



NC series

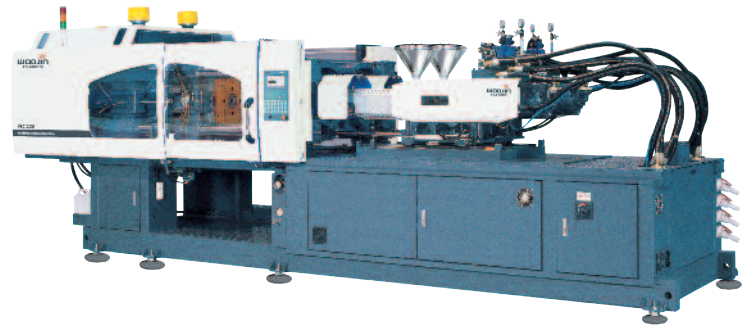
Energy Saving Multi Injection Machine

NC series Multi Injection Machine



Multi Injection Molding Machine

This machine produces a part with two different raw materials for colors in a single operation including two injection units, two stable clamping cylinder and all closed-loop system, which is suitable for precise molding. This technology allows you to produce goods with precision, speed and reproductibility. (Most suitable for parts of communication equipments and O.A)



NC 140

NC 240

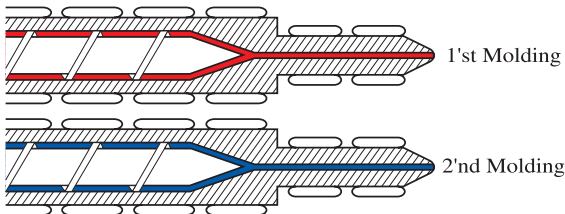
Injection Unit (1st / 2nd)

Screw & Barrel type		S	O	A	S	O	A
Screw Diameter	mm	25	28	32	40	45	50
	inch	1.0	1.1	1.3	1.6	1.8	2.0
Injection Pressure	psi	46098	36753	28134	31988	25275	20467
Theoretical Injection Capacity	inch ³ /sec	4.5	5.6	7.4	13.8	17.5	21.5
Shot Weight (PS)	oz	2.4	3.0	3.9	7.2	9.2	11.4
Screw Stroke	inch	5.9	5.9	5.9	7.1	7.1	7.1
Injection Rate	inch ³ /s	3.5	4.5	5.9	8.1	10.3	12.6
Plasticizing Capacity (PS)	lbs/h	52.9	70.6	101.4	165.4	224.9	299.8
Screw Revolution	rpm	253	253	253	226	226	226

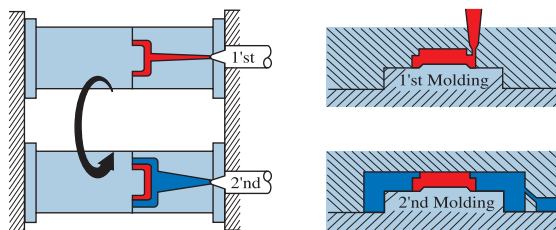
Clamping Unit

Clamping Force	US ton(kN)	140 (1275)	240 (2157)
Tie-Bar Clearance (H x V)	inch	27.6 x 11.9	37.4 x 14.2
Platen Size (H x V)	inch	37.0 x 21.3	48.0 x 24.8
Max. Mold Size	inch	(14.2 x 11.6) x 2	(19.7 x 15.7) x 2
Rotary Table Size	inch	φ 28.9	φ 39.0
Min. Opening Stroke	inch	17.7	20.5
Daylight	inch	25.6	30.3
Min. Mold Height	inch	6.7	9.8
Max. Mold Height	inch	24.4	30.3
Ejector Force	US ton(kN)	3.6 (32)	3.6 (32)
Ejector Stroke	inch	4.7	5.5

Two color molding with double injection structures & rotary-type double clamping rams



Two color precision molding through first & second injection with rotary type double clamping rams.



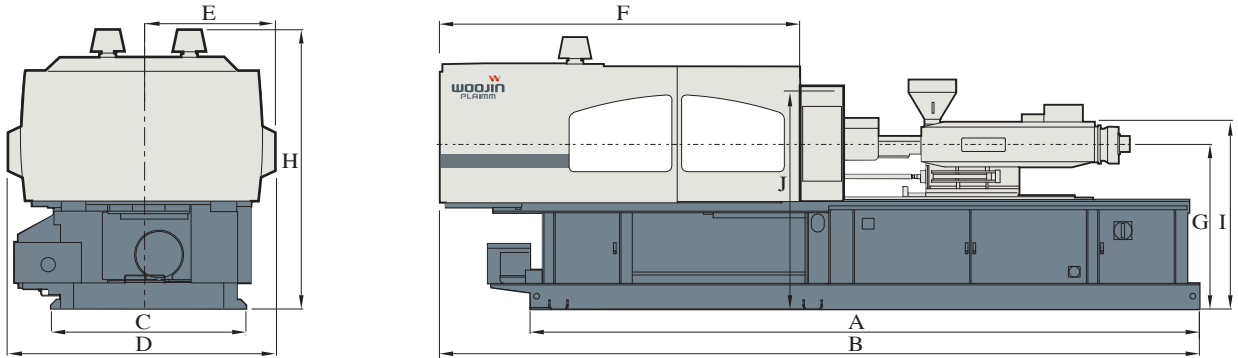
Procedures

General

Heat Capacity	kW	20.0	32.0
Electric Motor Power Capacity	kW	25.0	40.0
Total Electric Power Capacity	kW	45.0	72.0
Hydraulic Oil Volume	gal	79.3	171.7
Machine Weight	lbs	14991	25251
Machine Dimensions (L x W x H)	ft	15.3 x 5.0 x 5.4	19.4 x 6.1 x 6.3
Cooling Water Requirement	gal/min	11	11

1. Theoretical Injection Volume : Screw Dia x Screw Stroke
2. Clamping method is direct hydraulic type.
3. This data based upon the 60Hz electricity frequency.
4. Minimum mold size must be over 60% of distance between tie-bar.
5. Specifications can be changed for improved performance without prior notice.

Machine Dimensions



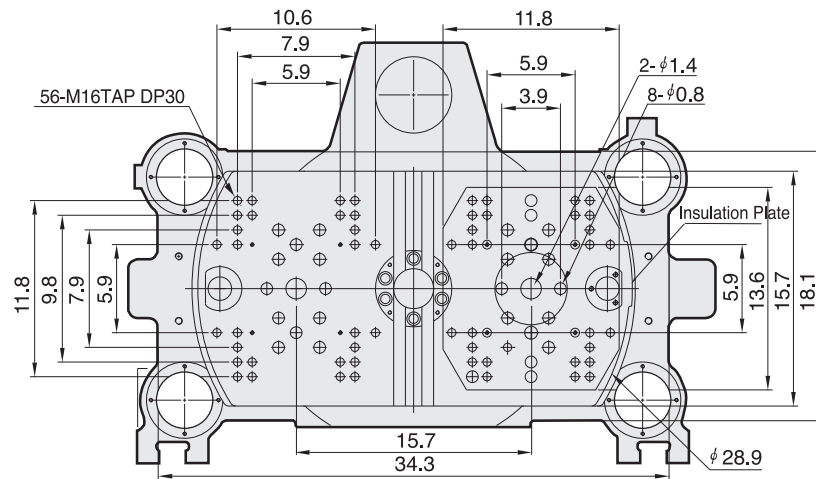
Unit : ft

	A	B	C	D	E	F	G	H	I	J
NC140	13.3	15.3	3.9	5.5	2.7	7.7	4.4	5.8	4.3	4.7
NC240	17.1	19.4	4.9	6.3	3.2	9.1	4.7	6.9	4.7	5.3

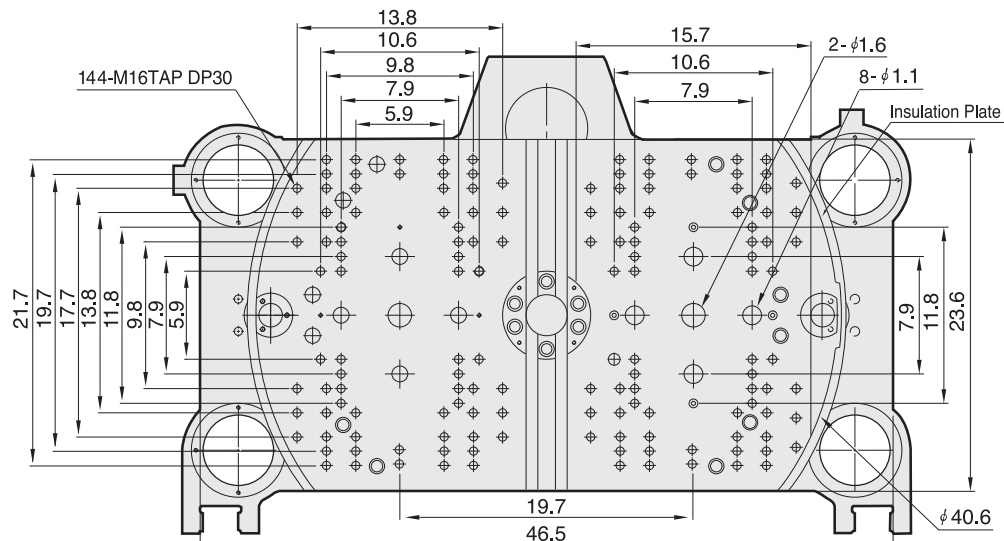
Platen Dimensions

Unit : inch

NC 130



NC 220



Feature Lists

S : standard **O** : optional

Injection Unit

1. Injection process control stage (Speed / Pressure)	6
2. Holding process control stage (Speed / Pressure)	3
3. Charging process control stage (Speed / Pressure)	4
4. Back pressure control stage	4
5. Prevention of resin leakage before charging	S
6. Prevention of resin leakage after charging	S
7. Injection position display	S
8. Injection speed graphic display	S
9. Injection pressure graphic display	O
10. Closed-loop of injection process by servo pump system	S
11. Cushion amount display & alarm	S
12. Screw RPM display	S
13. Auto purging circuit	S
14. Charging time over alarm	S
15. Screw cold start prevention device	S
16. Heater pre-heating timer (for Weekly)	S
17. Heater temperature abnormal display & alarm	S
18. PID heater temperature control	S
19. Heater temperature "WAIT" mode	S
20. Mold opening during charging	O
21. Shut-off nozzle (Hydraulic type)	O
22. Shut-off nozzle (Spring type)	O
23. Valve gate (1 Stage)	S
24. Double-stage-speed control hydraulic motor	O
25. Anti-wear screw & barrel	O
26. Anti-wear & corrosion screw & barrel	O
27. Double barrier mixing screw (SB Screw)	O

Clamping Unit

1. Mold open & close speed control stage	5
2. Mold open & close pressure control stage	5
3. Ejector speed control stage	2
4. Ejector pressure control stage	2
5. Clamping position display	S
6. Ejector position display	S
7. Hydraulic core puller (1 Stage)	S
8. Core moving during mold opening	O
9. Ejecting during mold opening	O
10. Unscrewing device	O
11. Air blow-off unit	S
12. Safety device (Electrical / Hydraulic)	S
13. Safety device (Electrical / Mechanical)	S
14. Daylight extension	O

Generals

1. Molding data memory capacity (Internal / External)	1000/usb
2. Alarm history display & saving	S
3. Record of setting-value changing	S
4. Statistical function	S
5. I/O circuit display	S
6. Multi language display (Korean / English / Chinese / Portuguese / Czech)	S
7. Robot Interlock circuit	S
8. Robot Interface circuit (Euromap 12 / SPI)	O
9. Printer port	S
10. Hydraulic oil level alarm	O
11. Hydraulic oil temperature over alarm	S
12. Hydraulic oil auto heating device	O
13. Hydraulic oil temperature control device	O
14. Production quantity control & alarm	S
15. Hopper throat temperature control device	O
16. Auto grease for clamping unit	O
17. Auto grease for Injection unit	O
18. Shot data file saving	S
19. Molding data print & file saving	S
20. Hopper swivel & moving device	O
21. Auto safety door (Open & Close)	O
22. Auto safety door (Open only)	O
23. Hydraulic oil cleaner	O
24. Insulation plate for mold	O
25. Product knock-out confirmation device	O
26. Product good / bad check device	O
27. Safety sensor for safety door	O
28. Product chute	O
29. Levelling pads	S
30. 3 Stage alarm lamp	S
31. Maintenance tools	S
32. Spare parts	S

* This feature lists can be changed for improved performance without prior notice.

Service & Support

The following technical support and warranty program will be honored by Woojin Plaimm, Inc. and this program will be apply to all the Woojin Plaimm injection molding machine sold in the U.S. and after April 1, 2012.



Machine Start-up & Training Program

Free installation and start-up service with training program is provided by Woojin Plaimm, Inc.

Service Parts

Most of spare and replacement parts can be delivered from warehouse in CA within 24 hours. Also if required it can be supplied by HQ in Korea by air.

5 Year Limited Warranty Program

Warranty Period	The warranty period begins on date of "Start-up" or 60 days from the delivery, whichever comes earlier .	
Basic Coverage	This warranty covers repair or replacement of parts due to defects in material and or workmanship for machines run under normal operation. The entire program applies only to the original customer at the original place of installation.	
Basic Warranty	5 years	Mechanical Parts Toggle link body, mold adjustment unit, tie-bars, barrel, frame, platens, proportional valve (main & back pressure), brackets, flanges, screw driving shaft.
	3 years	Printed Circuit Boards CPU board, output cards, operation panel board, power supply, display screen, oil leveler, oil temperature sensor.
	2 years	Electric Motors Electric motors, servo motor, servo drive, ball screw, auto lubrication for toggle, potentionmeter
	1 year	Hydraulic & Electric Parts Hydraulic valves, hydraulic motor, hydraulic gauges, hydraulic bearing, bushings, locating ring, pumps, hoses & pipes, switches, sensors, amplifier, transformers, magnetic contactor, relay, circuit breakers, safety doors, guards, oil seal(o-rings etc), heat exchanger, screw, check ring assembly, barrel, barrel head, nozzle, safety bar, manual grease pump.

1 Year Service Labor Warranty

This warranty covers all service labor for the diagnosis and repair or replacement of all defective parts for one year after the warranty begins.

WOOJIN PLAIMM, INC.

Head office

684 Park Ridge Ave. Norco, CA 92860

Tel : 951-734-7890 Fax : 951-734-7891

Nextel : 124*43856*1 E-mail : us@wjpim.com

WJP MACHINERY S.A. DE C.V

Head office

Local #6 Ubicado en Ave. Miguel Aleman #804 en San Nicolas de los Garza,
N.L. Mexico

Tel : +52-81-1090-8726 iTel : 070-7531-4747
Nextel : 52*15*43051 E-mail : mx@wjpim.com



Head office & Plant

46-17, Robotland-ro 249 beon-gil, Seo-gu, Incheon, Korea

Tel : +82-32-580-8841

Fax : +82-32-573-7030

E-mail : info@wjpim.com

www.woojinplaimm.com
www.plaimm.com