

DK Series



The Passionate Pursuit of Perfection

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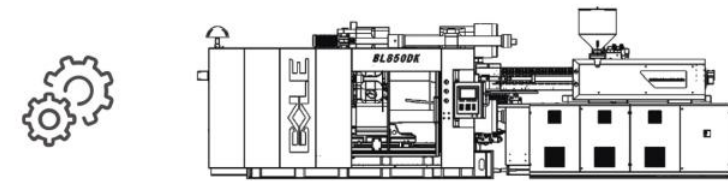
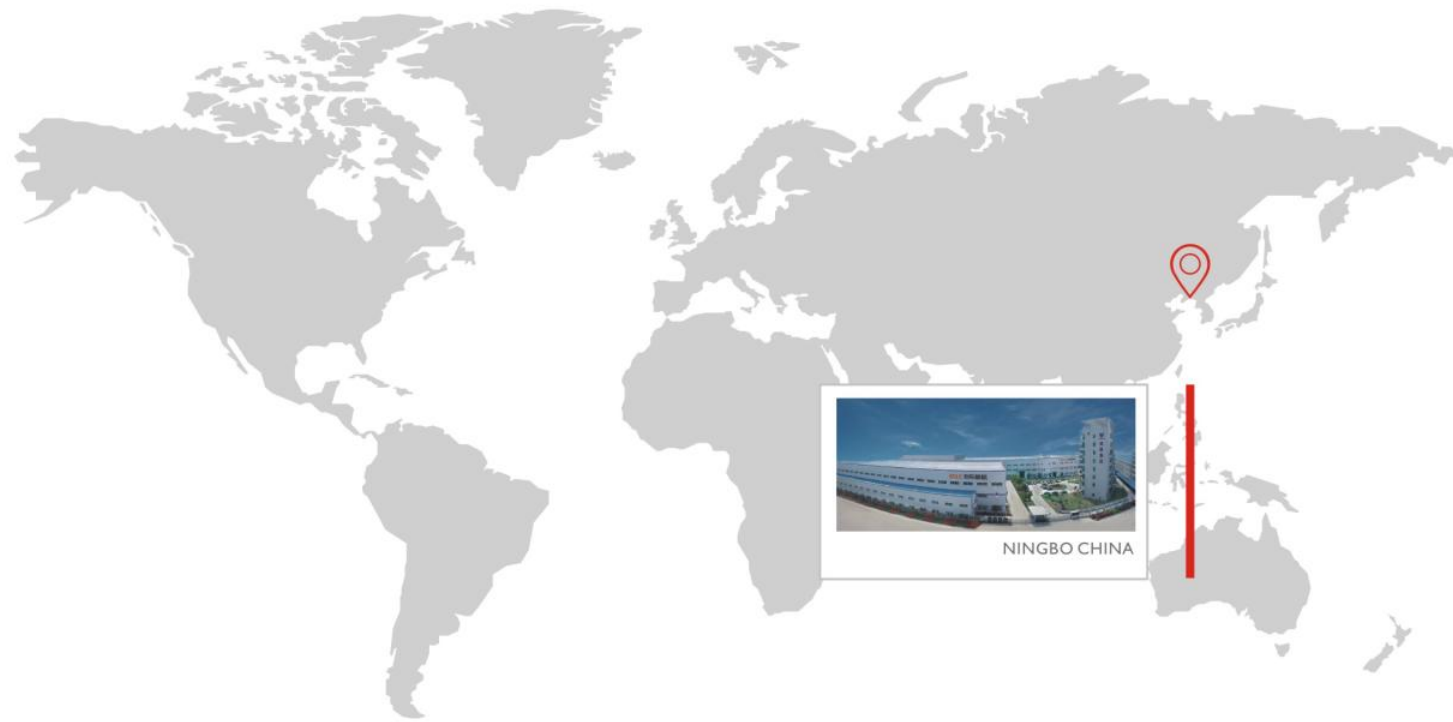
THIS VERSION WAS PRINTED IN APRIL 2019,
ANY DIFFERENCE SPECIFICATION FROM OLD VERSION SHOULD BE SUBJECT TO THIS VERSION.

DK Series Two Platen Injection Moulding Machine

German Origin



Injection Moulding Machine



Operate independently to ensure German quality and present European performance perfectly.

More than 100 tests, more than 20 patents, speed, accuracy, stability are increased, It will become the first choice in automobile industry compared with European products.



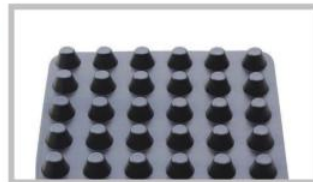
Automobile industry



Household electrical appliance industry



Deep cavity product



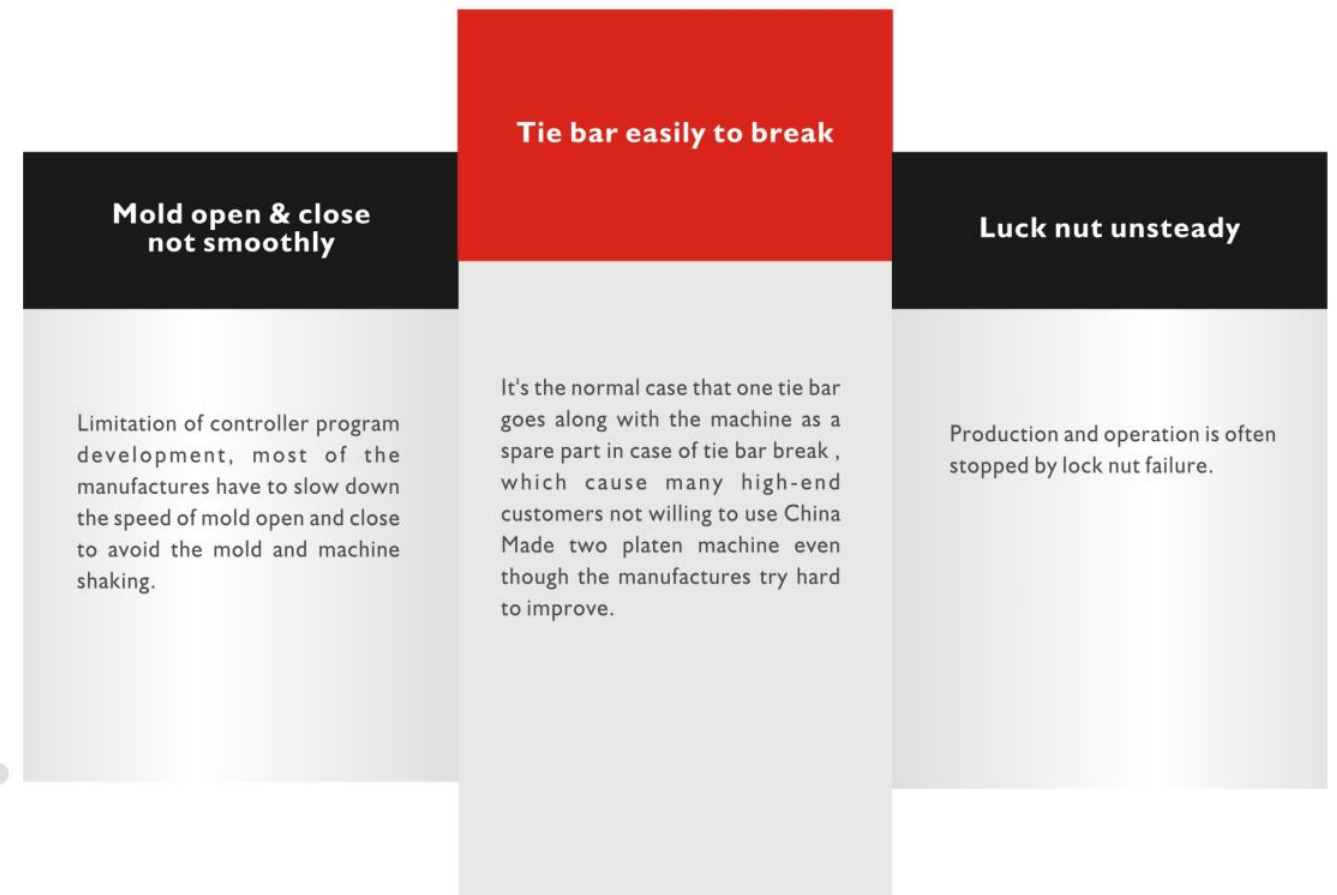
Logistics building material





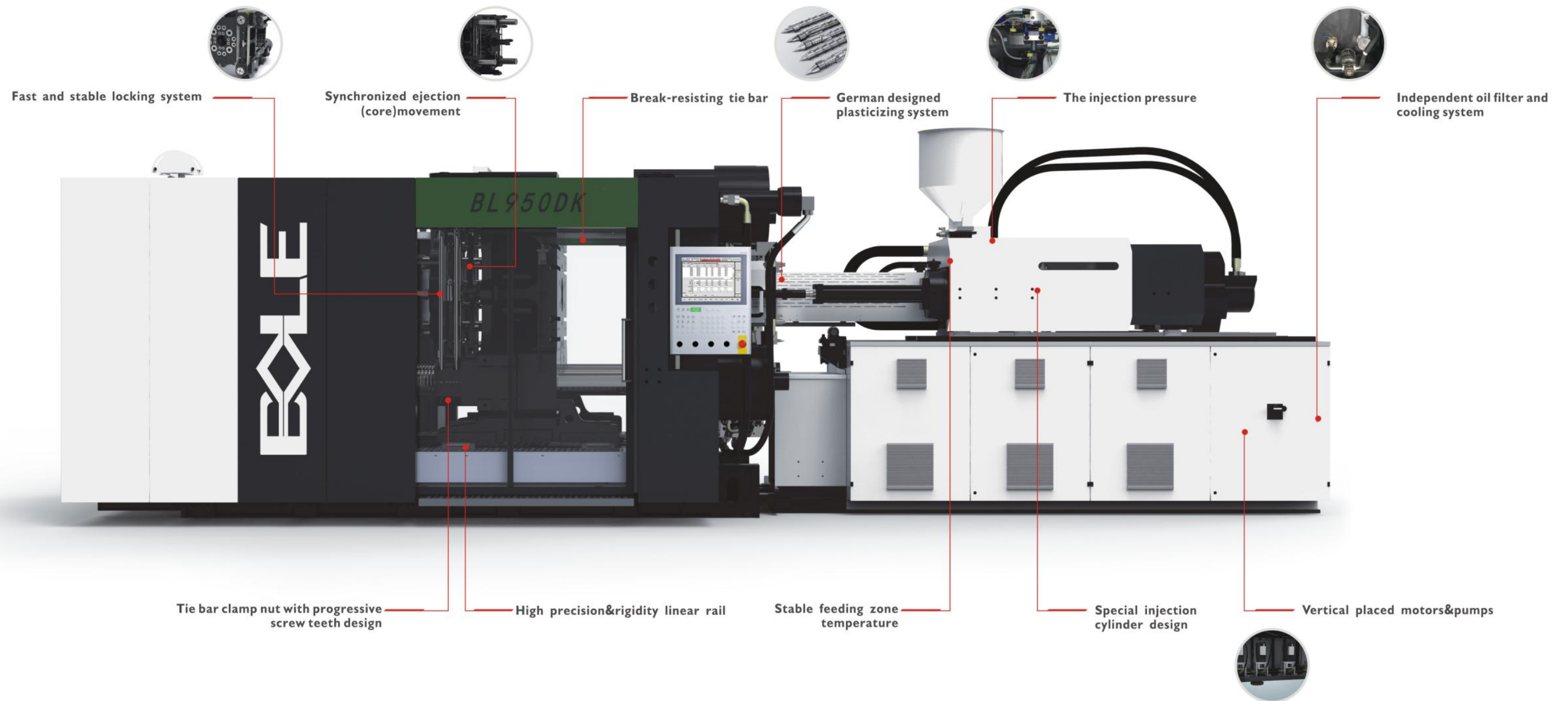
Two Platen
Injection Moulding Machine

Technical Pain Points in China



Bole two platen injection moulding machine can solve these problems effectively.

DK Series Two Platen Injection Moulding Machine



DK series two-platen injection moulding machine eleven core strengths

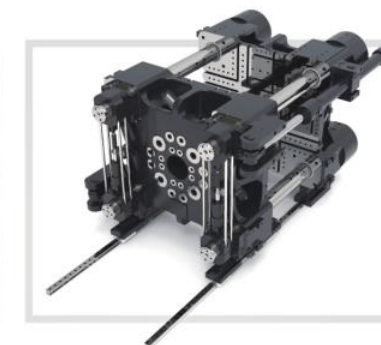
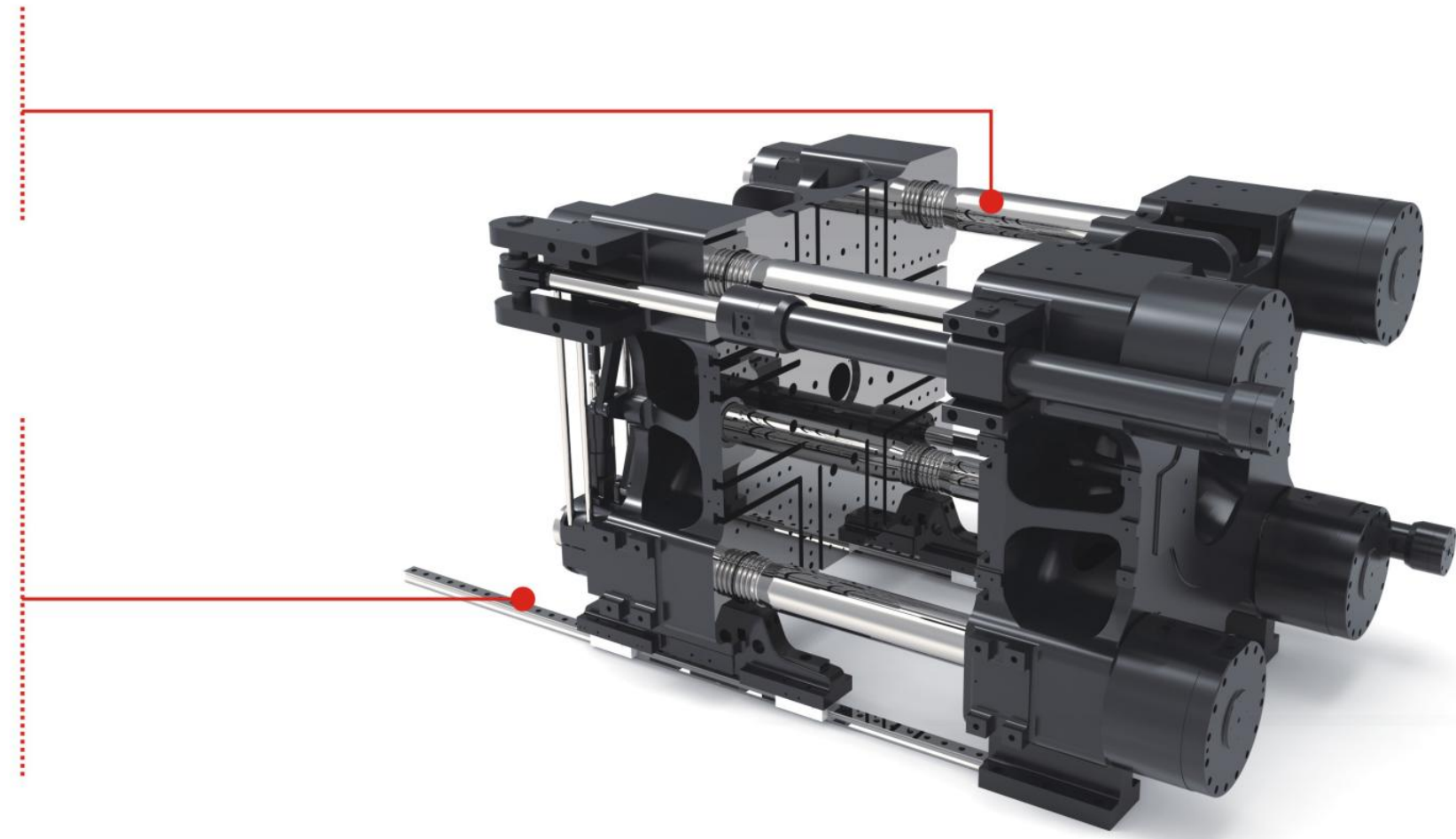


01 Break-resisting tie bar

Less stress for weak point of tie bar, there is almost no risk of fracture, high overload and bending resisted tie bar. Patent applied.

02 High precision&rigidity linear rail

DK series two platen machines adopt high-precision and high-rigidity liner guide coordinates with sliding foot to support movable platen, guaranteeing high .



NO.	NAME	UNIT	VALUE	MIN	MAX
0001	1500.00	mm	1500.00	1500.00	1500.00
0002	1500.00	mm	1500.00	1500.00	1500.00
0003	1500.00	mm	1500.00	1500.00	1500.00
0004	1500.00	mm	1500.00	1500.00	1500.00
0005	1500.00	mm	1500.00	1500.00	1500.00
0006	1500.00	mm	1500.00	1500.00	1500.00
0007	1500.00	mm	1500.00	1500.00	1500.00
0008	1500.00	mm	1500.00	1500.00	1500.00
0009	1500.00	mm	1500.00	1500.00	1500.00
0010	1500.00	mm	1500.00	1500.00	1500.00
0011	1500.00	mm	1500.00	1500.00	1500.00
0012	1500.00	mm	1500.00	1500.00	1500.00
0013	1500.00	mm	1500.00	1500.00	1500.00
0014	1500.00	mm	1500.00	1500.00	1500.00
0015	1500.00	mm	1500.00	1500.00	1500.00
0016	1500.00	mm	1500.00	1500.00	1500.00
0017	1500.00	mm	1500.00	1500.00	1500.00
0018	1500.00	mm	1500.00	1500.00	1500.00
0019	1500.00	mm	1500.00	1500.00	1500.00
0020	1500.00	mm	1500.00	1500.00	1500.00

DK series two-platen injection moulding machine, developed by the German chief engineer, reshapes the Chinese two-platen injection machine market.



03 Break-resisting tie bar

- ③ Originate from Germany design Plasticizing System, efficiency excess above 20% of domestic level (Common plastics such as ABS, PS, PP, etc).
- ③ Custom made complicated technical requirement, applied to special plasticizing system.
- ③ All series can fit with A\B\C screw, L/D ratio 23:1, to achieve the best plasticizing effect and efficiency.

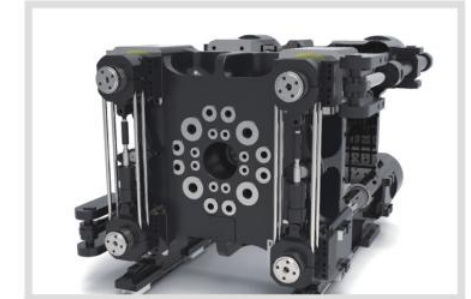
04 Vertical placed motors&pumps

The vertical arrangement of the motor reduces the area occupied, and reduces the influence of the bias load caused by the gravity of the motor rotor, which makes the motor more stable.



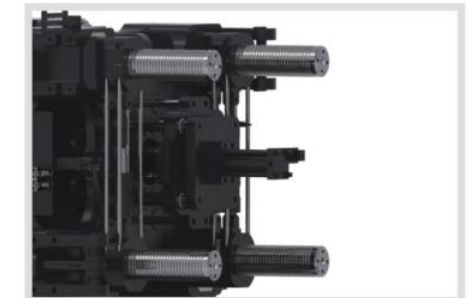
05 Fast and stable locking system

Fast, smooth, quiet, more effective lock nut to protect tie bar and the nut itself, prolong equipment lifetime.



06 Synchronized ejection (core)movement

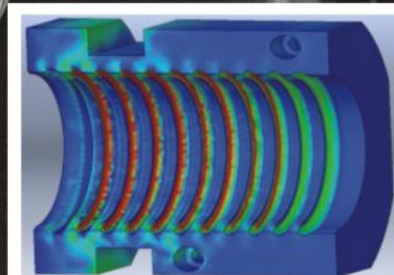
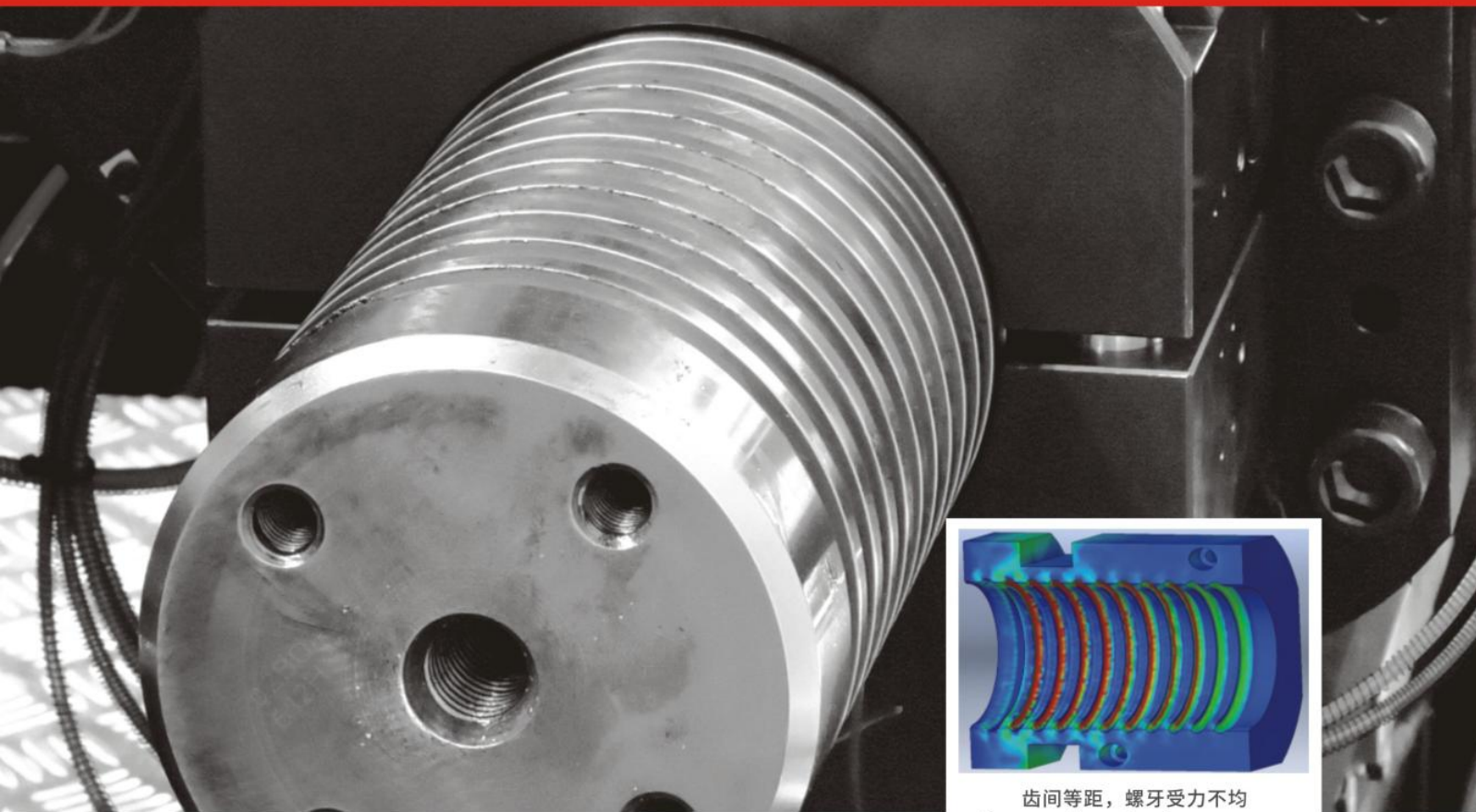
simultaneous eject (core pulling) function as standard, improve machine cycle efficiency.



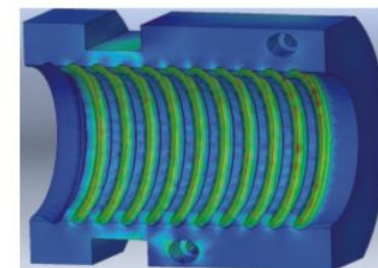
07 Special injection cylinder design

The new injection cylinder has extremely low oil return resistance and cooperates with the frame structure of the linear guide to reduce the friction of the injection part and greatly improve the control precision of the injection unit.





齿间等距，螺牙受力不均
Same tooth spacing, force not even



齿间变距设计，螺牙受力均匀
Variable tooth spacing, force even

08 Tie bar clamp nut with progressive screw teeth design

Each stress on even teeth, longer life time for locking nuts.

09 Independent oil filter and cooling system

Very compact and less space occupation. Stabilize the entire oil temperature without any other interruption, such as cycle time and other working elements.



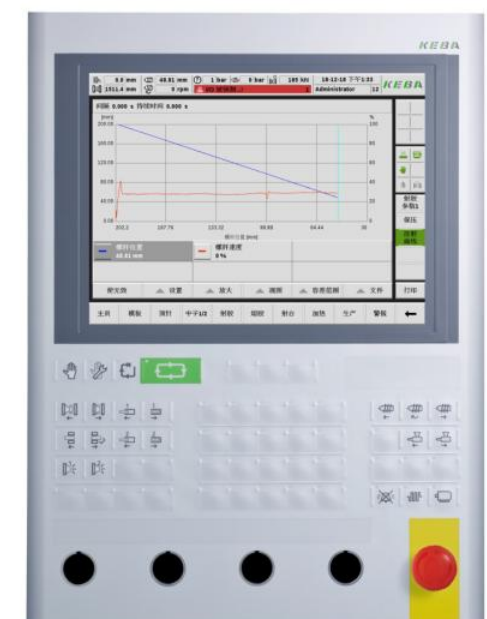
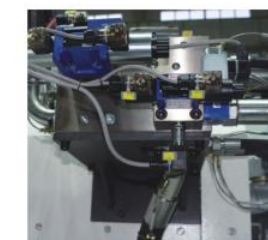
10 Stable feeding zone temperature

The feed throat temperature is brought into the closed loop control of the temperature unit, thus the efficiency and precision of the whole injection molding unit are improved. To avoid low injection accuracy due to inconsistency and caking.



11 The injection pressure

The injection pressure gets feedback always, and the injection curve makes it easier for the customer to adjust the process of the product.



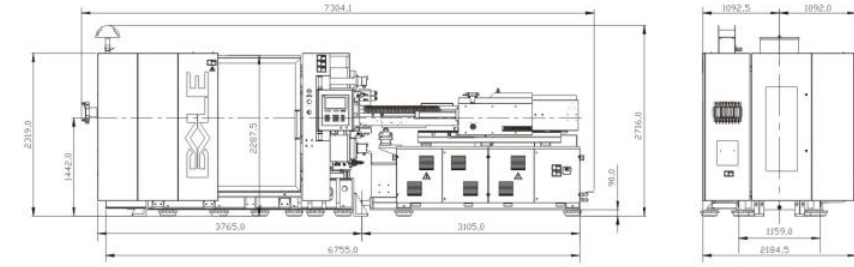
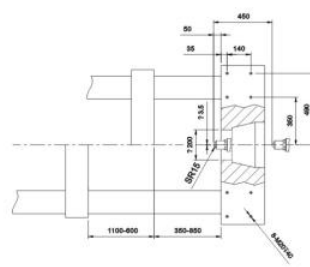
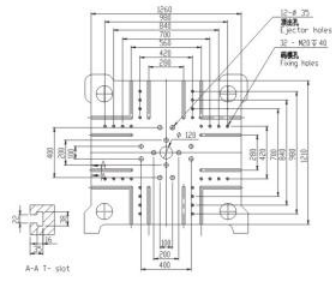
Technical Data

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		BL520DK/Z2950			BL620DK/Z3700			BL750DK/Z4800			BL950DK/Z5900			BL1100DK/Z7900			BL1400DK/Z13400			BL1700DK/Z19300			BL2000DK/Z19300		
Injection Unit																									
公称射胶能力		Z2950			Z3700			Z4800			Z5900			Z7900			Z13400			Z19300			Z19300		
Screw diameter	mm	65	75	80	70	80	85	75	85	90	80	90	100	90	100	110	110	120	130	120	135	145	120	135	145
Screw L/D ratio		23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
Calculated injection volume	cm ³	1227	1634	1859	1596	2085	2354	2009	2581	2893	2513	3181	3927	3467	4280	5180	6082	7238	8495	8200	10378	11972	8200	10378	11972
Shot weight,PS	g	1129	1503	1710	1469	1918	2165	1848	2374	2662	2312	2926	3612	3189	3938	4765	5596	6659	7815	7544	9547	11014	7544	9547	11014
	oz	40	53	60	52	68	77	65	84	94	82	103	127	112	138	168	197	235	276	266	337	388	266	337	388
Injection piston speed	mm/s	116			119			116			106			104			105			102			102		
Injection rate	cm ³ /s	386	514	585	458	598	675	513	659	738	519	657	812	666	822	995	1038	1235	1450	1235	1563	1803	1235	1563	1803
	g/s	351	467	532	417	544	614	467	599	672	478	605	747	612	756	915	955	1136	1334	1136	1438	1659	1136	1438	1659
Injection pressure	MPa	246	185	162	234	179	159	239	186	166	230	182	147	230	186	154	221	186	158	236	186	161	236	186	161
Screw speed	r/min	160			147			140			135			120			115			100			100		
Clamping Unit																									
Clamping force	Ton	531			633			765			969			1122			1429			1735			2041		
	kN	5200			6200			7500			9500			11000			14000			17000			20000		
Size of mould platens(h x v)	mm x mm	1260X1210			1380X1280			1500X1360			1560X1420			1855X1715			2130X2030			2260X2100			2480X2320		
Clearance between tie bars (h x v)	mm x mm	860X810			960X860			1060X920			1160X1020			1260X1120			1420X1320			1620X1460			1720X1560		
Opening stroke	mm	1100/600			1300/750			1400/800			1600/950			1870/1150			2200/1500			2570/1700			2580/1700		
Mould height min.	mm	350			350			400			450			480			650			680			720		
Mould height max.	mm	850			900			1000			1100			1200			1350			1550			1600		
Max. daylight	mm	1450			1650			1800			2050			2350			2850			3250			3300		
Ejector stroke	mm	250			250			280			280			320			360			400			450		
Ejector force forward	kN	124			124			232			232			232			309			309			465		
Ejector force backward	kN	75			75			155			155			155			210			210			310		
Number of ejector rods	PC	13			21			17			17			25			25			25			25		
Driving and Heating																									
Installed heating power	kW	22	25	22	28	33	37	32	38	42	37	42	56	42	56	72	72	75	87	75	96	115	75	96	115
Drive power	kW	30+42			42+42			50+30			50+30			50+30+21			50+50+50			50+50+42+42			50+50+42+42		
Working pressure	MPa	17.5			17.5			17.5			17.5			17.5			17.5			17.5			17.5		
Other																									
Oil tank capacity	L	600			800			900			1000			1400			2000			2500			2500		
Maximum mould weight	kg	6500			8000			9500			12000			15000			21000			35000			42000		
Net weight	ton	18			22			26			35			45			60			75			90		
Machine dimensions (LxWxH)	m x m x m	7.3X2.2X2.5			7.8X2.6X2.4			8.3X2.8X2.6			9.1X3.1X2.7			10.5X3.2X2.8			11.4X3.5X2.9			12.1X3.7X3.4			13.2X3.7X3.2		

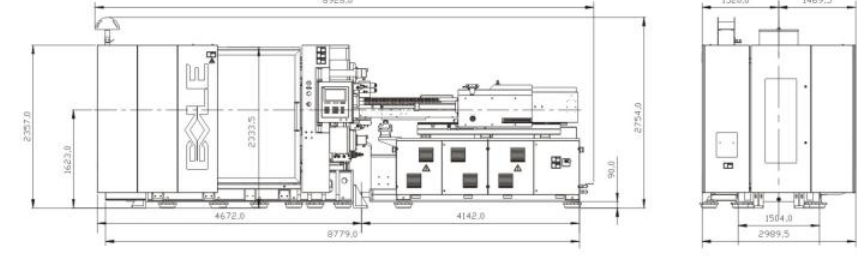
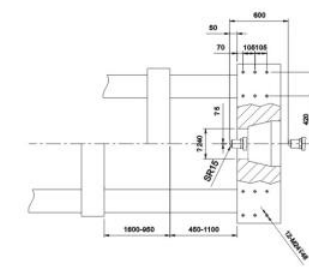
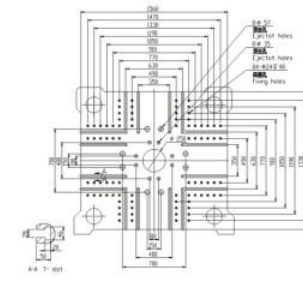
Technical Data

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Injection Unit																									
公称射胶能力		Z25800			Z27300*	Z36800			Z36800			Z58100			Z79800			Z79800			Z119000				
Screw diameter	mm	140	150	160	170	160	170	185	160	170	185	185	200	220	200	220	240	200	220	240	220	240	260		
Screw L/D ratio		23	23	23	22	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23		
Calculated injection volume	cm ³	12084	13872	15783	19293	18598	20996	24864	18598	20996	24864	28224	32987	39914	38013	45996	54739	38013	45996	54739	57780	68763	80701		
Shot weight,PS	g	11117	12762	14521	17750	17110	19316	22875	17110	19316	22875	25966	30348	36720	34972	42316	50360	34972	42316	50360	53157	63262	74245		
	oz	392	450	512	626	603	681	807	603	681	807	916	1070	1295	1233	1492	1776	1233	1492	1776	1875	2231	2619		
Injection piston speed	mm/s	96			95	95			95			69			58			58			56				
Injection rate	cm ³ /s	1432	1645	1871	2158	1932	2182	2583	1932	2182	2583	1856	2170	2626	1822	2205	2625	1822	2205	2625	2138	2545	2987		
	g/s	1318	1513	1722	1985	1778	2007	2377	1778	2007	2377	1708	1996	2416	1677	2029	2415	1677	2029	2415	1968	2342	2748		
Injection pressure	MPa	213	186	164	142	198	175	148	198	175	148	206	176	146	210	174	146	210	174	146	208	174	148		
Screw speed	r/min	84			84	69			69			60			54			54			50				
Clamping Unit																									
Clamping force	Ton	2347			2755			3061			3571			4082			5102			6939					
	kN	23000			27000			30000			35000			40000			50000			68000					
Size of mould platens(h x v)	mm x mm	2560X2360			2700X2500			2840X12640			3120X2820			3340X2940			3820X3420			4350X3750					
Clearance between tie bars (h x v)	mm x mm	1820X1620			1920X1720			2020X1820			2220X1920			2420X2020			2800X2400			3200X2600					
Opening stroke	mm	2720/1800			2920/1900			3020/2000			3180/2160			3480/2360			3680/2460			4200/2900					
Mould height min.	mm	780			780			880			980			980			1080			1200					
Mould height max.	mm	1700			1800			1900			2000			2100			2300			2500					
Max. daylight	mm	3500			3700			3900			4160			4460			4760			5400					
Ejector stroke	mm	450			500			500			550			550			550			1000					
Ejector force forward	kN	465			465			465			465			619			619			891					
Ejector force backward	kN	310			310			310			310			420			420			616					
Number of ejector rods	PC	25			29			29			33			33			33			33					
Driving and Heating																									
Installed heating power	kW	109	123	128	145	128	158	173	128	158	173	173	216	236	216	236	263	216	236	263	236	263	290		
Drive power	kW	50+50+50+50			50+50+50+50			50+50+50+50+50			50+50+50+50+50			50+50+50+50+50			50+50+50+50+50			42+50+50+50+50+50					
Working pressure	MPa	17.5			17.5			17.5			17.5			17.5			17.5			17.5					
Other																									
Oil tank capacity	L	3000			3000			3200			3200			3500			3500			3500			3800		
Maximum mould weight	kg	50000			50000			68000			72000			80000			100000			100000			180000		
Net weight	ton	120			125			135			155			195			254			330			420		
Machine dimensions (LxWxH)	m x m x m	15X4.1X3.6			15X4.1X3.6			15.5X4.3X4.1			16.5X4.5X4.2			19.5X4.9X4.7			20.5X5.2X5.0			23.5X5.3X5.0			25.5X5.8X5.3		

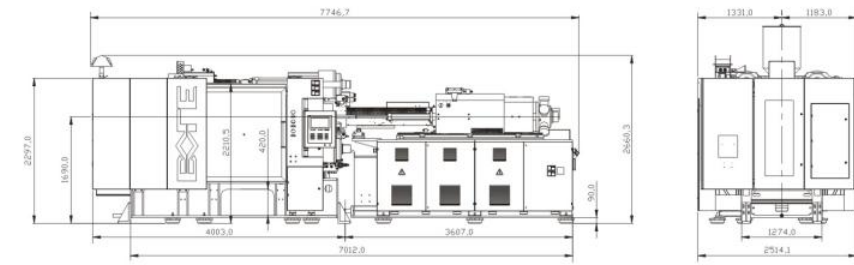
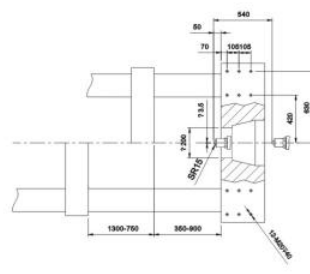
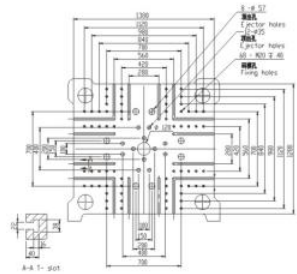
Platen Dimensions & Machine Dimensions



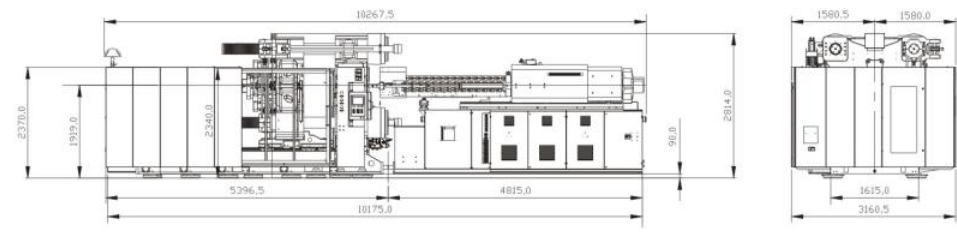
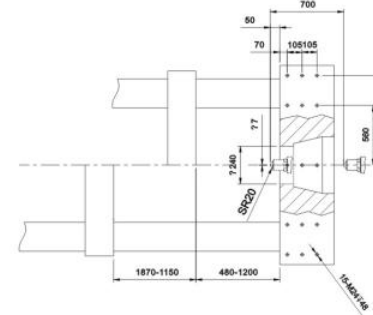
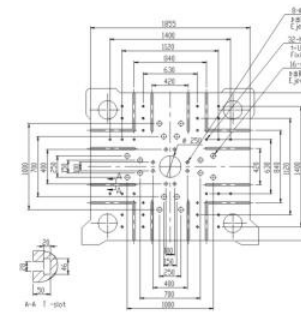
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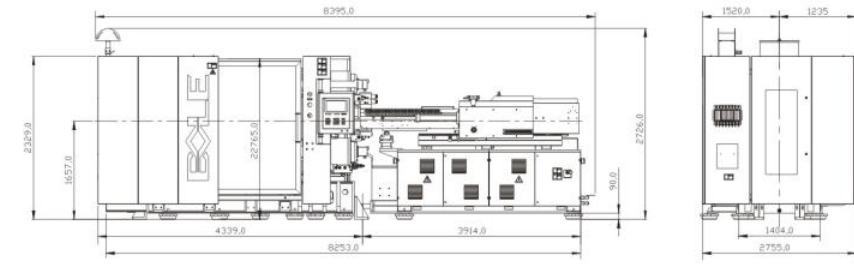
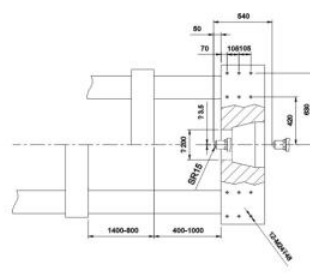
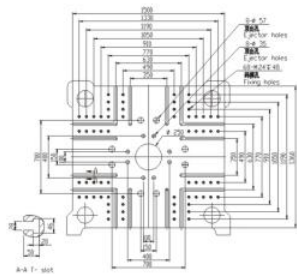
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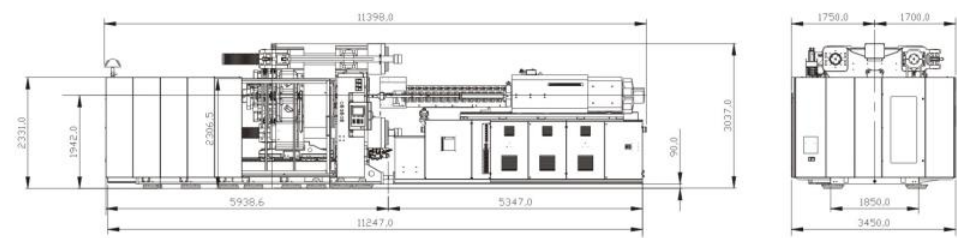
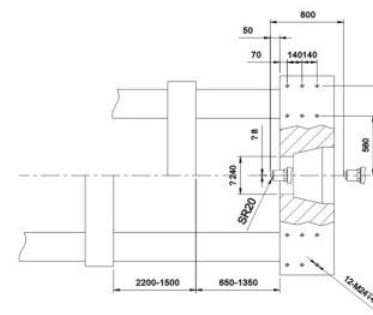
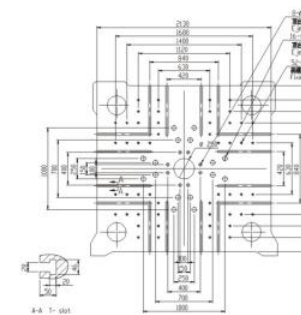
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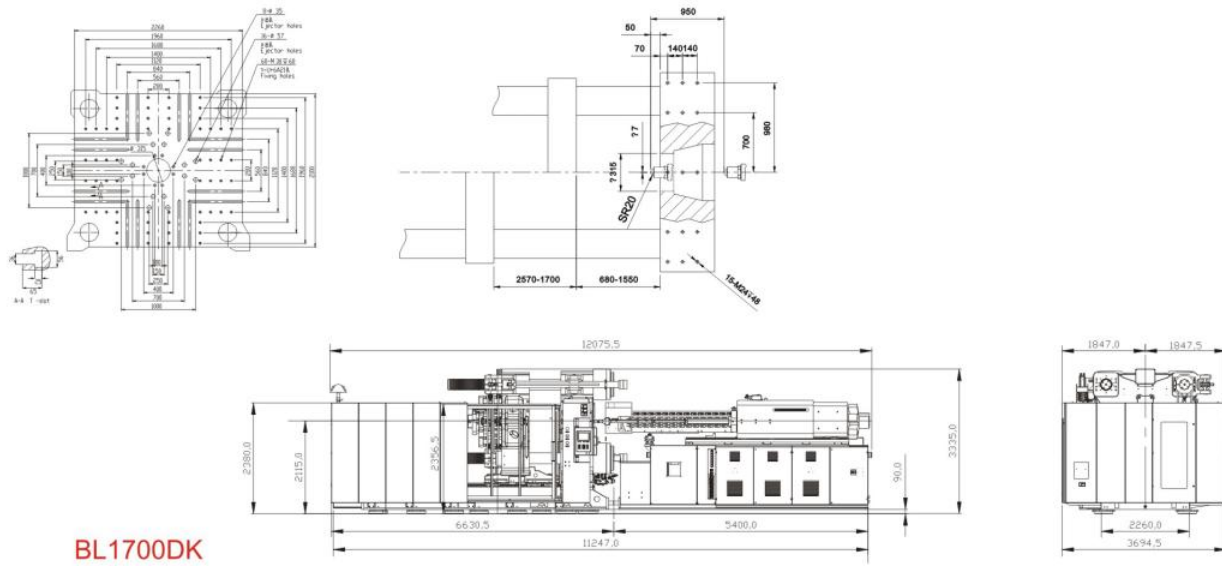


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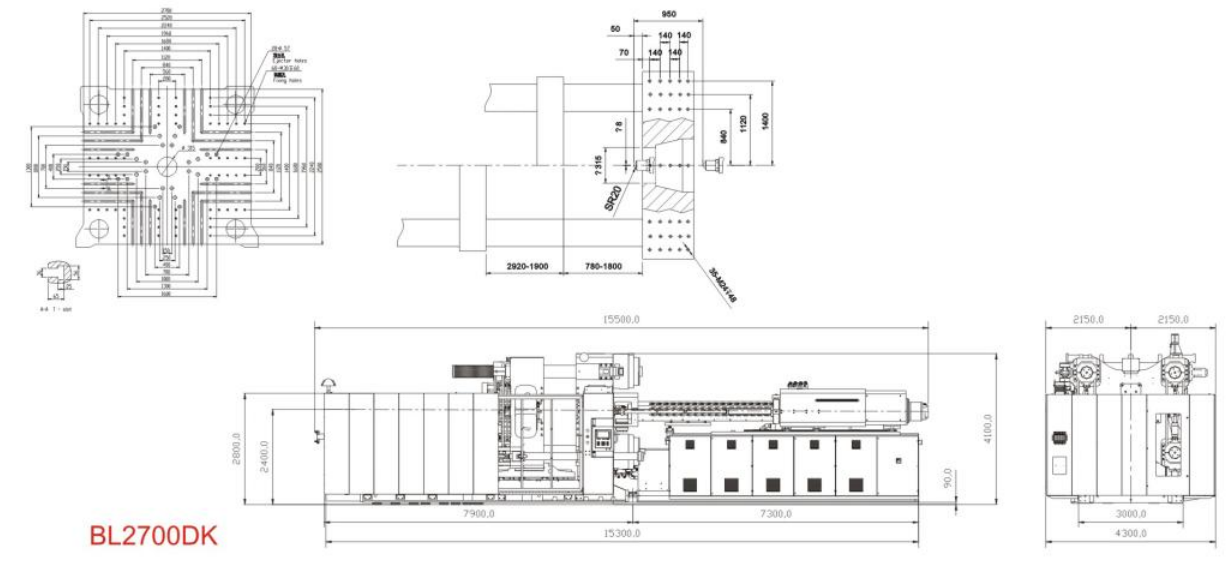


BL1400DK

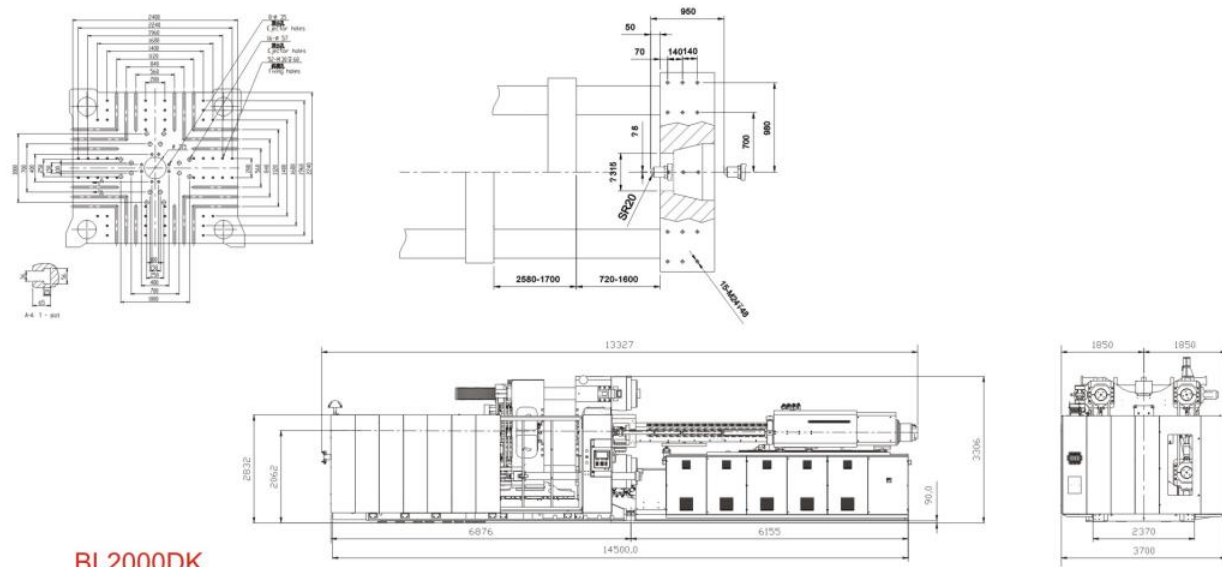
Platen Dimensions & Machine Dimensions



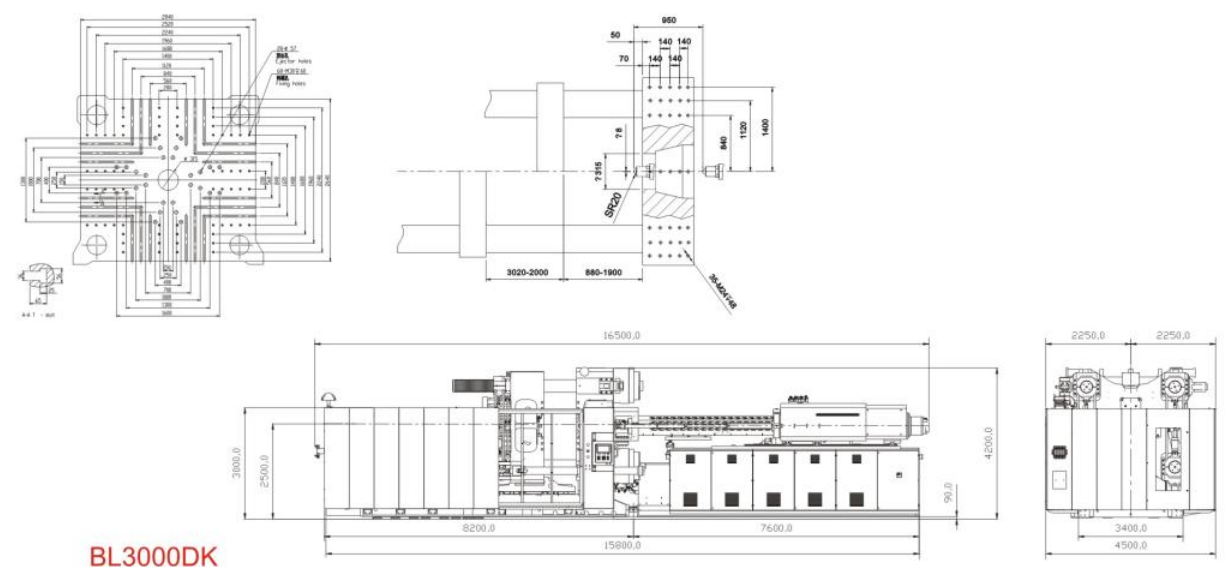
BL1700DK



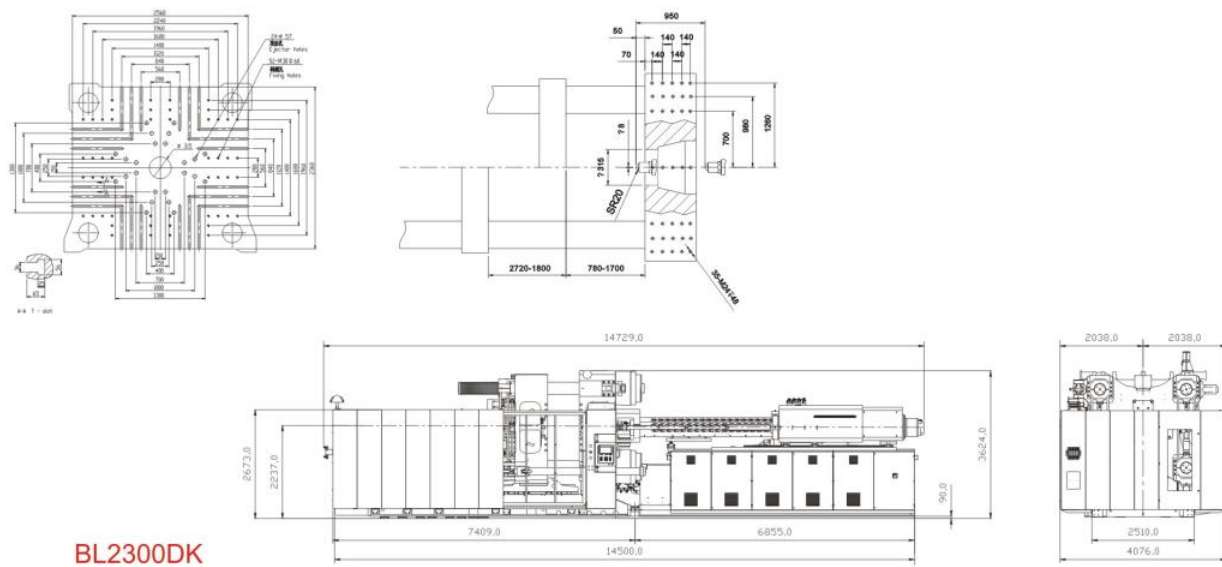
BL2700DK



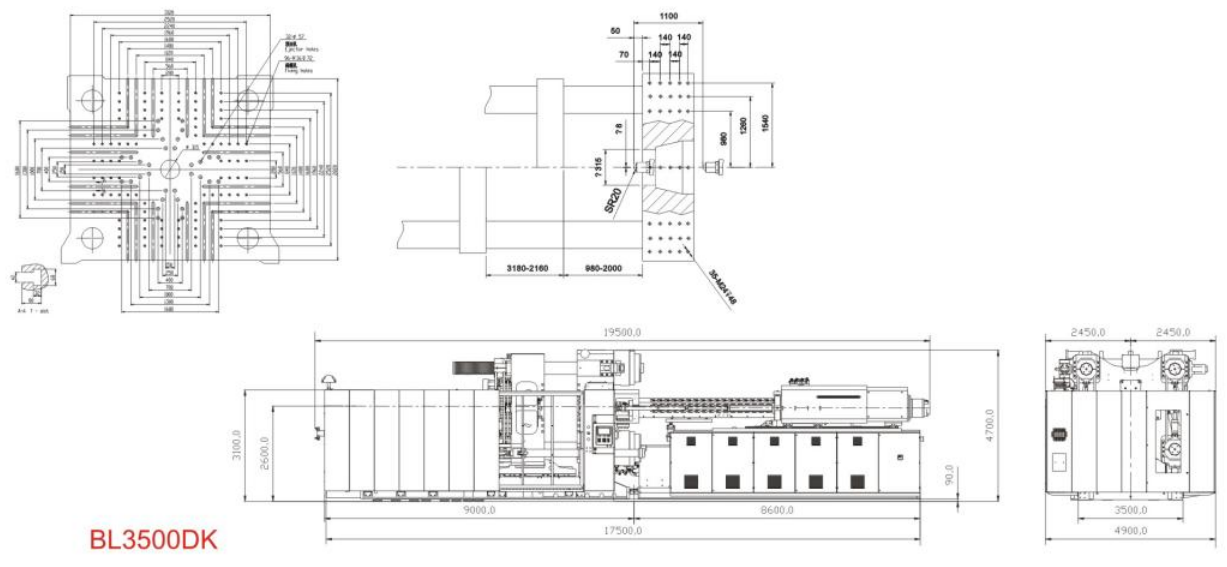
BL2000DK



BL3000DK



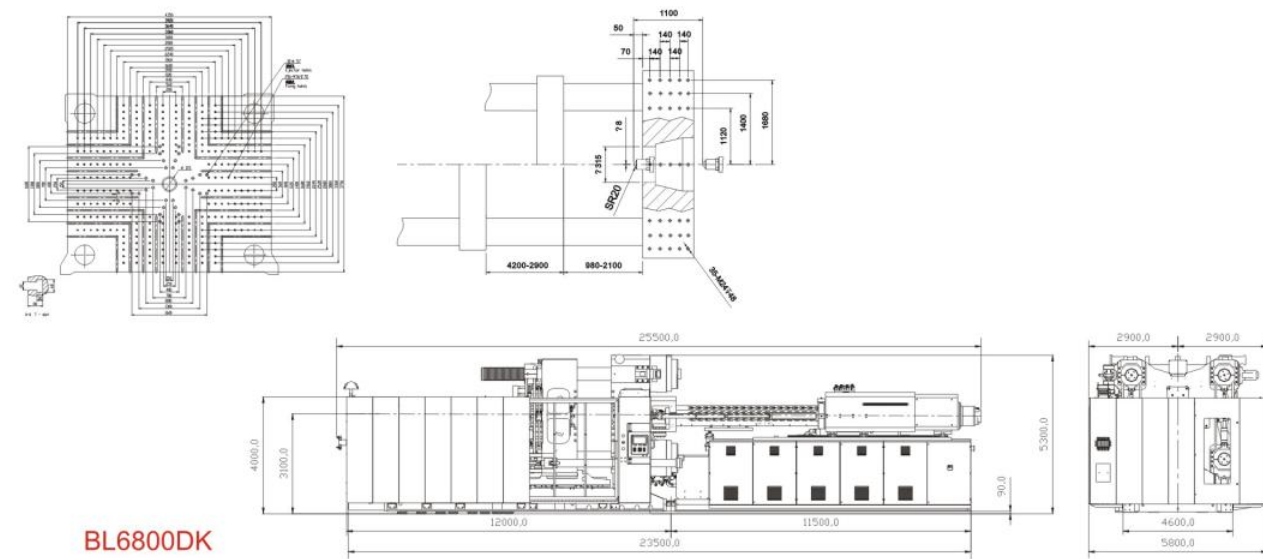
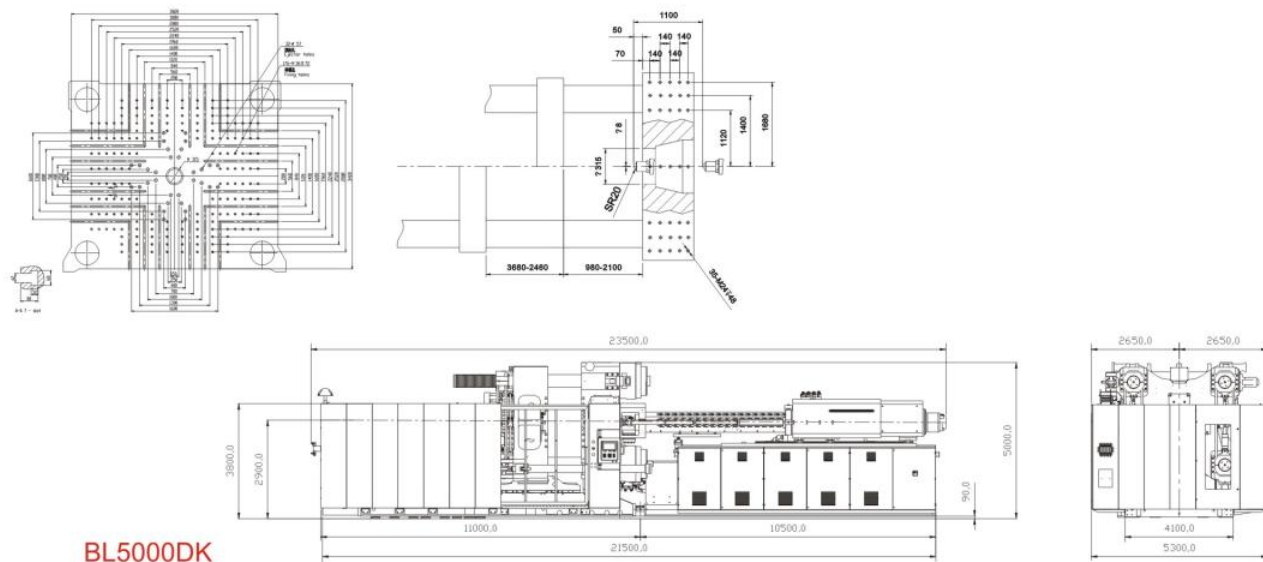
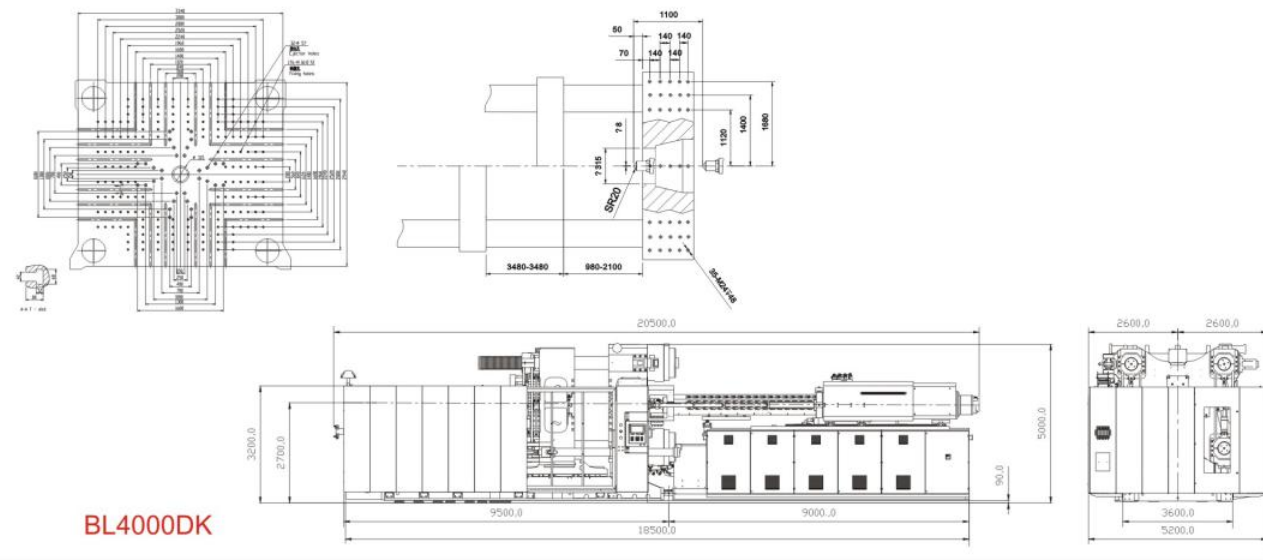
BL2300DK



BL3500DK

Platen Dimensions & Machine Dimensions

Combination of Clamp Unit And Injection Unit



Injection unit		Z2950	Z3700	Z4800	Z5900	Z7900	Z13400
Clamp unit		65/70/80	70/80/85	75/85/90	80/90/100	90/100/110	110/120/130
Clamping force	Space between tie bar						
5200	860 × 810	●	◎	◎			
6200	960 × 860	◎	●	◎	◎		
7500	1060 × 920		◎	●	◎	◎	
9500	1160 × 1020			◎	●	◎	◎
11000	1260 × 1120				◎	●	◎
14000	1420 × 1320					◎	●
17000	1620 × 1460						◎
20000	1720 × 1560						◎
23000	1820 × 1620						◎
27000	1920 × 1720						
30000	2020 × 1820						
35000	2220 × 1920						
40000	2420 × 2020						
50000	2800 × 2400						
68000	3200 × 2600						

Injection unit		Z19300	Z25800	Z27300*	Z36800	Z58100	Z79800	Z119000
Clamp unit		120/135/145	140/150/160	170	160/170/185	185/200/220	200/220/240	220/240/260
Clamping force	Space between tie bar							
5200	860 × 810							
6200	960 × 860							
7500	1060 × 920							
9500	1160 × 1020							
11000	1260 × 1120	◎						
14000	1420 × 1320	◎	◎					
17000	1620 × 1460	●	◎		◎			
20000	1720 × 1560	●	◎		◎			
23000	1820 × 1620	◎	●	◎	◎			
27000	1920 × 1720	◎	◎		●	◎		
30000	2020 × 1820	◎	◎		●	◎		
35000	2220 × 1920		◎		◎	●	◎	◎
40000	2420 × 2020		◎		◎	◎	●	◎
50000	2800 × 2400					◎	●	◎
68000	3200 × 2600					◎	◎	●

Remark : ● Standard ◎ Optional

● Standard ◎ Optional

Clamping Unit	520-1400DK		520-1400DK	
	Standard	Optional	Standard	Optional
T-slot platen (including T-slot+Screw holes)	●		●	
Moving platen feet slip adopts linear guide rail support structure	●			◎
Anti-down support in slide shoes of movable platen,high hardness steel strip			●	
Hydraulic and electrical dual safety protection device	●		●	
Automatic mold height calibration	●		●	
Automatic adjustment of clamping force on demand	●		●	
Euromap U18 robot postion	●		●	
Lowpressure mould protect with high precision	●		●	
Equipped with safety screen in the clamping unit (Above 950DK)	●		●	
Auto-door control and safety switch in its bottom and confirmed button in mold closing	●		●	
The operation of the open/close mold,ejection is controlled by a high precision electronic ruler	●		●	
Optional:multiple ejector model,saperated setting pressure,speed	●		●	
Equipped with synchronous ejector and core pulling system	●		●	
Pull back the central ejecting rod to reset forcibly	●		●	
Two groups of water flow meter(one in stationary platen and one in moving platen, Below 950DK is 4 in/4 out, above 950DK is 6 in/6out)	●		●	
Five process in mold opening and mold closing,adjustable pressure	●		●	
Self-detector for volumetric central oil lubrication,equiped with terminal pressure detection	●		●	
Two core puller as standard(one in stationary platen and one in moving platen),reserve one core puller in moving platen	●		●	
Differential hydraulic circuit for mold open	●		●	
Mold open/close proportional valve	●		●	
Emergency stop button on operating side and non-operating side both	●		●	
Magnetic Platen Eu70		◎		◎
Hydraulic clamber		◎		◎
Tie bar pull function		◎		◎
Mould heat shiled plate		◎		◎
Bigger mould height		◎		◎
Quick mold change system		◎		◎
Wider machine cover&door		◎		◎
Bigger eject force		◎		◎
Bigger eject stroke		◎		◎
Sccrew hole platen		◎		◎
Special requirements for water block (including fast plug-in, water glass tube flowmeter)		◎		◎
Special number requirement of core		◎		◎
2 air blow		◎		◎

● Standard ◎ Optional

Injection Unit	520-1400DK		520-1400DK	
	Standard	Optional	Standard	Optional
Injection/charging base use linear guide rail support structure	●		●	
German designed efficient plasticizing quality nitride steel screw barrel	●		●	
Barrel support	●		●	
Multi-section PID temperature control for nozzle and barrel	●		●	
Totally enclosed insulation cover, nozzle cover	●		●	
Injection stroke control with precise transducer	●		●	
The strimming device of the nozzle centering	●		●	
Time-setting heating function,screw cold start protection	●		●	
Screw anti-fluid device(pull-out/retract/suck back)	●		●	
Screw rotation speed detection	●		●	
Auto purge function for cleaning the barrel	●		●	
Proportional back pressure of charging	●		●	
Central lubrication in injection unit	●		●	
Extented nozzle,extent to 50mm	●		●	
Ceramic heating band	●		●	
(gas/water)assistant injection signal interface	●		●	
The material feed opening temperature control	●		●	
Special screw barrel (electroplating,alloy,and hard pcmma,pbt,pa,ect)		◎		◎
Bearing type mobile hopper seat with ordinary hopper		◎		◎
Feeding plate,without hopper		◎		◎
Extented nozzle,extent to 100mm		◎		◎
Spring or hydraulic,penumatic and shut off nozzle		◎		◎
Enlarging the injection unit		◎		◎
Decrease injection unit		◎		◎
Infrared heating band		◎		◎
Barrel fan coolingsystem		◎		◎
Electrical charging		◎		◎
Hydraulic synchronous charging system		◎		◎
Signal interface of dosing color machine		◎		◎
Micro-foaming molding		◎		◎
Upgrade plasticizing motor		◎		◎
Nitrogen injection function (Accelerate container)		◎		◎

● Standard ⊙ Optional

Control Unit & Hydraulic Unit	520-1400DK		520-1400DK	
	Standard	Optional	Standard	Optional
KEBA computer (12 inch)	●		●	
Multiple operating language	●		●	
Tricolor alarm light	●		●	
Real-time clamping force monitoring	●		●	
Euromap U12 manipulator interface	●		●	
USB interface,easy backup panel application update and mould parameters save	●		●	
Have stop memory function,random can store 240 setsmould data	●		●	
200 group abnormal alarm and 200 group modify 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,output point detection and i/o online simulation function,can quickly confirm the machine operation status	●		●	
Quality data process monitoring interface	●		●	
Production statistical process control real-time list interface(SPC)	●		●	
Socket:5-core 32Ax2+5-core 16Ax1,3-core multi-functionx2	●		●	
Injection moulding machine industry 4.0 network monitoring system interface	●		●	
Servo energy-saving system	●		●	
Oil temperature detection, deviation automatic alarm	●		●	
Motor overload protection function	●		●	
Independent cooling filtration system	●		●	
BECKHOFF computer (15 inch)		⊙		⊙
Euro map67 robot interface		⊙		⊙
Process data protection lock		⊙		⊙
Hot runner interface		⊙		⊙
Special requirement socket		⊙		⊙
Computer network centralized control,network monitoring system		⊙		⊙
Real-time energy consumption monitoring		⊙		⊙
The computer has built-in operation instruction to view the function		⊙		⊙
Multi-group sequential injection function		⊙		⊙
Upgrade servo pump&motor system		⊙		⊙

● Standard ⊙ Optional

Other parts	520-1400DK		520-1400DK	
	Standard	Optional	Standard	Optional
Standard machine color of BOLE DK	●		●	
Adjustable level pad	●		●	
Anchor bolt, L fixed block	●		●	
Spare parts tool box,common tools,vulnerable parts,extended nozzle,user's guide	●		●	
Special color		⊙		⊙
Robot		⊙		⊙
Magnetic frame		⊙		⊙
Hopper dryer		⊙		⊙
Auto-loader		⊙		⊙
Fumigation wood package		⊙		⊙
Pick-up platform		⊙		⊙
Hydraulic oil		⊙		⊙
Multiple language warning signs		⊙		⊙