

快速机

HK Series High Speed Machine



● 节能 ENERGY

能量转换高效，进一步节省能源
High energy conversion efficiency, more energy saving.

● 高效 EFFICIENT

多种同步动作，实现最短的成型周期
Synchronous machine movement is possible
to achieve a short cycle time

● 精密 PRECISION

高达0.01mm级别的高定位精度，保证产品质量
(选配电动锁模)
Up to 0.01 mm high position control accuracy,
ensure product quality
(Optional electrical mould-clamping function)

● 高速 HIGH SPEED

实现高射速，满足薄壁、包装等特殊产品的成型需求
High speed to meet thin-wall and package special
product molding requirement.

● 安静 QUIET

低噪音，工作环境更舒适
Low noise level, create comfortable environment

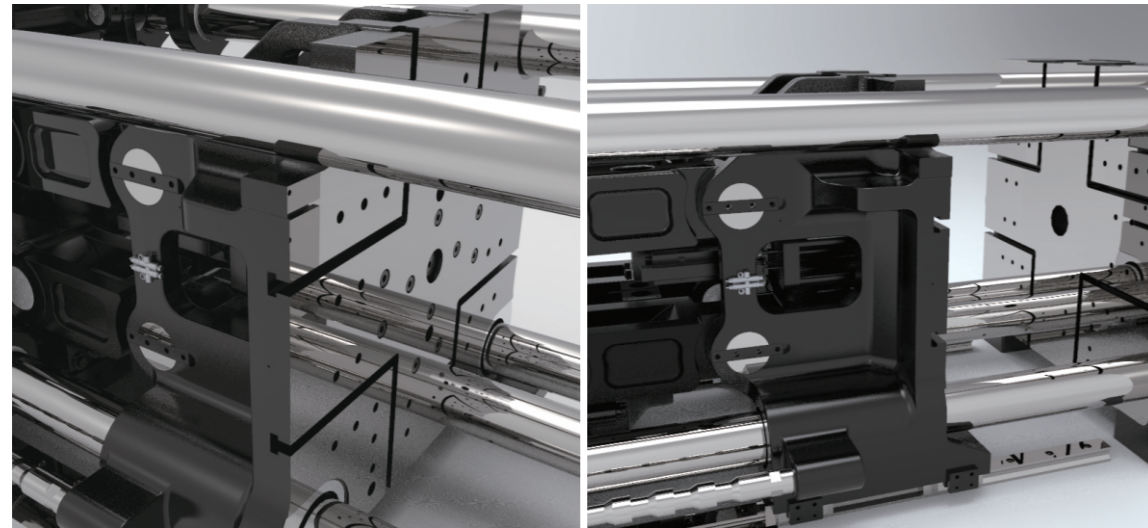
锁模单元 Clamping Unit

全国发明专利 中心锁模

Central clamping toggle, invention patent in China

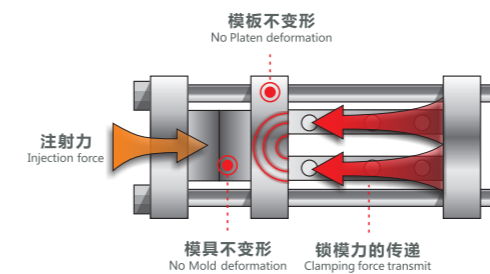
(专利号: ZL2011 10250342.5)

(Patent No.: ZL2011 10250342.5)



- **HK**全系列采用中心锁模结构及优化的连杆参数，开合模运行平稳
HK whole series machine with central clamping structure and optimized toggle design, mould open and close are very stable.
- 锁模机构在标准机型基础上，模板刚性、拉杆刚性、机架刚性提升**100%**，以保证机器使用寿命
Based on standard structure, HK clamping structure will be improved by 100% on mould platen rigidity, tie bar rigidity and frame rigidity.
- **HK**锁模部分、注射部分全系列采用线性导轨结构
HK whole series machine's clamping unit and injection unit are with linear guide structure.

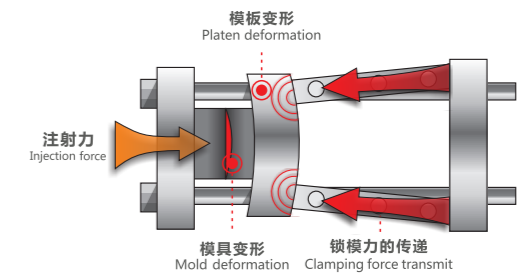
外曲式与内曲式受力图解 Toggle System Comparison



BOLE

伯乐塑机中心受力
BOLE centre clamping structure

- **100%**
锁模力利用率
Clamping force efficiency
- **2-5%**
原料节省
Material saving
- 减少模具磨损和模板变形
Reduces mold wear, platen deflection
- 比传统结构更少飞边
Less possibility of flash, save flash trim work

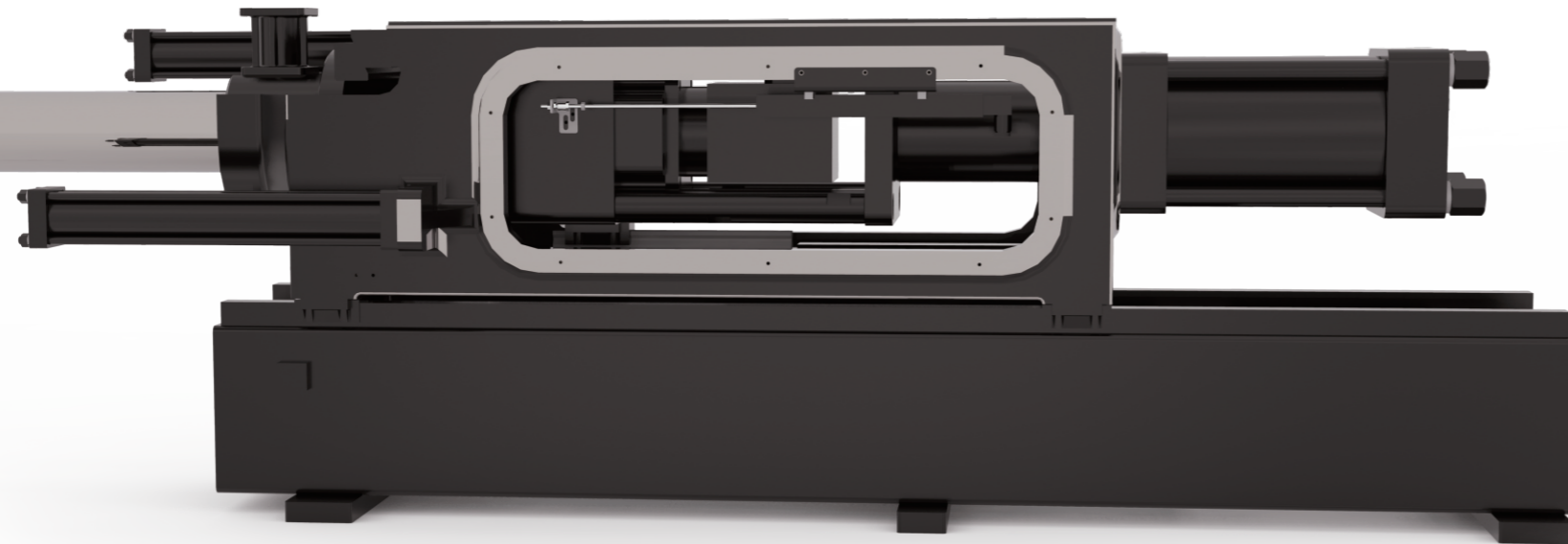


Others

传统结构(其它品牌)
Tradition Toggle system

- **80-85%**
锁模力利用率
Clamping force efficiency
- 动模板会变形，造成飞边浪费人力和材料。
Moving platen with obvious deformation, cause flashes, waste of material and labor of trim the flashes.

注射单元 Injection Unit



德国设计的塑化系统 German designed plasticizing system

- 源自德国设计的塑化系统：塑化效率远超国内水平**20%**以上
Originate from Germany design Plasticizing System, efficiency excess above 20% of domestic level
- 可定制各种复杂工艺要求、各种应用要求的专用塑化系统。
Custom made complicated technical requirement, applied to special plasticizing system
- 专用螺杆设计，以保证达到最佳塑化效果及塑化效率。
Screw for special design purposes, to achieve the best plasticizing effect and efficiency

- **HK**注射部分采用特殊单缸结构，注射活塞不随螺杆转动，无漏油风险；
HK injection unit is with special single injection cylinder design and injection rod is not rotating with screw, which will be no oil leakage risk.
- 注射速度机型需求匹配，**350mm/s**到**600mm/s**，完全满足目前包装行业及扎带行业要求
HK injection speed is from 350mm/s to 600mm/s, which can meet the package and zip tie molding requirement.



控制系统 Control Unit

12
Inches | 英寸

I/O
Module | 模块

PC
Port | 端口

4.0
Germany | 德国

XFC
Control | 极控

0.01
Precision | 精密



- 独有的**XFC**极速控制技术，能够有效减少原料消耗，提高成型产品质量。
Unique XFC topspeed control technology, can reduce the materials consumption properly, improve the product quality.
- **EtherCAT** 现场总线系统，配置具实时特性的超高速**I/O** 模块。
EtherCAT fieldbus control system, utilize superspeed I/O module with real time function.
- 德国工业**4.0**标准，易于实现的智能制造技术。
Germany industry 4.0 standard, intelligent manufacturing technology which is easy to implement.
- 标配**SM**第三代低惯量伺服系统，响应时间最快达**35ms**，节能高达**50%**
Equipped with SM third generation low inertia servo system, minimum response time can be 35ms and save energy 50%.



- 标配多级顶出功能，可实现脉冲顶出。
Equipped with multigrade ejector function, and also can be with pulse ejector.



应用领域 Application

- 广泛运用于包装、快速消费品、医疗等行业，特别适合薄壁短周期类产品。
Widely used in packaging, fast moving consumer goods, medical and other industries, especially for thinwall short cycle products.

技术参数 Technical Data

		BL330HK/C800	
国际标准规格 International specification		3300/C800	
螺杆规格 Screw Specification		A	B
螺杆直径 Screw Diameter	mm	50	55
螺杆长径比 L/D ratio		25.3	23
理论注射容积 Theoretical injection capacity	cm ³	432	522
注射量(PS) Shot Weight Ps	g	397	481
	oz	14.0	17.0
最大对空注射速率 Injection rate into Air	cm ³ /s	746	902
注射压力 Injection Pressure	MPa	185	153
注射行程 Screw Stroke	mm	220	220
最大注射速度 Max. Injection Piston Speed	mm/s	380	380
最大螺杆转速 Screw Speed	r/min	300	300
锁模力 Clamping Force	kN	3300	
开模行程 Opening Stroke Max	mm	600	
拉杆内间距 (H×V) Tie-bar Distance (h×v)	mmXmm	660X610	
最小模具厚度 Mold Height Min	mm	250	
最大模具厚度 Mold Height Max	mm	600	
最大模板距离 Max Daylight	mm	1200	
顶出行程 Ejector Stroke	mm	150	
顶出力 Ejector Force	kN	62	
顶针回缩力 Ejector force back	kN	36	
顶出杆数 Number of ejector rods	PCS	13	
系统压力 Sys. Pressure	MPa	16.0	
电机功率 Pump Motor	kW	40+40	
电热功率 Heater power	kW	19	
温控区数 Number of temp. control zones		5+1	
料斗容积 Hoper capacity	kg	50	
油箱容量 Oil tank capacity	L	500	
机械外形尺寸(约)(L×W×H) Machine dimensions(LXWXH)	mXmXm	7.2X1.8X2.2	
机器重量(约) Net weight(appro.)	ton	13	

		BL420HK/C1000		BL550HK/C1300	
		4200/C1000		5500/C1300	
		A	B	A	B
		55	60	60	65
		25.1	23	24.9	23
		570	678	735	862
		524	624	676	793
		18.5	22.0	23.9	28.0
		1069	1272	1696	1990
		181	152	178	151
		240	240	260	260
		450	450	600	600
		250	250	200	200
		4200		5500	
		660		750	
		710X650		860X710	
		270		270	
		680		880	
		1340		1630	
		180		210	
		62		113	
		36		75	
		13		13	
		16.0		16.0	
		40+18		40+22	
		24		28	
		6+1		6+1	
		50		50	
		550		600	
		7.9X1.85X2.3		8.6X2.2X2.6	
		16		24	