

# JADS™ SERIES

All Electric Servo Drive  
Injection Molding Machine

## JSW THE JAPAN STEEL WORKS, LTD.

<https://www.jsw.co.jp/en/>

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Model  
J220ADS | J280ADS | J350ADS | J450ADS  
(Specifications for Europe)



2020.7

JSW



JQA-QMA13993  
JQA-EM6416

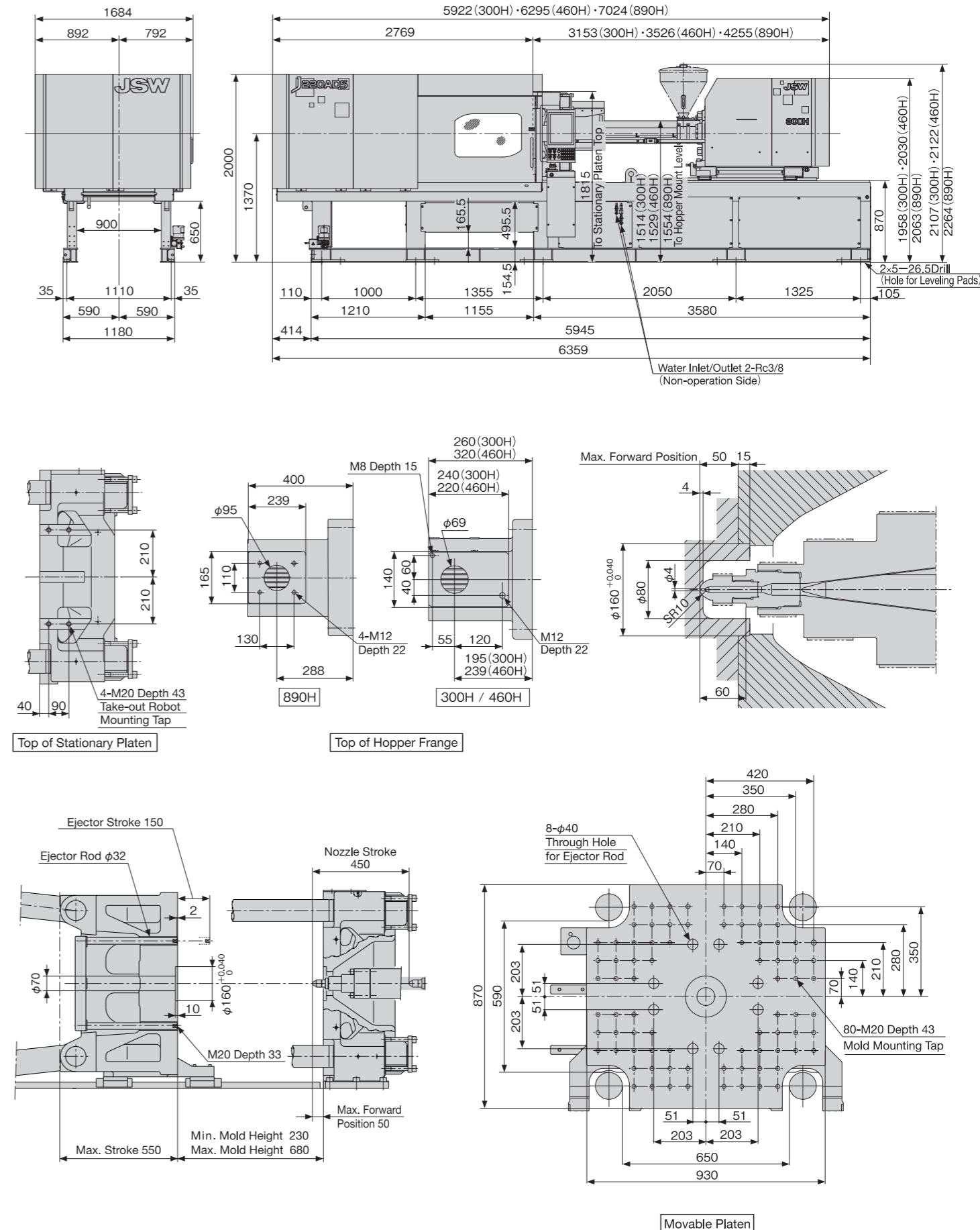
Performance Table

Equipment Dimensions and Mold Related Dimensions

| Unit                | Model                           | J220ADS                   |                               |           |           |                  |           |           |                |           |           |           |
|---------------------|---------------------------------|---------------------------|-------------------------------|-----------|-----------|------------------|-----------|-----------|----------------|-----------|-----------|-----------|
|                     |                                 | 300H                      |                               |           | 460H      |                  |           | 890H      |                |           |           |           |
| Injection Unit      | Screw Diameter                  | mm                        | 40                            | 46        | 51        | 46               | 53        | 58        | 58             | 66        | 72        |           |
|                     | Screw Stroke                    | mm                        | 180                           |           |           | 210              |           |           | 260            |           |           |           |
|                     | Theoretical Injection Capacity  | cm <sup>3</sup>           | 226                           | 299       | 368       | 349              | 463       | 555       | 687            | 890       | 1059      |           |
|                     | Injection Capacity (GP-PS)      | g                         | 206                           | 273       | 335       | 318              | 421       | 505       | 625            | 810       | 965       |           |
|                     | Standard                        | Injection Pressure (Max.) | MPa(kgf/cm <sup>2</sup> )     | 250{2550} | 189{1920} | 154{1570}        | 234{2380} | 177{1800} | 147{1490}      | 229{2330} | 177{1800} | 149{1510} |
|                     |                                 | Holding Pressure (Max.)   | MPa(kgf/cm <sup>2</sup> )     | 227{2310} | 172{1750} | 140{1420}        | 213{2170} | 161{1640} | 134{1360}      | 208{2120} | 161{1640} | 135{1370} |
|                     |                                 | Injection Speed           | mm/s                          | 240       |           |                  | 160       |           |                | 160       |           |           |
|                     |                                 | Injection Rate            | cm <sup>3</sup> /s            | 302       | 399       | 490              | 266       | 353       | 423            | 423       | 547       | 651       |
|                     |                                 | Plasticizing Rate (GP-PS) | kg/h                          | 130       | 184       | 232              | 115       | 163       | 197            | 197       | 282       | 336       |
|                     |                                 | Screw Speed               | min <sup>-1</sup>             | 400       |           |                  | 250       |           |                | 250       |           |           |
| High Speed (Option) | Injection Pressure (Max.)       | MPa(kgf/cm <sup>2</sup> ) | 250{2550}                     | 189{1920} | 154{1570} | 234{2380}        | 177{1800} | 147{1490} | 229{2330}      | 177{1800} | 149{1510} |           |
|                     | Holding Pressure (Max.)         | MPa(kgf/cm <sup>2</sup> ) | 227{2310}                     | 172{1750} | 140{1420} | 213{2170}        | 161{1640} | 134{1360} | 208{2120}      | 161{1640} | 135{1370} |           |
|                     | Injection Speed                 | mm/s                      | 330                           |           |           | 300              |           |           | 270            |           |           |           |
|                     | Injection Rate                  | cm <sup>3</sup> /s        | 415                           | 548       | 674       | 499              | 662       | 793       | 713            | 924       | 1099      |           |
|                     | Plasticizing Rate (GP-PS)       | kg/h                      | 130                           | 184       | 232       | 161              | 228       | 275       | 197            | 282       | 336       |           |
|                     | Screw Speed                     | min <sup>-1</sup>         | 400                           |           |           | 350              |           |           | 250            |           |           |           |
| Clamping Unit       | Nozzle Touch Force              | kN(tf)                    | 39.3{4.0} Center Nozzle Touch |           |           |                  |           |           |                |           |           |           |
|                     | Nozzle Stroke from Platen       | mm                        | 50                            |           |           |                  |           |           |                |           |           |           |
|                     | Type of Nozzle                  |                           | Open Nozzle (Tip Type)        |           |           |                  |           |           |                |           |           |           |
|                     | Barrel Temperature Control      |                           | Barrel4, Nozzle1              |           |           | Barrel5, Nozzle1 |           |           |                |           |           |           |
|                     | Heater Wattage                  | kW                        | 12.0                          |           |           | 12.4             |           |           | 18.7           |           |           |           |
|                     | Mechanism                       |                           | Double Toggle                 |           |           |                  |           |           |                |           |           |           |
|                     | Clamping Force                  | kN(tf)                    | 2160{220}                     |           |           |                  |           |           |                |           |           |           |
|                     | Daylight Opening (Max.)         | mm                        | 1230                          |           |           |                  |           |           |                |           |           |           |
|                     | Opening Stroke (Max.)           | mm                        | 550                           |           |           |                  |           |           |                |           |           |           |
|                     | Mold Height                     | mm                        | 230~680                       |           |           |                  |           |           |                |           |           |           |
| General             | Distance Between Tie-bars (HXV) | mm                        | 650×590                       |           |           |                  |           |           |                |           |           |           |
|                     | Platen Size (H×V)               | mm                        | 930×870                       |           |           |                  |           |           |                |           |           |           |
|                     | Locating Ring Diameter          | mm                        | φ160                          |           |           |                  |           |           |                |           |           |           |
|                     | Ejector Point                   |                           | 8 Points                      |           |           |                  |           |           |                |           |           |           |
|                     | Ejector Force                   | kN(tf)                    | 44.2{4.5}                     |           |           |                  |           |           |                |           |           |           |
|                     | Ejector Stroke                  | mm                        | 150                           |           |           |                  |           |           |                |           |           |           |
|                     | Machine Weight                  | t                         | 10.5                          |           |           | 11.1             |           |           | 11.6           |           |           |           |
|                     | Machine Dimensions (L×W×H)      | m                         | 6.36×1.68×2.00                |           |           | 6.36×1.68×2.03   |           |           | 7.02×1.68×2.06 |           |           |           |

Remarks:  
 1. Maximum injection pressure and maximum holding pressure may be restricted due to molding condition.  
 2. The theoretical injection capacity is (cross sectional area of barrel) × (stroke of screw).  
 3. The injection capacity is applicable for GP-PS and variable according to the grade of resin, molding conditions and mold.  
 4. The plasticizing rate is applicable for GP-PS.  
 5. PC, HPVC, other engineering plastic, etc., low temperature setting and high speed molding may require a high torque depending on the grade or molding conditions. Please contact us if you plan.

Note:  
 1. Due to continual improvements, specifications are subject to change without notice.  
 2. Actual figures of the specification will vary depending on final machine configuration. Please contact us if you require more specific data.  
 3. Performance specifications are based on theoretical data.  
 4. High speed injection is optional.  
 5. 1MPa=10.2 kgf/cm<sup>2</sup>, 1kN=0.102tf



Performance Table

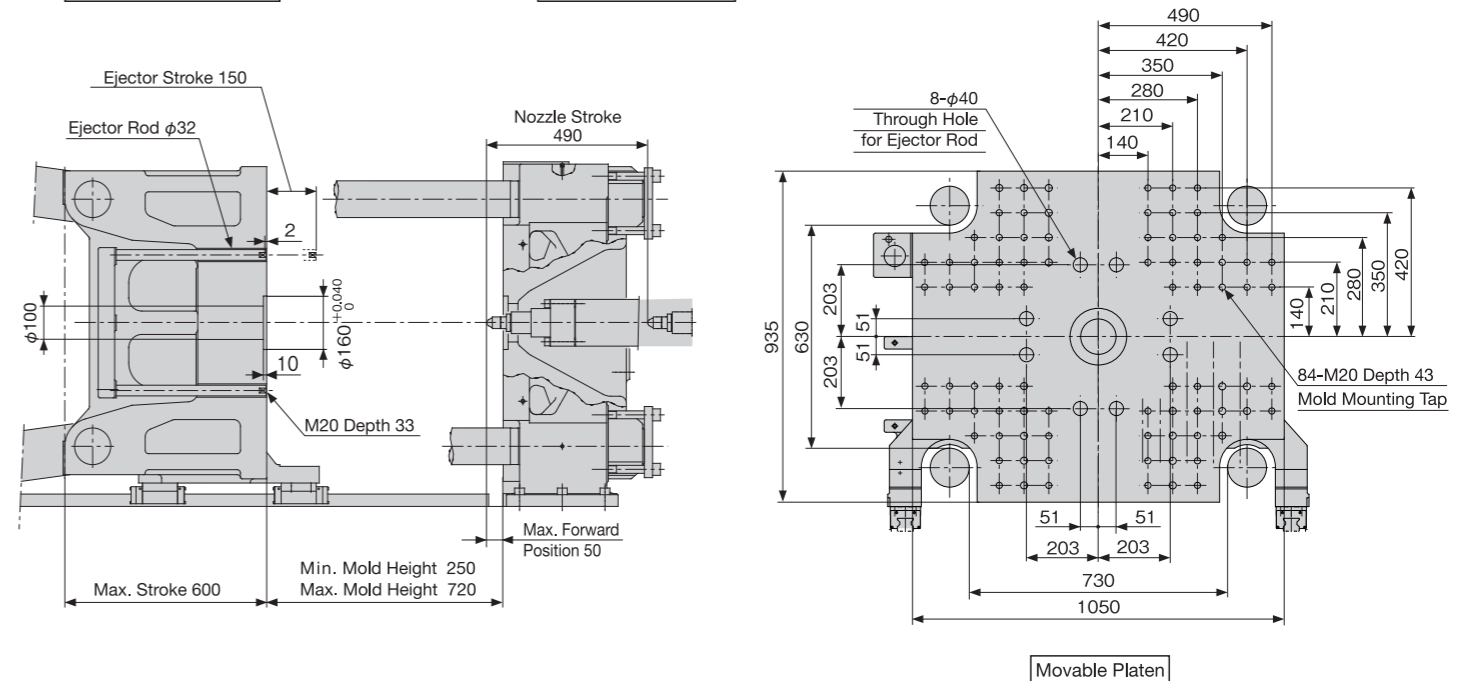
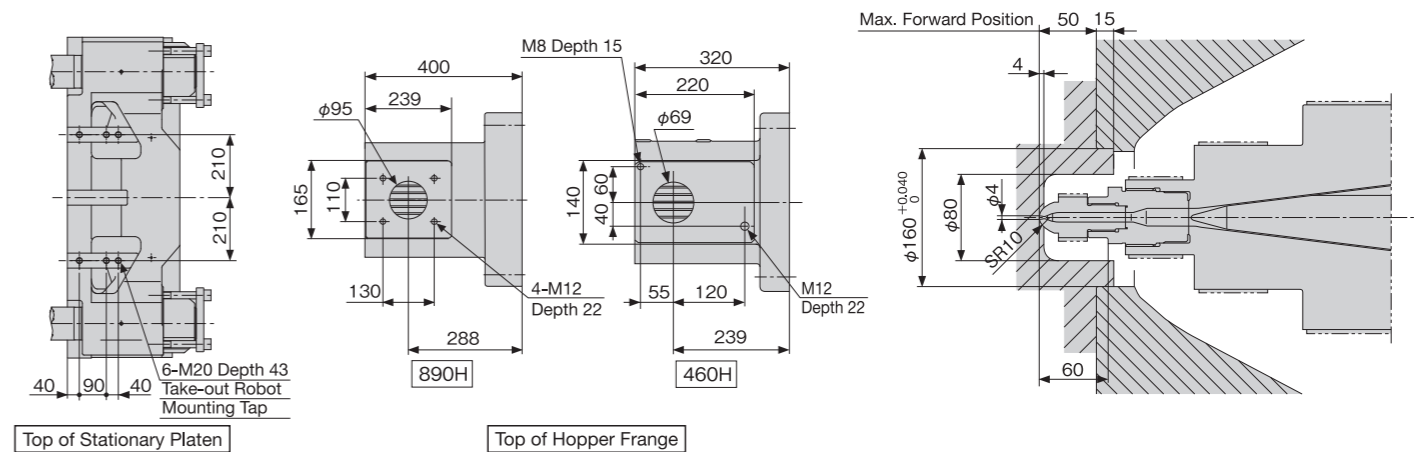
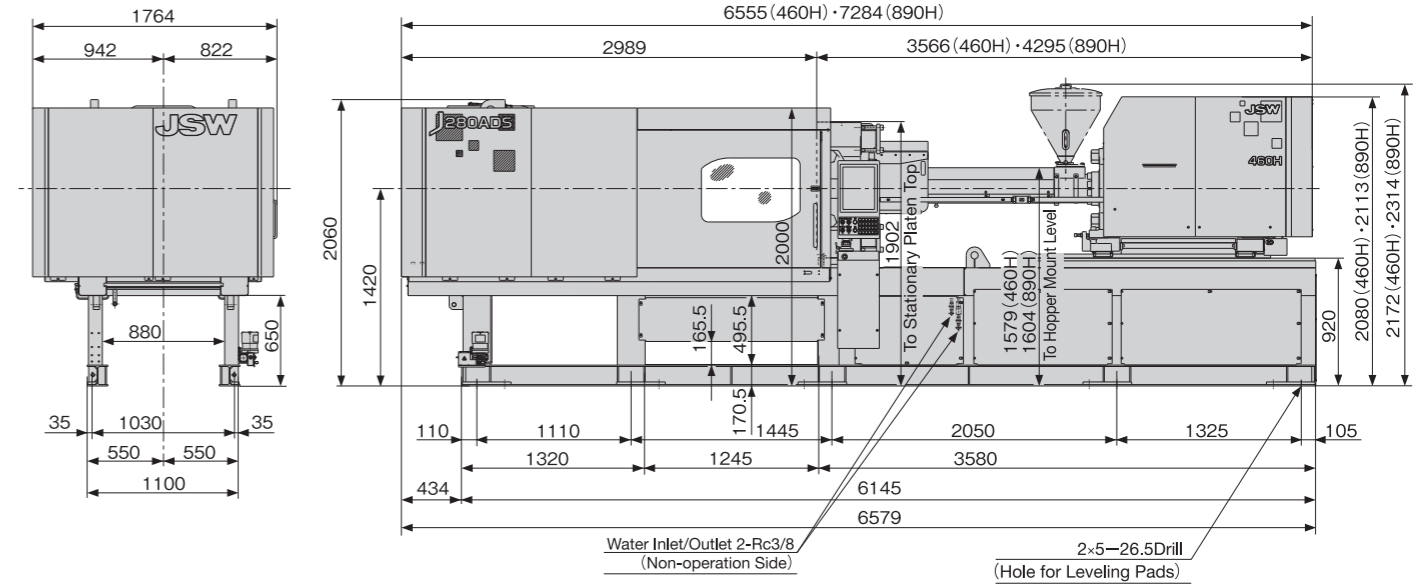
Equipment Dimensions and Mold Related Dimensions

| Unit                      | Item                            | Model                     | J280ADS                    |                                |            |                |            |            |            |            |
|---------------------------|---------------------------------|---------------------------|----------------------------|--------------------------------|------------|----------------|------------|------------|------------|------------|
|                           |                                 |                           | 460H                       |                                |            | 890H           |            |            |            |            |
| Injection Unit            | Screw Diameter                  | mm                        | 46                         | 53                             | 58         | 58             | 66         | 72         |            |            |
|                           | Screw Stroke                    | mm                        | 210                        |                                |            | 260            |            |            |            |            |
|                           | Theoretical Injection Capacity  | cm <sup>3</sup>           | 349                        | 463                            | 555        | 687            | 890        | 1059       |            |            |
|                           | Injection Capacity (GP-PS)      | g                         | 318                        | 421                            | 505        | 625            | 810        | 965        |            |            |
|                           | Standard                        | Injection Pressure (Max.) | MPa (kgf/cm <sup>2</sup> ) | 234 {2380}                     | 177 {1800} | 147 {1490}     | 229 {2330} | 177 {1800} | 149 {1510} |            |
|                           |                                 | Holding Pressure (Max.)   | MPa (kgf/cm <sup>2</sup> ) | 213 {2170}                     | 161 {1640} | 134 {1360}     | 208 {2120} | 161 {1640} | 135 {1370} |            |
|                           |                                 | Injection Speed           | mm/s                       | 160                            |            |                | 160        |            |            |            |
|                           |                                 | Injection Rate            | cm <sup>3</sup> /s         | 266                            | 353        | 423            | 423        | 547        | 651        |            |
|                           |                                 | Plasticizing Rate (GP-PS) | kg/h                       | 115                            | 163        | 197            | 197        | 282        | 336        |            |
|                           |                                 | Screw Speed               | min <sup>-1</sup>          | 250                            |            |                | 250        |            |            |            |
|                           |                                 | High Speed (Option)       | Injection Pressure (Max.)  | MPa (kgf/cm <sup>2</sup> )     | 234 {2380} | 177 {1800}     | 147 {1490} | 229 {2330} | 177 {1800} | 149 {1510} |
|                           | Holding Pressure (Max.)         |                           | MPa (kgf/cm <sup>2</sup> ) | 213 {2170}                     | 161 {1640} | 134 {1360}     | 208 {2120} | 161 {1640} | 135 {1370} |            |
|                           | Injection Speed                 |                           | mm/s                       | 300                            |            |                | 270        |            |            |            |
|                           | Injection Rate                  |                           | cm <sup>3</sup> /s         | 499                            | 662        | 793            | 713        | 924        | 1099       |            |
| Plasticizing Rate (GP-PS) | kg/h                            |                           | 161                        | 228                            | 275        | 197            | 282        | 336        |            |            |
| Screw Speed               | min <sup>-1</sup>               |                           | 350                        |                                |            | 250            |            |            |            |            |
| Clamping Unit             | Nozzle Touch Force              |                           | kN (tf)                    | 39.3 {4.0} Center Nozzle Touch |            |                |            |            |            |            |
|                           | Nozzle Stroke from Platen       | mm                        | 50                         |                                |            |                |            |            |            |            |
|                           | Type of Nozzle                  |                           | Open Nozzle (Tip Type)     |                                |            |                |            |            |            |            |
|                           | Barrel Temperature Control      |                           | Barrel5, Nozzle1           |                                |            |                |            |            |            |            |
|                           | Heater Wattage                  | kW                        | 12.4                       |                                |            | 18.7           |            |            |            |            |
|                           | Mechanism                       |                           | Double Toggle              |                                |            |                |            |            |            |            |
|                           | Clamping Force                  | kN (tf)                   | 2750 {280}                 |                                |            |                |            |            |            |            |
|                           | Daylight Opening (Max.)         | mm                        | 1320                       |                                |            |                |            |            |            |            |
|                           | Opening Stroke (Max.)           | mm                        | 600                        |                                |            |                |            |            |            |            |
|                           | Mold Height                     | mm                        | 250~720                    |                                |            |                |            |            |            |            |
| General                   | Distance Between Tie-bars (HxV) | mm                        | 730x630                    |                                |            |                |            |            |            |            |
|                           | Platen Size (HxV)               | mm                        | 1050x935                   |                                |            |                |            |            |            |            |
|                           | Locating Ring Diameter          | mm                        | φ160                       |                                |            |                |            |            |            |            |
|                           | Ejector Point                   |                           | 8Points                    |                                |            |                |            |            |            |            |
|                           | Ejector Force                   | kN (tf)                   | 59.0 {6.0}                 |                                |            |                |            |            |            |            |
|                           | Ejector Stroke                  | mm                        | 150                        |                                |            |                |            |            |            |            |
|                           | Machine Weight                  | t                         | 12.4                       |                                |            | 13.0           |            |            |            |            |
|                           | Machine Dimensions (LxWxH)      | m                         | 6.58x1.76x2.08             |                                |            | 7.28x1.76x2.11 |            |            |            |            |

- Remarks:
- Maximum injection pressure and maximum holding pressure may be restricted due to molding condition.
  - The theoretical injection capacity is (cross sectional area of barrel) × (stroke of screw).
  - The injection capacity is applicable for GP-PS and variable according to the grade of resin, molding conditions and mold.
  - The plasticizing rate is applicable for GP-PS.
  - PC, HPVC, other engineering plastic, etc., low temperature setting and high speed molding may require a high torque depending on the grade or molding conditions. Please contact us if you plan.

Note:

- Due to continual improvements, specifications are subject to change without notice.
- Actual figures of the specification will vary depending on final machine configuration. Please contact us if you require more specific data.
- Performance specifications are based on theoretical data.
- High speed injection is optional.
- 1MPa=10.2 kgf/cm<sup>2</sup>, 1kN=0.102tf



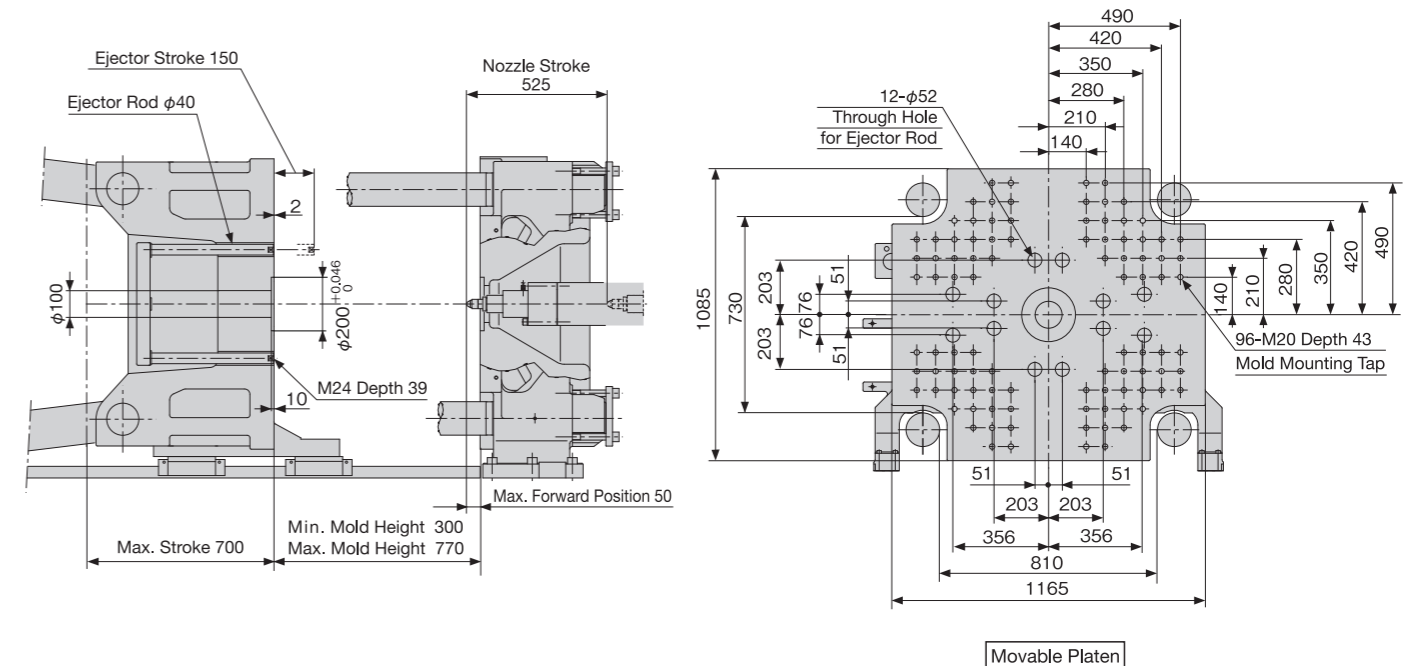
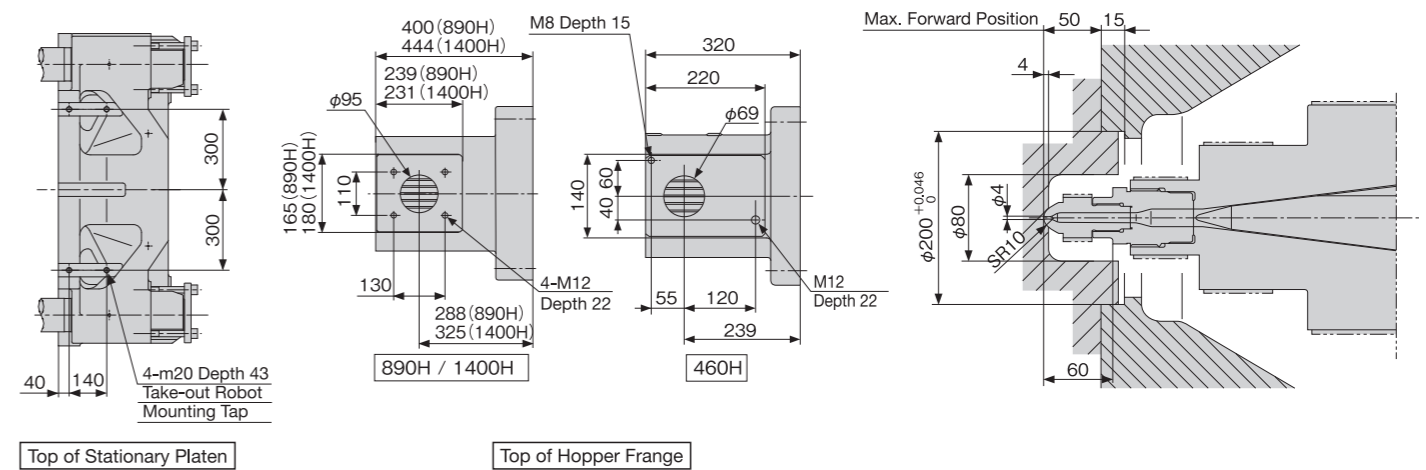
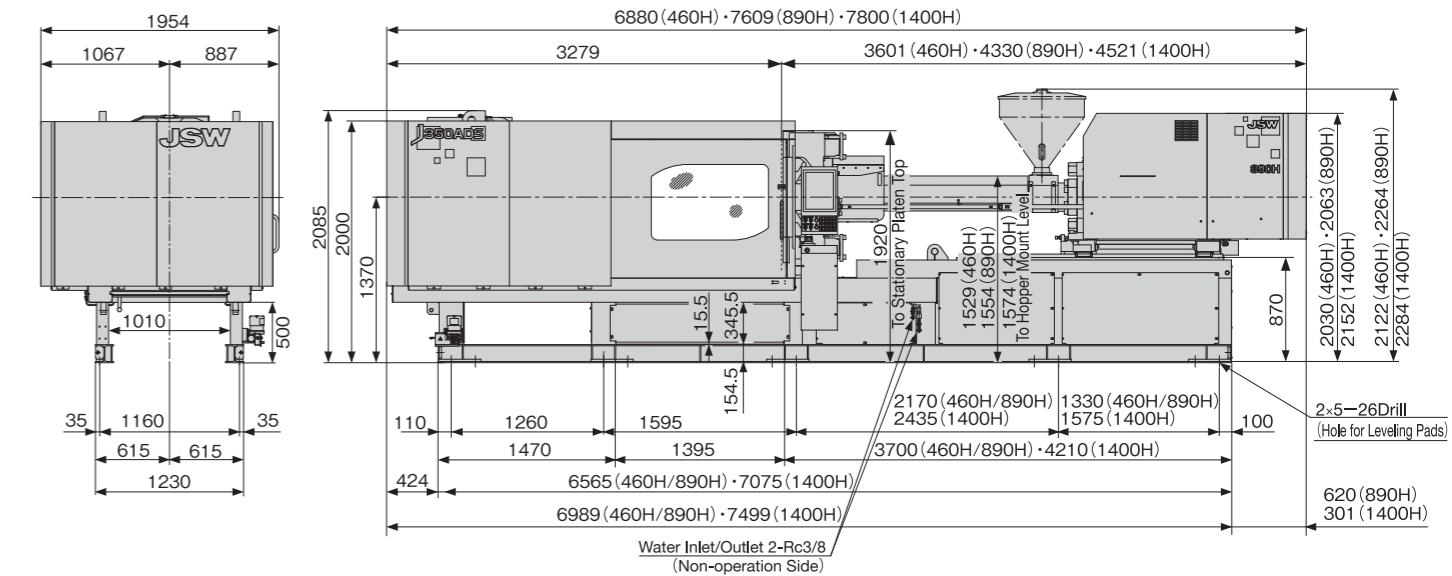
Performance Table

Equipment Dimensions and Mold Related Dimensions

| Unit                       | Item                            | Model                     | J350ADS                    |                                |            |                |            |            |                |            |            |            |
|----------------------------|---------------------------------|---------------------------|----------------------------|--------------------------------|------------|----------------|------------|------------|----------------|------------|------------|------------|
|                            |                                 |                           | 460H                       |                                |            | 890H           |            |            | 1400H          |            |            |            |
| Injection Unit             | Screw Diameter                  | mm                        | 46                         | 53                             | 58         | 58             | 66         | 72         | 66             | 76         | 84         |            |
|                            | Screw Stroke                    | mm                        | 210                        |                                |            | 260            |            |            | 300            |            |            |            |
|                            | Theoretical Injection Capacity  | cm <sup>3</sup>           | 349                        | 463                            | 555        | 687            | 890        | 1059       | 1026           | 1361       | 1663       |            |
|                            | Injection Capacity (GP-PS)      | g                         | 318                        | 421                            | 505        | 625            | 810        | 965        | 934            | 1238       | 1513       |            |
|                            | Standard                        | Injection Pressure (Max.) | MPa (kgf/cm <sup>2</sup> ) | 234 {2380}                     | 177 {1800} | 147 {1490}     | 229 {2330} | 177 {1800} | 149 {1510}     | 241 {2450} | 182 {1850} | 149 {1510} |
|                            |                                 | Holding Pressure (Max.)   | MPa (kgf/cm <sup>2</sup> ) | 213 {2170}                     | 161 {1640} | 134 {1360}     | 208 {2120} | 161 {1640} | 135 {1370}     | 216 {2200} | 163 {1660} | 134 {1360} |
|                            |                                 | Injection Speed           | mm/s                       | 160                            |            |                | 160        |            |                | 160        |            |            |
|                            |                                 | Injection Rate            | cm <sup>3</sup> /s         | 266                            | 353        | 423            | 423        | 547        | 651            | 547        | 726        | 887        |
|                            |                                 | Plasticizing Rate (GP-PS) | kg/h                       | 115                            | 163        | 197            | 197        | 282        | 336            | 237        | 338        | 418        |
|                            |                                 | Screw Speed               | min <sup>-1</sup>          | 250                            |            |                | 250        |            |                | 210        |            |            |
|                            | High Speed (Optional)           | Injection Pressure (Max.) | MPa (kgf/cm <sup>2</sup> ) | 234 {2380}                     | 177 {1800} | 147 {1490}     | 229 {2330} | 177 {1800} | 149 {1510}     | 241 {2450} | 182 {1850} | 149 {1510} |
|                            |                                 | Holding Pressure (Max.)   | MPa (kgf/cm <sup>2</sup> ) | 213 {2170}                     | 161 {1640} | 134 {1360}     | 208 {2120} | 161 {1640} | 135 {1370}     | 216 {2200} | 163 {1660} | 134 {1360} |
|                            |                                 | Injection Speed           | mm/s                       | 300                            |            |                | 270        |            |                | 300        |            |            |
|                            |                                 | Injection Rate            | cm <sup>3</sup> /s         | 499                            | 662        | 793            | 713        | 924        | 1099           | 1026       | 1361       | 1663       |
|                            |                                 | Plasticizing Rate (GP-PS) | kg/h                       | 161                            | 228        | 275            | 197        | 282        | 336            | 237        | 338        | 418        |
|                            |                                 | Screw Speed               | min <sup>-1</sup>          | 350                            |            |                | 250        |            |                | 210        |            |            |
|                            | Clamping Unit                   | Nozzle Touch Force        | kN (tf)                    | 39.3 {4.0} Center Nozzle Touch |            |                |            |            |                |            |            |            |
| Nozzle Stroke from Platen  |                                 | mm                        | 50                         |                                |            |                |            |            |                |            |            |            |
| Type of Nozzle             |                                 |                           | Open Nozzle (Tip Type)     |                                |            |                |            |            |                |            |            |            |
| Barrel Temperature Control |                                 |                           | Barrel 5, Nozzle 1         |                                |            |                |            |            |                |            |            |            |
| Heater Wattage             |                                 | kW                        | 12.4                       |                                |            | 18.7           |            |            | 26.8           |            |            |            |
| Mechanism                  |                                 |                           | Double Toggle              |                                |            |                |            |            |                |            |            |            |
| Clamping Force             |                                 | kN (tf)                   | 3440 {350}                 |                                |            |                |            |            |                |            |            |            |
| Daylight Opening (Max.)    |                                 | mm                        | 1470                       |                                |            |                |            |            |                |            |            |            |
| Opening Stroke (Max.)      |                                 | mm                        | 700                        |                                |            |                |            |            |                |            |            |            |
| Mold Height                |                                 | mm                        | 300~770                    |                                |            |                |            |            |                |            |            |            |
| General                    | Distance Between Tie-bars (HXV) | mm                        | 810×730                    |                                |            |                |            |            |                |            |            |            |
|                            | Platen Size (H×V)               | mm                        | 1165×1085                  |                                |            |                |            |            |                |            |            |            |
|                            | Locating Ring Diameter          | mm                        | φ200                       |                                |            |                |            |            |                |            |            |            |
|                            | Ejector Point                   |                           | 17 Points                  |                                |            |                |            |            |                |            |            |            |
|                            | Ejector Force                   | kN (tf)                   | 59.0 {6.0}                 |                                |            |                |            |            |                |            |            |            |
|                            | Ejector Stroke                  | mm                        | 150                        |                                |            |                |            |            |                |            |            |            |
|                            | Machine Weight                  | t                         | 16.1                       |                                |            | 17.0           |            |            | 18.5           |            |            |            |
|                            | Machine Dimensions (L×W×H)      | m                         | 6.99×1.95×2.09             |                                |            | 7.61×1.96×2.09 |            |            | 7.80×1.95×2.15 |            |            |            |

Remarks:  
 1. Maximum injection pressure and maximum holding pressure may be restricted due to molding condition.  
 2. The theoretical injection capacity is (cross sectional area of barrel) × (stroke of screw).  
 3. The injection capacity is applicable for GP-PS and variable according to the grade of resin, molding conditions and mold.  
 4. The plasticizing rate is applicable for GP-PS.  
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Note:  
 1. Due to continual improvements, specifications are subject to change without notice.  
 2. Actual figures of the specification will vary depending on final machine configuration. Please contact us if you require more specific data.  
 3. Performance specifications are based on theoretical data.  
 4. High speed injection is optional.  
 5. 1MPa=10.2 kgf/cm<sup>2</sup>, 1kN=0.102tf



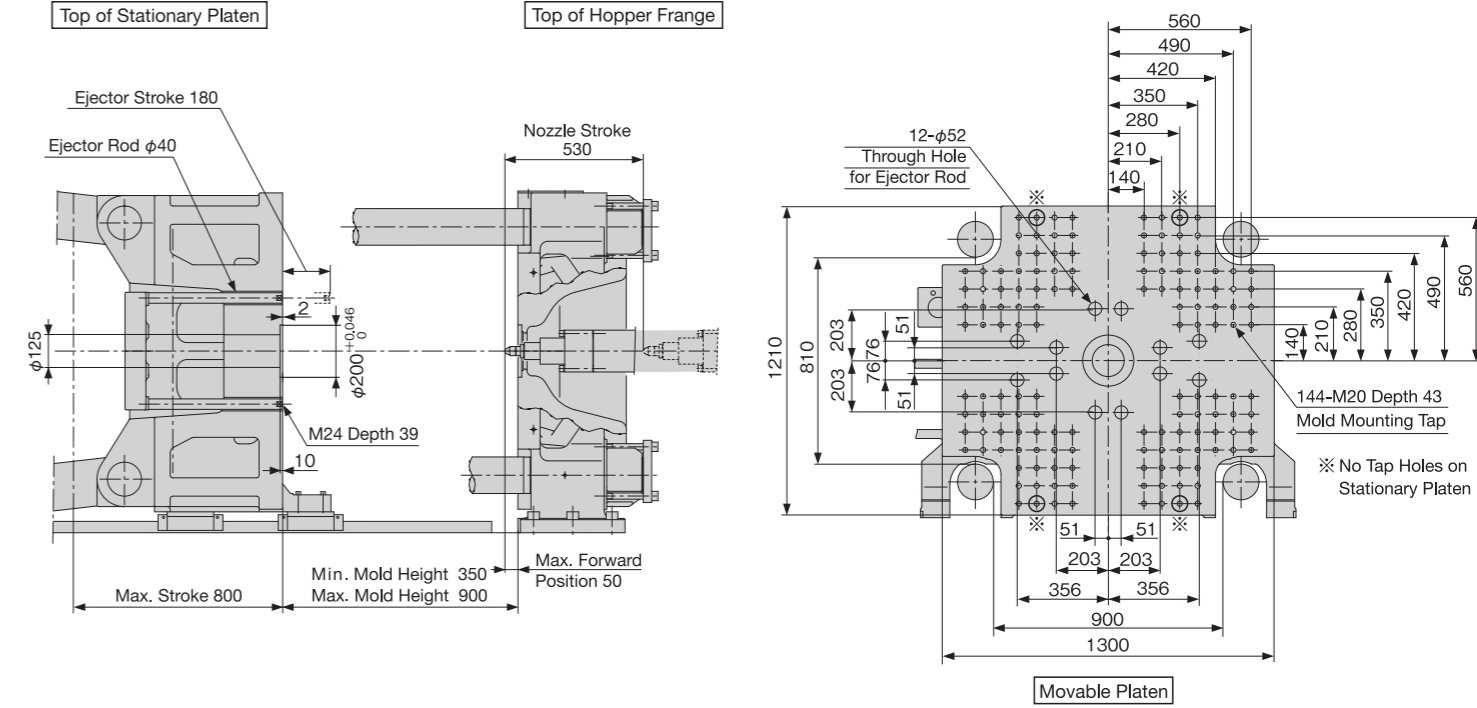
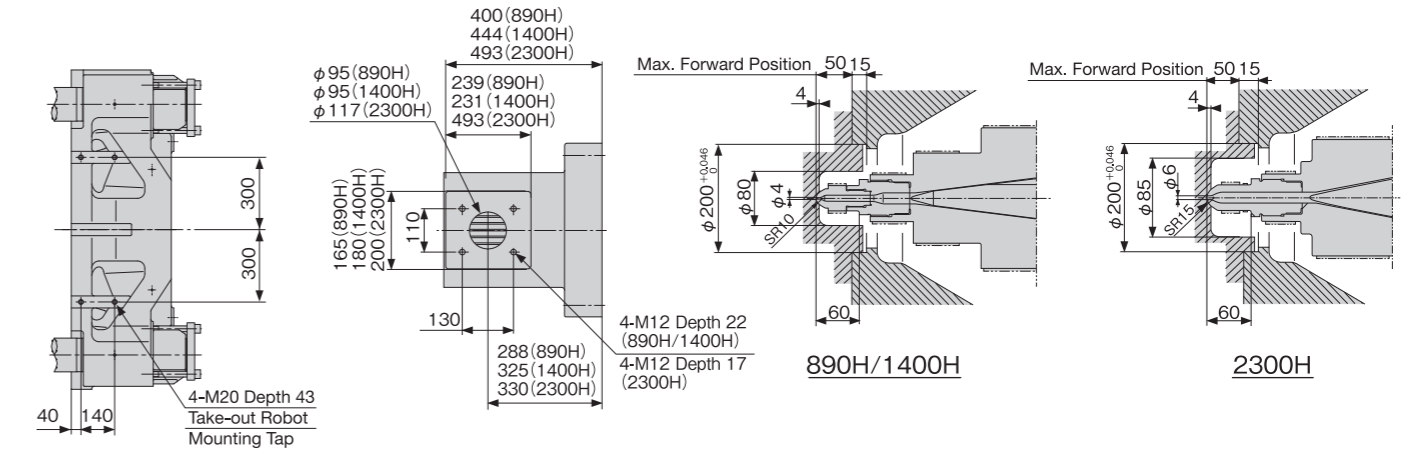
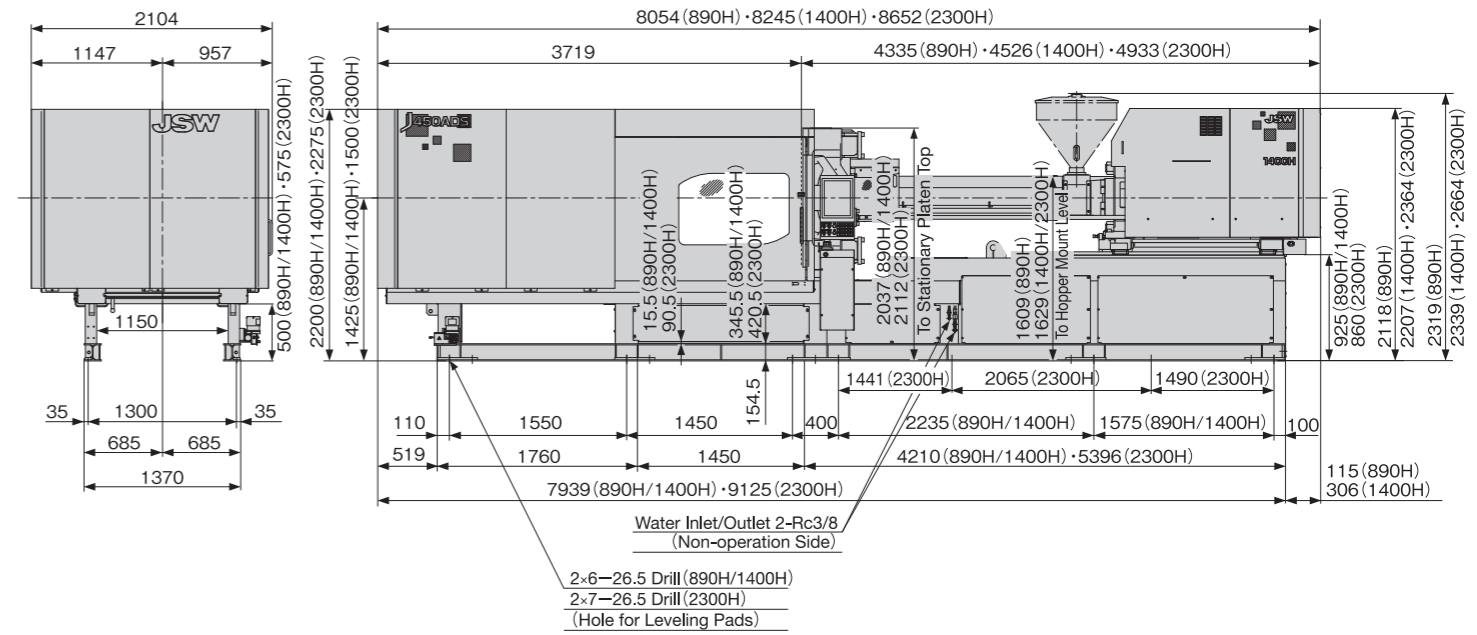
Performance Table

Equipment Dimensions and Mold Related Dimensions

| Unit                           | Model                           | J450ADS   |                    |           |           |                |           |             |                |           |   |
|--------------------------------|---------------------------------|---|--------------------|-----------|-----------|----------------|-----------|-------------|----------------|-----------|---|
|                                |                                 | 890H  |                    |           | 1400H     |                |           | 2300H       |                |           |   |
| Screw Diameter                 | mm                              | 58  | 66                 | 72        | 66        | 76             | 84        | 84          | 92             |           |   |
| Screw Stroke                   | mm                              | 260   |                    |           | 300       |                |           | 420         |                |           |   |
| Theoretical Injection Capacity | cm <sup>3</sup>                 | 687   | 890                | 1059      | 1026      | 1361           | 1663      | 2328        | 2792           |           |   |
| Injection Capacity (GP-PS)     | g                               | 625   | 810                | 965       | 934       | 1238           | 1513      | 2118        | 2541           |           |   |
| Injection Unit                 | Standard                        | Injection Pressure (Max.) MPa(kgf/cm <sup>2</sup> ) | 229{2330}          | 177{1800} | 149{1510} | 241{2450}      | 182{1850} | 149{1510}   | 190{1930}      | 158{1610} |   |
|                                |                                 | Holding Pressure (Max.) MPa(kgf/cm <sup>2</sup> )   | 208{2120}          | 161{1640} | 135{1370} | 216{2200}      | 163{1660} | 134{1360}   | 171{1740}      | 142{1440} |   |
|                                | Injection Speed                 | mm/s  | 160                |           |           | 160            |           |             | 160            |           |   |
|                                | Injection Rate                  | cm <sup>3</sup> /s                                  | 423                | 547       | 651       | 547            | 726       | 887         | 887            | 1064      |   |
|                                | Plasticizing Rate (GP-PS)       | kg/h  | 197                | 282       | 336       | 237            | 338       | 418         | 420            | 470       |   |
|                                | Screw Speed                     | min <sup>-1</sup>                                   | 250                |           |           | 210            |           |             | 200            |           |   |
|                                | High speed (Option)             | Injection Pressure (Max.) MPa(kgf/cm <sup>2</sup> ) | 229{2330}          | 177{1800} | 149{1510} | 241{2450}      | 182{1850} | 149{1510}   | —              | —         |   |
|                                |                                 | Holding Pressure (Max.) MPa(kgf/cm <sup>2</sup> )   | 208{2120}          | 161{1640} | 135{1370} | 216{2200}      | 163{1660} | 134{1360}   | —              | —         |   |
|                                |                                 | Injection Speed                                     | mm/s               | 270       |           |                | 300       |             |                | —         |   |
|                                |                                 | Injection Rate                                      | cm <sup>3</sup> /s | 713       | 924       | 1099           | 1026      | 1361        | 1663           | —         | — |
| Plasticizing Rate (GP-PS)      | kg/h                            | 197   | 282                | 336       | 237       | 338            | 418       | —           | —              |           |   |
| Screw Speed                    | min <sup>-1</sup>               | 250   |                    |           | 210       |                |           | —           |                |           |   |
| Nozzle Touch Force             | kN {tf}                         | 39.3 {4.0} Center Nozzle Touch                      |                    |           |           |                |           | 59.0 {6.0}  |                |           |   |
| Nozzle Stroke from Platen      | mm                              | 50  |                    |           |           |                |           |             |                |           |   |
| Type of Nozzle                 |                                 | Open Nozzle (Tip Type)                              |                    |           |           |                |           | Open Nozzle |                |           |   |
| Barrel Temperature Control     |                                 | Barrel5, Nozzle1                                    |                    |           |           |                |           |             |                |           |   |
| Heater Wattage                 | kW                              | 18.7  |                    |           | 26.8      |                |           | 39.8        |                |           |   |
| Clamping Unit                  | Mechanism                       | Double Toggle                                       |                    |           |           |                |           |             |                |           |   |
|                                | Clamping Force                  | kN {tf}   | 4420 {450}         |           |           |                |           |             |                |           |   |
|                                | Daylight Opening (Max.)         | mm  | 1700               |           |           |                |           |             |                |           |   |
|                                | Opening Stroke (Max.)           | mm  | 800                |           |           |                |           |             |                |           |   |
|                                | Mold Height                     | mm  | 350~900            |           |           |                |           |             |                |           |   |
|                                | Distance Between Tie-bars (HXV) | mm  | 900×810            |           |           |                |           |             |                |           |   |
|                                | Platen Size (H×V)               | mm  | 1300×1210          |           |           |                |           |             |                |           |   |
|                                | Locating Ring Dia               | mm  | φ200               |           |           |                |           |             |                |           |   |
|                                | Ejector Point                   |   | 17 Points          |           |           |                |           |             |                |           |   |
|                                | Ejector Force                   | kN {tf}   | 99.0 {10.0}        |           |           |                |           |             |                |           |   |
| Ejector Stroke                 | mm                              | 180   |                    |           |           |                |           |             |                |           |   |
| General                        | Machine Weight                  | t   | 21.0               |           |           | 22.3           |           |             | 26.2           |           |   |
|                                | Machine Dimensions (L×W×H)      | m   | 8.05×2.10×2.20     |           |           | 8.25×2.10×2.21 |           |             | 9.13×2.10×2.36 |           |   |

Remarks:  
 1. Maximum injection pressure and maximum holding pressure may be restricted due to molding condition.  
 2. The theoretical injection capacity is (cross sectional area of barrel) × (stroke of screw).  
 3. The injection capacity is applicable for GP-PS and variable according to the grade of resin, molding conditions and mold.  
 4. The plasticizing rate is applicable for GP-PS.  
 5. PC, HPVC, other engineering plastic, etc., low temperature setting and high speed molding may require a high torque depending on the grade or molding conditions. Please contact us if you plan.

Note:  
 1. Due to continual improvements, specifications are subject to change without notice.  
 2. Actual figures of the specification will vary depending on final machine configuration. Please contact us if you require more specific data.  
 3. Performance specifications are based on theoretical data.  
 4. High speed injection is optional.  
 5. 1MPa=10.2 kgf/cm<sup>2</sup>, 1kN=0.102tf



### Standard Equipment List

| Item                    |   |  |
|-------------------------|---|--|
| Injection unit          | Open Nozzle (Tip type) / (Injection Units up to 1400H) (Note 1) |  |
|                         | N2000F Barrel   |  |
|                         | Chrome-plated Screw (Note 2)                                    |  |
|                         | Screw Pull-back   |  |
|                         | Injection Unit Swiveling Device (with Limit Switch)             |  |
|                         | Screw Cold Start Prevention                                     |  |
|                         | Molding/Purging/Pause Temperature Select                        |  |
|                         | Auto Purging Circuit  |  |
|                         | Nozzle Retract Select   |  |
|                         | Injection/Metering Programmed Control                           | Injection/Holding Pressure: 1 to 6 Steps (Variable)<br>Metering/Back Pressure: 1 to 3 Steps (Variable) |
|                         | Holding Pressure Control Select                                 |  |
|                         | Pull-back Select  |  |
|                         | IVS Control (Holding Pressure Transfer by Speed Detection)      |  |
|                         | Barrel Temperature Control (PID)                                |  |
|                         | Synchronous Temperature Rise Control                            |  |
|                         | Hopper Flange Temperature Control                               |  |
|                         | Soft Pack Servo Control   |  |
|                         | HAVC (High Accuracy Volume Control)                             |  |
|                         | IWCS (Injection Weight and Cushion Stability) Control           |  |
|                         | Reverse seal Control  |  |
| Auto Grease Lubrication |   |  |
| Clamping unit           | High-performance Platen Support                                 |  |
|                         | Low Vibration Mold Open/Close                                   |  |
|                         | Wide Platen   |  |
|                         | Flat Press Platen Mechanism (Stationary side/Movable side)      |  |
|                         | Mold Open/Close and Ejection Programmed Control                 | Mold Open/Close : 4 Steps (Fixed)<br>Ejection : 1 to 3 Steps (Variable)                                |
|                         | Mold Protection Function  |  |
|                         | Mold Open Close Servo Motor With Brake                          |  |
|                         | Ejecter Servo Motor With Brake                                  |  |
|                         | Electric-driven Mold Thickness Adjusting Device                 |  |
|                         | Auto Clamp Force Setting  |  |
|                         | Clamp Force Display   |  |
|                         | Clamp Force Feed Back Control                                   |  |
|                         | Ejector Plate Return Confirmation Circuit                       |  |
|                         | Toggle Type Injection Compression Function                      | A-mode<br>B-mode<br>Compression: 1 to 6 Steps (Variable)   |
|                         | Parallel Motion   | Screw Rotation During Mold Open/Close<br>Eject During Mold Open<br>Injection During Clamp Up           |
|                         | Clamping Unit Safety Device (Electrical)                        |  |
|                         | Robot Mounting Holes  |  |
|                         | Grease-free Toggle Bushing                                      |  |
|                         | Auto Grease Lubrication   |  |

(Note)

- Nozzle of 2300H is one piece type nozzle.
- Screw of injection units 300H, 460H, 890H and 1400H, GP21 screw is equipped as standard.  
Screw of injection unit 2300H, Hi-Melter MIII screw is equipped as standard.
- USB memory device as external memory is capable of storing of molding conditions.
- Screen Capture can be saved in PNG format, and measuring data can be saved in CSV format.
- Maximum of 16 items and alarms can be selected out of the following monitor items.  
① Cycle time ② Injection time ③ Metering time ④ Max Injection pressure ⑤ Cushion position  
⑥ Holding pressure end position ⑦ Holding pressure transfer pressure ⑧ Screw back pressure  
⑨ Metering end position ⑩ Injection start position ⑪ Holding pressure transfer position  
⑫ Metering torque ⑬ Holding pressure transfer speed ⑭ Mold close time ⑮ Mold open time  
⑯ Clamping force ⑰ Shift stroke (HAVC) ⑱ End speed (HAVC)
- Maintenance monitor based on molding condition

| Item       |  |
|------------|--|
| Controller | Multi-touch Panel 15" TFT Color LCD Controller                   |
|            | Multi-language Select (English, Chinese, Japanese)               |
|            | 300 Mold Conditions Storage (Internal Memory) (Note 3)           |
|            | Soft Start Molding   |
|            | Self Diagnostics Function  |
|            | I/O Customize Function   |
|            | Molding Operation Assist Function                                |
|            | Help Function  |
|            | Pop-up Display   |
|            | Manual Browsing Function   |
|            | Start-up Safety Notice   |
|            | Molding Condition MEMO   |
|            | Screen Capture Files can be stored to USB memory device (Note 4) |
|            | Overall Setting Screen   |
|            | Pre-heat Timer   |
| Monitor    | Product Takeout Robot Circuit                                    |
|            | Attended/Unattended Operation Select                             |
|            | Actual Value Display   |
|            | Injection/Metering Waveform Monitor                              |
|            | Injection/Metering Waveform Storage                              |
|            | Oscilloscope Waveform Monitor                                    |
|            | Energy Consumption and Regeneration Monitor                      |
|            | Barrel Temperature Monitor                                       |
|            | Injection Pressure Monitor (IPM)                                 |
|            | Statistical Graph  |
|            | Production Monitor   |
|            | Cumulative Operating Hour Display                                |
|            | Cycle Monitor  |
|            | Molding Condition Upper/Lower Limit Monitor (Note 5)             |
|            | Inspection and Maintenance Guide (Note 6)                        |
| Others     | Heater System Alarm  |
|            | Injection Pressure Overshoot Alarm                               |
|            | Servo Fault Alarm  |
|            | Grease Lubrication Alarm   |
|            | Fault Alarm Buzzer   |
|            | Alarm History  |
|            | Set Value History  |
|            | Safety Compliance to ISO20430, ISO60204-1                        |
|            | Cooling Water Closed Circuit for Feed Throat                     |
|            | Accessories (Maintenance Tools and Ejector Rods, etc.)           |

### Options List

| Item   |   |
|--|---|
| Injection unit   | Long Nozzle   |
|  | Shut-off Nozzles (Pneumatic Type and Hydraulic Type) (Note 1) |
|  | KC Nozzle   |
|  | M7 Screw (High Plasticization Type)                           |
|  | HP Screw (High Dispersion Type)                               |
|  | LSP-2 screw (Abrasion-resistant type)                         |
|  | Screws and Barrels for Optical Application                    |
|  | Screws and Barrels for Super Engineered Plastics Application  |
|  | Special Screw (Note 2)  |
|  | Barrel Insulation Cover                                       |
|  | Barrel Blower Cooling Unit                                    |
|  | Hopper  |
|  | Hopper Slide Device (Operation Side)                          |
|  | High-speed Injection  |
|  | Extended Holding Time Spec. (Note 3)                          |
| Clamping unit  | Daylight Extension  |
|  | Mold Platen Heat Insulation Bord (5 or 10mm) (Note 4)         |
|  | Locating Rings  |
|  | Air Jet   |
|  | Core Pull Devices (Pneumatic Type and Hydraulic Type)         |
|  | Valve Gate Device (Pneumatic Type and Hydraulic Type)         |
|  | Coupler joint (Hydraulic, Pneumatic)                          |
|  | Hydraulic Power Pack (40L or 60L) Internal Unit               |
|  | Ejector Gate Cutting Circuit                                  |
|  | Unscrewing Motor Circuit                                      |
|  | Product Drop Detector (Photoelectric)                         |
|  | Chute   |
|  | Rejecting Product Detecting Chute                             |
|  | T-groove Platen   |
|  | Mold Setup Device   |
| Mold Clamper Device (Pneumatic Type, Hydraulic Type, Magnet Type) (Note 4) |   |
| Mold Clamper   |   |
| Clamping Unit Safety Device (Mechanical)                                   |   |

| Item                                   |   |
|--|---|
| Electrical instrumentation and control | Multi-language Select (1 Language Additional)                                   |
|  | J-WiSe® solution (Note 5)   |
|  | Mold temperature display (with Mold Temperature Upper/Lower Limit Alarm)        |
|  | Mold Temperature Control device (with Mold Temperature Upper/Lower Limit Alarm) |
|  | Hot Ranner Control Circuit  |
| Other                                  | Cooling Water Manifolds on Bed, Max. 60C-deg.                                   |
|  | Cooling Water Failure Warning   |
|  | Leveling Pad for Installation   |
|  | Machine Anchoring Device  |
|  | Signal Tower (1 Color, 3 Colors)  |
|  | Export Specification (Note 6)   |
|  | Designated Color (Bed & Covers only) (Note 7)                                   |

(Note)

- Pneumatic shut-off nozzle and hydraulic shut-off nozzle can be mounted, Additional hydraulic unit is required for hydraulic type.
- Contact sales to know the application.
- The motor is prevented from being overloaded in a long holding time and high holding pressure molding condition.
- Extension nozzle is required. Ask sales to confirm the nozzle length to meet requirement.  
Note that the usable mold thickness range will change.
- Please contact us for detailed specifications.
- Ask sales to confirm the details depending upon the final destination.
- Color sample or Muncell code is required.

### Utilities

#### ■ Total Power Capacity

| Machine Model | Total Power Capacity (kVA) |                      |
|---------------|----------------------------|----------------------|
|               | Standard Injection         | High Speed Injection |
| J220ADS       | 300H                       | 20.0                 |
|               | 460H                       | 27.0                 |
|               | 890H                       | 34.0                 |
| J280ADS       | 460H                       | 27.0                 |
|               | 890H                       | 34.0                 |
| J350ADS       | 460H                       | 27.0                 |
|               | 890H                       | 35.0                 |
|               | 1400H                      | 46.0                 |
| J450ADS       | 890H                       | 36.0                 |
|               | 1400H                      | 48.0                 |
|               | 2300H                      | 56.0                 |

- Note: 1. Total power capacity does not include external outlets.  
2. We recommend that the rated interrupting current of the main power supply breaker is more than 25 kA at AC400V/460V.

#### ■ Cooling Water Capacity for Barrel Temperature Control

| Machine Model | Cooling Water Capacity for Barrel Temperature Control (ft³/h) |
|---------------|---|
| 300H          | 14.12 (0.4m³/h)   |
| 460H          |   |
| 890H          |   |
| 1400H         | 21.20 (0.6m³/h)   |
| 2300H         | 42.38 (1.2m³/h)   |

Note: The above figures do not include the required quantity of water for the mold temperature controller.