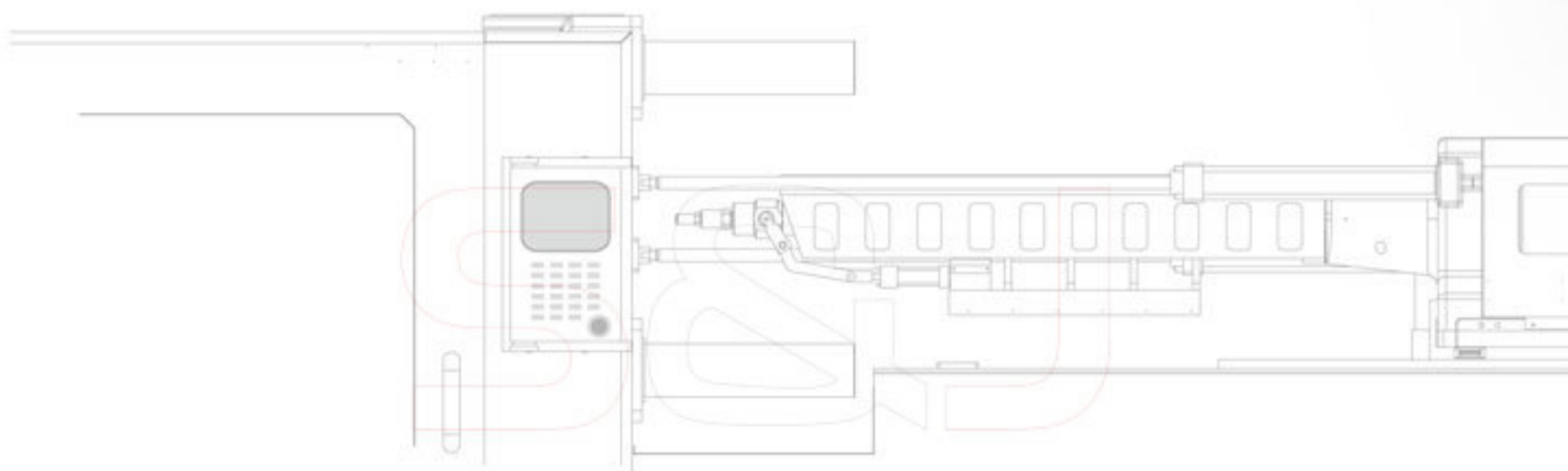


HB

Energy Efficiency
Hybrid System



WENHA®

INJECTION MOLDING MACHINES

工廠全景
FACTORY FULL VIEW



LIEN FA INJECTION MACHINERY CO., LTD

No.165, Aly. 418, Ln. 506, Sec. 1, Xinan Rd., Wuri Dist.,
Taichung City, TAIWAN (41462) R.O.C.
Tel +886-4-2335 4606~9 Fax +886-4-2335 4551~2

鏈發射出機械股份有限公司

台灣 台中市烏日區
溪南路一段 506巷 418弄 165號

e-mail:lf@lienfa.com.tw

www.lienfa.com.tw



IT'S VERY WELL
MADE IN TAIWAN



HB

35t~4000t

Energy Efficiency Hybrid System

System Feature :

- ▲ New hydraulic circuit design, integration of electrical control technology, not only achieve a high response, Low noise, the precision of speed and pressure control, and not compromise the ability of holding injection. More can be avoided by a large amount of waste lubricants and Ball screw contour supplies shortcomings that existing from Electric injection machine.
- ▲ Low depletion of energy control technology import, increased significantly inhibit oil temperature (5 to 10°C), and stability the actuator oil quality, not only improve the efficiency of the machinery and molded product yields, will also be eligible for dynamic Oil life enhancement, and the administrative expenses of the cooling system of multiple economic benefits.
- ▲ Mining closed loop with a single pump to control the multi-cylinder actuator, aims to save energy. The system for the minimum amount of investment.
- ▲ Lower supplies and maintenance needs, and improve energy use efficiency, environmental protection, etc. All lower operating costs, making the initial investment difference in the short term can be very rapid recovery.

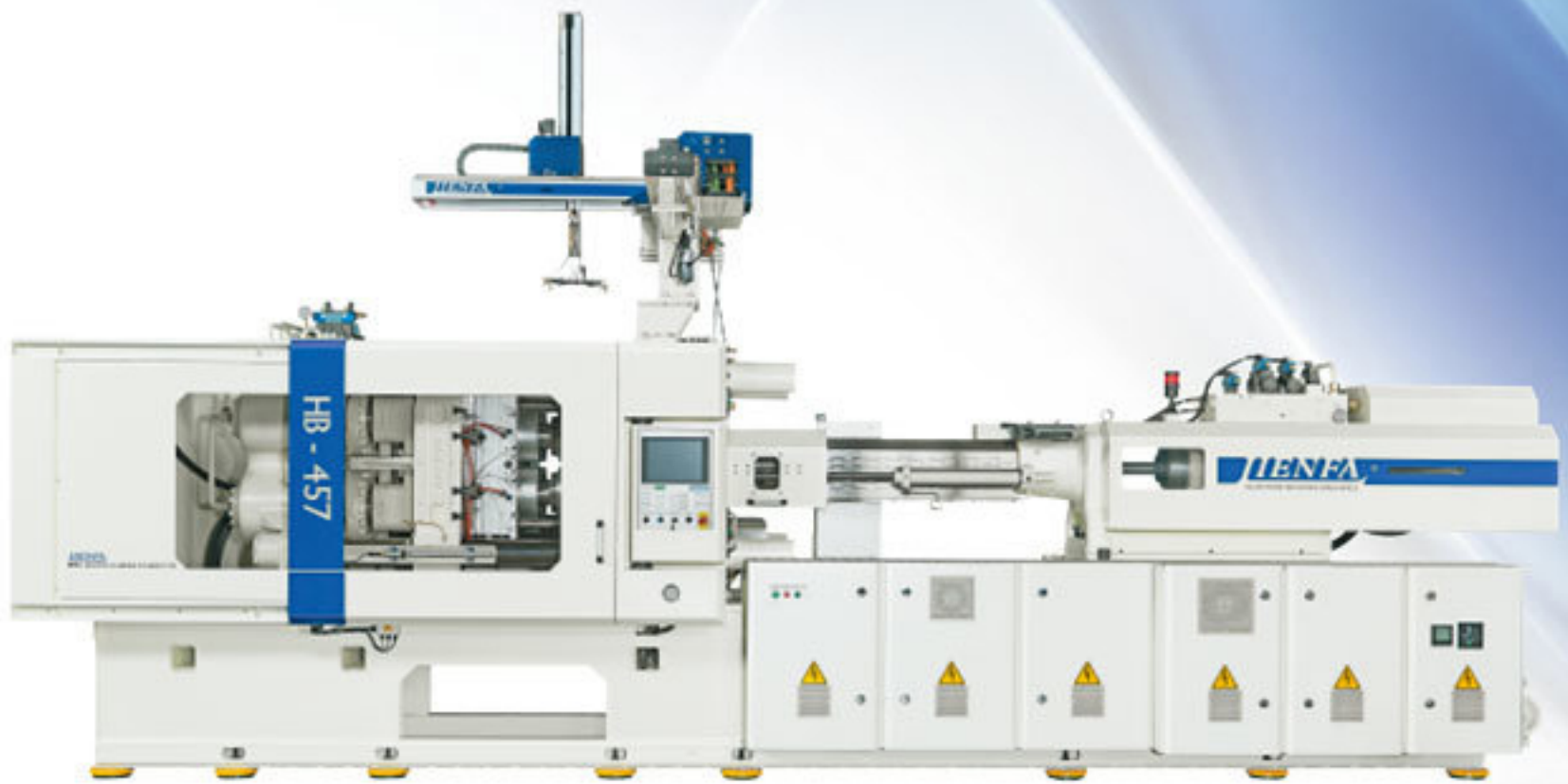




Full range of machinery equipped with microprocessor controller. Large features, friendly operation and clearly display all the necessary information.

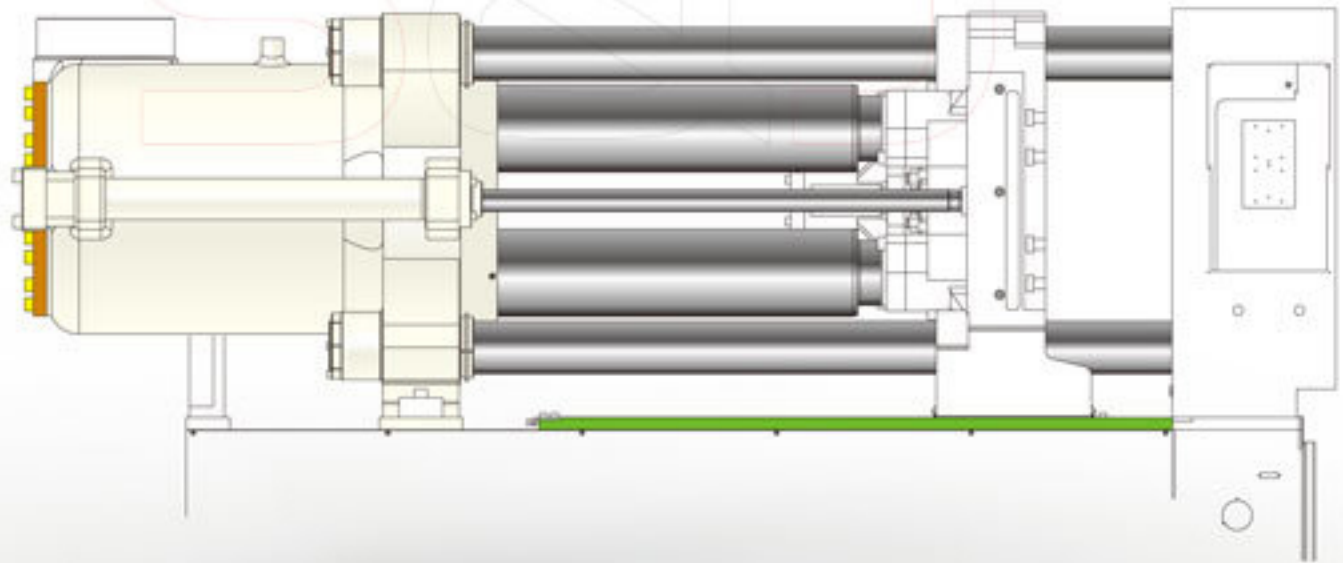
- ▲ Database-type controller. Database built-in upgrade functional for variety injection molding machines.
- ▲ 200 internal mold data sets, USB access, save the mold changing set up process.
- ▲ Clamping, injection and ejector adapt high-precision transducer, which performs accurately driving position.
- ▲ Transducer with CAN Bus, SSI interface. (OPTIONAL)
- ▲ Ethernet connection for the host computer. (OPTIONAL)
- ▲ Full closed loop injection with servo valve. (OPTIONAL)
- ▲ Euromap 67 (12) robot interface. (OPTIONAL)





Direct Clamping Structure

MT model with excellent structural rigidity, flexible and accurate, it reduces mechanical wear and power consumption. In response to diverse plastic molding process, the direct clamping system is widely used to meet the technical requirements for precision molding.



HB series injection molding machine
 Is based on the consistently high stability and
 reliability of direct clamping system



Hybrid system ~ Super energy-efficient
 plastic injection molding machine



HB energy efficiency system is an advanced modular system, based on MT model, Integrated electrical control and hydraulic circuit technology, designed for energy saving, low supplies designed for high performance environmentally friendly models. High production flexibility and a full range of features reduce operating costs, and it is widely applied to different fields.

In the medium-sized, large-sized machines also provides II locking platen design, which represents high-precision, high-efficiency multi-cylinder direct clamping system also enable you to have more compact production space. In addition, LIEN FA HB series models provide more system configuration to meet customer's satisfaction on production needs.



2002 Japan **IPF** Exhibition, First published

2003 USA **NPE** Chicago Show

2004 **K-Show** in Dusseldorf, Germany.

We continuously obtained a great affirmation from world-wide customer.

HB / ST & MT

35t~700t

Direct Clamping Cylinders Type

	型式 TYPE	單位 Unit	LF 37		LF 57				
			A	B	A	B	C	D	A
射出系統 Injection Unit	料軸直徑 Screw Diameter	mm	18	20	18	20	22	25	22
	射出重量 (PS) Shot Weight (PS)	gram	18	23	25	31	37	48	44
	射出壓力 Injection Pressure	kg/cm ²	3456	2800	3462	3160	2612	2023	3616
	理論射出容積 Theoretical Shot Volume	cm ³	20	25	28	35	42	54	49
	射出率 Injection Rate	cm ³ /sec.	56	69	50	61	74	96	65
	射出速度 Injection Speed	mm/sec.	220		195				
	可塑化能力 Plasticization	kg/hr	14	17	14	17	21	26	21
鎖模系統 Mold Lock Unit	直壓缸數 Number of Cylinder Drive	Pcs.	1		1				
	閉模力 Clamping Force	ton	35		60				
	開模行程 Opening Stroke	mm	280		350				
	最小模厚 Minimum Mold Thickness	mm	150		150				
	總行程 Maximum Daylight	mm	430		500				
	機柱間隔 Tie Bar Clearance (H×V)	mm	255×255		305×305				
	頂出行程 Ejector Stroke	mm	70		70				
其他 Other	HB-馬達 Motor	hp	10		10				
	電熱容量 Heater Capacity	kW	2		3.5				
	油箱容量 Oil Tank Capacity	L	100		200				
	機械重量 Machine Weight	ton	1.4		2				
	機械尺寸 Machine Size (L×W×H)	mm	3050×1000×1500		3900×1290×1900				

	型式 TYPE	單位 Unit	LF 270			LF 320			
			A	B	C	A	B	C	A
射出系統 Injection Unit	料軸直徑 Screw Diameter	mm	50	55	60	55	60	65	60
	射出重量 (PS) Shot Weight (PS)	gram	521	630	750	630	750	880	890
	射出壓力 Injection Pressure	kg/cm ²	2625	2170	1822	2170	1822	1555	2060
	理論射出容積 Theoretical Shot Volume	cm ³	579	701	834	701	834	978	989
	射出率 Injection Rate	cm ³ /sec.	216	261	311	297	353	415	311
	射出速度 Injection Speed	mm/sec.	110			125			
	可塑化能力 Plasticization	kg/hr	106	128	153	128	153	179	153
鎖模系統 Mold Lock Unit	直壓缸數 Number of Cylinder Drive	Pcs.	1		4	4			
	閉模力 Clamping Force	ton	270			320			
	開模行程 Opening Stroke	mm	800			900			
	最小模厚 Minimum Mold Thickness	mm	300			300			
	總行程 Maximum Daylight	mm	1100			1200			
	機柱間隔 Tie Bar Clearance (H×V)	mm	560×560			610×610			
	頂出行程 Ejector Stroke	mm	150			150			
其他 Other	HB-馬達 Motor	hp	40			50			
	電熱容量 Heater Capacity	kW	15			15			
	油箱容量 Oil Tank Capacity	L	800			1000			
	機械重量 Machine Weight	ton	10.5			14			
	機械尺寸 Machine Size (L×W×H)	mm	6700×1800×2400			7400×1900×2580			78

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. SPECIAL SPECIFICATION ORDERING IS ACCEPTABLE.

LF 77			LF 107			LF 137			LF 187		
B	C	D	A	B	C	A	B	C	A	B	C
25	28	30	28	30	35	30	35	40	45	50	55
57	72	82	99	114	155	114	155	203	315	388	469
2800	2232	1945	2695	2348	1726	3208	2357	1805	2600	2106	1741
64	80	92	111	127	173	127	173	226	350	432	522
83	105	120	86	99	135	99	135	176	175	216	261
170			140			140			110		
26	33	38	33	38	52	38	52	68	86	106	128
1			1			1	4		1	4	
80			120			150			180		
400			450			550			650		
150			180			200			200		
550			630			750			850		
355×355			402×402			455×455			505×505		
70			95			95			95		
15			20			25			30		
5			5.9			8			11.5		
200			400			500			600		
3			4.3			4.8			6.8		
4200×1400×2000			5000×1350×2100			5790×1500×2200			6000×1600×2250		

LF 370		LF 507			LF 607			LF 707			
	B	C	A	B	C	A	B	C	A	B	C
	65	70	65	70	75	70	75	80	75	80	85
	1045	1211	1045	1212	1390	1471	1689	1922	1689	1921	2169
	1755	1515	2145	1850	1610	2357	2055	1805	2550	2240	1985
	1161	1346	1161	1346	1545	1635	1877	2135	1877	2135	2410
	365	423	365	423	486	423	486	553	442	502	567
	110		110			110			100		
	179	208	179	208	238	208	238	271	238	271	306
	4		4			4			4		
	370		500			600			700		
	950		1100			1150			1150		
	400		400			400			450		
	1350		1500			1550			1600		
	665×665		710×710			805×765			860×810		
	200		200			200			250		
	60		60			75			100		
	16		21			26			30		
	1200		1400			1600			1800		
	18.5		20.5			23.5			29.5		
	7800×2000×2650		8200×2100×2850			10500×2200×3100			11000×2200×3250		

HB / MT II

450t~4000t

II Locking Platen Type

SPEC

	型式 TYPE	單位 Unit	LF 457			LF 557			
			A	B	C	A	B	C	A
射出系統 Injection Unit	料軸直徑 Screw Diameter	mm	65	70	75	70	75	80	75
	射出重量 (PS) Shot Weight (PS)	gram	1044	1121	1390	1471	1689	1922	1689
	射出壓力 Injection Pressure	kg/cm ²	2004	1729	1505	2057	1792	1575	1944
	理論射出容積 Theoretical Shot Volume	cm ³	1161	1346	1545	1635	1877	2135	1877
	射出率 Injection Rate	cm ³ /sec.	398	462	530	442	508	578	530
	射出速度 Injection Speed	mm/sec.	120			115			
	可塑化能力 Plasticization	kg/hr	179	208	238	208	238	271	238
鎖模系統 Mold Lock Unit	直壓缸數 Number of Cylinder Drive	Pcs.							
	閉模力 Clamping Force	ton	450			550			
	開模行程 Opening Stroke	mm	700			850			
	最小模厚 Minimum Mold Thickness	mm	400~700			400~800			
	總行程 Maximum Daylight	mm	1400			1650			
	機柱間隔 Tie Bar Clearance (H×V)	mm	715×715			815×815			
	頂出行程 Ejector Stroke	mm	200			200			
其他 Other	HB-馬達 Motor	hp	75			80			
	電熱容量 Heater Capacity	kW	21			25			
	油箱容量 Oil Tank Capacity	L	1100			1500			
	機械重量 Machine Weight	ton	15.5			22			
	機械尺寸 Machine Size (L×W×H)	mm	7800×2000×2450			8800×2150×2450			9

	型式 TYPE	單位 Unit	LF 1670		LF 2070		LF 2570		
			A	B	A	B	A	B	
射出系統 Injection Unit	料軸直徑 Screw Diameter	mm	120	130	130	140	150	160	
	射出重量 (PS) Shot Weight (PS)	gram	6103	7164	7760	9000	10332	11755	13
	射出壓力 Injection Pressure	kg/cm ²	1945	1657	1914	1650	1945	1709	1
	理論射出容積 Theoretical Shot Volume	cm ³	6782	7960	8623	10001	11481	13062	14
	射出率 Injection Rate	cm ³ /sec.	1243	1459	1459	1692	1943	2211	2
	射出速度 Injection Speed	mm/sec.	110		110		90		
	可塑化能力 Plasticization	kg/hr	610	716	716	831	954	1085	1
鎖模系統 Mold Lock Unit	直壓缸數 Number of Cylinder Drive	Pcs.							
	閉模力 Clamping Force	ton	1600		2000		2500		
	開模行程 Opening Stroke	mm	1600		1700		1900		
	最小模厚 Minimum Mold Thickness	mm	600~1500		650~1500		650~1700		
	總行程 Maximum Daylight	mm	3100		3200		3600		
	機柱間隔 Tie Bar Clearance (H×V)	mm	1520×1420		1805×1505		1905×1605		
	頂出行程 Ejector Stroke	mm	380		380		380		
其他 Other	HB-馬達 Motor	hp	180		240		300		
	電熱容量 Heater Capacity	kW	73		101		101		
	油箱容量 Oil Tank Capacity	L	2800		3000		3000		
	機械重量 Machine Weight	ton	70		110		145		
	機械尺寸 Machine Size (L×W×H)	mm	15000×3300×4000		15500×3400×4400		17000×3600×5000		

LF 737			LF 837		LF 1070		LF 1270		LF 1470	
A	B	C	A	B	A	B	A	B	A	B
5	80	85	90	100	95	105	100	110	110	120
39	1921	2169	2861	3532	3187	3894	3532	4274	5129	6103
44	1710	1414	1944	1575	2100	1719	1905	1575	1980	1664
77	2135	2410	3179	3925	3542	4327	3925	4749	5699	6782
10	603	681	699	864	779	952	864	1045	1045	1243
120			110		110		110		110	
8	271	306	343	424	383	467	424	513	513	610
4										
700			850		1000		1200		1400	
900			1100		1250		1400		1500	
450~900			450~1100		500~1250		500~1350		550~1400	
1800			2200		2500		2750		2900	
905×905			1005×1005		1120×1120		1210×1210		1355×1255	
250			250		300		320		350	
100			120		135		135		150	
28			30		35		41		55	
1600			2000		2200		2400		2600	
26			33.5		45		55		65	
9800×2350×2200			11200×3000×2600		11800×3150×2700		12450×3300×2770		14500×3300×3600	

	LF 3070			LF 3570			LF 4070		
	A	B	C	A	B	C	A	B	C
170	160	170	180	170	180	190	190	200	210
13271	12660	14292	16023	14292	16023	17855	17855	19782	21809
1514	1850	1637	1463	2200	2020	1810	1810	1650	1500
14746	14067	15881	17804	15881	17804	19837	19837	21980	24233
2496	2211	2496	2798	2042	2289	2550	2550	2826	3116
90			90			90			
1225	1085	1225	1373	1225	1373	1530	1530	1696	1869
4									
3000			3500			4000			
2300			2250			2500			
980~2000			980~2000			980~2000			
4300			4250			4500			
2005×1805			2100×1900			2300×1900			
380			380			450			
360			420			420			
101			101			101			
4000			4000			4000			
170			200			220			
18000×3800×5000			19000×3850×5100			20000×4000×5200			