

EVO Series



The Passionate Pursuit of Perfection

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Full Electrical Machine Terminator
EVOlution Hybrid Power IMM



Injection Moulding Machine

BOLE EVO Tradtional Hydraulic Machine

The same mould and the same raw materials other brand produces 100 in the same cycle time, while Bole can produce 120~130 products  More	Injection speed is by 50% faster, and the moulding cycle by 20~30% faster Fast 
 Good Easy to adjust, Precision by 30% higher, less flash, higher pass rate	Saving  30% savings on consumption, higher efficiency and greater returns

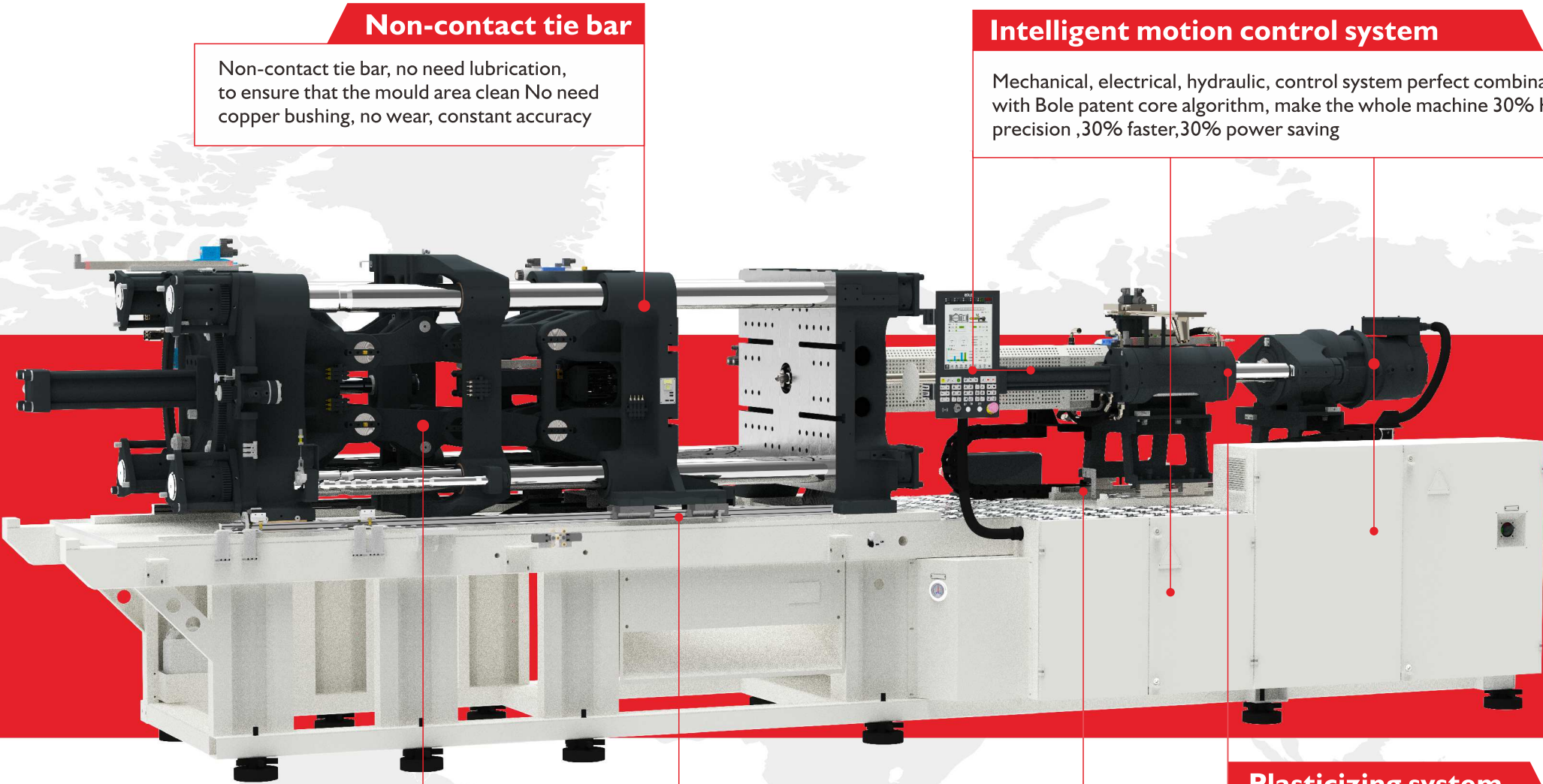
BOLE EVO Electric IMM

 More The same mould and the same raw materials other brand produces 100 in the same cycle time, while Bole can produce 101-103 products	 Fast Injection speed 200mm/s, Dry cycle is fast
 Good Injection weight repetition accuracy $\pm 1\%$, high qualified rate	 Saving Energy consumption is simila as full electric IMM, Lower maintenance costs, 1/3 of the investment saving.



Full Electrical Machine Terminator

FULL ELECTRIC MACHINE TERMINATOR



Non-contact tie bar

Non-contact tie bar, no need lubrication, to ensure that the mould area clean No need copper bushing, no wear, constant accuracy

Intelligent motion control system

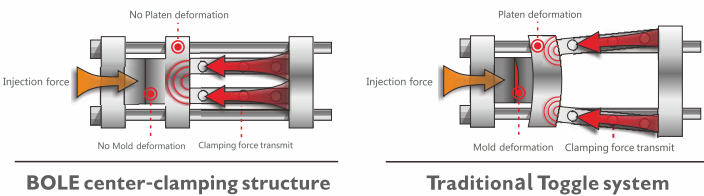
Mechanical, electrical, hydraulic, control system perfect combination, with Bole patent core algorithm, make the whole machine 30% Higher precision ,30% faster,30% power saving

Plasticizing system

The high efficiency plasticizing unit designed in Germany, with high efficiency bimetal screw as standard, the plasticizing efficiency exceeds 20% peers in China, and the durability is further improved

Center-clamping structure

Center-clamping structure, invention patent in China

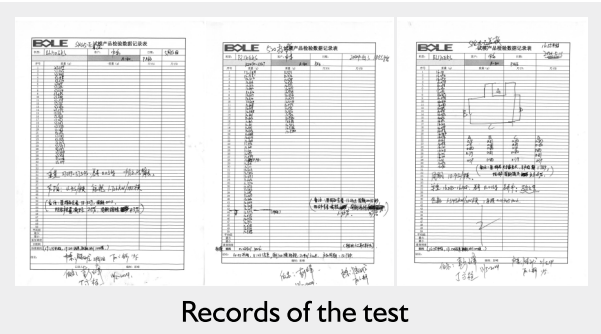


Linear guide

Standard linear guide to reduce friction and energy consumption

- Ensures high parallelism and repeated positioning accuracy of the platen
- The injection unit moves quickly, flexibly and precisely

CASE ANALYSIS



(Other brand)XXX-XXI60S

BLI60EVO/C63I

Product	 SNC05-E Base		 SNC05-E Cover Plate		 520 Nameplate	
	Original production had surface appearance shrinkage, flash		Original production had thickness deviations, large planar dimension deviations		Original production had flash bonding issues	
Existing Problems						
	XX*	BOLE	XX*	BOLE	XX*	BOLE
Energy Consumption	- Equipment Energy Consumption: 2.466kW - Energy Consumption Per Mould: 0.02466kW		- Equipment Energy Consumption: 1.726kW - Energy Consumption Per Mould: 0.01726kW		- Equipment Energy Consumption: 1.921kW - Energy Consumption Per Mould: 0.01921kW	
Cycle time	20s		11.4S Cycle Improvement 43.000%		17s	
Weight	38.32g		37.36g Weight Reduction 2.485%		16.03g Weight Reduction 6.006%	
Test Results	Surface appearance shrinkage significantly improved, no flash		Wall thickness is uniform, surface dimensions consistent, stable		Resolves original issues of shrinkage flash, burrs	

Conclusion:

- With appearance and dimensions meeting requirements, weight reduction by **1.7-6%**;
- Product cycle time is **30-43%** shorter, higher yield rate, significantly improving production efficiency;
- Production energy consumption significantly reduced, product weight more accurate;
- Compared to conventional hydraulic machines, **30% higher precision, 30% faster speed, 30% energy saving.**



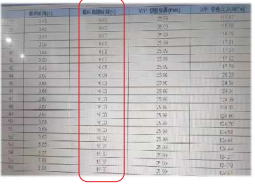
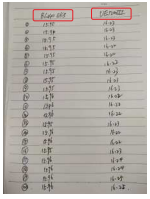
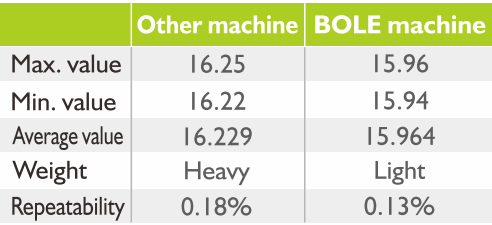
CASE ANALYSIS

Model	Other brand I200T	BLI40EVO/C460
Clamping Force(T)	120	140
Screw Diameter(mm)	36	36
Injection Volume(cm ³)	147	203
Tie Bar Spacing(mm)	470x470	460x410
Motor Power	18kW	37kW
Energy Consumption for Producing 227 Molds	4.373kW/h	4.417kW/h
Energy Consumption per Mould	0.0193kW/h	0.0195kW/h



Other Brand Injection Moulding Machine

BOLE EVO Injection Moulding Machine*

Energy Consumption	-Starting-Ending Energy Consumption : 0.000KWh-4.373kW/h -Actual Energy Consumption: 4.373kW/h -Production Quantity During This Period: 227 pieces -Energy Consumption per Product: 0.0193kW/h		- Starting-Ending Energy Consumption: 0.000KWh-4.417kW/h - Actual Energy Consumption: 4.417kW/h - Production Quantity During This Period: 227 pieces - Energy Consumption per Mould Product: 0.0195kW/h	
				
Cycle Time	 16.03s		 15.1s	
				
Precision	Records of the test		Conclusion: The repeatability accuracy of BOLE is equivalent to that of conventional full electric machine; it meets the requirements for precision moulding and can replace full electric machines for manufacturing precision parts.	

Test Comparison Conclusions and Explanation:

Explanation: Due to the inconsistency of the robot interface, the robot was not used in this test. Without using the robot, the ejector vibrates three times during the production of the product's material head and then falls off with the product.
The comparison was made under the same material temperature, demolding method, and cooling time of 8 seconds for both devices.

The BLI40EKS+ has shorter times for actions such as closing the mould, ejecting, and plasticizing.
Under the original normal mass production conditions with a cooling time of 5 seconds, the production cycle of this product on the BLI40EKS+ can be shortened to within 12 seconds.

Conclusion: The energy consumption and product repeatability accuracy of the EVO hybrid injection moulding machine are comparable to the level of full electric machines!