

# $\alpha$ -S250iB Mechanical specifications

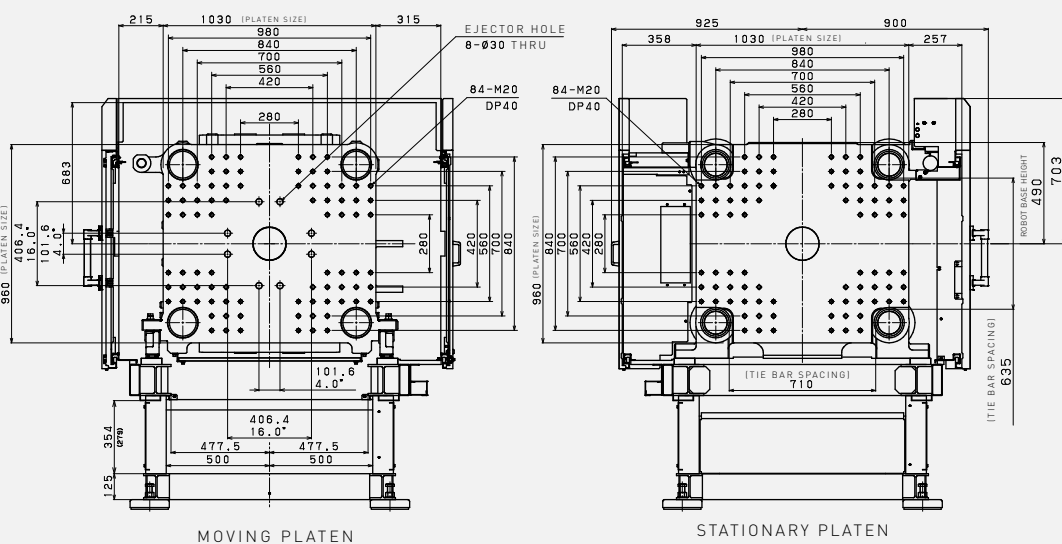
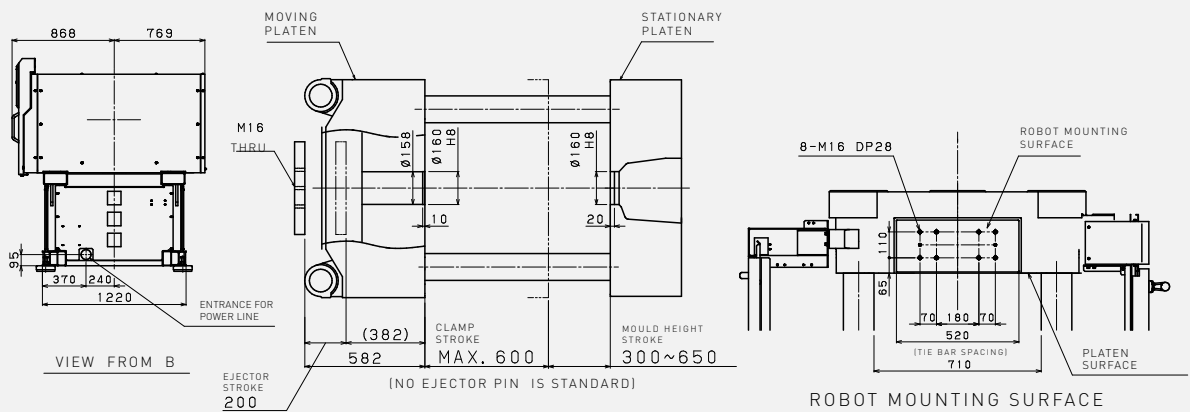
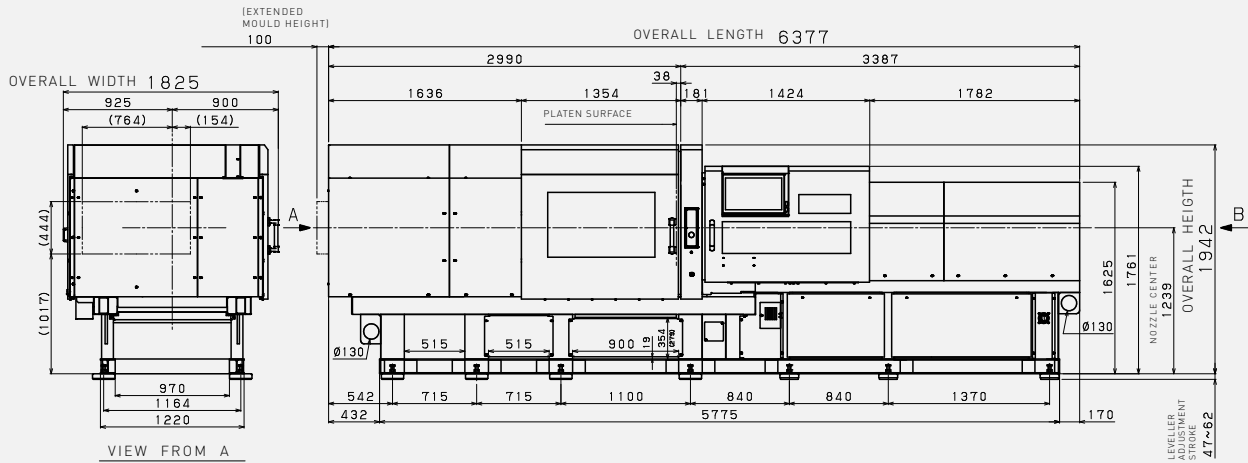


| Clamping unit  |                    |                                     |      |      |      |      |        |        |   |
|--|--------------------|-------------------------------------|------|------|------|------|--------|--------|---|
| Clamping mechanism   |                    | Double toggle                       |      |      |      |      |        |        |   |
| Tonnage  | kN   tonf          | 2500   250 / Increased (3000   300) |      |      |      |      |        |        |   |
| Maximum and minimum die height Single platen               | mm                 | 650-300 / Increased (750-300)       |      |      |      |      |        |        |   |
| Clamping stroke  | mm                 | 600                                 |      |      |      |      |        |        |   |
| Locating ring diameter                                     | mm                 | 160                                 |      |      |      |      |        |        |   |
| Tie bar spacing, HxV                                       | mm                 | 710 x 635                           |      |      |      |      |        |        |   |
| Platen size, HxV   | mm                 | 1030 x 960                          |      |      |      |      |        |        |   |
| Minimum mould size, HxV *1                                 | mm                 | 420 x 385                           |      |      |      |      |        |        |   |
| Maximum mould weight Single platen (Moving-Stationary) *2  | kg                 | 2000-2000                           |      |      |      |      |        |        |   |
| Ejector stroke   | mm                 | 200                                 |      |      |      |      |        |        |   |
| Maximum ejector force                                      | kN   tonf          | 80   8.0                            |      |      |      |      |        |        |   |
| Injection unit   |                    |                                     |      |      |      |      |        |        |   |
| Screw diameter   | mm                 | 32                                  | 36   | 40   | 44   | 48   | 52 *11 | 56 *12 |   |
| Injection stroke   | mm                 | 150                                 | 150  | 150  | 176  | 176  | 208    | 260    |   |
| Max. injection volume                                      | cm <sup>3</sup>    | 121                                 | 153  | 188  | 268  | 318  | 442    | 640    |   |
| Nozzle touch force *6                                      | kN   tonf          | 30   3.0 / Increased (50   5.0)     |      |      |      |      |        |        |   |
| <b>Max. Injection Speed mm/s *4</b>                        | <b>mm/s</b>        | <b>280 (high duty)</b>              |      |      |      |      |        |        |   |
| Max. injection pressure (high-pressure filling mode) *3 *5 | MPa                | 380                                 | 345  | 320  | 280  | -    | -      | -      |   |
| Max. injection & Hold Pressure 2 *3 *7                     | MPa                | 280                                 | 280  | 280  | 260  | 230  | 200    | 172    |   |
| Max. injection rate *4                                     | cm <sup>3</sup> /s | 225                                 | 285  | 351  | 425  | 506  | 594    | 689    |   |
| Max. screw rotation speed                                  | min <sup>-1</sup>  | 400                                 |      |      |      |      |        |        |   |
| Machine weight Double platen   Single platen *9            | t                  | 12.5                                |      |      |      |      |        |        |   |
| <b>Max. Injection Speed *4</b>                             | <b>mm/s</b>        | <b>350</b>                          |      |      |      |      |        |        |   |
| Max. injection pressure (high-pressure filling mode) *3 *5 | MPa                | 380                                 | 345  | -    | -    | -    | -      | -      |   |
| Max. injection & Hold Pressure 1 *3 *6                     | MPa                | 310                                 | 310  | 280  | 240  | 190  | 160    | 140    |   |
| Max. injection & Hold Pressure 2 *3 *7                     | MPa                | 280                                 | 280  | 260  | 220  | 190  | 160    | 140    |   |
| Max. injection rate *4                                     | cm <sup>3</sup> /s | 281                                 | 356  | 439  | 532  | 633  | 743    | 862    |   |
| Max. screw rotation speed                                  | min <sup>-1</sup>  | 400                                 |      |      |      |      |        |        |   |
| Machine weight Double platen   Single platen *9            | t                  | 12.5                                |      |      |      |      |        |        |   |
| Screw and Barrel   |                    |                                     |      |      |      |      |        |        |   |
| Number of heater zones                                     | Barrel             | 3                                   |      |      |      |      |        |        | 4 |
| Number of pyrometers                                       | Nozzle             | 1                                   |      |      |      |      |        |        |   |
| Total heater wattage                                       | kW                 | 12.0                                | 13.0 | 14.9 | 15.9 | 17.9 | 20.2   | 23.5   |   |

● standard    - not available    ( ) with hardware and/or software option

- \*1) Smaller mold than this size may limit clamp force.
- \*2) If the weight of a mold exceeds maximum mold weight, the molding condition may be limited.
- \*3) Maximum injection pressure and maximum hold pressure are the output of the injection unit, not the resin pressure.  
- Maximum injection pressure and maximum hold pressure are the maximum values that can be set.
- \*4) Maximum injection rate and maximum injection speed is a theoretical value.  
- Maximum injection rate and maximum injection speed can not be guaranteed when the injection pressure is maximum.
- \*5) The maximum injection pressure setting at high pressure filling mode option.  
- There is a limitation in injection time setting and pack time setting, when high pressure filling mode option is selected. (Contact sales for detail)
- \*6) Maximum injection pressure 1 and maximum hold pressure 1 are the values when the wear-resistant and anti-corrosion cylinder etc. is installed.  
- Maximum injection pressure and maximum hold pressure may vary depends on the installed screw and cylinder specifications.
- \*7) Maximum injection pressure 2 and maximum hold pressure 2 are the values when the general purpose cylinder etc. is installed.  
- Maximum injection pressure and maximum hold pressure may vary depends on the installed screw and cylinder specifications.
- \*8) Sprue break cannot be used with increased nozzle touch force option.
- \*9) The machine without option.
- \*10) The pressure conversion is 1MPa=10kgf/cm<sup>2</sup>.
- \*11) The molding condition might be limited by the resin. (Contact sales for detail)
- \*12) In case of the replacement to different screw diameter after shipment, some covers may be needed to replace. (Contact sales for detail)

# $\alpha$ -S250iB Dimensions / Clamp layout



In case of the tiebarbusless clamping specification is selected, this value is applied.