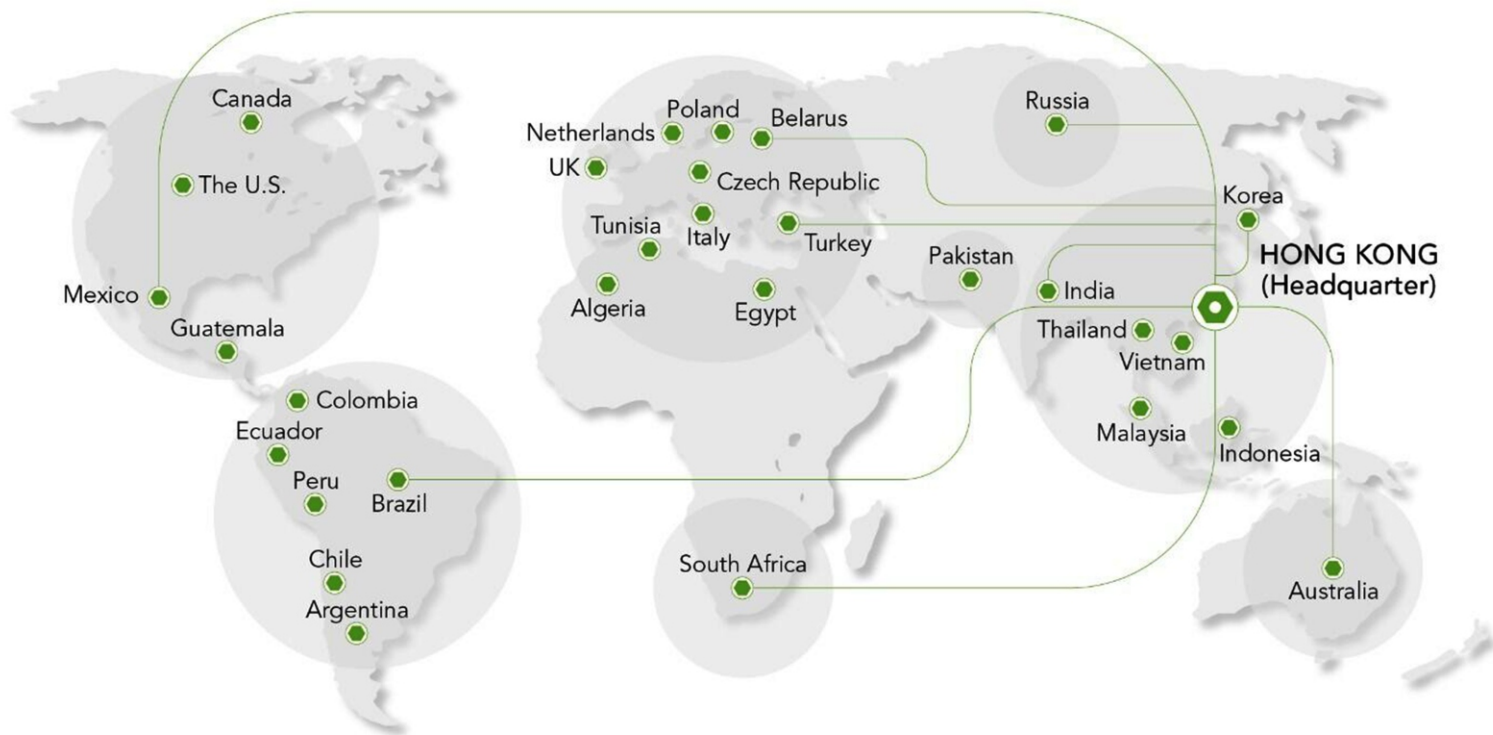


Our offices and agents



**CPMIA**  
Energy Saving Award

**WELLTEC**  
INJECTION EXPERT

## 450-900JSe II

Small and medium-sized Servo-driven  
Two-platen Injection Moulding Machine



**Welltec Machinery Ltd**

[f](#) [in](#) [Q](#) [www.welltec.com.hk](http://www.welltec.com.hk)

Version: JSeII-202403



[www.welltec.com.hk](http://www.welltec.com.hk)

We are one of the pioneers in developing two-platen injection moulding machines from 1990s.

We launched the first two-platen injection moulding machine in 2000 which was granted with national design patents.

**Year 2002**

Batch production of two-platen injection moulding machines

**Year 2007**

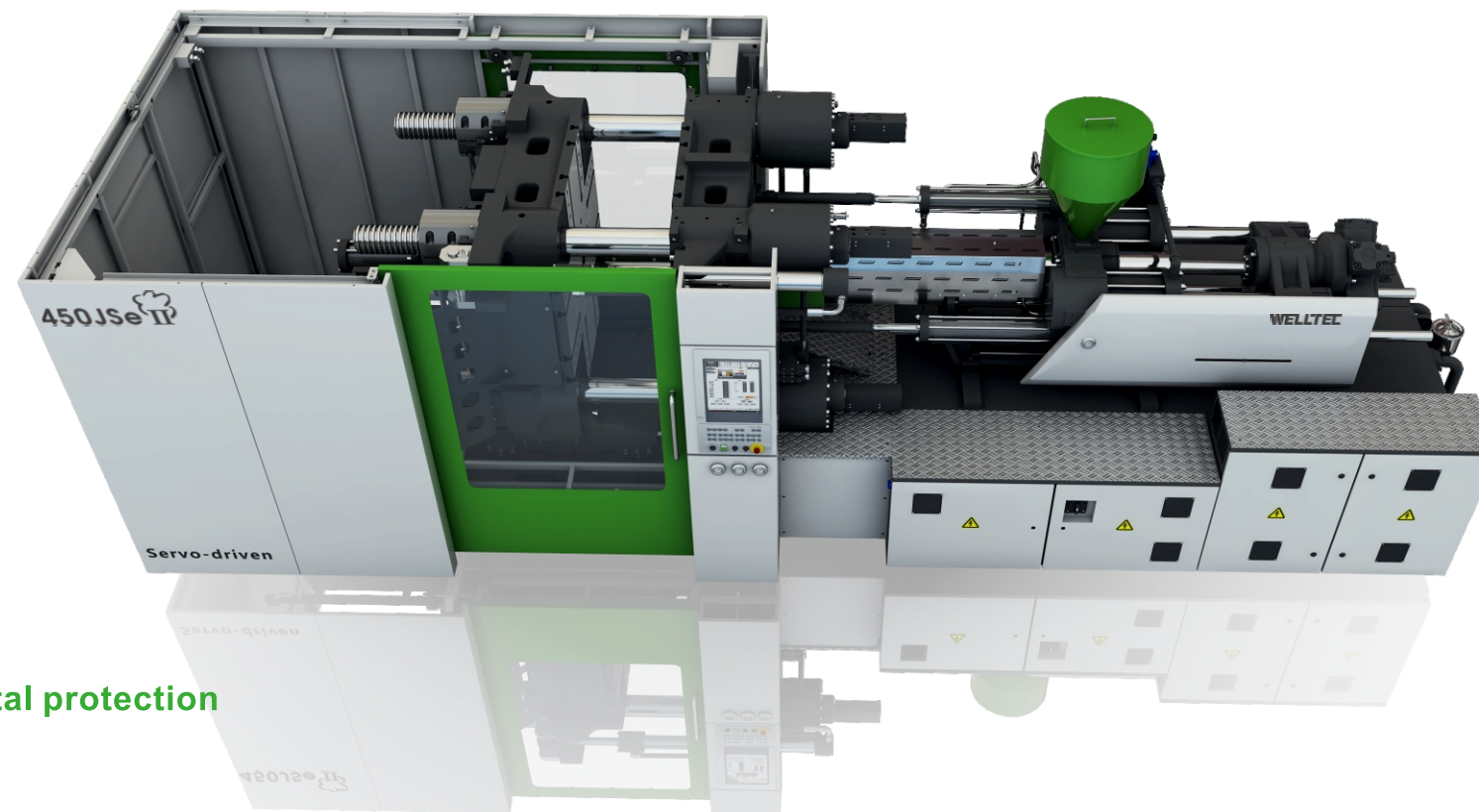
The first 4000 Ton two-platen injection moulding machine in China

**Year 2013**

The 4<sup>th</sup> generation was well developed

**Year 2016**

Small and medium-sized two-platen injection moulding machines successfully launched



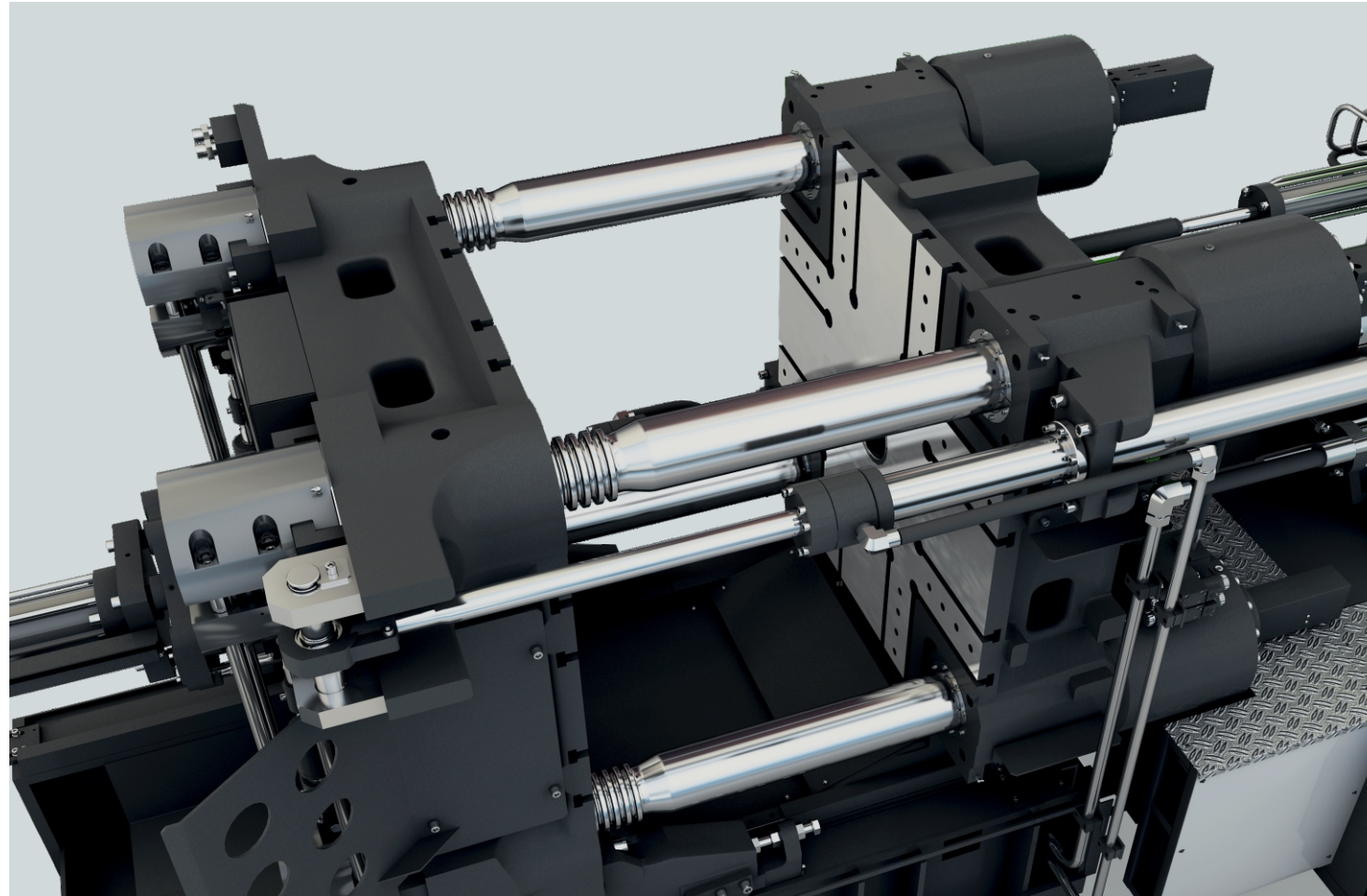
 **Energy saving and environmental protection**  
Energy saving by over 50% on average

 **Patent right**  
Advanced clamping structure

 **High repeatability**  
Product weight repeatability with deviation less than 0.3%



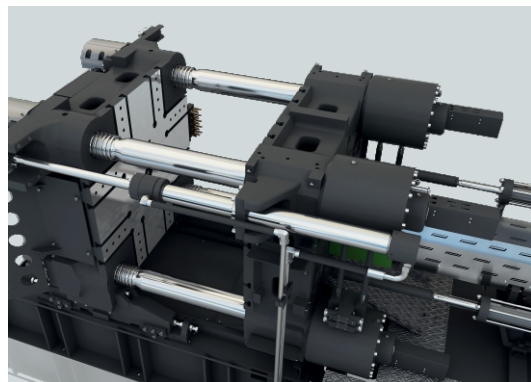




## CLAMPING UNIT

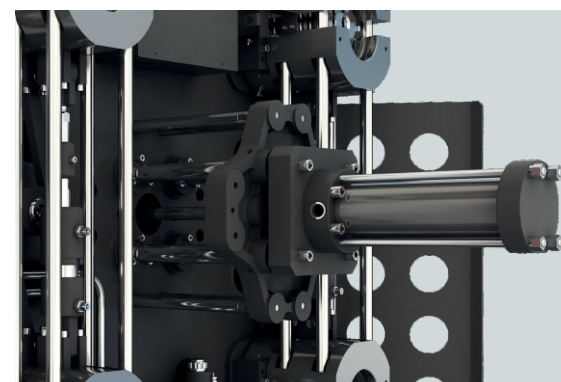
### Advanced two-platen clamping design

The compact structure of the two-platen clamping design significantly reduces the floor space occupancy.



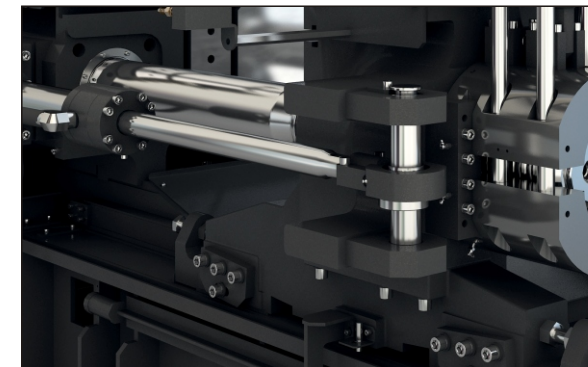
### Minimal rebound

Synchronous tie bar locking system with buffer feature ensures the nut locking precision with minimal rebound.



### Extended moving platen support

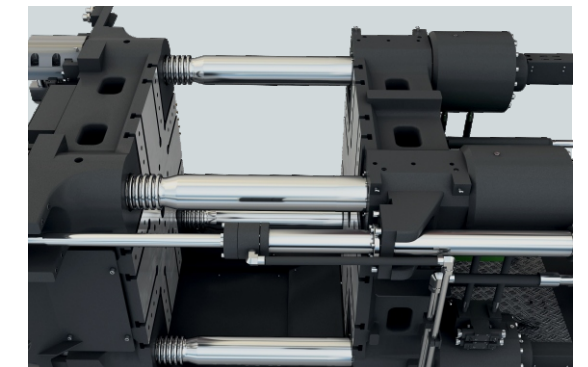
Extended moving platen ensures precise movement though mounted with heavy moulds. The mould life is therefore extended.



### Friction-free design

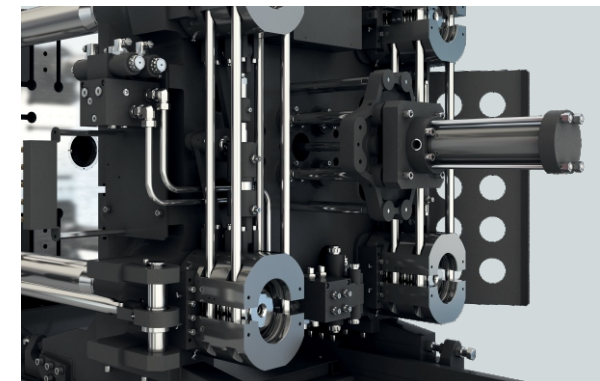
No friction between the tie bar and moving platen securing longer machine life.

The two diagonally placed hydraulic cylinders increase mould opening and closing speed.



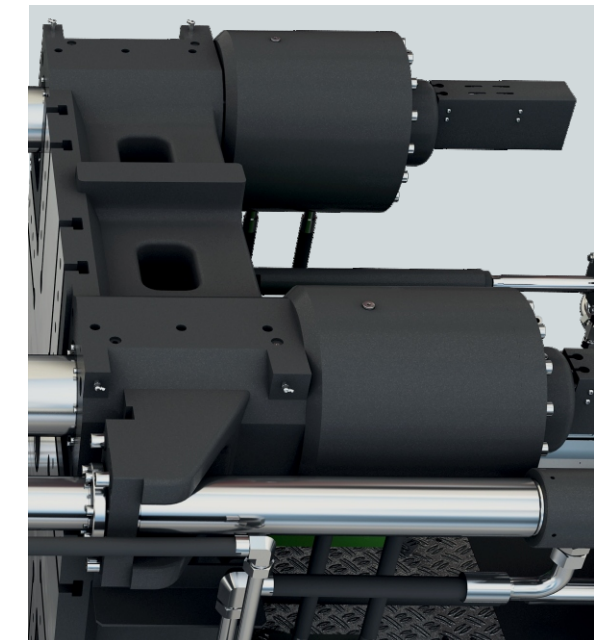
### Modular design

Facilitates easy maintenance.



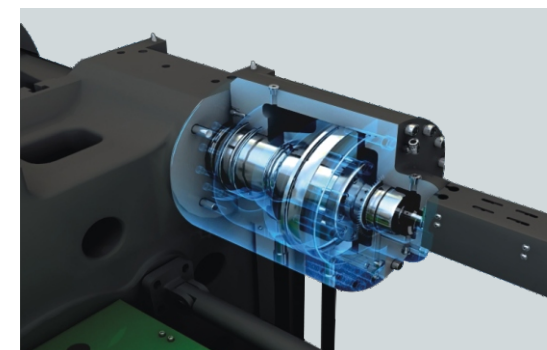
### Even force distribution

Four short-stroke clamping cylinders are embedded on the fixed platen attaining even force distribution during clamping.

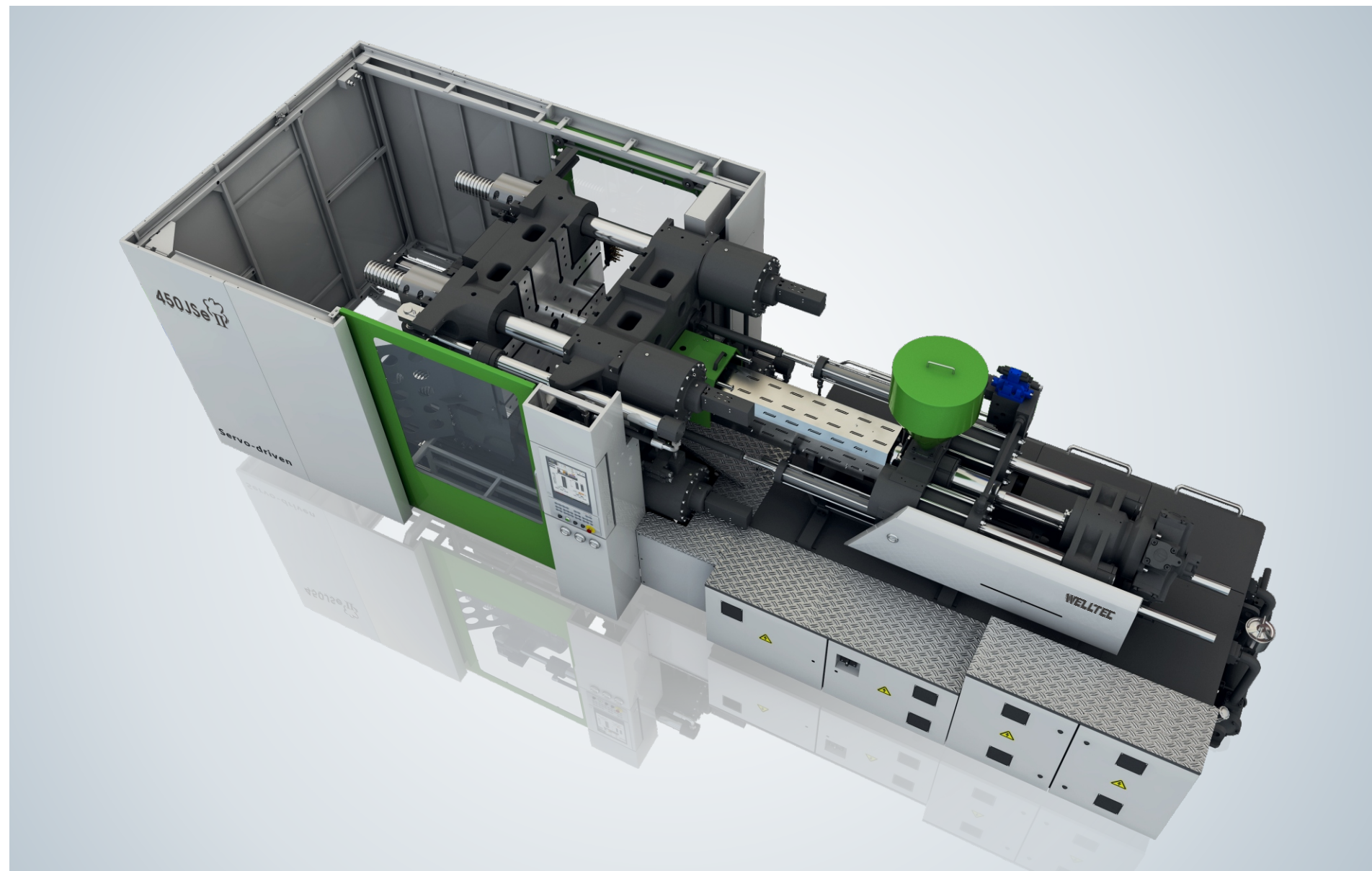


### No Toggle design

With less mechanical parts compared with toggle machines, hydraulic cylinder seals are the only parts that need maintenance.







### Advanced control system

- High performance European B&R control system for injection moulding machine.
- 15 inch colour touch screen with separate operation keyboard.
- Powerful software enables different system integration.
- Multi-language



### Precise control

The whole control system adopts full digital control and the CPU has an extreme short response time. With optimized combination and switching code system, the speed and pressure are controlled through predicted curve. It enables a smooth movement, accurate positioning and high repeatability of product weight and dimension.

### iSee 4.0 built-in interface

iSee 4.0 interface is incorporated for real-time monitoring, remote diagnosis and smart factory management.

### High-performance hydraulic system



With high- performance servo and integrated hydraulic system , output efficiency and response are optimized. Power consumption and noise are significantly reduced.

### Optimized injection unit

New optimized injection unit design. Linear guide rail greatly reduces mechanical loss and improves machine performance.

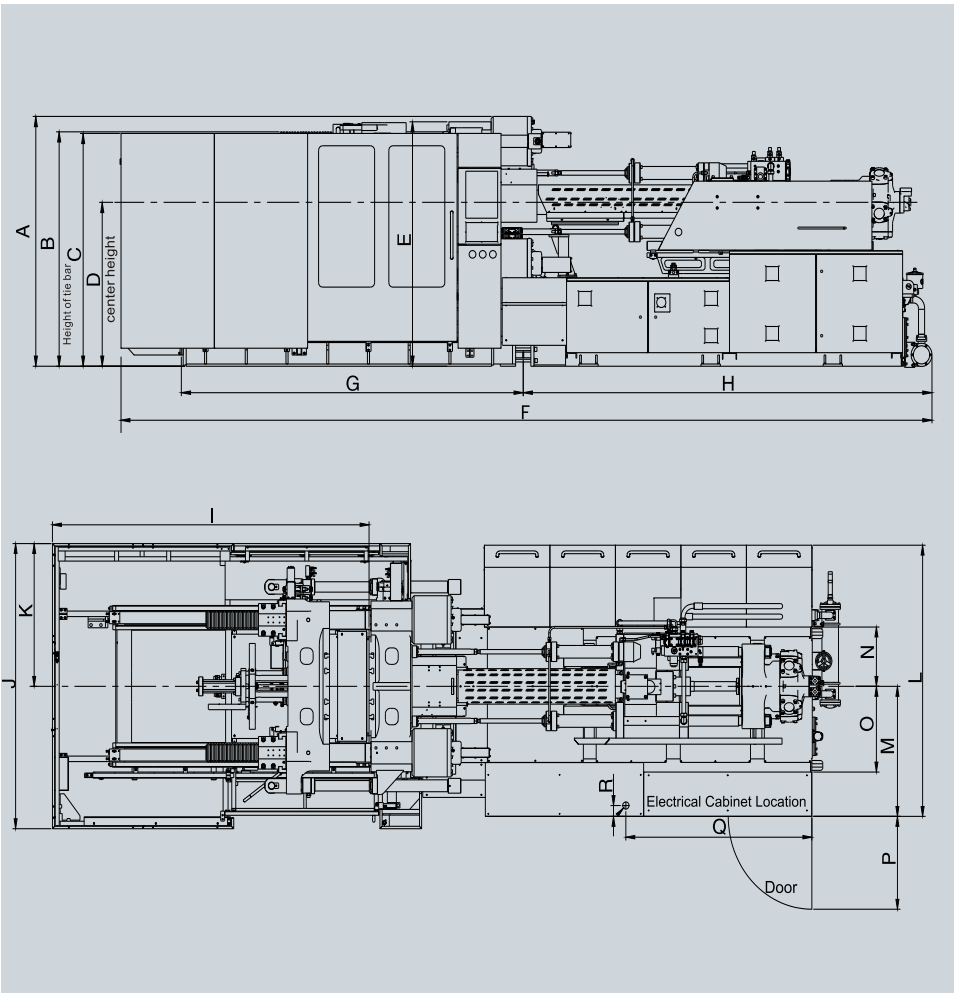


SPECIFICATIONS

|                                                  |         | 450JSell       |      |       | 550JSell       |      |       | 650JSell       |       |       | 750JSell       |      |      | 900JSell       |      |      |
|--------------------------------------------------|---------|----------------|------|-------|----------------|------|-------|----------------|-------|-------|----------------|------|------|----------------|------|------|
| INJECTION UNIT                                   |         |                |      |       |                |      |       |                |       |       |                |      |      |                |      |      |
| Screw diameter                                   | mm      | 70             | 80   | 94    | 70             | 80   | 94    | 80             | 90    | 105   | 90             | 100  | 110  | 90             | 100  | 110  |
| Screw ratio                                      | L/D     | 24.2           | 21.2 | 18    | 24.2           | 21.2 | 18    | 23.6           | 21    | 18    | 22.6           | 20   | 18   | 22.6           | 20   | 18   |
| Theoretical shot volume                          | cm³     | 1539           | 2011 | 2776  | 1539           | 2011 | 2776  | 2212           | 2799  | 3810  | 2990           | 3691 | 4467 | 2990           | 3691 | 4467 |
| Shot weight (PS)                                 | g       | 1401           | 1830 | 2526  | 1401           | 1830 | 2526  | 1991           | 2519  | 3429  | 2691           | 3322 | 4020 | 2691           | 3322 | 4020 |
|                                                  | oz      | 49.5           | 64.7 | 89.3  | 49.5           | 64.7 | 89.3  | 70.3           | 89    | 121.2 | 95             | 117  | 142  | 95             | 117  | 142  |
| Injection pressure                               | Mpa     | 228            | 174  | 126   | 228            | 174  | 126   | 215            | 170   | 125   | 218            | 176  | 146  | 218            | 176  | 146  |
| Injection rate (50Hz)                            | cm³/sec | 366            | 478  | 660   | 366            | 478  | 660   | 536            | 679   | 924   | 604            | 746  | 902  | 604            | 746  | 902  |
| Injection speed (50Hz)                           | mm/s    | 95             |      |       | 95             |      |       | 107            |       |       | 95             |      |      | 95             |      |      |
| Injection stroke                                 | mm      | 400            |      |       | 400            |      |       | 440            |       |       | 470            |      |      | 470            |      |      |
| Max. screw speed                                 | rpm     | 177            |      |       | 177            |      |       | 165            |       |       | 126            |      |      | 126            |      |      |
| Plasticizing capacity(PS)                        | g/s     | 75.6           | 98   | 136.6 | 75.6           | 98   | 136.6 | 99.9           | 121.2 | 183.3 | 74             | 92   | 124  | 74             | 92   | 124  |
| Injection unit force                             | Ton     | 12             |      |       | 12             |      |       | 19.8           |       |       | 19.8           |      |      | 19.8           |      |      |
| Carriage stroke                                  | mm      | 530            |      |       | 530            |      |       | 600            |       |       | 650            |      |      | 730            |      |      |
| CLAMPING UNIT                                    |         |                |      |       |                |      |       |                |       |       |                |      |      |                |      |      |
| Clamping force                                   | Ton     | 450            |      |       | 550            |      |       | 650            |       |       | 750            |      |      | 900            |      |      |
| Opening force<br>(High pressure locking cyliner) | Ton     | 47.5           |      |       | 55             |      |       | 64.7           |       |       | 64.7           |      |      | 84.5           |      |      |
| Opening force<br>(Close and open cyliner)        | Ton     | 13.47          |      |       | 13.47          |      |       | 17.59          |       |       | 22.27          |      |      | 22.27          |      |      |
| Distance between tie bars                        | mm      | 810×800        |      |       | 960×860        |      |       | 1040×910       |       |       | 1110×960       |      |      | 1180×1000      |      |      |
| Platen size                                      | mm      | 1210×1200      |      |       | 1370×1270      |      |       | 1440×1370      |       |       | 1520×1450      |      |      | 1650×1560      |      |      |
| Opening stroke                                   | mm      | 1050-550       |      |       | 1200-650       |      |       | 1350-800       |       |       | 1400-900       |      |      | 1600-1000      |      |      |
| Max. daylight                                    | mm      | 1400           |      |       | 1550           |      |       | 1750           |       |       | 1850           |      |      | 2100           |      |      |
| Mould thickness range                            | mm      | 350-850        |      |       | 350-900        |      |       | 400-950        |       |       | 450-950        |      |      | 500-1100       |      |      |
| Min. mould dimension                             | mm      | 540×530        |      |       | 640×580        |      |       | 700×600        |       |       | 740×640        |      |      | 800×680        |      |      |
| Mould closing speed                              | mm/s    | 1242           |      |       | 1242           |      |       | 1220           |       |       | 1210           |      |      | 1210           |      |      |
| Mould opening speed                              | mm/s    | 1192           |      |       | 1192           |      |       | 1361           |       |       | 1110           |      |      | 1110           |      |      |
| Ejector force                                    | Ton     | 13.5           |      |       | 13.5           |      |       | 13.5           |       |       | 21.5           |      |      | 21.5           |      |      |
| Ejector stroke                                   | mm      | 250            |      |       | 250            |      |       | 250            |       |       | 300            |      |      | 300            |      |      |
| Dry cycle ( EUROMAP 6)                           | s       | 3.9            |      |       | 4.4            |      |       | 4.8            |       |       | 5.2            |      |      | 5.7            |      |      |
| GENERAL                                          |         |                |      |       |                |      |       |                |       |       |                |      |      |                |      |      |
| Hydraulic pump capacity                          | L/min   | 286            |      |       | 286            |      |       | 396            |       |       | 451            |      |      | 451            |      |      |
| Main motor                                       | kW      | 26.7+16.4+11   |      |       | 26.7+16.4+11   |      |       | 40.9+26.7+11   |       |       | 50.7+26.7+11   |      |      | 50.7+26.7+11   |      |      |
| Heating power                                    | kW      | 34.94          |      |       | 34.94          |      |       | 35.66          |       |       | 50             |      |      | 50             |      |      |
| Oil filling capacity                             | L       | 900            |      |       | 900            |      |       | 1200           |       |       | 1500           |      |      | 1500           |      |      |
| Machine dimension                                | mm      | 7000×2300×2110 |      |       | 7185×2500×2110 |      |       | 7970×2600×2210 |       |       | 8735×2700×2415 |      |      | 9100×2950×2460 |      |      |
| Machine weight                                   | Ton     | 18             |      |       | 21             |      |       | 25             |       |       | 32             |      |      | 36             |      |      |

■ We are always working on improvement and reserve the right to change design and specifications without prior notice

Machine Dimensions 450~900JSe II



|          | A    | B    | C    | D    | E    | F    | G    | H    | I    |
|----------|------|------|------|------|------|------|------|------|------|
| 450JSell | 2060 | 1940 | 2110 | 1400 | 2025 | 6993 | 2820 | 3600 | 2740 |
| 550JSell | 2110 | 1979 | 2060 | 1400 | 2070 | 7183 | 3030 | 3590 | 2930 |
| 650JSell | 2210 | 2074 | 2060 | 1450 | 2162 | 7965 | 3358 | 4014 | 3200 |
| 750JSell | 2415 | 2259 | 2110 | 1600 | 2350 | 8733 | 3513 | 4533 | 3450 |
| 900JSell | 2460 | 2297 | 2110 | 1600 | 2400 | 9098 | 3858 | 4533 | 3730 |

|          | J    | K    | L    | M    | N   | O   | P   | Q    | R   |
|----------|------|------|------|------|-----|-----|-----|------|-----|
| 450JSell | 2300 | 1180 | 2184 | 964  | 480 | 560 | 633 | 1460 | 99  |
| 550JSell | 2500 | 1265 | 2184 | 964  | 480 | 560 | 633 | 1460 | 99  |
| 650JSell | 2596 | 1300 | 2319 | 1059 | 515 | 655 | 845 | 1880 | 99  |
| 750JSell | 2700 | 1400 | 2364 | 1014 | 610 | 610 | 845 | 1950 | 130 |
| 900JSell | 2950 | 1475 | 2364 | 1014 | 610 | 610 | 845 | 1950 | 130 |

Remark: C-hopper height for reference only





## Platen/Nozzle Dimensions

