

**LIEN YU**

**EURO INJ<sup>®</sup>**

**SAVE THE PLANET**  
**CO<sub>2</sub> EMISSION**

SUNSHINE

AIR

WATER

The Computerized  
Injection Molding Machine

LIEN YU MACHINERY CO., LTD.

The global warming from the manmade greenhouse gases endanger the human health and living Earth.

How to emission carbon and efficient energy is considered by Line Yu Machinery Co.,Ltd. for the new environmental trend.

The SV series is the new hybrid combination to save the energy.

size from 75.0-2,300.0 tonnages.

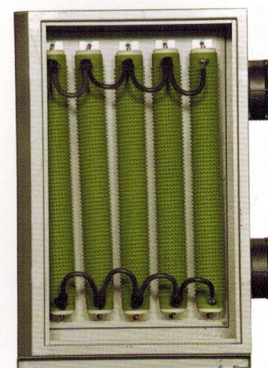


### ➤ Philosophy of SV series:

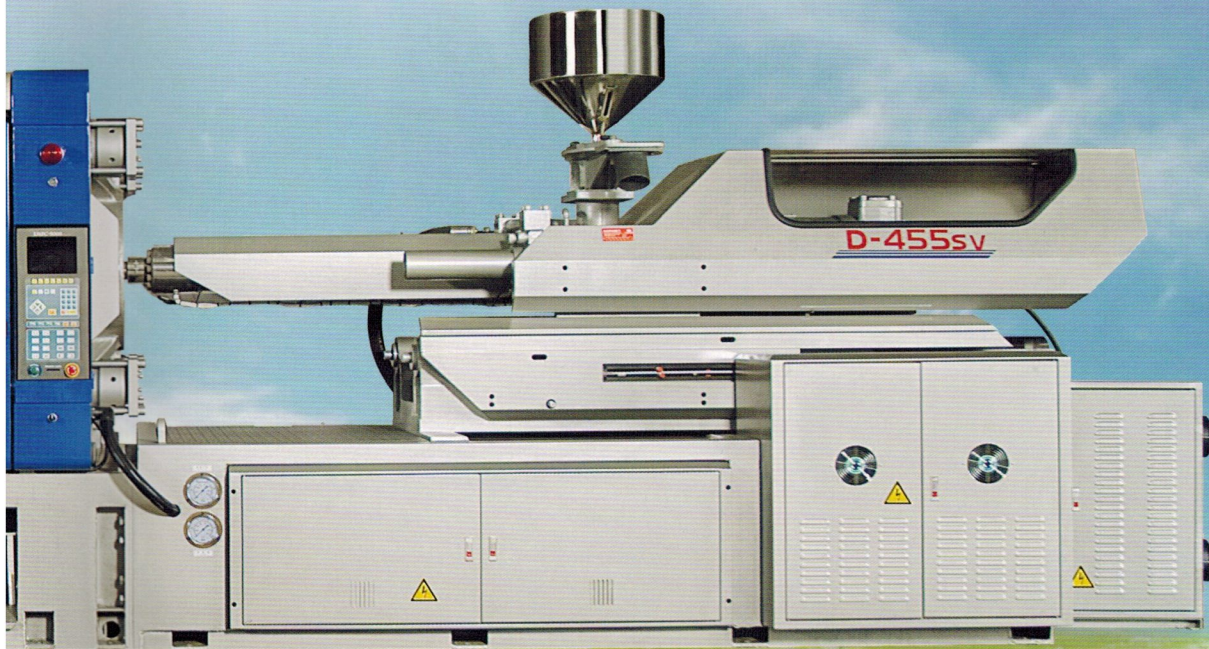
Traditional injection molding machine using the electric motor to drive the fixed pump continuously running even at stand-by or cooling which wastes energy.

SV series:the inverter receiving signal to change frequency and actuate necessary output for servo motor. When stand-by or cooling, the servo motor is almost at stop condition. Without the output from servo motor/pump, it reaches energy saving purpose.

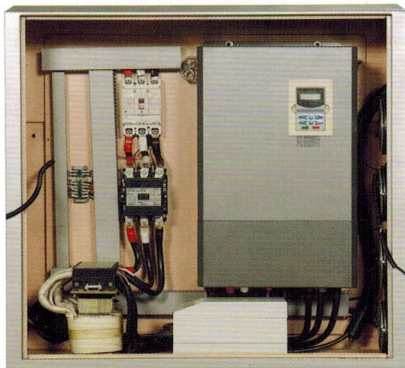
➤ **-Braking resistor-** The external resistance is equipped to control the braking torque when de-acceleration is actuated.



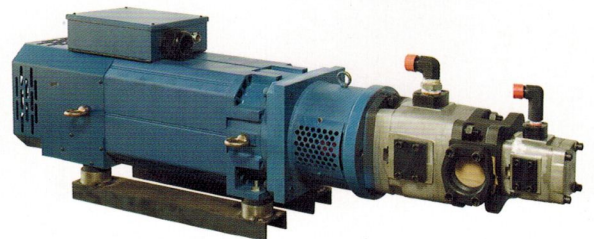
Certificate No. IG-080-2004/0407-04-08-006  
IG-271-2006/0407-06-11-017



➤ **Q-9000 inverter** is a closed circuit control using the sensor to feed back the needed pressure/speed value. Changing its frequency to output required force.



➤ **The powerful servo motor+internal gear pump group** which achieved High efficiency and economic. Also could be extended for multi-combination for big machine.





### E.The hybrid SV type of energy saving system

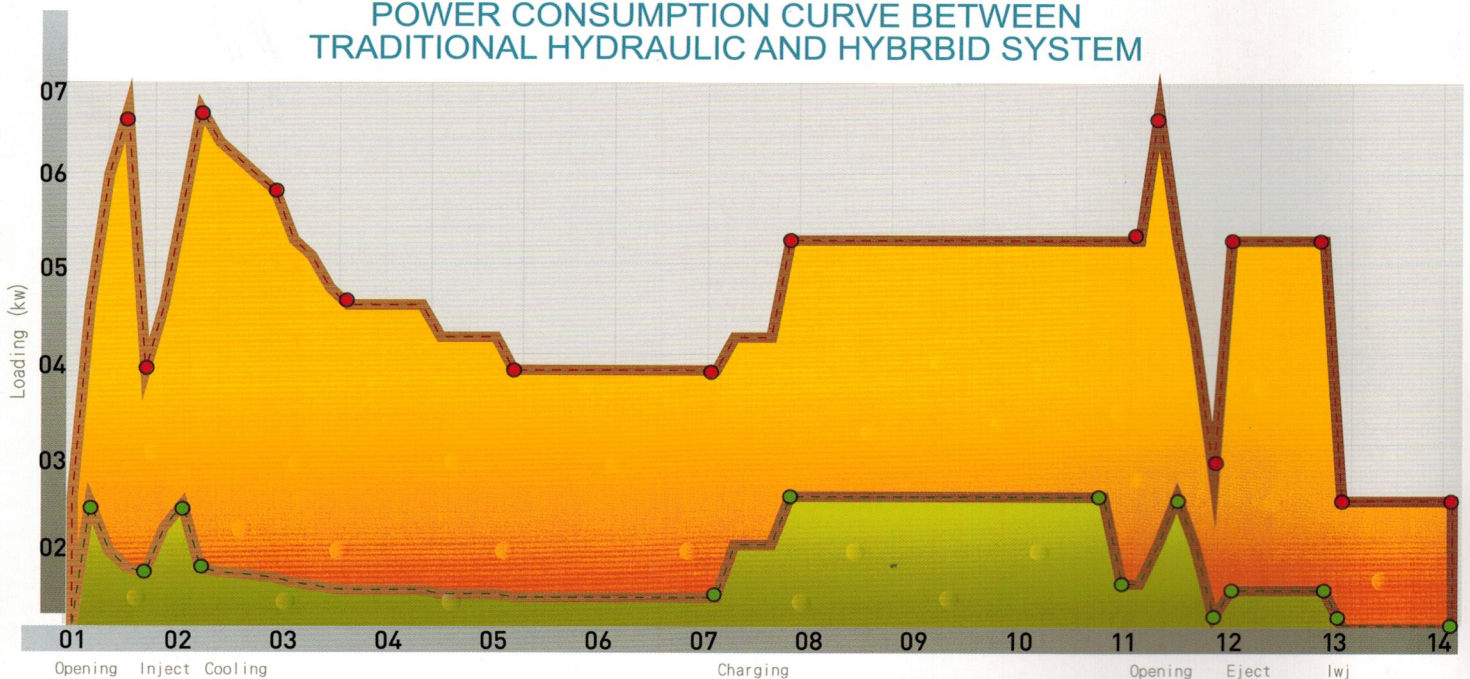
- Taiwan made servo motor/internal pump/invertor group.
- Under many years developing,we are proud that the hybrid combination is successful to present into the market with competitive price and efficiency.
- 100hp servo motor is single maximum size for 220-440v.  
There are many 2-way or 3-way circuit was introduced of this group into 1000-1400 tonnages machine for saving the energy and short the cycle time.
- All the knowledge is from Europe and made here.so There is not problem for future service.

### Testing laboratory:

- ★ TRADITIONAL HYDRAULIC SYSTEM
- ★ HYBRID SYSTEM



POWER CONSUMPTION CURVE BETWEEN TRADITIONAL HYDRAULIC AND HYBRID SYSTEM



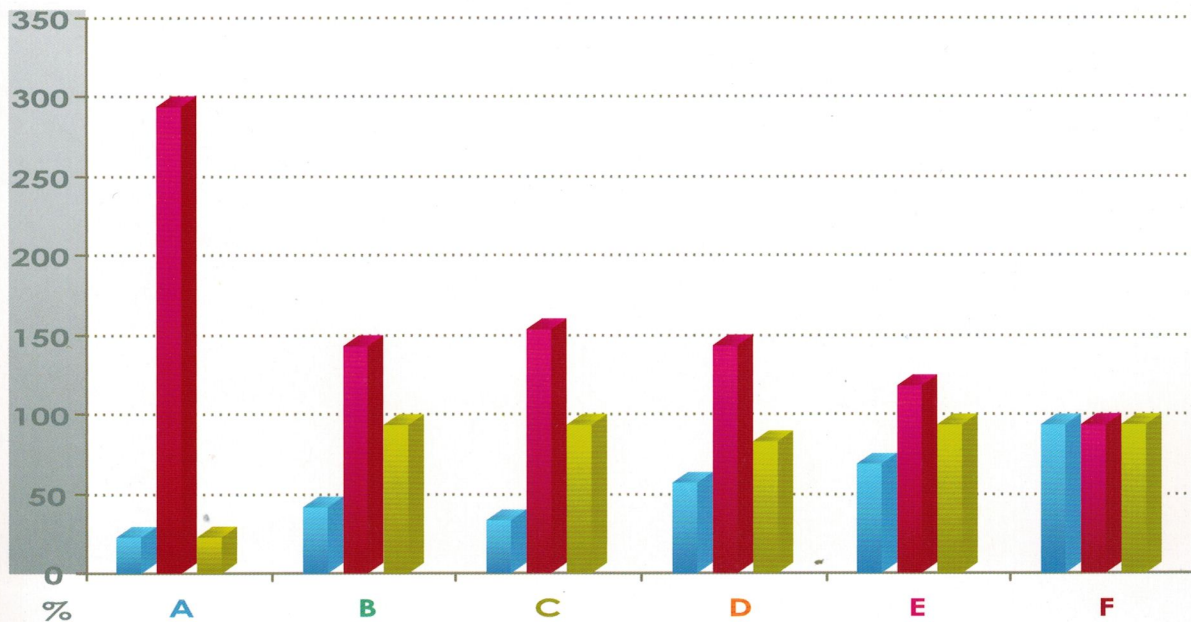
## Comparison of energy saving/efficiency/maintenance expense



- A. Full electric machine.
- B. Traditional hydraulic-driving machine with electric servo motor for charging.
- C. Traditional hydraulic-driving machine with variable pumps group.
- D. Japan made servo motor/piston pump/invertor group.
- E. Taiwan made servo motor/internal gear pump/invertor group.
- F. Traditional hydraulic-driving machine.

%	A	B	C	D	E	F
Power Consumption	30	48	40	64	75	100
Cost increased	300	150	160	150	125	100
Operation differ	30	100	100	90	100	100

■ Power Consumption  
■ Cost increased  
■ Operation differ





## Standard & Optional Equipment

### INJECTION UNIT

#### ITEM

- Barrel/A.B.C. for choice
- Injection unit swivel device
- Injection 4 stages pressure/speed
- Holding 3 stages pressure/speed
- Plasticizing 2 stages pressure/speed
- Pre-extrusion before shooting
- The plasticizing & injection stroke are accurately controlled by linear transducer.
- Suck back circuit
- Screw cold-start preventing circuit
- Screw back pressure selection
- Pid temperature monitor to each heating zone of barrel
- Screw R.P.M(options)
- Electric back pressure controlled by monitor(options)
- Pre-Heating barrel temperture
- Accumlator for injection(options)
- Bimetallic barrel/screw set(options)
- Fast speed of hydraulic motor for charging(options)

### CLAMPING UNIT

#### ITEM

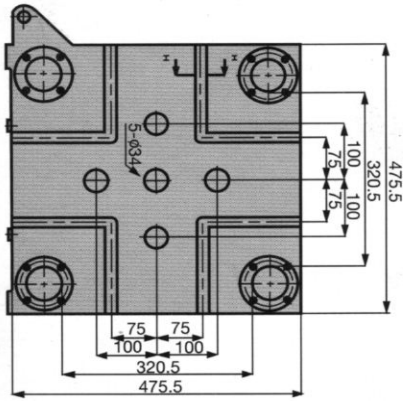
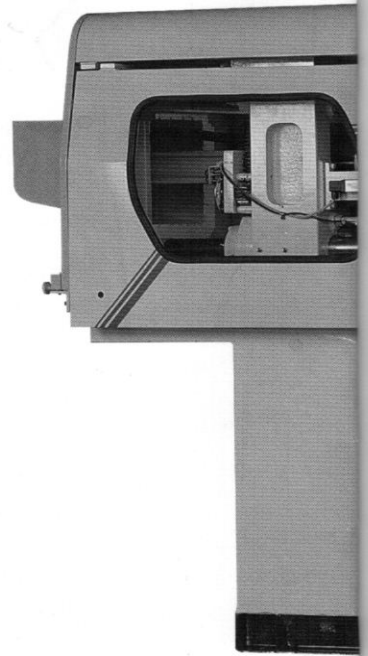
- 3 stages pressure/speed of mold closing/opening
- Mold protection circuit
- Hydraulic ejector
- Hydraulic core system
- Mold stroke is controlled by linear transducer
- Ejection stroke is adjusted by proximity switch(option by transducer)
- Auto die height adjustment by controller(only for samll/middle machines)
- (Electric/hydraulic/mechanical)interlocks to prevent the mold closing without guards being closed.
- Air biast
- Automatic lubrication device
- Hydraulic unscrewing device(options)
- Ejection is simultaneously at mold is opening(options)

### STANDARD EQUIPMENT

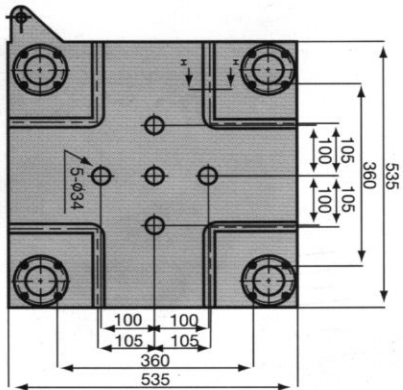
- Hopper dryer
- Hi pads
- Auto lubrication device
- Tool box

# EURO INJ<sup>®</sup> The Computerized Injector

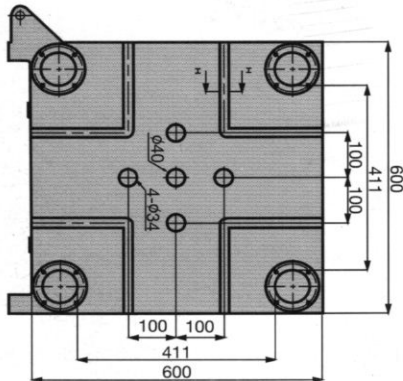
MODELS : D75 / D95 / D125 / D155 / D205 / D255



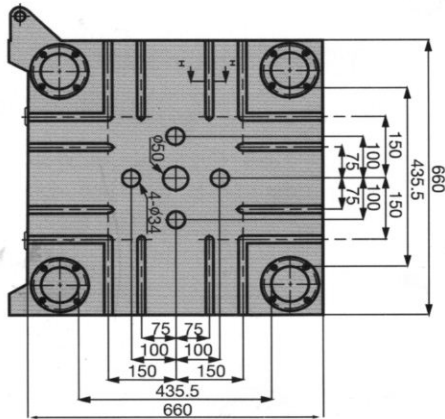
D75



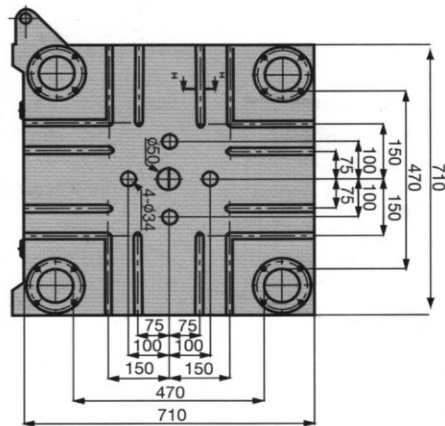
D95



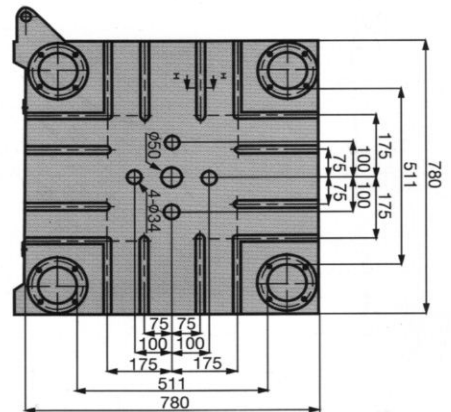
D125



D155



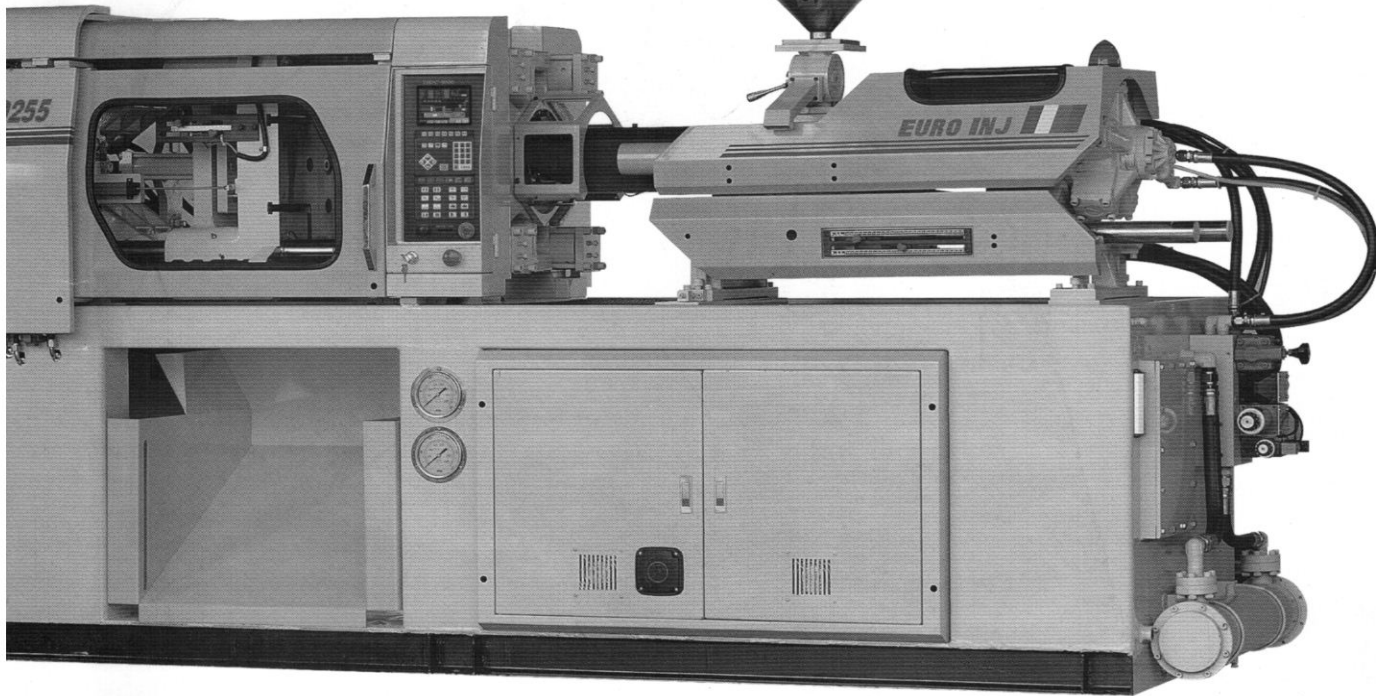
D205



D255



# Injection Moulding Machine



## Specification:

	MODEL	Unit	D.75			D.95			D.125			D.155			D.205			D.255		
<b>INJECTION</b>	Screw Diameter	mm	28	32	36	32	36	40	36	40	45	40	45	50	45	50	55	50	55	60
	Screw L/D Ratio	L/D	22.8	20	17.8	22.5	20	18	22.2	20	17.77	22.5	20	18	22.2	20	18.1	22	20	18.3
	Swept Volume	cc	98	128	162	144	183	226	203	251	318	276	349	431	381	471	570	510	617	735
	Max shot Weight (P.S.)	g	88	115	146	130	164	203	183	226	286	248	314	388	343	424	513	459	555	661
		oz	3.1	4.0	5.1	4.5	5.8	7.1	6.4	7.9	10	8.7	11.1	13.7	12	14.9	18	16.2	19.6	23.3
	Max Injection Pressure	bar	2321	1777	1404	2180	1722	1395	2074	1680	1327	2104	1662	1346	2125	1722	1423	2046	1691	1421
	Max Injection Rate	g/sec	49	65	82	67	85	105	84	103	131	106	134	166	131	162	196	165	199	237
<b>LOCKING</b>	Screw Stroke	mm	160			180			200			220			240			260		
	Max Locking Force	tonne	75			95			125			155			205			255		
	Max Opening Stroke	mm	270			320			355			390			430			475		
	Min Mould Height	mm	100			130			130			150			150			150		
	Max Mould Height	mm	360			400			430			460			525			650		
	Max Daylight	mm	630			720			785			850			955			1125		
	Space between tie bars	mm	320 x 320			360 x 360			410 x 410			430 x 430			470 x 470			510 x 510		
	Diameter of tie bars	mm	55			60			70			80			90			100		
	Max Ejector forward Force	tonne	2.74			2.74			3.32			3.95			3.95			7.03		
	Max Ejector Stroke	mm	80			90			110			130			140			150		
<b>GENERAL</b>	Pump Drive Motor	kw (HP)	7.5(10)			11(15)			15(20)			18.5(25)			22(30)			30(40)		
	Hydraulic Pressure	bar	140			140			140			140			140			140		
	Heating Capacity	kw	4.0			4.6			6.5			7			8			10		
	Number of Heating Zones	qty	3+N			3+N			3+N			3+N			3+N			4+N		
	Oil Filling	liter	280			325			340			360			390			450		
	Machine Dimensions (LxWxH)	m	3.8 x 1.05 x 1.5			4 x 1.1 x 1.6			4.6 x 1.2 x 1.68			5.4 x 1.25 x 1.8			5.8 x 1.3 x 1.9			6.2 x 1.35 x 2.0		
Machine Weight, dry.	kgs	3,500			4,300			5,600			6,500			7,500			10,000			

INJECTION WEIGHT=CALCULATED INJECTION VOLUME x GRAVITY SPECIFIC x 85%

We Reserve The Right To Amend The Above Figure Without Prior Notice.

