

# THE ROBOSHOT

## ALPHA SERIES

### TONNAGE: S330-iA

Screw Diameter:  
40, 44, 48, 52,  
56, 64, 68, 72

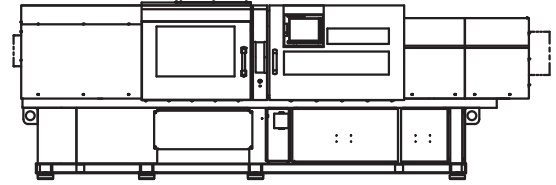
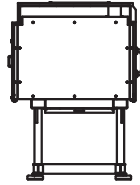
# TECHNICAL SPECIFICATIONS

| Screw Diameter                       |  | 40   | 44              | 48              | 52              | 56              | 64              | 68              | 72              |
|--------------------------------------|--|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                      | ENGLISH<br>METRIC                            |  |                 |                 |                 |                 |                 |                 |                 |
| <b>General</b>                       |  |  |                 |                 |                 |                 |                 |                 |                 |
| Overall Dimensions (L x W x H) ****  | in<br>mm                                     | 251.1 x 72.8 x 78.4<br>6,377 x 1,850 x 1,992 |                 |                 |                 |                 |                 |                 |                 |
| Machine Weight                       | lbs<br>kg                                    | 32,187<br>14,200                             |                 |                 |                 |                 |                 |                 |                 |
| Nominal Input Power Source           | Ph/Volt                                      | 3 Phase, 200 - 220V *                        |                 |                 |                 |                 |                 |                 |                 |
| Breaker Size Machine Only            | Amp  | 150  |                 |                 |                 |                 |                 |                 |                 |
| Breaker Size with Aux Outlets        | Amp  | 225  |                 |                 |                 |                 |                 |                 |                 |
| Min Transformer w/std breaker        | kva  | 55   |                 |                 |                 |                 |                 |                 |                 |
| Min Transformer w/increased breaker  | kva  | 85   |                 |                 |                 |                 |                 |                 |                 |
| <b>Injection Unit Specifications</b> |  |  |                 |                 |                 |                 |                 |                 |                 |
| Screw Diameter                       | in<br>mm                                     | 1.57<br>40                                   | 1.73<br>44      | 1.89<br>48      | 2.05<br>52      | 2.2<br>56       | 2.52<br>64      | 2.68<br>68      | 2.83<br>72      |
| Injection Capacity, Maximum GPPS     | oz<br>gms                                    | 6.27<br>178                                  | 8.9<br>252      | 10.59<br>300    | 14.69<br>416    | 21.29<br>604    | 27.81<br>788    | 31.4<br>890     | 35.2<br>998     |
| Theoretical Displacement             | in <sup>3</sup><br>cm <sup>3</sup>           | 11.5<br>188                                  | 16.3<br>268     | 19.4<br>318     | 27<br>442       | 39.1<br>640     | 51<br>836       | 57.6<br>944     | 64.6<br>1,059   |
| Maximum Injection Pressure (S330-iA) | psi<br>bar                                   | 39,825<br>2,800                              | 39,825<br>2,800 | 38,403<br>2,700 | 34,136<br>2,400 | 32,002<br>2,250 | 24,891<br>1,750 | 22,046<br>1,550 | 19,201<br>1,350 |
| Maximum Pack Pressure (S330-iA)      | psi<br>bar                                   | 39,825<br>2,800                              | 36,980<br>2,600 | 34,136<br>2,400 | 31,291<br>2,200 | 27,735<br>1,950 | 21,335<br>1,500 | 18,490<br>1,300 | 17,779<br>1,200 |
| Maximum Injection Velocity (S330-iA) | in/sec<br>cm/sec                             | 9.45<br>24                                   | 9.45<br>24      | 9.45<br>24      | 9.45<br>24      | 9.45<br>24      | 9.45<br>24      | 9.45<br>24      | 9.45<br>24      |
| Maximum Injection Rate (S330-iA)     | in <sup>3</sup> /sec<br>cm <sup>3</sup> /sec | 18.4<br>302                                  | 22.27<br>365    | 26.5<br>434     | 31.1<br>510     | 36.07<br>591    | 47.11<br>772    | 53.18<br>872    | 59.62<br>977    |
| Max Injection Pressure (S330-iA-HD)  | psi<br>bar                                   | 39,825<br>2,800                              | 39,825<br>2,800 | 38,403<br>2,700 | 34,136<br>2,400 | 32,002<br>2,250 | 24,891<br>1,750 | 22,046<br>1,550 | 19,201<br>1,350 |
| Max Pack Pressure (S330-iA-HD)       | psi<br>bar                                   | 39,825<br>2,800                              | 36,980<br>2,600 | 34,136<br>2,400 | 31,291<br>2,200 | 27,735<br>1,950 | 21,335<br>1,500 | 18,490<br>1,300 | 17,068<br>1,200 |
| Max Injection Velocity (S330-iA-HD)  | in/sec<br>cm/sec                             | 7.87<br>20                                   | 7.87<br>20      | 7.87<br>20      | 7.87<br>20      | 7.87<br>20      | 7.87<br>20      | 7.87<br>20      | 7.87<br>20      |
| Max Injection Rate (S330-iA-HD)      | in <sup>3</sup> /sec<br>cm <sup>3</sup> /sec | 20.70<br>339                                 | 25.05<br>410    | 29.81<br>488    | 34.98<br>573    | 49.60<br>665    | 39.26<br>643    | 44.32<br>726    | 49.68<br>814    |
| Screw Stroke                         | in<br>mm                                     | 5.91<br>150                                  | 6.93<br>176     | 6.93<br>176     | 8.19<br>208     | 10.24<br>260    | 10.24<br>260    | 10.24<br>260    | 10.24<br>260    |
| Screw L/D Ratio                      | L/D  | 20:1   | 20:1            | 20:1            | 20:1            | 20:1            | 20:1            | 20:1            | 20:1            |

Notes

- 1) \*Allowable fluctuation V +/- 10%, +/- 1 Hz.
- 2) \*\*\*\* Standard Min/Max mold Height specification

# THE ROBOSHOT SERIES (17-550 TON)



Not actual model, for visual reference only.

| Screw Diameter                       |                   | 40                             | 44        | 48        | 52        | 56  | 64                             | 68        | 72                             |
|--------------------------------------|-------------------|--------------------------------|-----------|-----------|-----------|---|--------------------------------|-----------|--------------------------------|
|                                      | ENGLISH           |                                |           |           |           |   |                                |           |                                |
|                                      | METRIC            |                                |           |           |           |   |                                |           |                                |
| Injection Unit Specifications        |                   |                                |           |           |           |   |                                |           |                                |
| Screw Speed Max                      | min <sup>-1</sup> | 400                            | 400       | 400       | 400       | 400   | 400                            | 400       | 300                            |
| Nozzle Touch Force                   | ton<br>kN         | 3.3<br>30                      | 3.3<br>30 | 3.3<br>30 | 3.3<br>30 | 3.3<br>30   | 3.3<br>30                      | 3.3<br>30 | 3.3<br>30                      |
| Number of Pyrometers (Barrel/Nozzle) | qty               | 3/1                            | 3/1       | 3/1       | 3/1       | 4/1   | 4/1                            | 4/1       | 4/1                            |
| Total Heat Capacity                  | kW                | 14.9                           | 15.9      | 17.9      | 20.2      | 23.9  | 27.2                           | 27.8      | 27.2                           |
| Clamp                                |                   | Standard                       |           |           |           | Optional  |                                |           |                                |
| Clamping Force                       | ton<br>kN         | 330<br>3,000                   |           |           |           | 385*<br>3,500   |                                |           |                                |
| Platen Size (H x V)                  | in<br>mm          | 44.5 x 40.6<br>1,130 x 1,030   |           |           |           |   |                                |           |                                |
| Distance Between Tie Rods (H x V)    | in<br>mm          | 31.9 x 28<br>810 x 710         |           |           |           |   |                                |           |                                |
| Tie Rod Diameter                     | in<br>mm          | 5.12<br>130                    |           |           |           |   |                                |           |                                |
| Mold Opening Stroke                  | in<br>mm          | 23.62<br>600                   |           |           |           |   |                                |           |                                |
| Clamp Speed                          | in/sec<br>mm/sec  | 15.75<br>400                   |           |           |           | 12.6<br>320   |                                |           |                                |
| Maximum Daylight                     | in<br>mm          | 49.21<br>1,250                 |           |           |           | 53.15<br>1,350  |                                |           |                                |
| Min/Max Mold Thickness               | in<br>mm          | 11.8 / 25.6<br>300 / 650       |           |           |           | 11.8 / 29.5<br>300 / 750                              | 11.8 / 31.9<br>300 / 810       |           | 11.8 / 37.4<br>300 / 950**     |
| Minimum Mold Size (H x V)            | in<br>mm          | 520 x 420<br>20.5 x 16.5       |           |           |           |   |                                |           |                                |
| Maximum Mold Weight                  | lbs<br>kg         | 5,291 / 5,291<br>2,400 / 2,400 |           |           |           | 6,614 / 6,614<br>3,000 / 3,000                        | 6,614 / 6,614<br>3,000 / 3,000 |           | 9,920 / 9,920<br>4,500 / 4,500 |
| Euromap 6 Dry Cycle Time*            | sec               | 2.92                           |           |           |           | 2.09 (High Speed)***<br>3.51 sec (Increased Tonnage)* |                                |           |                                |
| Mold locating ring inside diameter   | in<br>mm          | 4.0<br>101.6                   |           |           |           |   |                                |           |                                |
| Ejector Force                        | tons<br>kN        | 8.8<br>80                      |           |           |           |   |                                |           |                                |
| Ejector Stroke Max                   | in<br>mm          | 7.87<br>200                    |           |           |           |   |                                |           |                                |

## Notes

- 1) All machine dimensions and specifications are subject to change. Values are for reference only. All general assembly drawings or visuals included herein are for reference only. Please consult the general assembly drawing from a Milacron representative.
- 2) \* Not available with High Speed Clamp Option.
- 3) \*\* Increased Mold weight capacity.
- 4) \*\*\* Not available with increased tonnage or high base.