MILACRON®

THE OMEGA

550-910 TON

THE OMEGA

GENEROUS MOLD SPACE

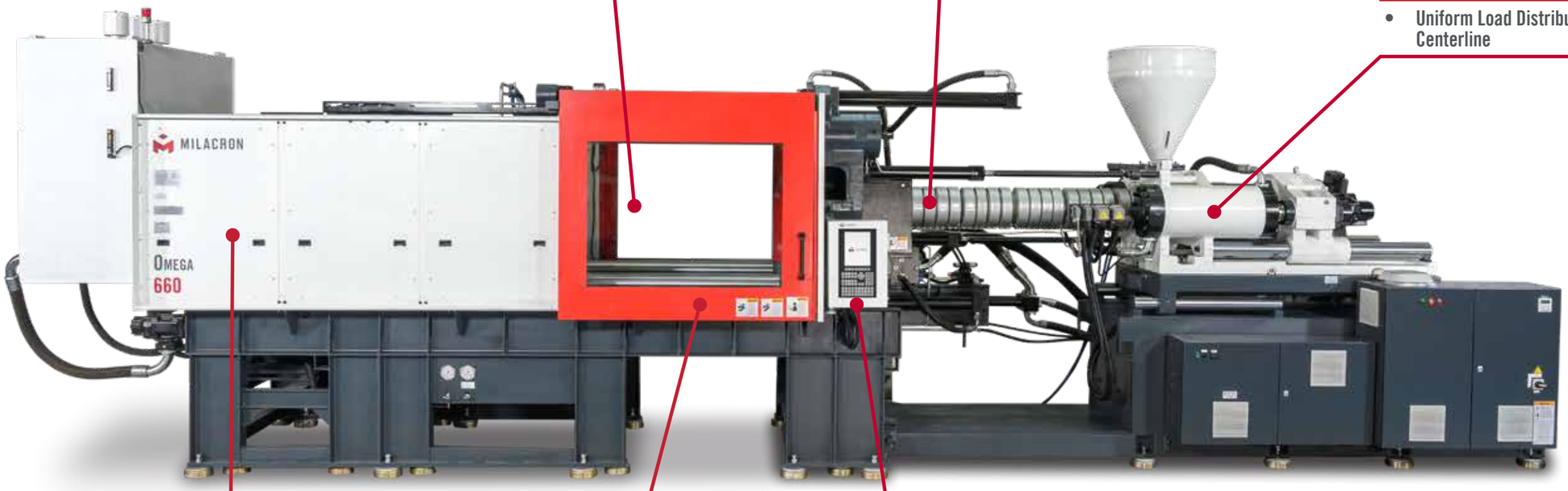
- Accommodates Large Molds

CLOSED LOOP PID TEMPERATURE CONTROL

- Provides precise Temperature Control
- Excellent Process Control & Stability

TWIN CYLINDER INJECTION UNIT

- Uniform Load Distribution across Screw Centerline



LARGE RAM DIAMETER & UNIQUE PREFILL CYLINDER DESIGN

- Provides Uniform Force Distribution across Platen
- Provides Excellent Mold Squareness & Parallelism
- Reduces Mold Wear
- Fast Tonnage Built-up Time

WIDE SKATES FOR PLATEN SUPPORTS

- Reduced Platen Deflection
- Enhanced Life of Tie-bars
- Higher Mold Carrying Capacity
- No Need of Frequent Adjustment. Hence Faster Mold Change

USER FRIENDLY CONTROL

- Ergonomic Layout
- High Speed Microprocessor
- Direct Access Menu Keys
- Graphical Presentation of Machine Features
- Self Diagnostic & Fault Finding Capability
- Parameter Entry in Absolute Value

THE OMEGA

Injection Unit Specifications

IU	70	80	90	100	110	13500	125
OMEGA 550							
OMEGA 660							
OMEGA 775							
OMEGA 910							

Clamp Specifications

MODEL	TONNAGE	PLATEN SIZE (H X V)	TIE BAR SPACING (H X V)	MAX DAYLIGHT
	tons	mm	mm	mm
OMEGA 550	550	1245 X 1245	870 X 870	1676
OMEGA 660	660	1400 X 1400	950 X 950	1780
OMEGA 775	775	1680 X 1475	1150 X 950	1920
OMEGA 910	910	2000 X 1600	1530 X 1120	2350

STANDARD FEATURES

CLAMP	
Hollow Headless Ram with Mono Seal & No Piston Rings	●
Large Prefill Designed for Fast Tonnage Build-up	●
Rapid Traverse Cylinders	●
Conical Strain Rod Nuts & Controlled Stress on Tie Rods	●
Adjustable moving Platen Skates	●
Rigid Cast Platens with FEA	●
Adjustable Pressure setting of Closing & Opening Stage	●
Proportional Speed Control with 5 Closing & 5 Opening Speed	●
Adjustable 2 Stage Mold Safety Pressure & 2 Stage Speed	●
Position Based Ramping for Accurate Position Switching -	●
Precise Speed & Pressure Control	●
Linear Position Transducer for Accurate Clamp Position Control	●
Sensitive Mold Protection with Try Again Circuit	●
Stage Wise Actual Time Display	●
Insert Molding Program	●
Auto Lubrication for Clamp	●
Flash Chrome Plated Ram	●
Jam Bar	○
Part Drop Detect for Single Cavity	○
Extended Daylight with Ram Spacer	○

INJECTION	
6 Stage Injection Velocity & 15 Stage Injection Pressure Profile	●
5 Stage Screw Speed & 5 Stage Back Pressure Control (Setting) through Screen	●
Digital setting of Extruder RPM & Digital Read out of Actual RPM	●
Wide Choice of Injection Units with A-B-C Screw/Barrel Combinations	●
Easy Injection Unit Swivelling	●
Switch Over from Fill to Pack based on Position or Time or Pressure	●
Linear Position Transducer for Accurate Injection Position Control	●
Injection Decompression Before/ After Refilling or Both	●
Semi-Auto Purge, Cold Slug removal & Intrusion Molding Programs	●
Chequered Plate below Purge Area	●
Sprue Break with Timer	●
Injection start, Suck-back & Melt Decompression -Delay Timer	●
Graphically Adjustable Alarm Bands for Injection Pressure	●
Nozzle Contact Force by Pressure Switch	●
Sliding Hopper	●
Bimetallic Barrel & Hardened/ Coated Screw	○

TEMPERATURE CONTROL	
Actual Current Display of Barrel Heating Zones	●
Heater Failure & Thermocouple Open Detection	●
Accurate PID Temperature Control	●
Feed Throat Temperature Indication	●
Auto Heat Startup & Shutdown	●
Heat Standby after set number of Cycles	●
Soak Timer for Cold Start Protection	●
High / Low Temperature Alarm	●
Set & Actual Temperature Data with Bar Graph	●
Insulated Heater Band	●
Oil Temperature Control for Heat Exchanger	●
Feed Throat Temperature Control	○
Extra Heating Zones	○

● - Standard Feature ○ - Optional Feature

HYDRAULICS	
Multiple Pump with PQ circuit	●
Pump & Motor slide out from Base for Ease of Maintenance	●
Ergonomic Hydraulic Layoutfor Easy Approach	●
Valves Placed near Actuators for Rapid Response	●
Pre-Healing Circuit for Hydraulic Oil	●
Low Oil Level Audible Alarm & Motor Shut Down	●
Continuous Oil Filtration with 10 Micron Filter	●
Audible Alarm for Filter Clogging	●

EJECTOR	
Knock-Out Bar	●
2 Stage Programmable Ejector Forward Profile with Soft Eject	●
Ejector Speed & Pressure adjustable on Screen	●
Linear Transducer for Ejector Position	●
Pulsating Ejector Strokes upto 9 Pulses	●
Intermediate Retract Set Point	●
Ejector Stay Forward & Forward Dwell Timer	●
Ejector on Fly	●
Pilot Operated Check Valve for Ejector	●
Air Ejection	○
Hydraulic Core pull	○
Interface for Ejector Retract Verification	○

CONTROLS	
18 freely process parameter selection out of 67 parameters for last 1000 cycles with graphics	●
10 freely process monitoring parameter selection out of 67 for alarm tolerance monitoring	●
10.4" TFT Color Display with Alpha - Numeric Keypad	●
Actual Injection Speed & Pressure Graph Display	●
80 Mold Data Storage	●
Configurable Multilevel Password with Operator's Name	●
Graphical Presentation of Last 48 Hours Production	●
Customized Setup Menu	●
High / Low Limit Display for Each Adjustable Parameter	●
I / 0 diagnosis - Analog & Digital	●
Timer Precision in 0.01 Second	●
Change Log Menu: logs last 100 Set Points Changes with Time & Date	●
Process Mode: Functions with its Co-functions on a Single Key Press	●
Note Pad & Maintenance Scheduling	●
Freely Programmable Smart Outputs & Inputs	●
Over View Screen with Graphical Display of Machine Functions	●
Soft Keys for Fast Access of Select Menus	●
Auto shut down	●
Visual & Audible Alarm	●
1000 Alarm History with Date & Time Log	●
Axis wise Graphical Cycle time Analysis	●
Batch Counter with option to turn off the motor	●
Mold data I Process data I Change log saving to External USB device	●
Freely Programmable Core Pull	●
Statistical Process Control (SPC) with Graphics	○

ADDITIONAL FEATURES	
Surge Suppressor Device	●
Y Strainer in Heat Exchanger Inlet	●
UV/OV Monitoring Relay-Voltage Monitor Relay	●
Water Manifolds	○
Water Battery with Temperature Indicator	○
Robot Interface (SPI / EUROMAP)	○
AC Variable Frequency Drive	○

APPLICATIONS

- *AUTOMOTIVE*
- *INDUSTRIAL APPLICATIONS*
- *CONSTRUCTION*



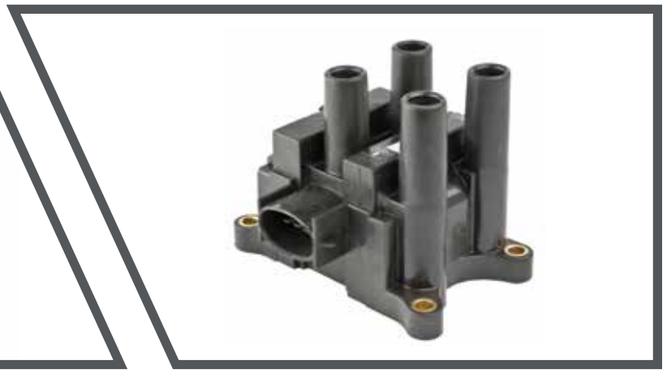



APPLICATIONS

- *STORAGE AND TRANSPORT CONTAINERS*
- *HOUSEWARES AND APPLIANCE*

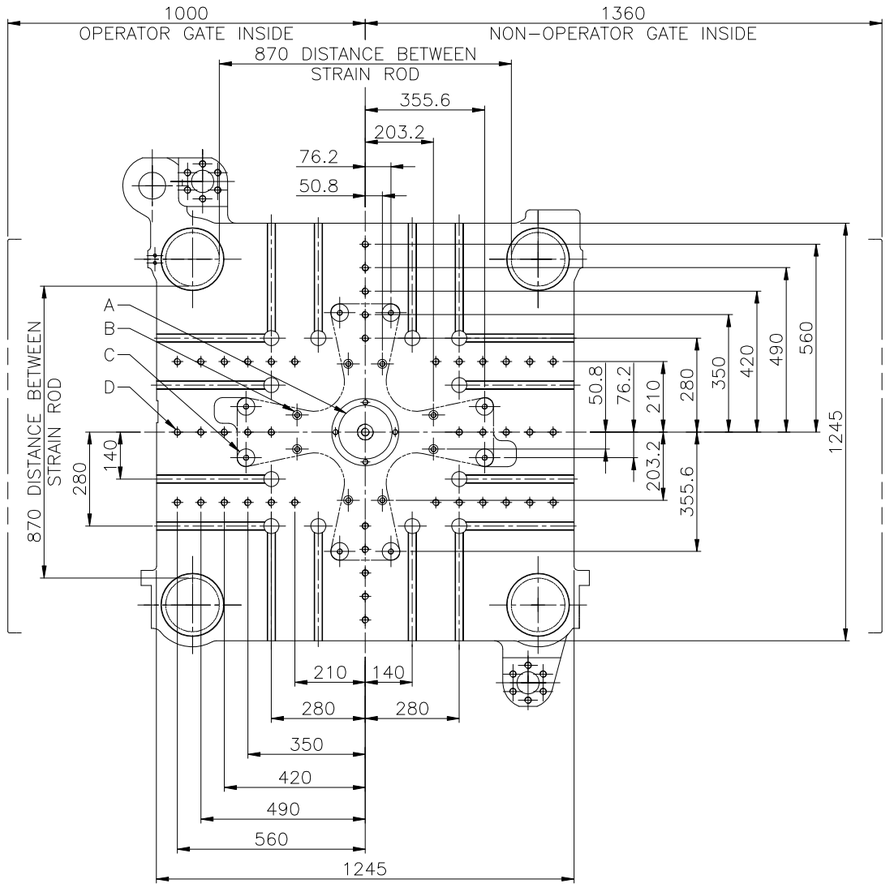


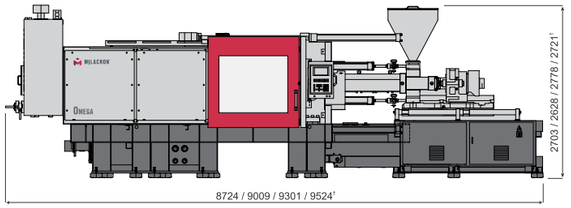


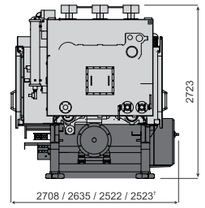



THE OMEGA
TONNAGE: 550

Injection Unit 70, 80, 90, 100
TECHNICAL SPECIFICATIONS







¹IU 70 / 80 / 90 / 100

OMEGA 550

INTERNATIONAL SIZE		5500-2350			5500-3340			5500-4850			5500-6440		5500-7290
POWER PACK		75 HP											
	UNIT	70 MM FRAME			80 MM FRAME			90 MM FRAME			100 MM FRAME		
	METRIC	A	B	C	A	B	C	A	B	C	A	B	C
INJECTION UNIT SPECIFICATIONS													
INJECTION CAPACITY MAX. (GPPS)	gms	1172	1530	1937	1722	2179	2690	2421	2989	3617	3288	3978	5137
THEORETICAL DISPLACEMENT	cc	1232	1608	2036	1810	2290	2827	2545	3142	3801	3456	4181	5400
INJECTION PRESSURE MAX.	bar	1909	1462	1155	1843	1456	1180	1906	1544	1276	1864	1540	1350
INJECTION RATE	cc/sec	441	576	728	469	594	733	441	545	659	464	561	657
INJECTION SCREW STROKE	mm	320	320	320	360	360	360	400	400	400	440	440	440
SCREW DIAMETER	mm	70	80	90	80	90	100	90	100	110	100	110	125
SCREW L/D RATIO		22.9	20	17.8	22.5	20	18	22.2	20	18.2	22	20	20
SCREW SPEED	rpm	213	213	163	146	146	132	108	108	108	86	86	86
SCREW TORQUE @ 172 BAR	Nm	3347	3347	4386	4875	4875	5384	6355	6355	6355	7924	7924	7924
PLASTICIZING RATE (STD SCOPE SCREW)	gm/sec	78	105	107	72	97	111	71	90	115	72	92	113
NO.OF PYROMETERS (BARREL+NOZZLE)		5+1			5+1			5+1			6+1		
TOTAL HEAT CAPACITY	kW	29.8			43.3			54			59.9		62.4
CLAMP UNIT SPECIFICATIONS													
CLAMP FORCE	ton	550			550			550			550		
CLAMP STROKE	mm	1140			1140			1140			1140		
MAXIMUM DAYIGHT	mm	1676			1676			1676			1676		
MINIMUM MOULD HEIGHT	mm	536			536			536			536		
PLATEN SIZE (H X V)	mm	1245 X 1245			1245 X 1245			1245 X 1245			1245 X 1245		
DISTANCE BETWEEN TIE ROD	mm	870 X 870			870 X 870			870 X 870			870 X 870		
TIE ROD DIAMETER	mm	160			160			160			160		
EJECTOR STROKE	mm	200			200			200			200		
EJECTOR FORCE	ton	12			12			12			12		
MOULD WEIGHT CAPACITY (STAT. / MOVING)	kg	7060 (2353 / 4707)			7060 (2353 / 4707)			7060 (2353 / 4707)			7060 (2353 / 4707)		
GENERAL													
ELECTRIC MOTOR	kW (HP)	55 (75)			55 (75)			55 (75)			55 (75)		
OIL TANK CAPACITY	L	1375			1375			1375			1375		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	215			215			215			215		
CONNECTED LOAD	kW	84.8			98.3			109			114.9		117.4
MACHINE DIMENSION (L X W X H)	m	8.73 X 2.71 X 2.80			9.21 X 2.64 X 2.80			9.60 X 2.57 X 2.80			10.04 X 2.57 X 2.80		10.22 X 2.57 X 2.80
MACHINE WEIGHT	kg	29800			30500			31500			32500		

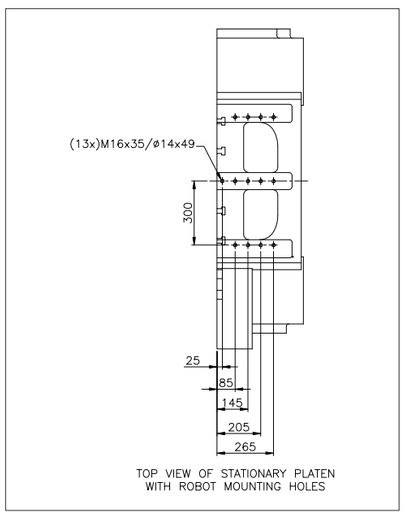
ALL DIMENSIONS ARE IN MM

A MOVING PLATEN: Ø160 THRU BORE &
Ø200(+0.072/0.00)x20.15 DEEP C'BORE
K/O BAR CENTER HOLE M24 THRU
STATIONARY PLATEN:
Ø160(+0.063/0.00) WITH LOCATING RING
Ø265(+0.052/0.00) WITHOUT LOCATING RING

B Ø27 THRU, (8) HOLES & K/O BAR HOLES M16x40 DEEP (20) NOS.

C Ø52.40 THRU, (8) HOLES ON MOVING PLATEN

D M20x40 DEEP (44) HOLES

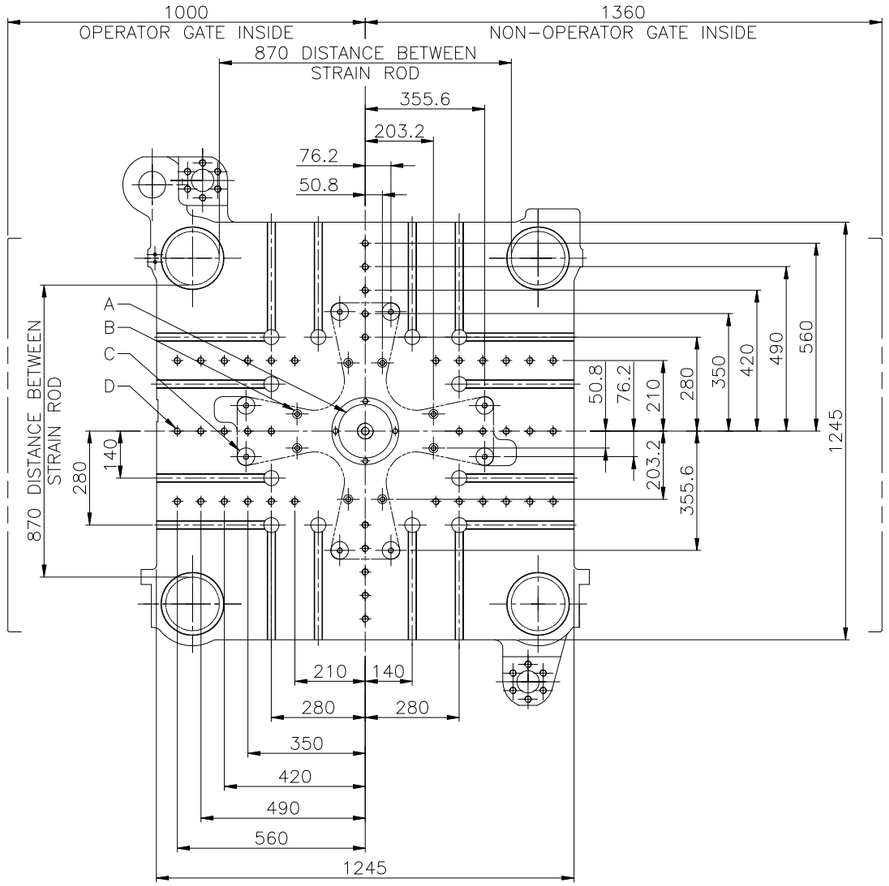


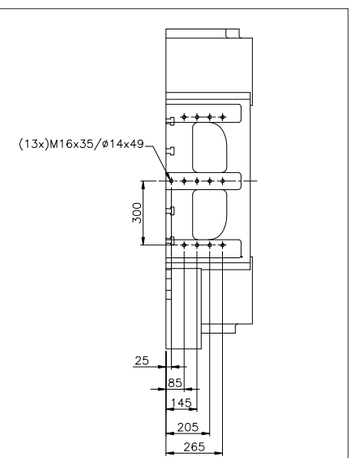
TOP VIEW OF STATIONARY PLATEN
WITH ROBOT MOUNTING HOLES

All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine power.

THE OMEGA
TONNAGE: 550

Injection Unit 70, 80, 90, 100
TECHNICAL SPECIFICATIONS





TOP VIEW OF STATIONARY PLATEN
WITH ROBOT MOUNTING HOLES

ALL DIMENSIONS ARE IN MM

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K/O BAR CENTER HOLE M24 THRU
STATIONARY PLATEN:
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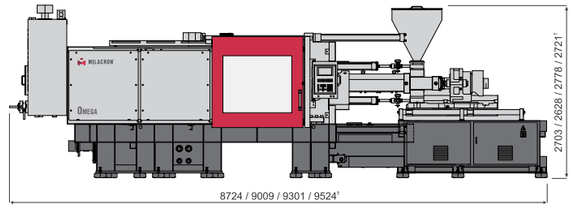
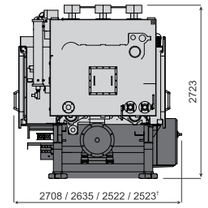




¹IU 70 / 80 / 90 / 100

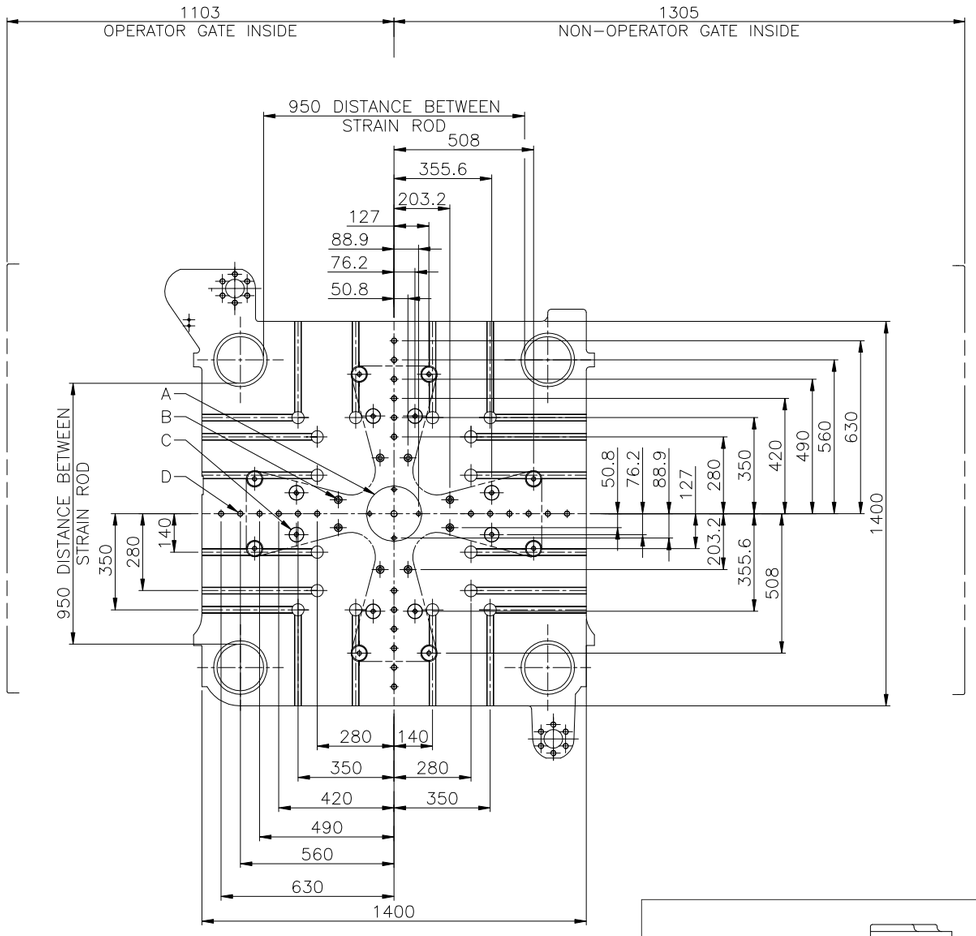
OMEGA 550

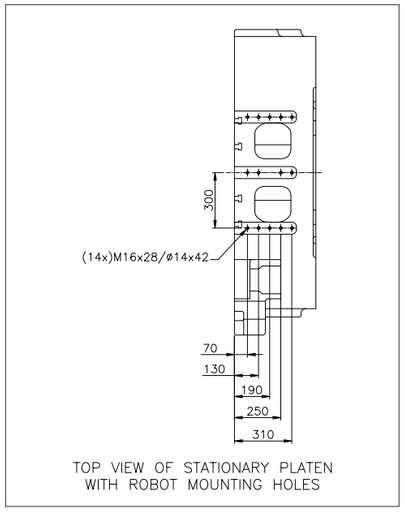
INTERNATIONAL SIZE		5500-3340			5500-4850			5500-6440		5500-7290
POWER PACK		100 HP								
	UNIT	80 MM FRAME			90 MM FRAME			100 MM FRAME		
	METRIC	A	B	C	A	B	C	A	B	C
INJECTION UNIT SPECIFICATIONS										
INJECTION CAPACITY MAX. (GPPS)	gms	1722	2179	2690	2421	2989	3617	3288	3978	5137
THEORETICAL DISPLACEMENT	cc	1810	2290	2827	2545	3142	3801	3456	4181	5400
INJECTION PRESSURE MAX.	bar	1843	1456	1180	1906	1544	1276	1864	1540	1350
INJECTION RATE	cc/sec	659	834	1029	620	765	926	651	788	923
INJECTION SCREW STROKE	mm	360	360	360	400	400	400	440	440	440
SCREW DIAMETER	mm	80	90	100	90	100	110	100	110	125
SCREW L/D RATIO		22.5	20	18	22.2	20	18.2	22	20	20
SCREW SPEED	rpm	205	205	186	151	151	151	121	121	121
SCREW TORQUE @ 172 BAR	Nm	4875	4875	5384	6355	6355	6355	7924	7924	7924
PLASTICIZING RATE (STD SCOPE SCREW)	gm/sec	102	136	156	100	127	161	102	129	159
NO.OF PYROMETERS (BARREL+NOZZLE)		5+1			5+1			6+1		
TOTAL HEAT CAPACITY	kW	43.3			54			59.9		62.4
CLAMP UNIT SPECIFICATIONS										
CLAMP FORCE	ton	550			550			550		
CLAMP STROKE	mm	1140			1140			1140		
MAXIMUM DAYIGHT	mm	1676			1676			1676		
MINIMUM MOULD HEIGHT	mm	536			536			536		
PLATEN SIZE (H X V)	mm	1245 X 1245			1245 X 1245			1245 X 1245		
DISTANCE BETWEEN TIE ROD	mm	870 X 870			870 X 870			870 X 870		
TIE ROD DIAMETER	mm	160			160			160		
EJECTOR STROKE	mm	200			200			200		
EJECTOR FORCE	ton	12			12			12		
MOULD WEIGHT CAPACITY (STAT. / MOVING)	kg	7060 (2353 / 4707)			7060 (2353 / 4707)			7060 (2353 / 4707)		
GENERAL										
ELECTRIC MOTOR	kW (HP)	75 (100)			75 (100)			75 (100)		
OIL TANK CAPACITY	L	1375			1375			1375		
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	215			215			215		
CONNECTED LOAD	kW	118.3			129			134.9		137.4
MACHINE DIMENSION (L X W X H)	m	9.21 X 2.64 X 2.80			9.60 X 2.57 X 2.80			10.04 X 2.57 X 2.80		10.22 X 2.57 X 2.80
MACHINE WEIGHT	kg	30500			31500			32500		

All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine power.

THE OMEGA
TONNAGE: 660

Injection Unit 80, 90, 100, 110
TECHNICAL SPECIFICATIONS





TOP VIEW OF STATIONARY PLATEN
WITH ROBOT MOUNTING HOLES

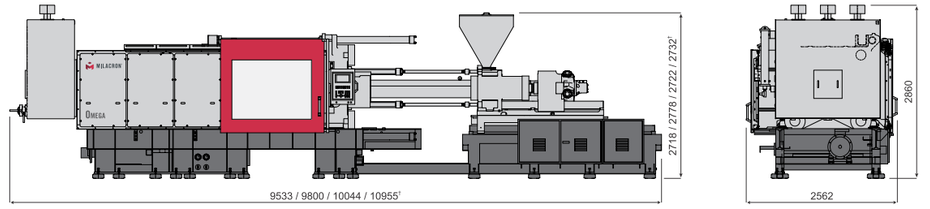
ALL DIMENSIONS ARE IN MM

A MOVING PLATEN: Ø200 THRU BORE
K/O BAR CENTER HOLE M24
STATIONARY PLATEN:
Ø200 WITH LOCATING RING
Ø315(+0.052/0.00) WITHOUT LOCATING RING

B Ø27 THRU, (12) HOLES & K/O BAR HOLES M16x40 DEEP (28) NOS.

C Ø52.40 THRU, (16) HOLES

D M20x40 DEEP (24) HOLES



†IU 80 / 90 / 100 / 110

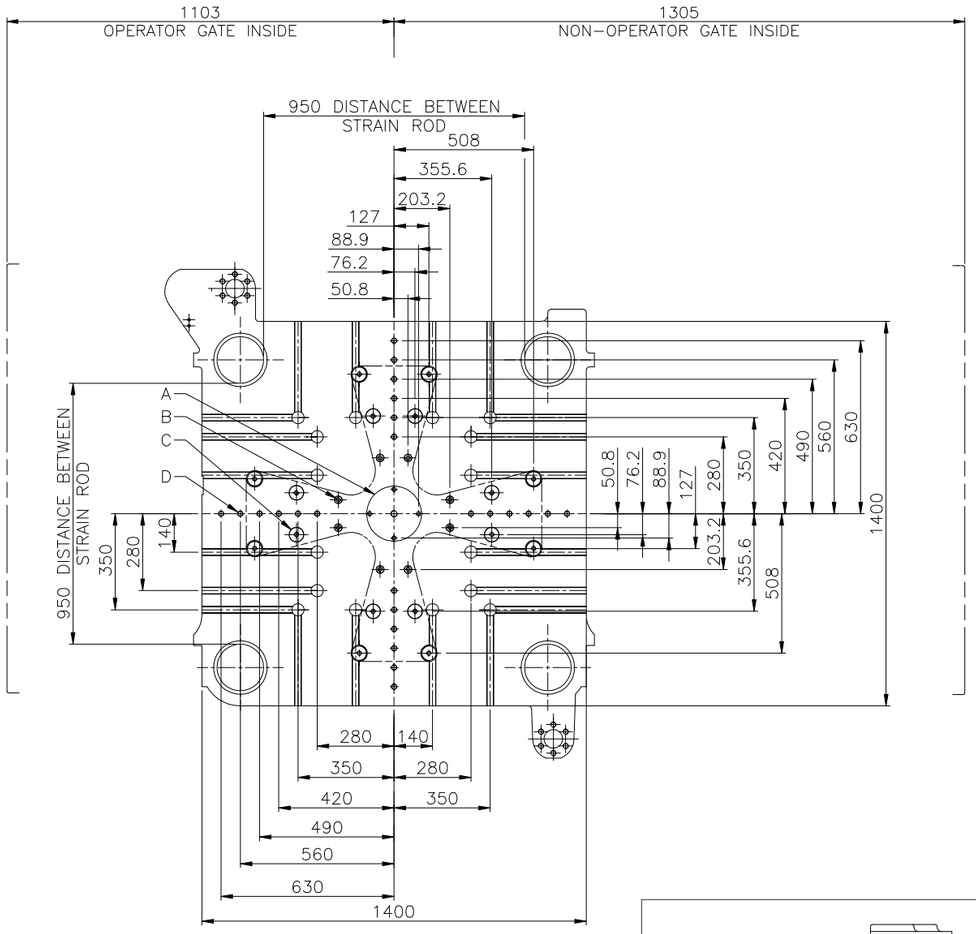
OMEGA 660

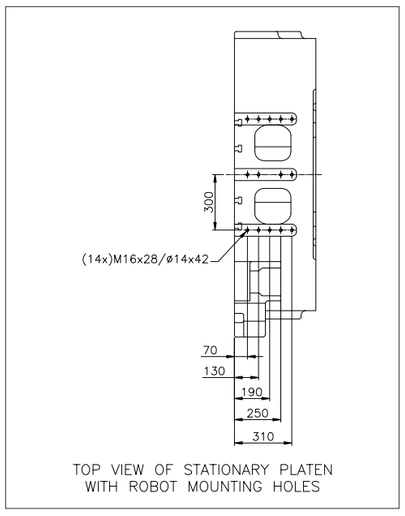
INTERNATIONAL SIZE		6600-3340			6600-4850			6600-6440		6600-7290	6600-10070	
POWER PACK		100 HP										
	UNIT	80 MM FRAME			90 MM FRAME			100 MM FRAME			110 MM FRAME	
	METRIC	A	B	C	A	B	C	A	B	C	A	B
INJECTION UNIT SPECIFICATIONS												
INJECTION CAPACITY MAX. (GPPS)	gms	1722	2179	2690	2421	2989	3617	3288	3978	5137	5063	6538
THEORETICAL DISPLACEMENT	cc	1810	2290	2827	2545	3142	3801	3456	4181	5400	5322	6872
INJECTION PRESSURE MAX.	bar	1843	1456	1180	1906	1544	1276	1864	1540	1350	1891	1465
INJECTION RATE	cc/sec	659	834	1029	620	765	926	651	788	923	541	699
INJECTION SCREW STROKE	mm	360	360	360	400	400	400	440	440	440	560	560
SCREW DIAMETER	mm	80	90	100	90	100	110	100	110	125	110	125
SCREW L/D RATIO		22.5	20	18	22.2	20	18.2	22	20	20	22.7	20
SCREW SPEED	rpm	205	205	186	151	151	151	121	121	121	121	121
SCREW TORQUE @ 172 BAR	Nm	4875	4875	5384	6355	6355	6355	7924	7924	7924	7924	7924
PLASTICIZING RATE (STD SCOPE SCREW)	gm/sec	102	136	156	100	127	161	102	129	159	129	159
NO.OF PYROMETERS (BARREL+NOZZLE)		5+1			5+1			6+1			6+1	
TOTAL HEAT CAPACITY	kW	43.3			54			59.9		62.4	64.7	
CLAMP UNIT SPECIFICATIONS												
CLAMP FORCE	ton	660			660			660			660	
CLAMP STROKE	mm	1320			1320			1320			1320	
MAXIMUM DAYIGHT	mm	1780			1780			1780			1780	
MINIMUM MOULD HEIGHT	mm	460			460			460			460	
PLATEN SIZE (H X V)	mm	1400 X 1400			1400 X 1400			1400 X 1400			1400 X 1400	
DISTANCE BETWEEN TIE ROD	mm	950 X 950			950 X 950			950 X 950			950 X 950	
TIE ROD DIAMETER	mm	170			170			170			170	
EJECTOR STROKE	mm	200			200			200			200	
EJECTOR FORCE	ton	12			12			12			12	
MOULD WEIGHT CAPACITY (STAT. / MOVING)	kg	9455 (3152 / 6303)			9455 (3152 / 6303)			9455 (3152 / 6303)			9455 (3152 / 6303)	
GENERAL												
ELECTRIC MOTOR	kW (HP)	75 (100)			75 (100)			75 (100)			75 (100)	
OIL TANK CAPACITY	L	1995			1995			1995			1995	
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	215			215			215			215	
CONNECTED LOAD	kW	118.3			129			134.9		137.4	139.7	
MACHINE DIMENSION (L X W X H)	m	9.86 X 2.58 X 2.93			10.22 X 2.57 X 2.93			10.57 X 2.57 X 2.93		10.88 X 2.57 X 2.93	11.10 X 2.57 X 2.93	
MACHINE WEIGHT	kg	33000			34000			35000			36500	

All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine power.

THE OMEGA
TONNAGE: 660

Injection Unit 80, 90, 100, 110
TECHNICAL SPECIFICATIONS





TOP VIEW OF STATIONARY PLATEN
WITH ROBOT MOUNTING HOLES

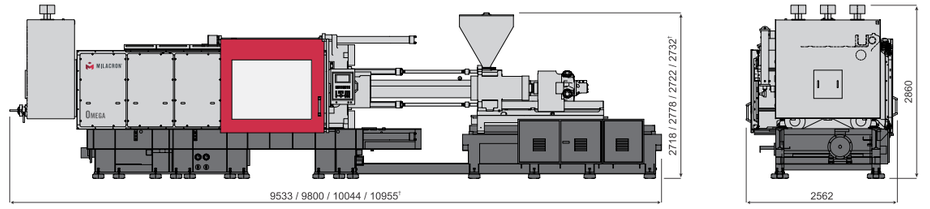
ALL DIMENSIONS ARE IN MM

A MOVING PLATEN: Ø200 THRU BORE
K/O BAR CENTER HOLE M24
STATIONARY PLATEN:
Ø200 WITH LOCATING RING
Ø315(+0.052/0.00) WITHOUT LOCATING RING

B Ø27 THRU, (12) HOLES & K/O BAR HOLES M16x40 DEEP (28) NOS.

C Ø52.40 THRU, (16) HOLES

D M20x40 DEEP (24) HOLES



†IU 80 / 90 / 100 / 110

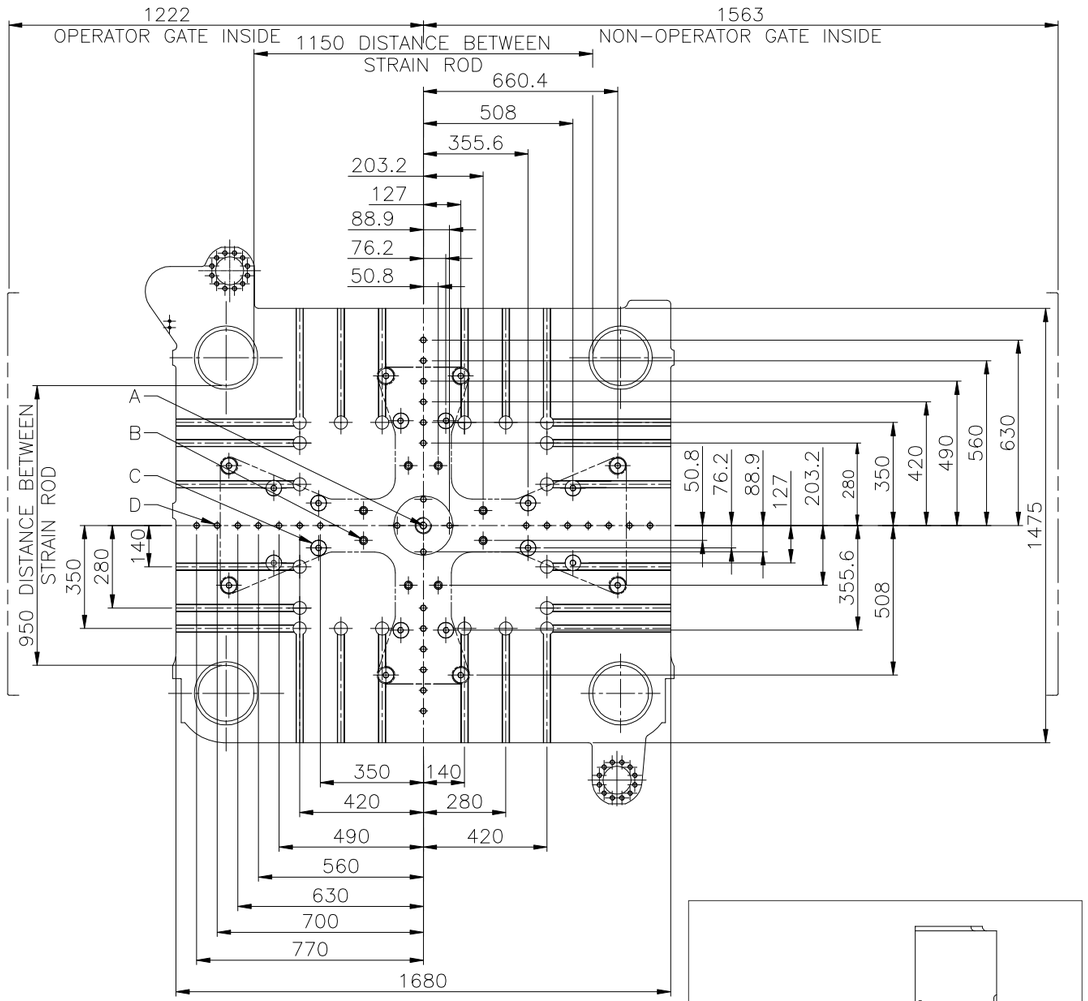
OMEGA 660

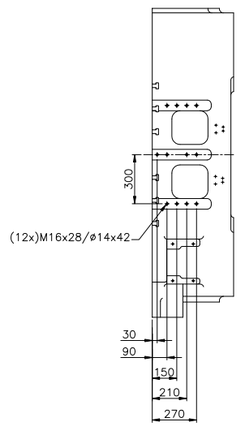
INTERNATIONAL SIZE		6600-4850			6600-6440		6600-7290	6600-10070	
POWER PACK		150 HP							
	UNIT	90 MM FRAME			100 MM FRAME			110 MM FRAME	
	METRIC	A	B	C	A	B	C	A	B
INJECTION UNIT SPECIFICATIONS									
INJECTION CAPACITY MAX. (GPPS)	gms	2421	2989	3617	3288	3978	5137	5063	6538
THEORETICAL DISPLACEMENT	cc	2545	3142	3801	3456	4181	5400	5322	6872
INJECTION PRESSURE MAX.	bar	1906	1544	1276	1864	1540	1350	1891	1465
INJECTION RATE	cc/sec	884	1091	1320	929	1124	1317	772	997
INJECTION SCREW STROKE	mm	400	400	400	440	440	440	560	560
SCREW DIAMETER	mm	90	100	110	100	110	125	110	125
SCREW L/D RATIO		22.2	20	18.2	22	20	20	22.7	20
SCREW SPEED	rpm	212	191	174	173	173	153	173	153
SCREW TORQUE @ 172 BAR	Nm	6355	6355	6355	7924	7924	7924	7924	7924
PLASTICIZING RATE (STD SCOPE SCREW)	gm/sec	140	160	185	145	184	201	185	201
NO.OF PYROMETERS (BARREL+NOZZLE)		5+1			6+1			6+1	
TOTAL HEAT CAPACITY	kW	54			59.9		62.4	64.7	
CLAMP UNIT SPECIFICATIONS									
CLAMP FORCE	ton	660			660			660	
CLAMP STROKE	mm	1320			1320			1320	
MAXIMUM DAYIGHT	mm	1780			1780			1780	
MINIMUM MOULD HEIGHT	mm	460			460			460	
PLATEN SIZE (H X V)	mm	1400 X 1400			1400 X 1400			1400 X 1400	
DISTANCE BETWEEN TIE ROD	mm	950 X 950			950 X 950			950 X 950	
TIE ROD DIAMETER	mm	170			170			170	
EJECTOR STROKE	mm	200			200			200	
EJECTOR FORCE	ton	12			12			12	
MOULD WEIGHT CAPACITY (STAT. / MOVING)	kg	9455 (3152 / 6303)			9455 (3152 / 6303)			9455 (3152 / 6303)	
GENERAL									
ELECTRIC MOTOR	kW (HP)	112 (150)			112 (150)			112 (150)	
OIL TANK CAPACITY	L	1995			1995			1995	
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	300			300			300	
CONNECTED LOAD	kW	166			171.9		174.4	176.7	
MACHINE DIMENSION (L X W X H)	m	10.22 X 2.57 X 2.93			10.57 X 2.57 X 2.93		10.88 X 2.57 X 2.93	11.10 X 2.57 X 2.93	
MACHINE WEIGHT	kg	34000			35000			36500	

All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine power.

THE OMEGA
TONNAGE: 775

Injection Unit 90, 100, 110
TECHNICAL SPECIFICATIONS





TOP VIEW OF STATIONARY PLATEN
WITH ROBOT MOUNTING HOLES

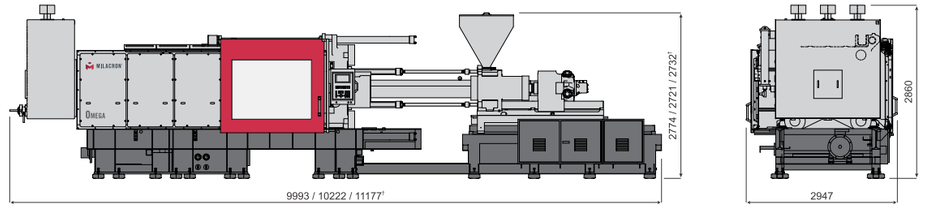
ALL DIMENSIONS ARE IN MM

A MOVING PLATEN: Ø200 THRU BORE
K/O BAR CENTER HOLE M24
STATIONARY PLATEN:
Ø200(+0.072/0.00) WITH LOCATING RING
Ø315(+0.052/0.00) WITHOUT LOCATING RING

B Ø27 THRU, (12) HOLES & K/O BAR HOLES M20x50 DEEP (32) NOS.

C Ø52.40 THRU, (20) HOLES

D M20x40 DEEP (26) HOLES



¹IU 90 / 100 / 110

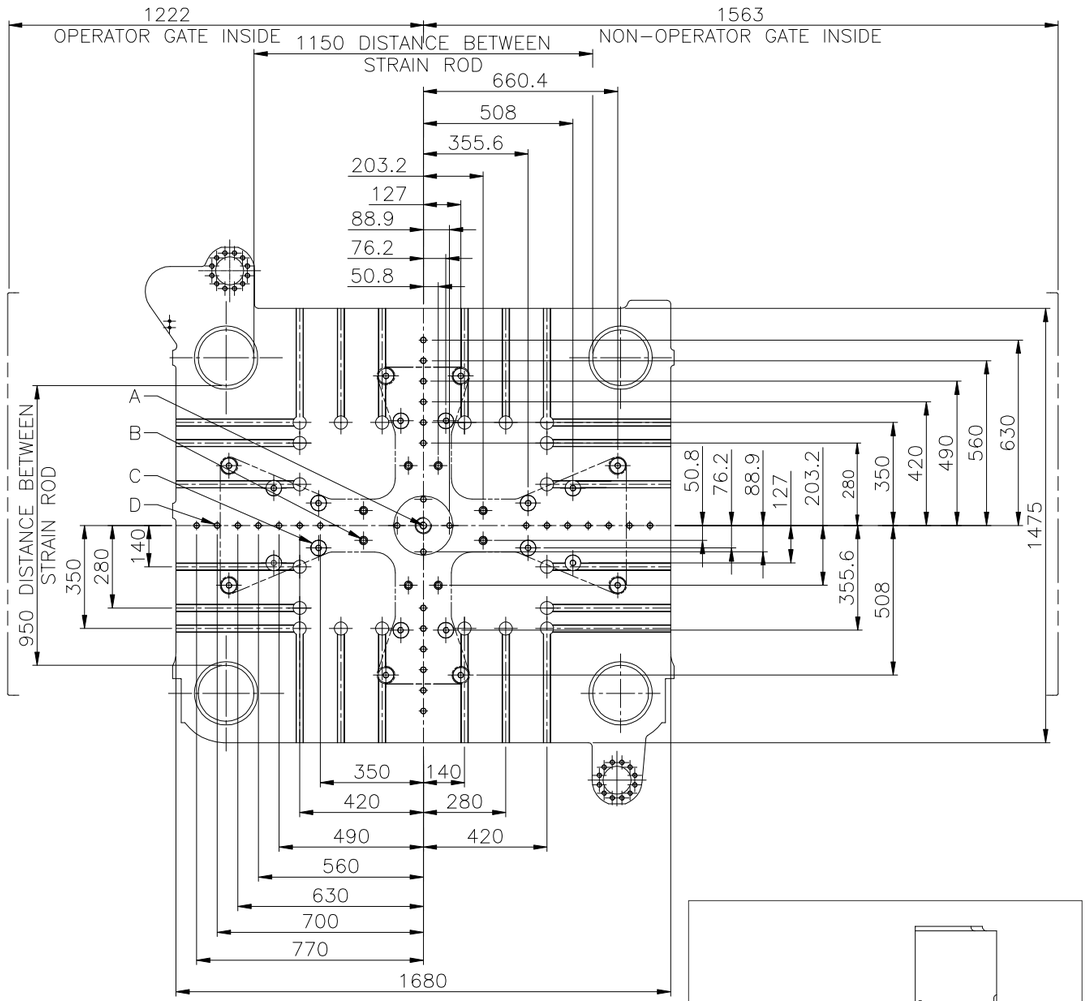
OMEGA 775

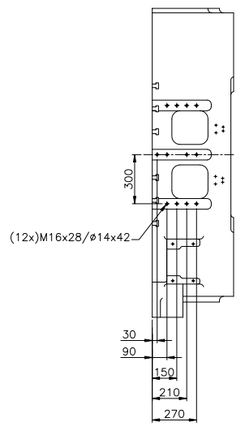
INTERNATIONAL SIZE		7750-4850			7750-6440		7750-7290	7750-10070	
POWER PACK		100 HP							
	UNIT	90 MM FRAME			100 MM FRAME			110 MM FRAME	
	METRIC	A	B	C	A	B	C	A	B
INJECTION UNIT SPECIFICATIONS									
INJECTION CAPACITY MAX. (GPPS)	gms	2421	2989	3617	3288	3978	5137	5063	6538
THEORETICAL DISPLACEMENT	cc	2545	3142	3801	3456	4181	5400	5322	6872
INJECTION PRESSURE MAX.	bar	1906	1544	1276	1864	1540	1350	1891	1465
INJECTION RATE	cc/sec	620	765	926	651	788	923	541	699
INJECTION SCREW STROKE	mm	400	400	400	440	440	440	560	560
SCREW DIAMETER	mm	90	100	110	100	110	125	110	125
SCREW L/D RATIO		22.2	20	18.2	22	20	20	22.7	20
SCREW SPEED	rpm	151	151	151	121	121	121	121	121
SCREW TORQUE @ 172 BAR	Nm	6355	6355	6355	7924	7924	7924	7924	7924
PLASTICIZING RATE (STD SCOPE SCREW)	gm/sec	100	127	161	102	129	159	129	159
NO.OF PYROMETERS (BARREL+NOZZLE)		5+1			6+1			6+1	
TOTAL HEAT CAPACITY	kW	54			59.9		62.4	64.7	
CLAMP UNIT SPECIFICATIONS									
CLAMP FORCE	ton	775			775			775	
CLAMP STROKE	mm	1320			1320			1320	
MAXIMUM DAYIGHT	mm	1920			1920			1920	
MINIMUM MOULD HEIGHT	mm	600			600			600	
PLATEN SIZE (H X V)	mm	1680 X 1475			1680 X 1475			1680 X 1475	
DISTANCE BETWEEN TIE ROD	mm	1150 X 950			1150 X 950			1150 X 950	
TIE ROD DIAMETER	mm	190			190			190	
EJECTOR STROKE	mm	200			200			200	
EJECTOR FORCE	ton	18.3			18.3			18.3	
MOULD WEIGHT CAPACITY (STAT. / MOVING)	kg	10820 (3607 / 7213)			10820 (3607 / 7213)			10820 (3607 / 7213)	
GENERAL									
ELECTRIC MOTOR	kW (HP)	75 (100)			75 (100)			75 (100)	
OIL TANK CAPACITY	L	1995			1995			1995	
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	215			215			215	
CONNECTED LOAD	kW	129			134.9		137.4	139.7	
MACHINE DIMENSION (L X W X H)	m	10.42 X 2.95 X 2.93			10.74 X 2.95 X 2.93		11.05 X 2.95 X 2.93	11.30 X 2.95 X 2.93	
MACHINE WEIGHT	kg	40000			41000			42500	

All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine power.

THE OMEGA
TONNAGE: 775

Injection Unit 90, 100, 110
TECHNICAL SPECIFICATIONS





TOP VIEW OF STATIONARY PLATEN
WITH ROBOT MOUNTING HOLES

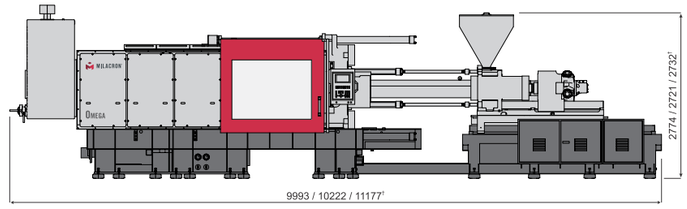
ALL DIMENSIONS ARE IN MM

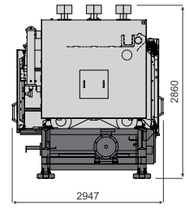
A MOVING PLATEN: Ø200 THRU BORE
K/O BAR CENTER HOLE M24
STATIONARY PLATEN:
Ø200(+0.072/0.00) WITH LOCATING RING
Ø315(+0.052/0.00) WITHOUT LOCATING RING

B Ø27 THRU, (12) HOLES & K/O BAR HOLES M20x50 DEEP (32) NOS.

C Ø52.40 THRU, (20) HOLES

D M20x40 DEEP (26) HOLES





†IU 90 / 100 / 110

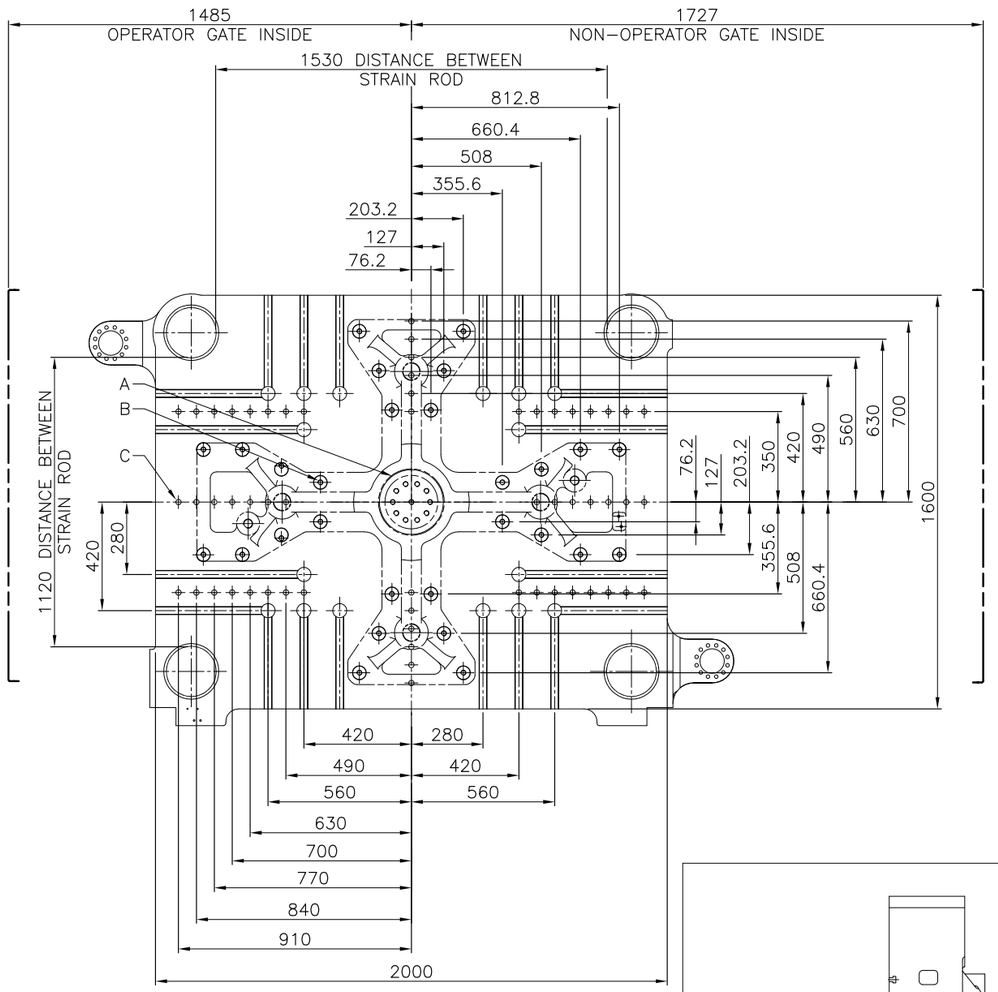
OMEGA 775

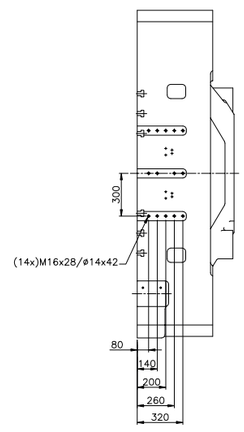
INTERNATIONAL SIZE		7750-4850			7750-6440		7750-7290	7750-10070	
POWER PACK		150 HP							
	UNIT	90 MM FRAME			100 MM FRAME			110 MM FRAME	
	METRIC	A	B	C	A	B	C	A	B
INJECTION UNIT SPECIFICATIONS									
INJECTION CAPACITY MAX. (GPPS)	gms	2421	2989	3617	3288	3978	5137	5063	6538
THEORETICAL DISPLACEMENT	cc	2545	3142	3801	3456	4181	5400	5322	6872
INJECTION PRESSURE MAX.	bar	1906	1544	1276	1864	1540	1350	1891	1465
INJECTION RATE	cc/sec	884	1091	1320	929	1124	1317	772	997
INJECTION SCREW STROKE	mm	400	400	400	440	440	440	560	560
SCREW DIAMETER	mm	90	100	110	100	110	125	110	125
SCREW L/D RATIO		22.2	20	18.2	22	20	20	22.7	20
SCREW SPEED	rpm	212	191	174	173	173	153	173	153
SCREW TORQUE @ 172 BAR	Nm	6355	6355	6355	7924	7924	7924	7924	7924
PLASTICIZING RATE (STD SCOPE SCREW)	gm/sec	140	160	185	145	184	201	185	201
NO.OF PYROMETERS (BARREL+NOZZLE)		5+1			6+1			6+1	
TOTAL HEAT CAPACITY	kW	54			59.9		62.4	64.7	
CLAMP UNIT SPECIFICATIONS									
CLAMP FORCE	ton	775			775			775	
CLAMP STROKE	mm	1320			1320			1320	
MAXIMUM DAYIGHT	mm	1920			1920			1920	
MINIMUM MOULD HEIGHT	mm	600			600			600	
PLATEN SIZE (H X V)	mm	1680 X 1475			1680 X 1475			1680 X 1475	
DISTANCE BETWEEN TIE ROD	mm	1150 X 950			1150 X 950			1150 X 950	
TIE ROD DIAMETER	mm	190			190			190	
EJECTOR STROKE	mm	200			200			200	
EJECTOR FORCE	ton	18.3			18.3			18.3	
MOULD WEIGHT CAPACITY (STAT. / MOVING)	kg	10820 (3607 / 7213)			10820 (3607 / 7213)			10820 (3607 / 7213)	
GENERAL									
ELECTRIC MOTOR	kW (HP)	112 (150)			112 (150)			112 (150)	
OIL TANK CAPACITY	L	1995			1995			1995	
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	300			300			300	
CONNECTED LOAD	kW	166			171.9		174.4	176.7	
MACHINE DIMENSION (L X W X H)	m	10.42 X 2.95 X 2.93			10.74 X 2.95 X 2.93		11.05 X 2.95 X 2.93	11.30 X 2.95 X 2.93	
MACHINE WEIGHT	kg	40000			41000			42500	

All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine power.

THE OMEGA
TONNAGE: 910

Injection Unit 90, 100, 110, 13500, 125
TECHNICAL SPECIFICATIONS





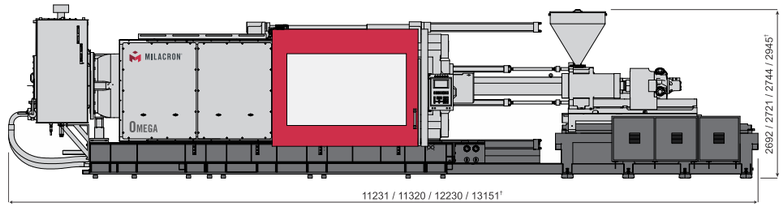
TOP VIEW OF STATIONARY PLATEN
WITH ROBOT MOUNTING HOLES

ALL DIMENSIONS ARE IN MM

A MOVING PLATEN: Ø250 H8 THRU BORE
STATIONARY PLATEN:
Ø250(+0.072/0.00) WITH LOCATING RING
Ø315 H7(+0.052/0.00) WITHOUT LOCATING RING

B Ø52.40 THRU, (28) HOLES & K/O BAR SIDE HOLES M20x50 DEEP (28) NOS.
K/O BAR CENTER HOLE M20x50 DEEP

C M24x60 DEEP (58) HOLES



†IU 90 / 100 / 110 / 13500

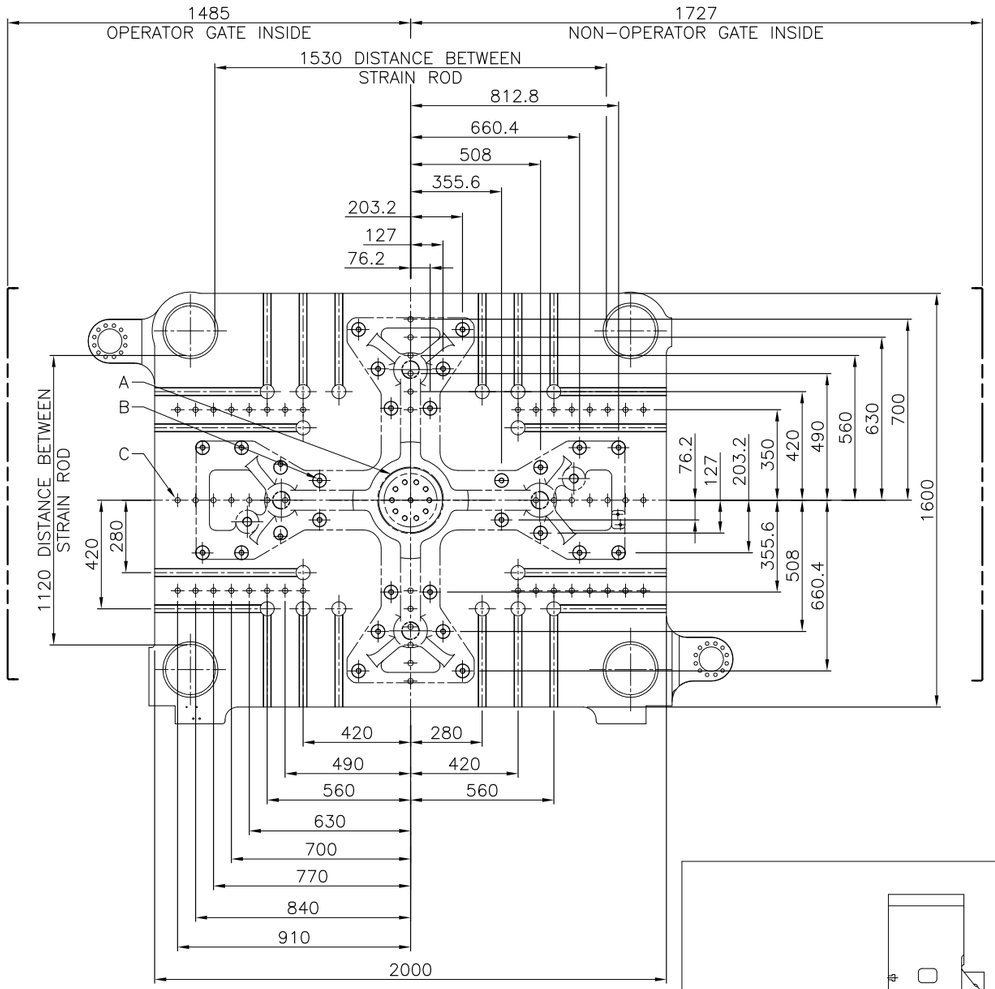
OMEGA 910

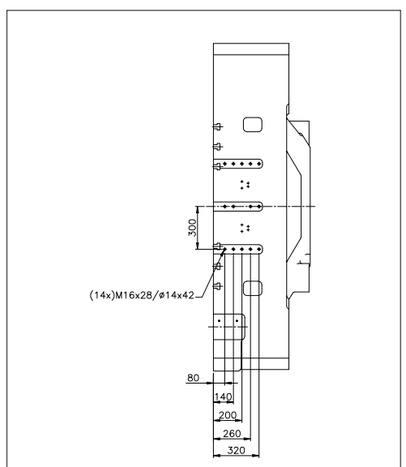
INTERNATIONAL SIZE		9100-4850			9100-6440		9100-7290	9100-10070	
POWER PACK		150 HP							
	UNIT	90 MM FRAME			100 MM FRAME			110 MM FRAME	
	METRIC	A	B	C	A	B	C	A	B
INJECTION UNIT SPECIFICATIONS									
INJECTION CAPACITY MAX. (GPPS)	gms	2421	2989	3617	3288	3978	5137	5063	6538
THEORETICAL DISPLACEMENT	cc	2545	3142	3801	3456	4181	5400	5322	6872
INJECTION PRESSURE MAX.	bar	1906	1544	1276	1864	1540	1350	1891	1465
INJECTION RATE	cc/sec	884	1091	1320	929	1124	1317	772	997
INJECTION SCREW STROKE	mm	400	400	400	440	440	440	560	560
SCREW DIAMETER	mm	90	100	110	100	110	125	110	125
SCREW L/D RATIO		22.2	20	18.2	22	20	20	22.7	20
SCREW SPEED	rpm	212	191	174	173	173	153	173	153
SCREW TORQUE @ 172 BAR	Nm	6355	6355	6355	7924	7924	7924	7924	7924
PLASTICIZING RATE (STD SCOPE SCREW)	gm/sec	140	160	185	145	184	201	185	201
NO.OF PYROMETERS (BARREL+NOZZLE)		5+1			6+1			6+1	
TOTAL HEAT CAPACITY	kW	54			59.9		62.4	64.7	
CLAMP UNIT SPECIFICATIONS									
CLAMP FORCE	ton	910			910			910	
CLAMP STROKE	mm	1600			1600			1600	
MAXIMUM DAYIGHT	mm	2350			2350			2350	
MINIMUM MOULD HEIGHT	mm	750			750			750	
PLATEN SIZE (H X V)	mm	2000 X 1600			2000 X 1600			2000 X 1600	
DISTANCE BETWEEN TIE ROD	mm	1530 X 1120			1530 X 1120			1530 X 1120	
TIE ROD DIAMETER	mm	190			190			190	
EJECTOR STROKE	mm	210			210			210	
EJECTOR FORCE	ton	18.3			18.3			18.3	
MOULD WEIGHT CAPACITY (STAT. / MOVING)	kg	19045 (6348 / 12697)			19045 (6348 / 12697)			19045 (6348 / 12697)	
GENERAL									
ELECTRIC MOTOR	kW (HP)	112 (150)			112 (150)			112 (150)	
OIL TANK CAPACITY	L	2900			2900			2900	
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	300			300			300	
CONNECTED LOAD	kW	166			171.9		174.4	176.7	
MACHINE DIMENSION (L X W X H)	m	11.81 X 3.40 X 2.90			12.03 X 3.40 X 2.90		12.50 X 3.40 X 2.90	12.60 X 3.40 X 2.90	
MACHINE WEIGHT	kg	59300			60000			61000	

All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine power.

THE OMEGA
TONNAGE: 910

Injection Unit 2290, 3470, 4880
TECHNICAL SPECIFICATIONS





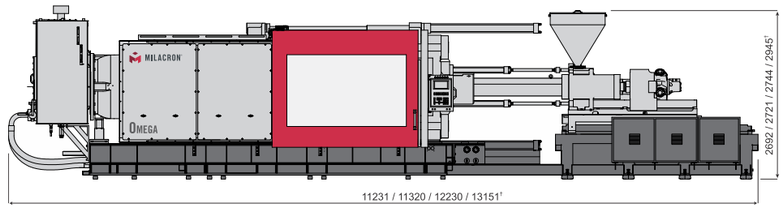
TOP VIEW OF STATIONARY PLATEN
WITH ROBOT MOUNTING HOLES

ALL DIMENSIONS ARE IN MM

A MOVING PLATEN: Ø250 H8 THRU BORE
STATIONARY PLATEN:
Ø250(+0.072/0.00) WITH LOCATING RING
Ø315 H7(+0.052/0.00) WITHOUT LOCATING RING

B Ø52.40 THRU, (28) HOLES & K/O BAR SIDE HOLES M20x50 DEEP (28) NOS.
K/O BAR CENTER HOLE M20x50 DEEP

C M24x60 DEEP (58) HOLES

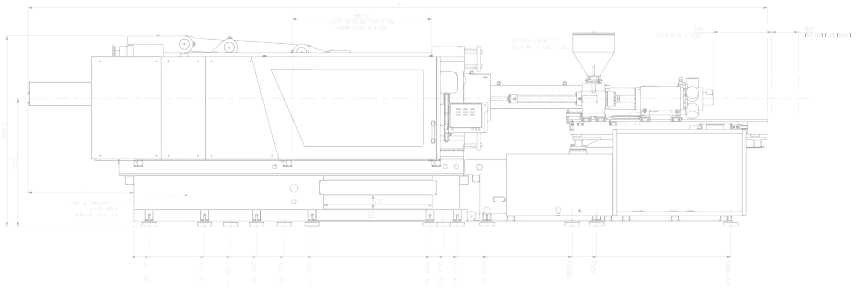


†IU 90 / 100 / 110 / 13500

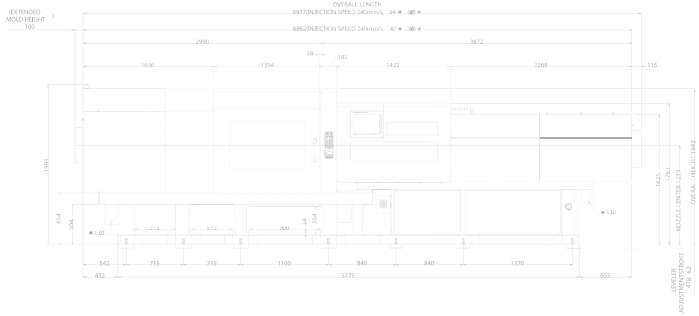
OMEGA 910

INTERNATIONAL SIZE		9100-13500		9100-13500		9100-16000	
POWER PACK		150 HP		175 HP			
	UNIT	13500		13500		125 MM FRAME	
	METRIC	A	B	A	B	A	B
INJECTION UNIT SPECIFICATIONS							
INJECTION CAPACITY MAX. (GPPS)	gms	7112	8295	7112	8295	8174	10253
THEORETICAL DISPLACEMENT	cc	7486	8731	7486	8731	8590	10776
INJECTION PRESSURE MAX.	bar	1798	1542	1798	1542	1890	1510
INJECTION RATE	cc/sec	878	1024	1075	1254	944	1184
INJECTION SCREW STROKE	mm	610	610	610	610	700	700
SCREW DIAMETER	mm	125	135	125	135	125	140
SCREW L/D RATIO		21.6	20	21.6	20	22.4	20
SCREW SPEED	rpm	123	123	140	140	100	100
SCREW TORQUE @ 172 BAR	Nm	10972	10972	10972	10972	13657	13657
PLASTICIZING RATE (STD SCOPE SCREW)	gm/sec	162	204	192	232	142	184
NO.OF PYROMETERS (BARREL+NOZZLE)		6+1		6+1		6+1	
TOTAL HEAT CAPACITY	kW	65		65		65	
CLAMP UNIT SPECIFICATIONS							
CLAMP FORCE	ton	910		910		910	
CLAMP STROKE	mm	1600		1600		1600	
MAXIMUM DAYIGHT	mm	2350		2350		2350	
MINIMUM MOULD HEIGHT	mm	750		750		750	
PLATEN SIZE (H X V)	mm	2000 X 1600		2000 X 1600		2000 X 1600	
DISTANCE BETWEEN TIE ROD	mm	1530 X 1120		1530 X 1120		1530 X 1120	
TIE ROD DIAMETER	mm	190		190		190	
EJECTOR STROKE	mm	210		210		210	
EJECTOR FORCE	ton	18.3		18.3		18.3	
MOULD WEIGHT CAPACITY (STAT. / MOVING)	kg	19045 (6348 / 12697)		19045 (6348 / 12697)		19045 (6348 / 12697)	
GENERAL							
ELECTRIC MOTOR	kW (HP)	112 (150)		131 (175)		131 (175)	
OIL TANK CAPACITY	L	2900		3260		3260	
WATER REQUIREMENT (INLET TEMP. 29°C)	lpm	300		310		310	
CONNECTED LOAD	kW	177		196		196	
MACHINE DIMENSION (L X W X H)	m	13.30 X 3.40 X 3.03		13.30 X 3.40 X 3.03		13.61 X 3.40 X 2.90	
MACHINE WEIGHT	kg	63500		64000		65500	

All machine dimensions and specifications are subject to change. Values are for reference only. These values are for standard machine power.



All specifications reflect average values based on typical machine layouts. Actual figures will vary depending on final machine configuration. Performance specifications are based on theoretical data. Photograph may show attachments or accessories, which may not be part of the standard scope of supply. Due to continual improvements, specifications & some components are subject to change without notice.



OFFICE	PHONE NUMBER
BENGALURU	+91 99169 51333
PANCHKULA	+91-172-415 5955
CHENNAI	+91-44-2378 3648/0456/3318
HYDERABAD	+91-40-4539 2595
KOLKATA	+91-33-4601 7768
MUMBAI	+91-22-4005 5459/65
NEW DELHI	+91-11-4630 1114/5/6
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