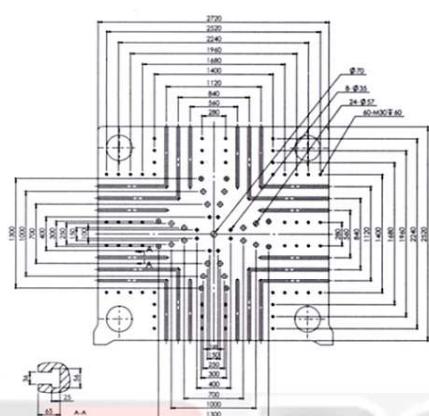
BL1700EK



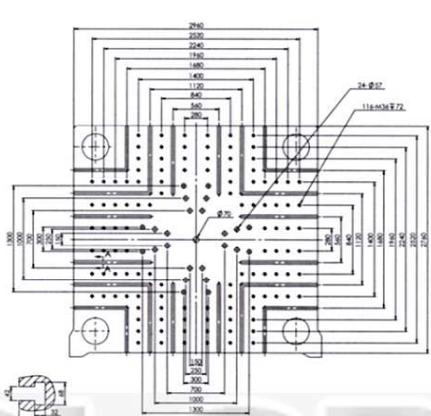
BL2100EK



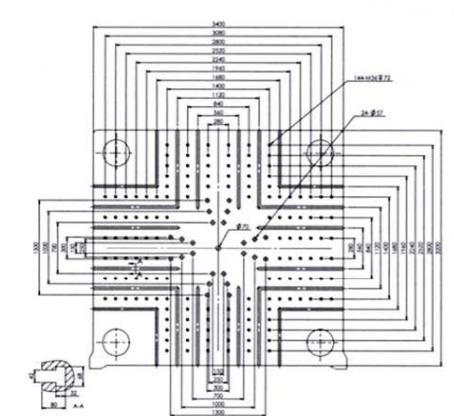
BL2500EK



BL2800EK

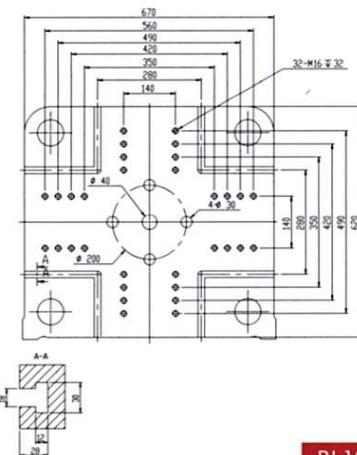


BL3300EK

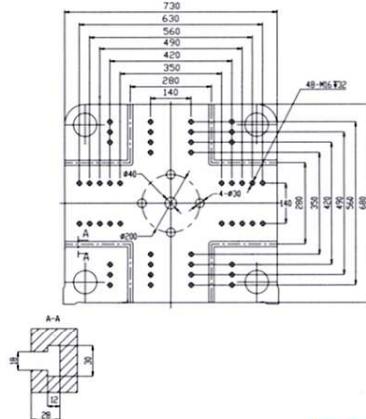


BL4000EK

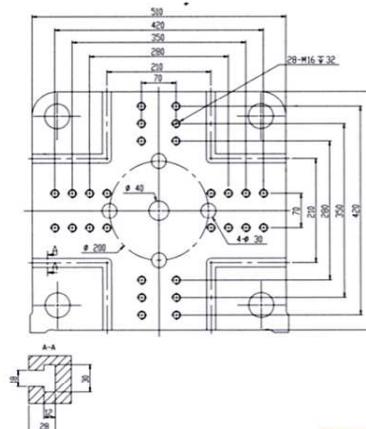
60—600EK
T Slot Platen
Dimension Obverse
Drawing(Optional)



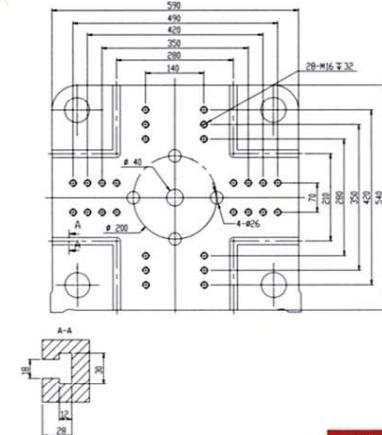
BL120EK



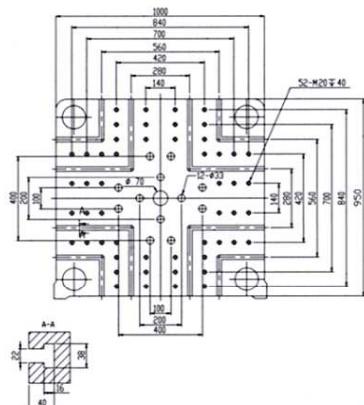
BL160EK



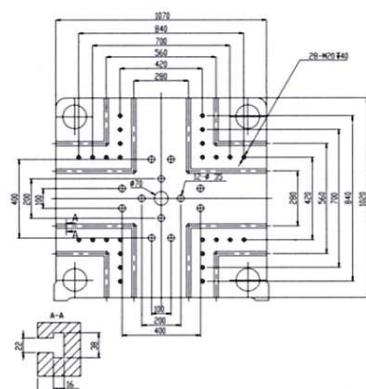
BL60EK



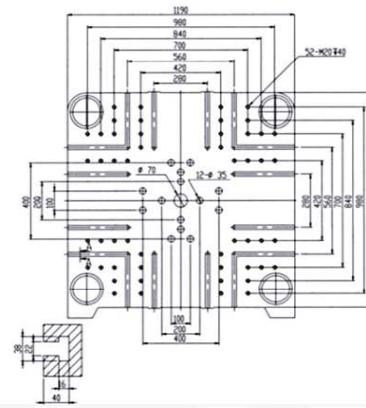
BL90EK



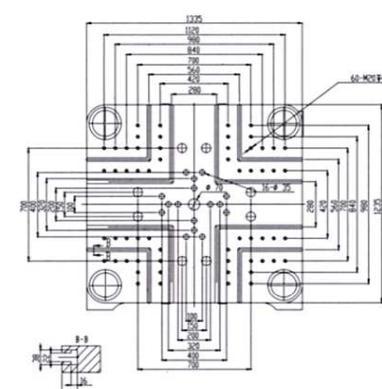
BL320EK



BL400EK



BL500EK



BL600EK

Standard Configuration Menu of BL EK series

Clamping Unit

- >> Patent of the five point outside mold clamping mechanism, has the largest mould stroke
- >> Wide type template design, can adapt to a larger mold
- >> Low-pressure protect mould with high precision
- >> Hydraulic motor drive gear automatic adjustment mode
- >> Adjustable mobile template support structure, reduce the rod bearing deformation
- >> Mechanical, electrical, hydraulic two/three safety protection devices
- >> Clamping part is equipped with mold pedal (BL1100EK above)
- >> Automatic safety door control (BL1100EK above)
- >> Open and close mold, ejection movement with high precision electronic scale control
- >> A variety of optional ejection patterns, pressure, speed setting respectively
- >> Standard synchronization function of ejection/core pulling is equipped on 2100EK-4000EK
- >> Central ejector on 60EK-800EK, Euro standard ejector on 900EK above
- >> Five period of opening and closing mode speed and pressure can be adjusted
- >> Automatic detector volumetric centralized lubrication system

Injection Unit

- >> High quality nitride steel efficient plasticizing screw barrel
- >> Time delay setting for cold start on screw, timing heating, automatic heat preservation function
- >> High quality high torque hydraulic motor drive melt
- >> Automatic detection of the nozzle choke and the raw materials overfeeding checkup function selection by the user self-control independently.
- >> Bjection moving oil cylinder design
- >> High rigid beam supporting structure
- >> The trimming device of the nozzle
- >> Electronic scale control of shoot stroke with high precision
- >> Six stages of injection, five stages of holding pressure, five stages of charging, pressure/speed can be adjusted
- >> The screw rotation speed detection
- >> "Auto Purge" function for cleaning the barrel set automatically
- >> Melt back pressure ratios
- >> Above 900EK with central lubrication of ejection unit
- >> Above 1100EK with feeding platform
- >> Attached to the extended nozzle(60EK-700EK:50mm more,800EK-4000EK:100mm more)

Hydraulic Unit

- >> Servo energy-saving system
- >> Oil temperature deviation automatic alarm
- >> Motor overload protection function
- >> Above 500EK with self sealing oil absorption filters
- >> Core pulling device
- >> Quick insert mold cooling water(Φ 10)

Electrical Control Unit

- >> Process parameters of presetting function
- >> Have value reference and online operating instructions auxiliary function
- >> Simple mechanical interface
- >> Parameter data protection lock
- >> PID automatic temperature control, realizes the cylinder temperature self-correcting
- >> USB interface, can be convenient to backup panel application update and mould parameters
- >> Have stop memory function, random can store 200 sets mould data
- >> 100 groups of abnormal alarm and 100 groups of modified a record store
- >> Multi-level password settings to prevent the error revising / changing unintentionally and the user could be freely authorized the qualifier to access the related password level as request.
- >> Input and output point inspection and I/O online simulation function, and can confirm the machine status quickly
- >> Multiple sets of backup socket
- >> 60EK-400EK with the hopper and check out magic eye
- >> Scram protection of front and back door,scram protection of mould area on 1100EK-4000EK
- >> Alarm lamp with voice prompt

The Rest

- >> Standard color of Shuangma
- >> Adjustable shock pad
- >> Accessory box
- >> Common tools
- >> Damageable spare parts

Optional Configuration Menu of BL EK series

Clamping Unit

- >> Increase in mold volume
- >> Increase in the eject force
- >> Increase in the eject stroke
- >> Widen the machine door
- >> With open mold mechanical limit
- >> Add mold heat shield
- >> Non-standard mould mounting holes (Japanese standard, American standard, etc.)
- >> T slot template(60EK-600EK)
- >> Mould hanging formwork
- >> Hydraulic/electric rotating demould device (twisted tooth device)

Injection Unit

- >> Increase/decrease the injection quantity
- >> Increase/decrease melt motor
- >> Chrome plating/bimetallic screw components
- >> PVC,PET,PC,PA,bakelite,etc all kinds of special plasticizing unit
- >> Pneumatic/hydraulic/spring self-locking nozzle
- >> Nitrogen auxiliary quick shoot glue device
- >> Gas-assisted/wit interface
- >> Sequential injection device
- >> Differential high-speed injection device
- >> Inlet temperature control device

Electrical Control Unit

- >> The Euro robot interface
- >> A mould labeling machine interface
- >> Change the voltage and frequency
- >> The change of control system
- >> Add working lamp
- >> Hot runner controllers

Optional Auxiliary

- >> Magic hand
- >> Dryer
- >> Dehumidifier
- >> Crusher
- >> Mold temperature controller
- >> Magnetic shelf
- >> Auto-loader
- >> Mold cooling flow meter glass tube

PROLOP



The Passionate Pursuit of Perfection

www.shuangma-machinery.com

www.bole-machinery.com

BOLE Customer Service Center

**BOLE PLASTIC MACHINERY
NINGBO SHUANGMA MACHINERY INDUSTRY CO.,LTD
ADD:NO.99 WEISAN ROAD,XIAOGANG,NINGBO,CHINA
P.C:315821
TEL:+86-574-86188007
FAX:+86-574-86188008
E-mail: bole-sales@shuangma-machinery.com**

THIS CATALOGUE ARE PROTECT BY LAW OF COPY RIGHT. ANY USE WITHOUT THE EXPRESS
PERMISSION OF THE LAW OF COPY RIGHT, MUST GET APPROVAL OF SHUANGMA IN ADVANCE.

THIS VERSION WAS PRINTED IN March 2014,
ANY DIFFERENCE SPECIFICATION FROM OLD VERSION SHOULD BE SUBJECT TO THIS VERSION.

