

## LPPM SPECIFICATIONS

| <b>CASTING MACHINE:</b>                             | <b>LPPM-1</b>         | <b>LPPM-2</b>         | <b>LPPM-3</b>         |
|---|-----------------------|-----------------------|-----------------------|
| <b>Overall Machine Height</b>                       | 206 inches            | 230.62 inches         | 233.75 inches         |
| <b>Platen Size</b>                                  | 52.25 x 63 inches     | 55.12 x 70.87 inches  | 55 x 71.5 inches      |
| <b>Guide Rod Diameter</b>                           | 3.94 inches           | 5 inches              | 5 inches              |
| <b>Approximate Machine Weight</b>                   | ~33,000 lbs           | ~33,000 lbs.          | ~21,600 lbs.          |
| <b>Center Distance (width)<br/>Between Tie Rods</b> | 55.12 inches          | 61.02 inches          | 62.00 inches          |
| <b>Center Distance (depth)<br/>Between Tie Rods</b> | 39.37 inches          | 43.31 inches          | 43.50 inches          |
| <b>Machine Shut Dimension</b>                       | 31.50 inches          | 31.50 inches          | 23.37 inches          |
| <b>Machine Open Dimension</b>                       | 41.50 inches          | 75.25 inches          | 67.37 inches          |
| <b>Moving Platen Stroke</b>                         | 40 inches (1016 mm)   | 44 inches (1117.6 mm) | 44 inches (1117.6 mm) |
| <b>Closing Force</b>                                | 43,826 lbs. force     | 43,826 lbs. force     | 42,000 lbs.           |
| <b>Hydraulic Pump Motor Rating</b>                  | 30 hp (22.4 kw)       | 40 hp (29.8 kw)       | 40 hp (29.8 kw)       |
| <b>Power Supply</b>                                 | 480 Volt/60Hz/3 Phase | 480 Volt/60Hz/3 Phase | 480 Volt/60Hz/3 Phase |

## LPPM1 SPECIFICATIONS

| ITEM   | DIMENSION  |
|--|--|
| <b>STANDARD REFRACTORY LINED FURNACE</b>                       |  |
| NUMBER OF STALK TUBES  | 1  |
| METAL CAPACITY OF FURNACE                                      | 1500 LBS (680.4 kg) APPROX   |
| HEAT SOURCE  | 9 RESISTANT GLOW BARS  |
| FURNACE RATING   | 36 kW  |
| FURNACE PRESSURIZATION   | AIR, PRESSURE COMPENSATED  |
| <b>NOTE: CRUCIBLE FURNACES CAN BE SUBSTITUED AS AN OPTION.</b> |  |
| <b>CASTING MACHINE</b>   |  |
| <b>DIMENSION</b>   |  |
| OVERALL MACHINE HEIGHT   | 206 INCHES (5232.4 MM)   |
| PLATEN SIZE  | 52.25 X 63 INCHES (1327.15 MM X 1600.2 MM)                                 |
| GUIDE ROD DIAMETER   | 3.94 INCHES (100.1 MM)   |
| APPROXIMATE MACHINE WEIGHT                                     | 33,000 LBS (15,000 kg) APPROX  |
| CENTER DISTANCE (WIDTH) BETWEEN TIE RODS                       | 55.12 INCHES (1400.05 MM)  |
| CENTER DISTANCE (DEPTH) BETWEEN TIE RODS                       | 39.37 INCHES (1000 MM)   |
| MACHINE SHUT DIMENSION   | 23.38" W/ SPACER, 31.50" W/O SPACER (593.85 MM, 800.1 MM)                  |
| MACHINE OPEN DIMENSION   | 63.38" W/ SPACER, 41.50" W/O SPACER (1609.85 MM, 1054.1 MM)                |
| MOVING PLATEN STROKE   | 40 INCHES (1016 MM)  |
| OPENING FORCE  | 53,016 LBS FORCE (24,048 KG)   |
| CLOSING FORCE  | 43,826 LBS FORCE (19,879 KG)   |
| SIDE CORE STROKE   | 7.50 INCHES (190.5 MM)   |
| EJECTOR PLATEN MAXIMUM STROKE                                  | 2.75 INCHES (69.85 MM)   |
| EJECTOR PLATEN MAXIMUM FORCE                                   | 48,696 LBS FORCE (22,088 KG)   |
| <b>MACHINE AND MOLD COOLING</b>                                |  |
| <b>DIMENSION</b>   |  |
| NUMBER OF MOLD AIR COOLING CIRCUITS                            | 8 SOLENOID CONTROLLED WITH MANUAL ADJUSTMENT                               |
| NUMBER OF MOLD WATER COOLING CIRCUITS                          | 8 SOLENOID CONTROLLED WITH MANUAL ADJUSTMENT                               |
| OPERATING PRESSURE OF PNEUMATICS                               | 80 PSI (5.4 BARS)  |
| COOLING WATER PRESSURE   | 70 PSI (4.76 BARS)   |
| <b>CASTING EXTRACTION</b>                                      |  |
| <b>DIMENSION</b>   |  |
| CASTING EXTRACTION   | AUTOMATIC  |
| <b>GENERAL</b>   |  |
| <b>DIMENSION</b>   |  |
| HYDRAULIC PUMP MOTOR RATING                                    | 30 HP (22.4 KW)  |
| OPERATING PRESSURE OF MACHINE                                  | 2500 PSI (COPE LIFT CRACKING ONLY), 1550 NORMAL PSI (170 BARS, 105.4 BARS) |
| HYDRAULIC FLUID  | WATER GLYCOL   |
| HYDRAULIC CYLINDER BRAND                                       | PARKER   |
| HYDRAULIC VALVING BRAND  | VICKER   |
| POWER SUPPLY   | 480 VOLT/60 Hz/3 PHASE   |
| PLC BRAND  | ALLEN BRADLEY  |
| ELECTRICAL PANEL MMI   | ALLEN BRADLEY  |
| CONTROLS VOLTAGE   | 24 VOLT DC   |
| MACHINE LUBRICATION  | MANUAL, HAND GREASE PUMP   |

## LPPM2 SPECIFICATIONS

| ITEM   | DIMENSION  |
|--|--|
| <b>STANDARD REFRACTORY LINED FURNACE</b>                       |  |
| NUMBER OF STALK TUBES  | 1 TO 5   |
| CAPACITY OF FURNACE  | 2300 LBS (1043.3 kg) APPROX  |
| HEAT SOURCE  | FOUR (4) WIRE WOUND RESISTANT HEATERS                                      |
| FURNACE RATING   | 40 Kw  |
| FURNACE PRESSURIZATION   | AIR, PRESSURE COMPENSATED  |
| <b>NOTE: CRUCIBLE FURNACES CAN BE SUBSTITUED AS AN OPTION.</b> |  |
| <b>CASTING MACHINE</b>   |  |
| <b>DIMENSION</b>   |  |
| OVERALL MACHINE HEIGHT   | 230.62 INCHES (5857.7 MM)  |
| PLATEN SIZE  | 55.12 X 70.87 INCHES (1400.05 X 1800.1 MM)                                 |
| GUIDE ROD DIAMETER   | 5 INCHES (127 MM)  |
| APPROX MACHINE WEIGHT  | 33,000 LBS (15,000 kg) APPROX  |
| GUIDE ROD CENTERLINES LEFT TO RIGHT                            | 61.02 INCHES (1549.91 MM)  |
| GUIDE ROD CENTERLINE FRONT TO BACK                             | 43.31 INCHES (1100.1 MM)   |
| MACHINE SHUT DIMENSION (WITH SPACER)                           | 23.62 INCHES (600 MM)  |
| MACHINE SHUT DIMENSION (WITHOUT SPACER)                        | 31.5 INCHES (800 MM)   |
| MACHINE OPEN DIMENSION (WITHOUT SPACER)                        | 75.25 INCHES (1911.3 MM)   |
| MOVING PLATEN STROKE   | 44 INCHES (1117.6 MM)  |
| OPENING FORCE  | 53,016 LBS FORCE (24,048 kG)   |
| CLOSING FORCE  | 43,826 LBS FORCE (19,879 kG)   |
| SIDE CORE STROKE   | 11.5 INCHES (292.1 MM)   |
| EJECTOR PLATEN MAXIMUM STROKE                                  | 2.75 INCHES (69.85 MM)   |
| EJECTOR PLATEN MAXIMUM FORCE                                   | 48,696 LBS FORCE (22,088 kG)   |
| <b>MACHINE AND MOLD COOLING</b>                                |  |
| <b>DIMENSION</b>   |  |
| NUMBER OF MOLD AIR COOLING CIRCUITS                            | 16 SOLENOID CONTROLLED WITH MANUAL ADJUSTMENT                              |
| NUMBER OF MOLD WATER COOLING CIRCUITS                          | 16 SOLENOID CONTROLLED WITH MANUAL ADJUSTMENT                              |
| OPERATING PRESSURE OF PNEUMATICS                               | 90 PSI (6.1 BARS)  |
| COOLING WATER PRESSURE   | 70 PSI (4.8 BARS)  |
| <b>CASTING EXTRACTION</b>                                      |  |
| <b>DIMENSION</b>   |  |
| CASTING EXTRACTION   | AUTOMATIC  |
| <b>GENERAL</b>   |  |
| <b>DIMENSION</b>   |  |
| HYDRAULIC PUMP MOTOR RATING                                    | 40 HP (29.8 KW)  |
| OPERATING PRESSURE OF MACHINE                                  | 2500 PSI (COPE LIFT CRACKING ONLY), 1550 NORMAL PSI (170 BARS, 105.4 BARS) |
| HYDRAULIC FLUID  | WATER GLYCOL   |
| HYDRAULIC CYLINDER BRAND                                       | PARKER   |
| HYDRAULIC VALVING BRAND  | VICKERS  |
| POWER SUPPLY   | 480 VOLT/60 Hz/3 PHASE   |
| PLC BRAND  | ALLEN BRADLEY  |
| ELECTRICAL PANEL MMI   | ALLEN BRADLEY  |
| CONTROLS VOLTAGE   | 24 VOLT DC   |
| MACHINE LUBRICATION  | MANUAL, HAND GREASE PUMP   |

### LPPM3 SPECIFICATIONS

| ITEM   | DIMENSION  |
|--|--|
| <b>STANDARD REFRACTORY LINED FURNACE</b>                       |  |
| NUMBER OF STALK TUBES  | 1  |
| CAPACITY OF FURNACE  | 2100 LBS APPROX MIN. (952.5 kg)  |
| HEAT SOURCE  | 9 PREMIUM KANTHAL RESISTANT GLOW BARS W/ APM PROTECTION TUBES            |
| FURNACE RATING   | 60 kW  |
| FURNACE PRESSURIZATION   | AIR, PRESSURE COMPENSATED  |
| <b>NOTE: CRUCIBLE FURNACES CAN BE SUBSTITUED AS AN OPTION.</b> |  |
| <b>CASTING MACHINE</b>   |  |
| <b>DIMENSION</b>   |  |
| OVERALL MACHINE HEIGHT   | 233.75 INCHES (5937.25 MM)   |
| PLATEN SIZE  | 55 X 71.5 INCHES (1397 X 1816.1 MM)                                      |
| GUIDE ROD DIAMETER   | 5 INCHES (127 MM)  |
| APPROX MACHINE WEIGHT  | 21,600 LBS (9797.6 kg)   |
| GUIDE ROD CENTERLINES LEFT TO RIGHT                            | 62 INCHES (1574.8 MM)  |
| GUIDE ROD CENTERLINE FRONT TO BACK                             | 43.5 INCHES (1104.9 MM)  |
| MACHINE SHUT DIMENSION   | 23.37 INCHES (593.6 MM)  |
| MACHINE OPEN DIMENSION   | 67.37 INCHES (1711.2 MM)   |
| MOVING PLATEN STROKE   | 44 INCHES (1117.6 MM)  |
| OPENING FORCE  | 48,000 LBS (21,772 kg)   |
| CLOSING FORCE  | 42,000 LBS (19,050 kg)   |
| SIDE CORE STROKE   | 11.5 INCHES (292.1 MM)   |
| EJECTOR PLATEN MAXIMUM STROKE                                  | 2.75 INCHES (69.85 MM)   |
| EJECTOR PLATEN MAXIMUM FORCE                                   | 57,730 LBS (26,186 kg)   |
| <b>MACHINE AND MOLD COOLING</b>                                |  |
| <b>DIMENSION</b>   |  |
| NUMBER OF MOLD AIR COOLING CIRCUITS                            | 12 PROPORTIONAL CONTROLLED   |
| NUMBER OF MOLD WATER COOLING CIRCUITS                          | 6 SOLENOID CONTROLLED WITH MANUAL ADJUSTMENT                             |
| OPERATING PRESSURE OF PNEUMATICS                               | 90 PSI (6.1 BARS)  |
| COOLING WATER PRESSURE   | 70 PSI (4.8 BARS)  |
| <b>CASTING EXTRACTION</b>                                      |  |
| <b>DIMENSION</b>   |  |
| CASTING EXTRACTION   | AUTOMATIC  |
| <b>GENERAL</b>   |  |
| <b>DIMENSION</b>   |  |
| HYDRAULIC PUMP MOTOR RATING                                    | 40 HP (29.8 KW)  |
| OPERATING PRESSURE OF MACHINE                                  | 2250 PSI (COPE LIFT CRACKING ONLY), 1500 NORMAL PSI (153 BARS, 102 BARS) |
| HYDRAULIC FLUID  | QUINTO-LUBRIC 888-46   |
| HYDRAULIC CYLINDER BRAND                                       | PARKER   |
| HYDRAULIC VALVING BRAND  | VICKERS  |
| POWER SUPPLY   | 480 VOLT/60 Hz/3 PHASE   |
| PLC BRAND  | ALLEN BRADLEY  |
| ELECTRICAL PANEL MMI   | ALLEN BRADLEY  |
| CONTROLS VOLTAGE   | 24 VOLT DC   |
| MACHINE LUBRICATION  | MANUAL, HAND GREASE PUMP   |