



WOOJIN PLAIMM ————— **VH SERIES CATALOGUE**

THE NEW TECHNOLOGY

Reborn VH series with new design and globalized line ups,

We hereby present this perfectly harmonized premium series to you.

VH-RG5 – Low-floor vertical power saving hydraulic injection molding machine

VH50RG5 VH100RG5 VH150RG5 VH200RG5

VHA-RS – Vertical power saving hydraulic injection molding machine

VHA50RS VHA75RS VHA100RS VHA120RS VHA150RS VHA200RS

VHL-RS – Low-floor vertical power saving hydraulic injection molding machine

VHL250RS VHL350RS VHL450RS



SUBSCRIBE
YOUTUBE

CONTENTS

VH Series

| | |
|--------------|-----|
| VH-RG5 | 4p |
| VHA-RS | 10p |
| VHL-RS | 14p |

Option List

| | |
|--------------------------------|-----|
| VHR-G5 / VHA-RS / VHL-RS | 18p |
|--------------------------------|-----|

Controller / CMS

| | |
|---------------------|-----|
| IMC 700 / 400 | 21p |
|---------------------|-----|

Energy Saving

| | |
|---------------------|-----|
| Energy Saving | 23p |
|---------------------|-----|

SPEED CLUB

| | |
|-----------------------------------|-----|
| SPEED CLUB / Service Center | 24p |
|-----------------------------------|-----|

Contact

| | |
|---|-----|
| Woojin Plaimm Worldwide (Sales & Service) | 25p |
|---|-----|

VH-RG5

Low-floor vertical power saving hydraulic injection molding machine

The low-floor vertical power saving hydraulic injection molding machine VH-RG5 is a Woojin Plaimm's recommended solution to users, who are seeking the answers for quality product and productivity.



New Design



01. Torque Hinge

- Apply Torque Hinge for easily adjustable angle and secure broad visual range.



02. Double coated surface

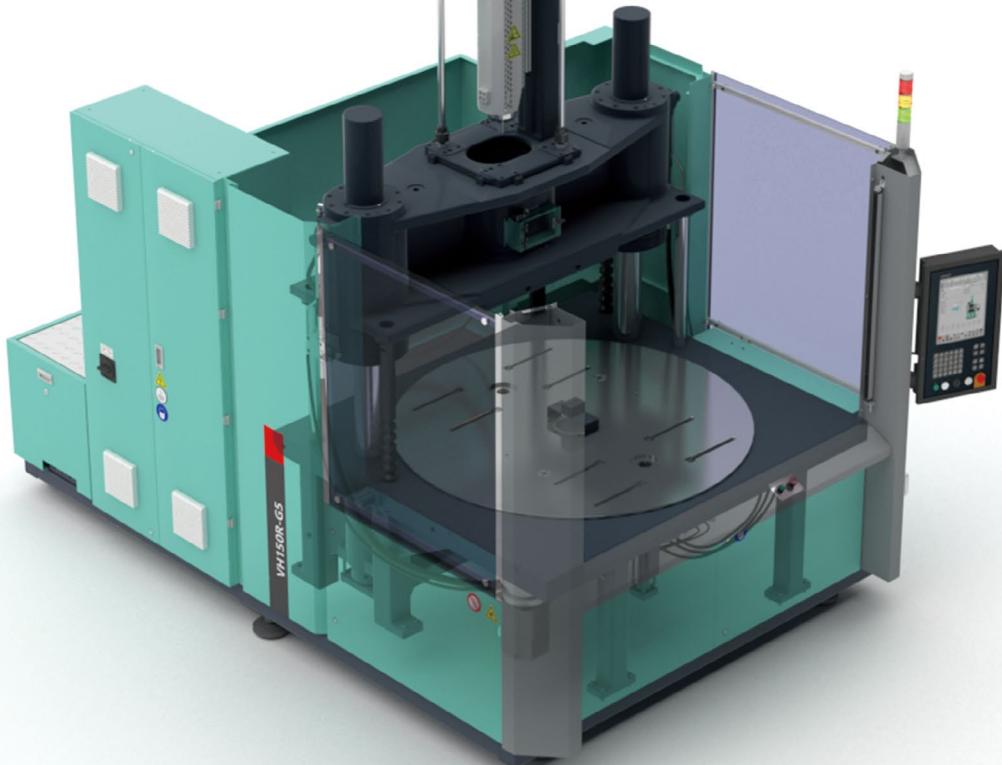
Double coated surface is very strong against scratches and other contaminants and makes it easy to manage



- Remove auxiliary tank and apply 2-axis tie bar.



- 180° forward and backward rotation by servo motor



Clamping Unit

01. Rotation by servo motor

- Precise control by deciding accelerating or decelerating point through digital pulse control of servo drive.

03. Energy saving

- Energy saving by using the weight of the upper platen and the mold.
- Optimization of self mold closing structure by applying a two-axis tie bar

05. optimized working environment

- No need for a separate foot step

02. Low floor structure

- Fixed turntable height from the floor regardless of tonnage
- Easy attachment and detachment of mold
- Easy to apply automation facilities

04. Easy to manage hydraulic oil

- Unlike universal low-floor type, hydraulic oil management is simple because auxiliary tanks are not required.

VH-RG5
50~200ton

VH-RS
50~200ton

VHL-RS
250~450ton

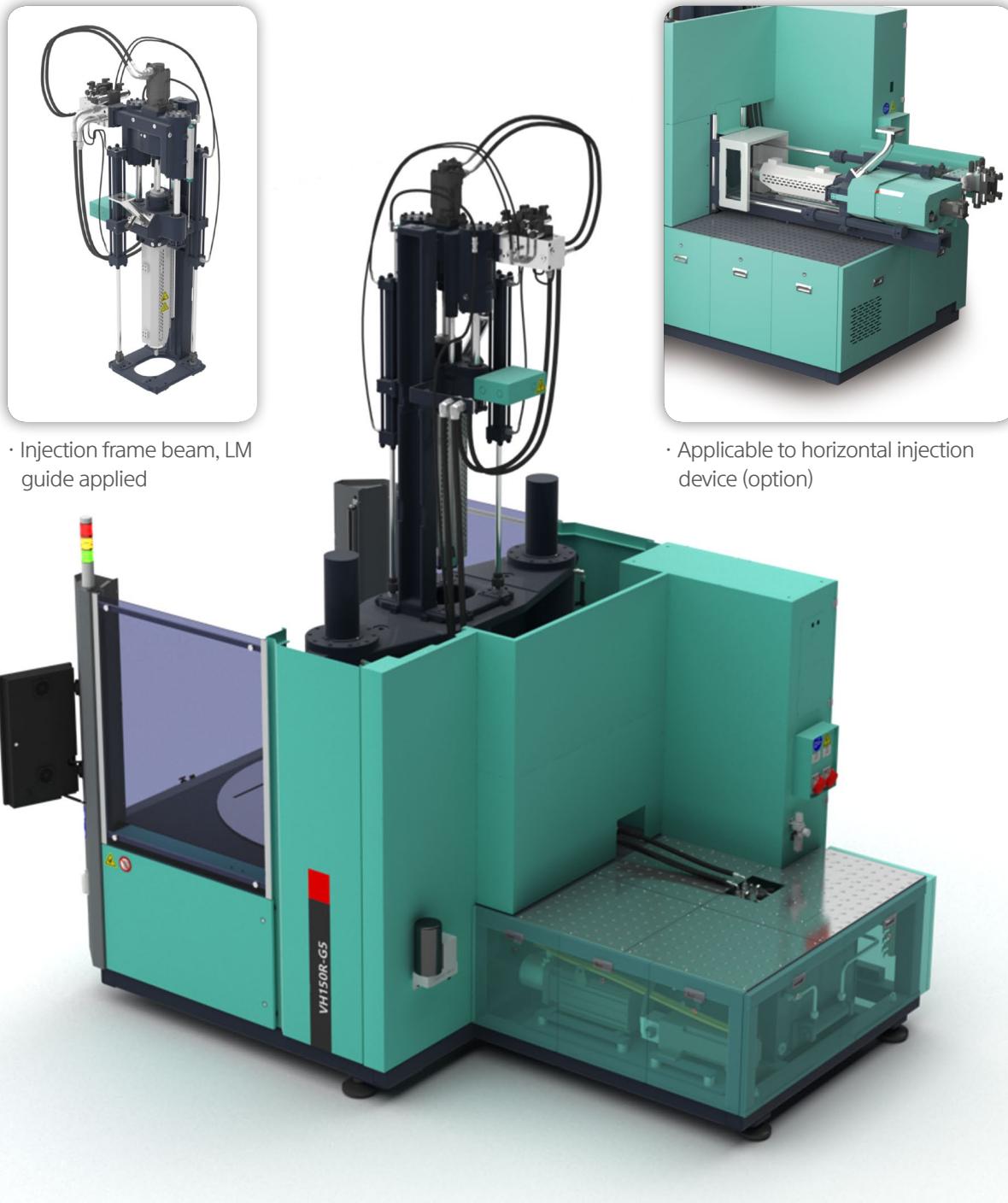
Option List
VH-RG5 / VHA-RS / VHL-RS

VH-RG5
50~200ton

VHA-RS
50~200ton

VHL-RS
250~450ton

Option List
VH-RG5 / VHA-RS / VHL-RS



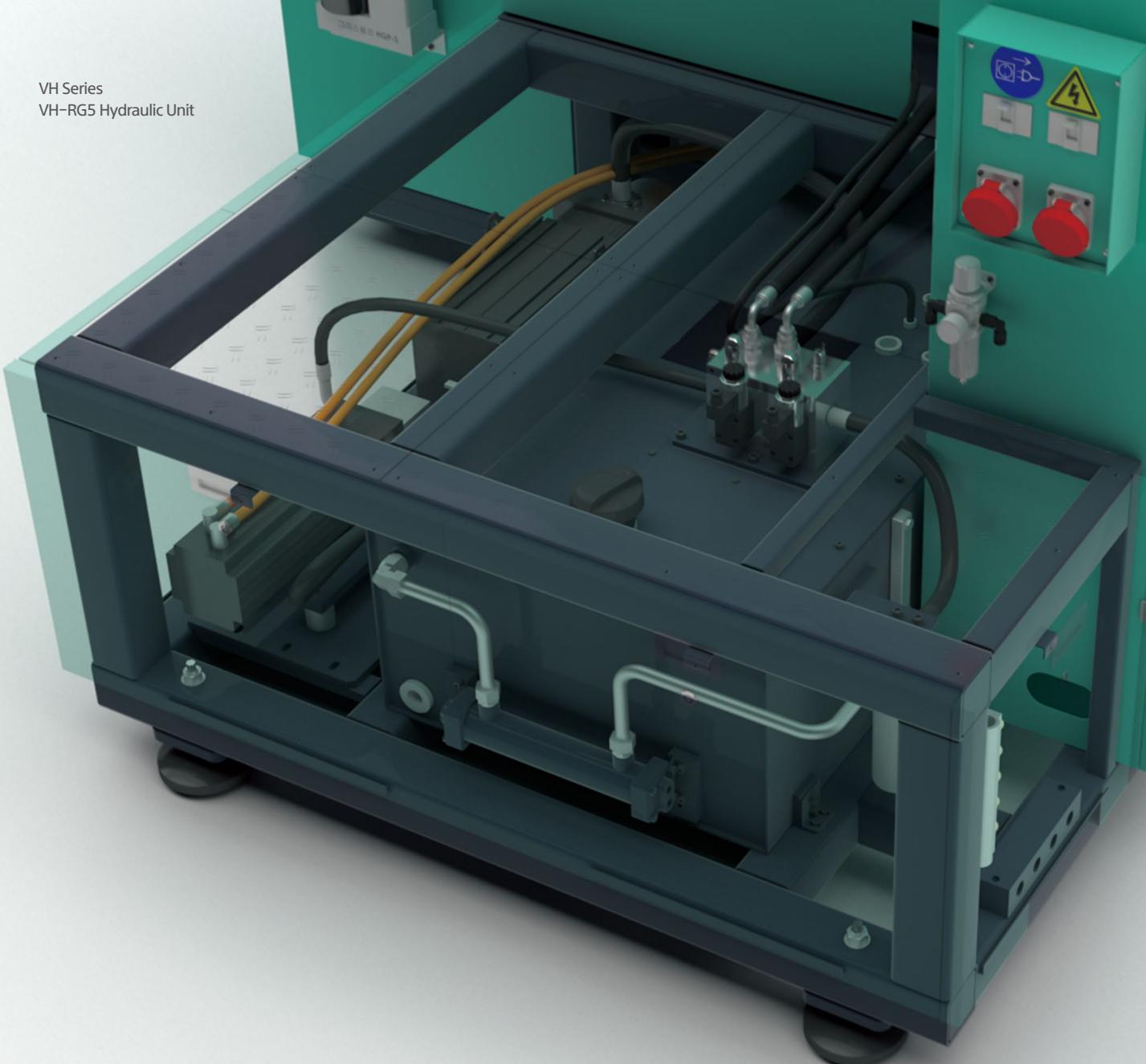
Injection Unit

01. 2 axis injection cylinder / Independent suck back structure

- Improving responsiveness and control capability by independent injection and suck back structure.
- Optimized design for balance and stability of the machine with symmetric structure
- LM guide applied on injection frame beam to maintain parallel alignment.
- Improving vibration during injection, nozzle and charging movement by applying injection frame beam

02. Horizontal injection device applicable

- Horizontal injection unit can be applicable (option)
- Automatic height adjustment function of horizontal injection device (check the height value through the monitor)



VH-RG5
50~200 ton

VHA-RS
50~200 ton

VHL-RS
250~450 ton

Hydraulic Unit

01. Save energy and hydraulic oil consumption

- Reduce energy and hydraulic oil consumption by applying high-efficiency servo pump system

02. Improved internal cleanliness and strong corrosion resistance

- Special coating inside and outside the hydraulic block for improved internal cleanliness and strong corrosion resistance.

03. Ejector hydraulic circuit and hydraulic oil cooling

- Hydraulic circuit configuration for simultaneous operation of ejector during mold closing, nozzle forward movement, and injection
- Independent oil circulation method except ejector operation keeps cleanliness and constant temperature (extending hydraulic oil lifespan and improving durability of hydraulic components)

04. Special painting treatment in oil tank

- Prevention of rust caused by moisture
- Keep hydraulic oil clean
- Extend hydraulic oil lifespan

Option List
VH-RG5 / VHA-RS / VHL-RS

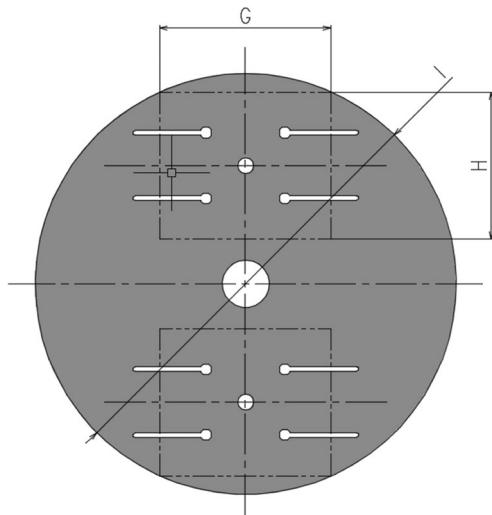
01. Theoretical injection volume: cross section of screw*screw stroke.
 02. Minimum mold height should be more than 60% of tie-bar distance.
 03. The specifications might be changed without any prior notice.
 04. The metering distance is recommended in the range of 1 to 3 times of screw diameter.

Specification

| | | VH50RG5 | | | VH100RG5 | | | VH150RG5 | | | VH200RG5 | | |
|-------------------------------|--------------------|-------------|------|------|-------------|------|------|-------------|------|------|-------------|------|------|
| | | IHV160 | | | IHV230 | | | IHV490 | | | IHV860 | | |
| Injection Unit | | | | | | | | | | | | | |
| Screw&barrel type | | O | A | B | O | A | B | O | A | B | O | A | B |
| Screw diameter | mm | 22 | 25 | 28 | 28 | 32 | 36 | 36 | 40 | 45 | 45 | 50 | 55 |
| Injection pressure | kg/cm ² | 2419 | 1928 | 1476 | 2409 | 1844 | 1457 | 2400 | 1944 | 1536 | 2405 | 1948 | 1610 |
| | Mpa | 237 | 189 | 145 | 236 | 181 | 143 | 235 | 191 | 151 | 236 | 191 | 158 |
| Theoretical injection volume | cm ³ | 69 | 86 | 113 | 99 | 129 | 163 | 204 | 251 | 318 | 358 | 442 | 535 |
| Shot weight(PS) | g | 64 | 79 | 104 | 91 | 119 | 150 | 188 | 231 | 293 | 330 | 407 | 493 |
| Injection rate | cm ³ /s | 74 | 93 | 121 | 70 | 92 | 116 | 119 | 147 | 186 | 216 | 267 | 323 |
| Screw stroke | mm | 140 | 140 | 140 | 160 | 160 | 160 | 200 | 200 | 200 | 225 | 225 | 225 |
| Injection speed | mm/s | 150 | 150 | 150 | 114 | 114 | 114 | 117 | 117 | 117 | 135 | 135 | 135 |
| Plasticizing capacity (PS) | kg/h | 26 | 36 | 51 | 36 | 52 | 70 | 63 | 84 | 115 | 115 | 152 | 196 |
| Screw rotation speed | rpm | 300 | 300 | 300 | 300 | 300 | 300 | 270 | 270 | 270 | 270 | 270 | 270 |
| Clamping Unit | | | | | | | | | | | | | |
| Clamping force | ton(kN) | 50(490) | | | 100(981) | | | 150(1471) | | | 200(1961) | | |
| Opening stroke | mm | 300 | | | 350 | | | 350 | | | 400 | | |
| Rotary Table Size | Ø | 900 | | | 1200 | | | 1600 | | | 1600 | | |
| Daylight | mm | 500 | | | 600 | | | 650 | | | 750 | | |
| Min. mold height | mm | 200 | | | 250 | | | 300 | | | 350 | | |
| Ejector force | ton(kN) | 2.7(26) | | | 4.3(42) | | | 4.3(42) | | | 5.4(53) | | |
| Ejector stroke | mm | 60 | | | 80 | | | 80 | | | 100 | | |
| General | | | | | | | | | | | | | |
| Total heater capacity | kW | 6.1 | 6.1 | 6.1 | 6.7 | 6.7 | 6.7 | 10.1 | 10.1 | 10.1 | 16.2 | 16.2 | 16.2 |
| Motor capacity | kW | 23 | 23 | 23 | 23 | 23 | 23 | 27.8 | 27.8 | 27.8 | 47.8 | 47.8 | 47.8 |
| Total electric power capacity | kW | 29.1 | 29.1 | 29.1 | 29.7 | 29.7 | 29.7 | 37.9 | 37.9 | 37.9 | 64 | 64 | 64 |
| Hydraulic oil tank capacity | l | 190 | | | 270 | | | 330 | | | 400 | | |
| Machine weight | ton | 3.9 | | | 6 | | | 8.9 | | | 10.2 | | |
| Machine dimension (L × W × H) | m | 3.0*1.9*3.2 | | | 3.5*2.0*3.6 | | | 3.8*2.7*4.2 | | | 4.0*2.7*4.8 | | |
| Cooling water requirement | l/min | 20 | | | 40 | | | 40 | | | 40 | | |

Platen Dimension

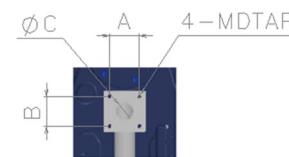
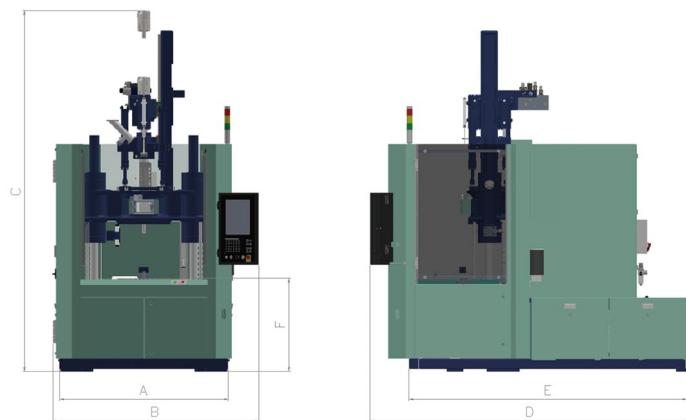
* The images and specifications might be changed without any prior notice.



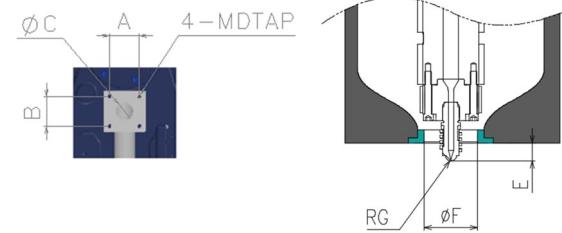
| | G | H | I |
|----------|-----|-----|------|
| VH50RG5 | 400 | 300 | 900 |
| VH100RG5 | 470 | 350 | 1200 |
| VH150RG5 | 650 | 560 | 1600 |
| VH200RG5 | 650 | 560 | 1600 |

* The images and specifications might be changed without any prior notice.

Machine Dimension



▲ Hopper installation
position dimension



▲ Nozzle dimension

| | Robot installation position dimension | | | | | | Hopper installation position dimension | | | | Nozzle dimension | | |
|----------|---------------------------------------|------|------|------|------|-----|--|----|----|----|------------------|-----|-----|
| | A | B | C | D | E | F | A | B | ØC | D | E | ØF | G |
| VH50RG5 | 1580 | 1924 | 3374 | 2999 | 2600 | 872 | 85 | 85 | 40 | 12 | 30 | 100 | 9 |
| VH100RG5 | 1870 | 2227 | 3616 | 3424 | 3000 | 872 | 85 | 85 | 40 | 12 | 30 | 100 | 9 |
| VH150RG5 | 2300 | 2663 | 4162 | 3798 | 3400 | 872 | 85 | 85 | 40 | 12 | 30 | 100 | 9 |
| VH200RG5 | 2300 | 2663 | 4861 | 3999 | 3600 | 872 | 85 | 85 | 50 | 12 | 40 | 100 | R14 |

VH-RG5
50~200ton

VHA-RS
50~200ton

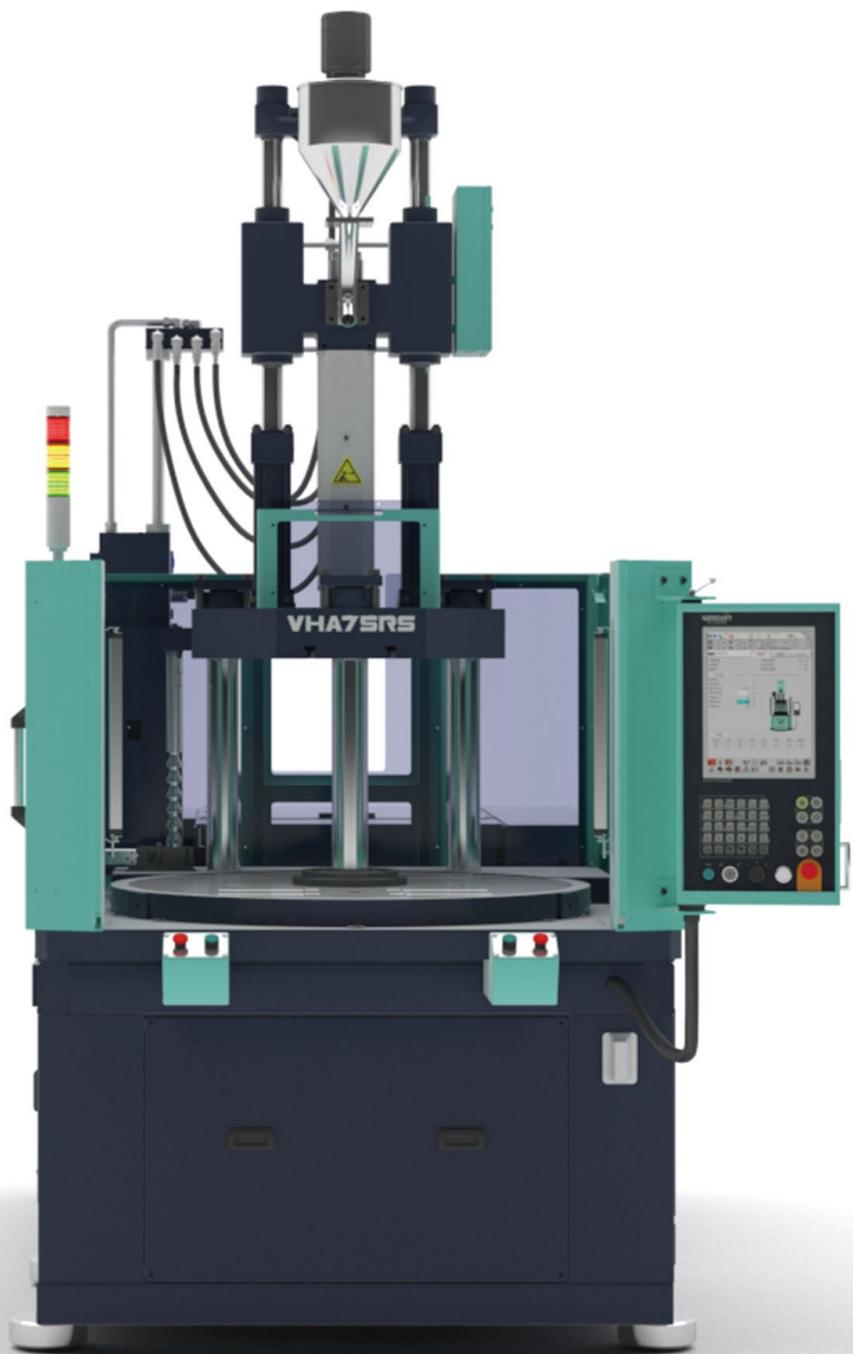
VHL-RS
250~450ton

Option List
VH-RG5 / VHA-RS / VHL-RS

VHA-RS

Harmonization of technology and flexibility

Vertical power saving hydraulic injection molding machine VH Series is a Woojin Plaimm's recommended solution to users, who are seeking the answers for quality products and productivity.

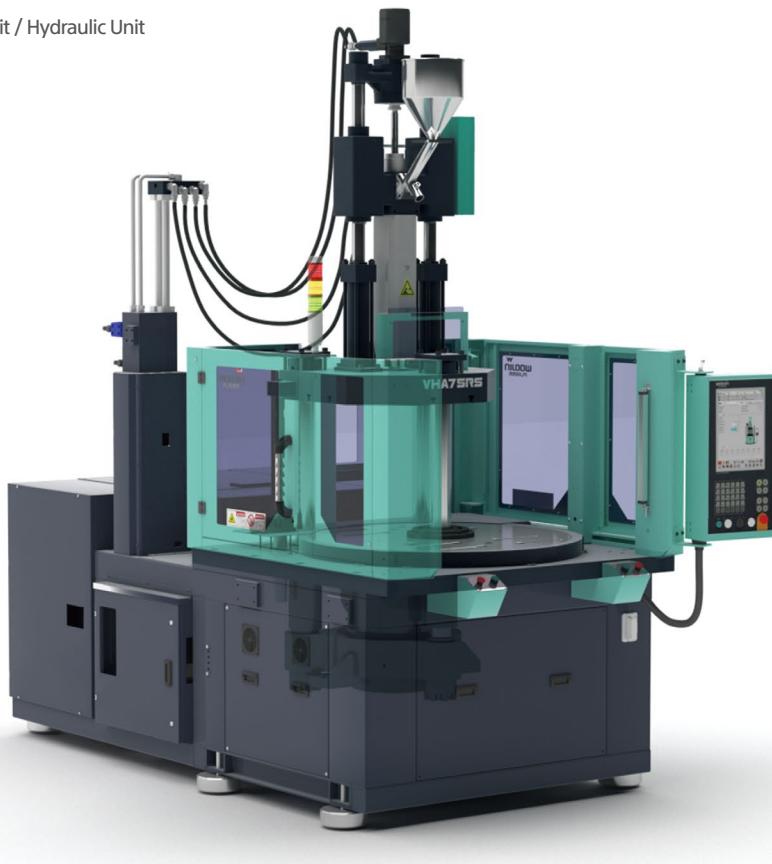


VH-RG5
50~200ton

VHA-RS
50~200ton

VHL-RS
250~450ton

Option List
VH-RG5 / VHA-RS / VHL-RS



Clamping Unit

01. Direct pressure clamping device

- Clamping force generates by center direct pressure boosting ram cylinder
- Accurate clamping force setting by clamping pressure setting
- Step seal and check valve applied to maintain clamping pressure

02. Turntable device

- Accurate clamping force setting by clamping pressure setting
- Precise control by deciding accelerating or decelerating point through digital pulse control of servo drive
- High precision rotating control by electric servo motor
- Accurate positioning control by positioning decision control method regardless of load
- Easy for speed setting and high speed rotation

Injection Unit

01. Application of various injection units

- A wide range of injection units is applicable according to the characteristics of the molded product
- Universal double injection cylinder structure
- Simple structure and easy maintenance
- Low height injection unit
- Applicable to most of molded products except for products requiring very quick responsiveness

02. Vertical In-Line Screw

03. Injection, multi-stage holding pressure control and remote back pressure control

Hydraulic Unit

01. Ejector hydraulic circuit hydraulic oil cooling

- Compose a hydraulic circuit to enable multi-stage control of ejector speed and pressure (standard: 2 stages)
- Simultaneous motion such as ejecting on the fly
- When the ejector does not operate, the ejector pump circulates the hydraulic oil to cool and filter the hydraulic oil.

VH-RG5
50~200ton

VHA-RS
50~200ton

VHL-RS
250~450ton

Option List
VH-RG5 / VHA-RS / VHL-RS

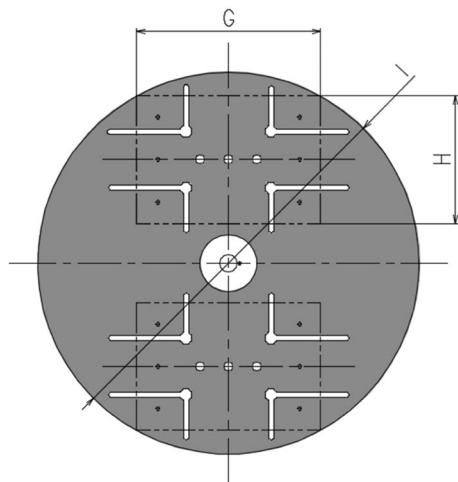
01. Theoretical injection volume: cross section of screw*screw stroke.
 02. Minimum mold height should be more than 60% of tie-bar distance.
 03. The specifications might be changed without any prior notice.
 04. The metering distance is recommended in the range of 1 to 3 times of screw diameter.

Specification

| | VHA50RS | VHA75RS | | | VHA100RS | | | VHA120RS | | | VHA150RS | | | VHA200RS | | |
|-------------------------------|---------------------|-------------|------|------|-------------|------|------|-------------|------|------|-------------|------|------|-------------|------|------|
| | | IH 140V | | | IH 200V | | | IH 280V | | | IH 390V | | | IH 470V | | |
| Injection Unit | | | | | | | | | | | | | | | | |
| Screw&barrel type | type | O | A | B | O | A | B | O | A | B | O | A | B | O | A | B |
| Screw diameter | mm | 22 | 25 | 28 | 25 | 28 | 32 | 28 | 32 | 36 | 32 | 36 | 40 | 36 | 40 | 45 |
| Injection pressure | kg/cm ² | 3487 | 2700 | 2152 | 2923 | 2330 | 1784 | 2847 | 2180 | 1722 | 2631 | 2079 | 1684 | 2316 | 1876 | 1482 |
| | Mpa | 342 | 265 | 211 | 287 | 228 | 175 | 279 | 214 | 169 | 258 | 204 | 165 | 227 | 184 | 145 |
| Theoretical injection volume | cmt ³ | 46 | 59 | 74 | 69 | 86 | 113 | 99 | 129 | 163 | 145 | 183 | 226 | 204 | 251 | 318 |
| Shot weight(PS) | g | 42 | 54 | 68 | 63 | 78 | 102 | 90 | 117 | 148 | 132 | 167 | 206 | 185 | 229 | 289 |
| Injection rate | cmt ³ /s | 49 | 64 | 80 | 59 | 74 | 97 | 97 | 127 | 161 | 106 | 134 | 166 | 151 | 186 | 235 |
| Screw stroke | mm | 120 | 120 | 120 | 140 | 140 | 140 | 160 | 160 | 160 | 180 | 180 | 180 | 200 | 200 | 200 |
| Injection speed | mm/s | 130 | 130 | 130 | 120 | 120 | 120 | 158 | 158 | 158 | 132 | 132 | 132 | 148 | 148 | 148 |
| Plasticizing capacity(PS) | kg/h | 13 | 16 | 13 | 16 | 23 | 31 | 23 | 31 | 52 | 29 | 48 | 59 | 48 | 59 | 77 |
| Screw rotation speed | rpm | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 200 | 200 | 200 | 200 | 200 | 180 |
| Clamping Unit | | | | | | | | | | | | | | | | |
| Clamping force | ton(kN) | 50(490) | | | 75(735) | | | 100(981) | | | 120(1177) | | | 150(1471) | | |
| Opening stroke | mm | 250 | | | 250 | | | 250 | | | 300 | | | 300 | | |
| Rotary Table Size | Ø | 880 | | | 1000 | | | 1100 | | | 1240 | | | 1350 | | |
| Daylight | mm | 450 | | | 450 | | | 500 | | | 600 | | | 650 | | |
| Min. mold height | mm | 200 | | | 200 | | | 250 | | | 300 | | | 350 | | |
| Ejector force | ton(kN) | 2.7(26) | | | 2.7(26) | | | 4.3(42) | | | 4.3(42) | | | 4.3(42) | | |
| Ejector stroke | mm | 60 | | | 60 | | | 80 | | | 80 | | | 80 | | |
| General | | | | | | | | | | | | | | | | |
| Total heater capacity | kW | 5.2 | 5.2 | 5.2 | 6.1 | 6.1 | 6.1 | 6.7 | 6.7 | 6.7 | 8.1 | 8.1 | 8.1 | 10.1 | 10.1 | 10.3 |
| Motor capacity | kW | 13.9 | 13.9 | 13.9 | 13.9 | 13.9 | 13.9 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 25.8 | 25.8 | 25.8 |
| Total electric power capacity | kW | 19.1 | 19.1 | 19.1 | 20.0 | 20.0 | 20.0 | 26.2 | 26.2 | 26.2 | 27.6 | 27.6 | 27.6 | 35.9 | 35.9 | 35.9 |
| Hydraulic oil tank capacity | l | 180 | | | 180 | | | 250 | | | 300 | | | 390 | | |
| Machine weight | ton | 3.5 | | | 4.2 | | | 5.5 | | | 7.3 | | | 8.5 | | |
| Machine dimension (L × W × H) | m | 2.7*1.6*2.9 | | | 2.9*1.8*3.0 | | | 3.3*1.9*3.4 | | | 3.3*2.0*3.8 | | | 3.6*2.1*4.1 | | |
| Cooling water requirement | l/min | 20 | | | 20 | | | 40 | | | 40 | | | 40 | | |

Platen Dimension

* The images and specifications might be changed without any prior notice.

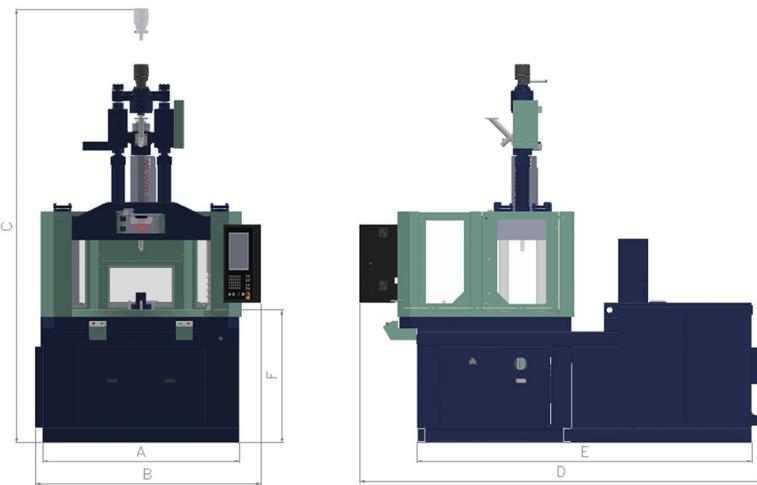


Unit: mm

| | G | H | I |
|----------|-----|-----|------|
| VHA50RS | 350 | 250 | 880 |
| VHA75RS | 450 | 300 | 1000 |
| VHA100RS | 450 | 350 | 1100 |
| VHA120RS | 600 | 400 | 1240 |
| VHA150RS | 650 | 450 | 1350 |
| VHA200RS | 750 | 500 | 1500 |

Machine Dimension

* The images and specifications might be changed without any prior notice.



Unit: mm

| | A | B | C | D | E | F |
|----------|------|------|------|------|------|------|
| VHA50RS | 1200 | 1574 | 2858 | 2650 | 2280 | 890 |
| VHA75RS | 1340 | 1738 | 3005 | 2895 | 2500 | 910 |
| VHA100RS | 1500 | 1823 | 3305 | 3210 | 2800 | 1010 |
| VHA120RS | 1700 | 1932 | 3767 | 3290 | 2900 | 1150 |
| VHA150RS | 1900 | 2075 | 4063 | 3523 | 3100 | 1170 |
| VHA200RS | 2050 | 2227 | 4459 | 3723 | 3300 | 1220 |

VHL-RS

Low floor vertical Insert Injection Molding Machine

The vertical insert injection molding machine VHL-RS is a low-floor vertical power saving hydraulic injection molding machine that lowers the table height.

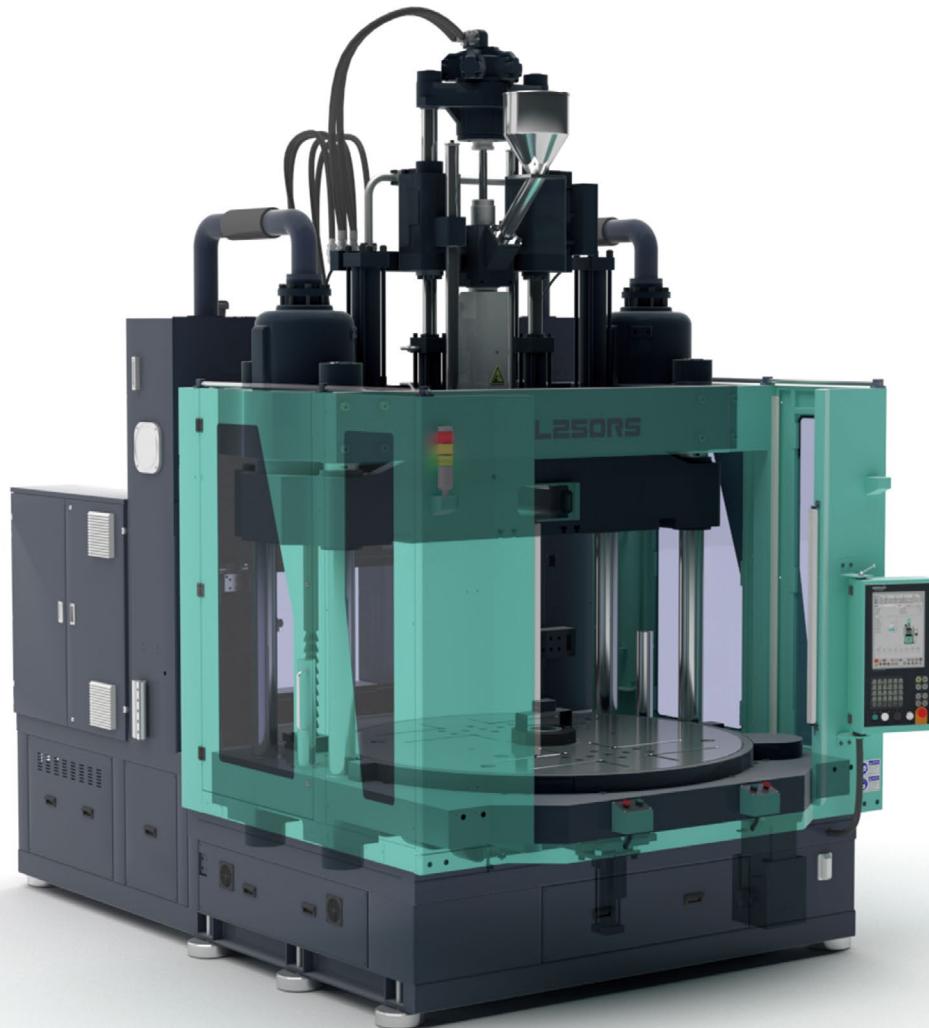


VH-RG5
50~200ton

VHA-RS
50~200ton

VHL-RS
250~450ton

Option List
VH-RG5 / VHA-RS / VHL-RS



Clamping Unit

01. Center press direct pressure clamping device

- Center press direct pressure method to uniformly apply the surface pressure inside the mold
- Allows users to set exact clamping force

02. Turntable precision control device

- Precise control by deciding accelerating or decelerating point through digital pulse control of servo drive
- 180° forward and backward method by servo motor

Injection Unit

01. Dual injection cylinder

- Optimized design for balance and stability with symmetrical structure
- Minimize vibration influence and secure molding stability

02. PID temperature control, synchronous temperature rise control

- Minimize temperature deviation by continuously controlling the temperature value set by the user
- When barrel temperature rises, all the section of barrel is controlled simultaneously in order to prevent resin carbonization and defects.

VH-RG5
50~200ton

VH-RS
50~200ton

VHL-RS
250~450ton

Option List
VH-RG5 / VHL-RS / VH-RS / VHL-RS

01. Theoretical injection volume: cross section of screw*screw stroke.
 02. Minimum mold height should be more than 60% of tie-bar distance.
 03. The specifications might be changed without any prior notice.
 04. The metering distance is recommended in the range of 1 to 3 times of screw diameter.

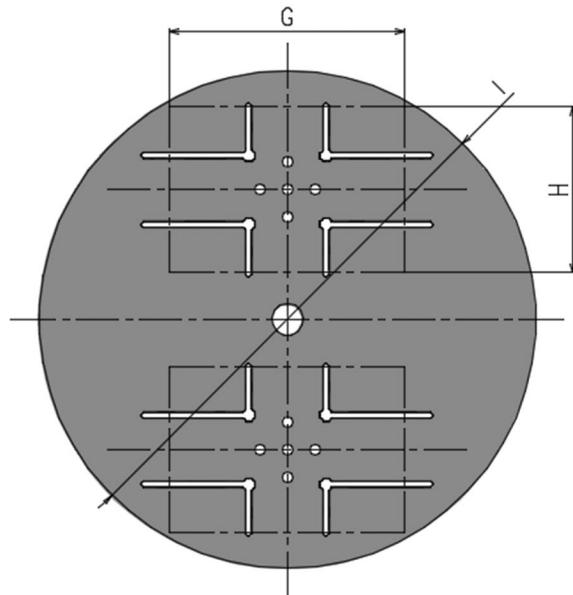
Specification

| | | VHL250RS | | | VHL350RS | | | VHL450RS | | |
|-------------------------------|--------------------|-----------------------------|------|------|-----------------------------|------|------|-----------------------------|------|------|
| | | IH 740V | | | IH 1090V | | | IH 1330V | | |
| Injection Unit | | | | | | | | | | |
| Screw&barrel type | | O | A | B | O | A | B | O | A | B |
| Screw diameter | mm | 40 | 45 | 50 | 50 | 55 | 60 | 55 | 60 | 65 |
| | kg/cm ² | 2695 | 2129 | 1724 | 2332 | 1928 | 1620 | 2166 | 1820 | 1551 |
| Injection pressure | Mpa | 264 | 208 | 169 | 228 | 189 | 158 | 212 | 178 | 152 |
| Theoretical injection volume | cm ³ | 276 | 350 | 432 | 471 | 570 | 678 | 618 | 735 | 863 |
| Shot weight(PS) | g | 254 | 322 | 397 | 434 | 525 | 625 | 568 | 676 | 794 |
| Injection rate | cm ³ /s | 163 | 207 | 255 | 240 | 291 | 346 | 323 | 384 | 451 |
| Screw stroke | mm | 220 | 220 | 220 | 240 | 240 | 240 | 260 | 260 | 260 |
| Injection speed | mm/s | 130 | 130 | 130 | 122 | 122 | 122 | 136 | 136 | 136 |
| Plasticizing capacity(PS) | kg/h | 42 | 58 | 77 | 103 | 131 | 168 | 130 | 164 | 203 |
| Screw rotation speed | rpm | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| Clamping Unit | | | | | | | | | | |
| Clamping force | ton(kN) | 250(2450) | | | 350(3500) | | | 450(4500) | | |
| Opening stroke | mm | 500 | | | 550 | | | 650 | | |
| Rotary Table Size | Ø | 1800 | | | 1900 | | | 2200 | | |
| Daylight | mm | 900 | | | 1000 | | | 1200 | | |
| Min. mold height | mm | 400 | | | 450 | | | 550 | | |
| Ejector force | ton(kN) | 5.4(52) | | | 7.0(68) | | | 11.0(107) | | |
| Ejector stroke | mm | 100 | | | 120 | | | 150 | | |
| General | | | | | | | | | | |
| Total heater capacity | kw | 12.6 | 12.6 | 12.6 | 16.2 | 16.2 | 16.2 | 20 | 20 | 20 |
| Motor capacity | kw | 27.5 | 27.5 | 27.5 | 37.3 | 37.3 | 37.3 | 50.2 | 50.2 | 50.2 |
| Total electric power capacity | kw | 40.1 | 40.1 | 40.1 | 53.5 | 53.5 | 53.5 | 70.2 | 70.2 | 70.2 |
| Hydraulic oil tank capacity | L | 380(main)+140(sub)+140(sub) | | | 550(main)+190(sub)+190(sub) | | | 660(main)+290(sub)+290(sub) | | |
| Machine weight | ton | 21 | | | 25 | | | 35 | | |
| Machine dimension (L × W × H) | m | 4.2*2.7*4.5 | | | 4.2*2.9*5 | | | 4.6*3.3*5.7 | | |
| Cooling water requirement | L/min | 40 | | | 40 | | | 40 | | |

Platen Dimension

* The images and specifications might be changed without any prior notice.

* The minimum mold size is 70% of the maximum mold size, and please contact Woojin Plaimm when installing/using molds below that size.

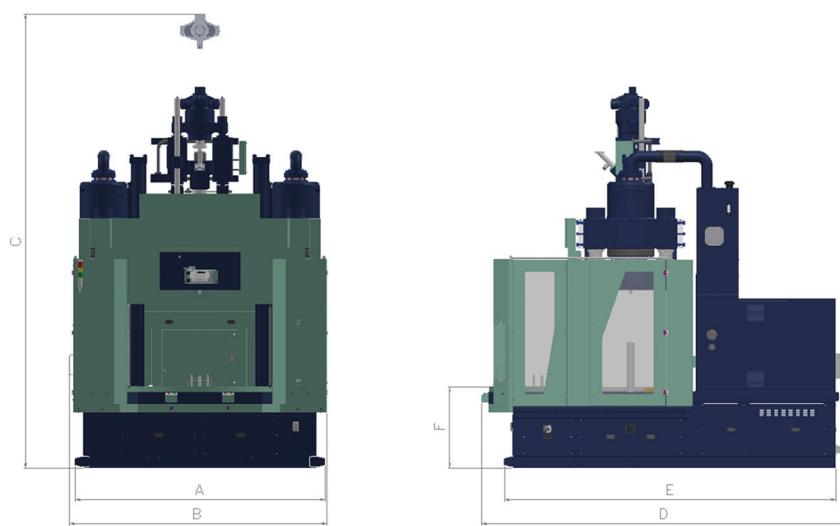


Unit: mm

| | G | H | I |
|----------|----------|----------|----------|
| VHL250RS | 850 | 600 | 1800 |
| VHL350RS | 980 | 685 | 1900 |
| VHL450RS | 1100 | 800 | 2200 |

Machine Dimension

* The images and specifications might be changed without any prior notice.



Unit: mm

| | A | B | C | D | E | F |
|----------|----------|----------|----------|----------|----------|----------|
| VHL250RS | 2450 | 2540 | 4436 | 4203 | 3600 | 920 |
| VHL350RS | 2700 | 2720 | 4915 | 4040 | 3680 | 865 |
| VHL450RS | 3096 | 2900 | 5619 | 4524 | 4107 | 1002 |

VHL-RG5
50~200ton

VHL-RS
50~200ton

VHL-RS
250~450ton

Option List
VHL-RG5 / VHL-RS / VHL-RS

Option List

* This page is provided for customer's better understanding.

| VH-RG5 | | |
|---|---|---|
| Injection Unit | Clamping Unit | General |
| Standard | | |
| 01. Single Flight Screw 02. Injection valve gate circuit (AC 1 + DC 1) 03. PID Heating Control 04. Heating downtime mode 05. Weekly Heating Timer 06. Cold screw start protection mode 07. Temperature display & Alarm in abnormal Temp. 08. Auto Purging 09. Injection Speed & Pressure step (10 step) 10. Holding Speed & Pressure step (5 step) 11. Charging Speed & Pressure step (4 step) 12. Back Pressure control step (4 step) 13. Injection Pressure Graph Display 14. Injection Speed Graph Display 15. Screw RPM Display 16. Cushion Display & Alarm 17. Charging time count & alarm 18. Screw & Barrel (Anti Wear) | 01. Clamping area Curtain sensor 02. Hydraulic Core puller (Moving platen side, 1 stage) 03. Air blow-off unit (Fixed side 1 + Moving side 1) 04. Safety device(for electric & hydraulic) 05. Automatic Mold thickness adjust mode 06. Mold-Open Speed & Pressure step (5 step) 07. Mold-Close Speed & Pressure step (5 step) 08. Ejector Speed & Pressure step (3 step) | 01. Clamp area safety sensor (Vertical type IMM) 02. Standard Maintenance tools 03. Standard spare part 04. Leveling pad 05. Cooling water distribution 06. Automatic grease lubrication (Clamping) 07. Robot interface (Standard) 08. 3 Phase electric outlet (2 ea) 09. Single Phase electric outlet (1 ea) 10. Hopper throat temperature control device 11. Hydraulic oil level alarm 12. Hydraulic oil temperature check & alarm 13. Hydraulic oil heating mode 14. 3 color alarm light 15. Shot-data saving by external way 16. Production data statistics 17. Alarming & History save 18. Log history save 19. I/O circuit display 20. Shot data save (Internal 1,000 / External device) |
| Option | | |
| 01. Heater Disconnection check device 02. Screw & Barrel (Nitrided barrel) 03. Screw & Barrel (Anti Wear & Corrosive) 04. Valve Gate Circuit & Connector (Interior type) 05. Pneumatic Valve Gate Block (Interior type) 06. Shut-off Nozzle (Pneumatic, Hydraulic, Spring) 07. Customized Design Screw (SB, Mixing, Coating) | 01. Daylight Extension 02. Hydraulic Core Check Valve 03. Hydraulic Core Interlock Connector (EM13, WJ Standard) 04. Hydraulic Core Device (Fixed,Moving, 1or2 stage) 05. Spring type Ejector retraction 06. Ejector Check Valve 07. Ejector Forward/Backward External switch 08. Mold Insulation Plate | 01. Hydraulic Auto-Clamp unit 02. Heater Insulation Band 03. Robot Interface (EM12, EM67, EM67.1, SPI) 04. CMS (Central Monitoring System) 05. AVR (Automatic Voltage Regulator) on Electric Panel 06. UPS (Uninterrentable Power Supply) on Electric Panel 07. Dosing unit Interface (for Masterbatch) 08. Gas Injection Interface 09. Steam Injection Interface 10. Interior type Hot Runner Controller (EM13, WJ Standard) 11. Controller Moving device |

* This page is provided for customer's better understanding.

| VHA-RS | | |
|---|---|--|
| Injection Unit | Clamping Unit | General |
| Standard | | |
| 01. Single Flight Screw | 01. Clamping area Curtain sensor | 01. Clamp area safety sensor (Vertical type IMM) |
| 02. Injection valve gate circuit (AC 1 + DC 1) | 02. Working Foot-board (Operator side, Above 120ton) | 02. Standard Maintenance tools |
| 03. Back-Pressure Closed-loop system | 03. Hydraulic Core puller (Moving platen side, 1 stage) | 03. Standard spare part |
| 04. PID Heating Control | 04. Air blow-off unit (1 ea) | 04. Leveling pad |
| 05. Heating downtime mode | 05. Safety device(for electric & hydraulic) | 05. Cooling water distribution |
| 06. Weekly Heating Timer | 06. Automatic Mold thickness adjust mode | 06. Automatic grease lubrication (Clamping) |
| 07. Cold screw start protection mode | 07. Mold-Open Speed & Pressure step (4 step) | 07. Robot interface (Standard) |
| 08. Temperature display & Alarm in abnormal Temp. | 08. Mold-Close Speed & Pressure step (5 step) | 08. 3 Phase electric outlet (2 ea) |
| 09. Auto Purging | 09. Ejector Speed & Pressure step (2 step) | 09. Single Phase electric outlet (1 ea) |
| 10. Injection Speed & Pressure step (10 step) | | 10. Hopper throat temperature control device |
| 11. Holding Speed & Pressure step (5 step) | | 11. Hydraulic oil purification device |
| 12. Charging Speed & Pressure step (3 step) | | 12. Hydraulic oil temperature control deivce |
| 13. Back Pressure control step (3 step) | | 13. Hydraulic oil level alarm |
| 14. Injection Pressure Graph Display | | 14. Hydraulic oil temperature check & alarm |
| 15. Injection Speed Graph Display | | 15. Hydraulic oil heating mode |
| 16. Screw RPM Display | | 16. 3 color alarm light |
| 17. Cushion Display & Alarm | | 17. Shot-data saving by external way |
| 18. Charging time count & alarm | | 18. Production data statistics |
| 19. Screw & Barrel (Anti Wear) | | 19. Alarming & History save |
| | | 20. Log history save |
| | | 21. I/O circuit display |
| | | 22. Shot data save (Internal 1,000 / External device) |
| Option | | |
| 01. Heater Disconnection check device | 01. Daylight Extension | 01. Hydraulic Auto-Clamp unit |
| 02. Screw & Barrel (Nitrided barrel) | 02. Hydraulic Core Check Valve | 02. Heater Insulation Band |
| 03. Screw & Barrel (Anti Wear & Corrosive) | 03. Hydraulic Core Interlock Connector (EM13, WJ Standard) | 03. Robot Interface (EM12, EM67, EM67.1, SPI) |
| 04. Valve Gate Circuit & Connector (Interior type) | 04. Hydraulic Core (Rotary table type) | 04. CMS (Central Monitoring System) |
| 05. Pneumatic Valve Gate Block (Interior type) | 05. Ejector Check Valve | 05. AVR (Automatic Voltage Regulator) on Electric Panel |
| 06. Shut-off Nozzle (Pneumatic, Hydraulic, Spring) | 06. Ejector Interlock Connector (WJ Standard, EM13) | 06. UPS (Uninterruptable Power Supply) on Electric Panel |
| 07. Customized Design Screw (SB, Mixing, Coating) | 07. Mold Insulation Plate | 07. Dosing unit Interface (for Masterbatch) |
| | 08. Pneumatic Core Puller (1~4 Stages) | 08. Gas Injection Interface |
| | | 09. Steam Injection Interface |
| | | 10. External Temperature Display (F/P) |
| | | 11. Interior type Hot Runner Controller (EM13, WJ Standard) |
| | | 12. Controller Moving device |

* This page is provided for customer's better understanding.

| VHL-RS | | |
|---|---|--|
| Injection Unit | Clamping Unit | General |
| Standard | | |
| 01. Single Flight Screw 02. Injection valve gate circuit (AC 1 + DC 1) 03. Back-Pressure Closed-loop system 04. PID Heating Control 05. Heating downtime mode 06. Weekly Heating Timer 07. Cold screw start protection mode 08. Temperature display & Alarm in abnormal Temp. 09. Auto Purging 10. Injection Speed & Pressure step (10 step) 11. Holding Speed & Pressure step (5 step) 12. Charging Speed & Pressure step (3 step) 13. Back Pressure control step (3 step) 14. Injection Pressure Graph Display 15. Injection Speed Graph Display 16. Screw RPM Display 17. Cushion Display & Alarm 18. Charging time count & alarm 19. Screw & Barrel (Anti Wear) | 01. Clamping area Curtain sensor 02. Hydraulic Core puller (Moving platen side, 1 stage) 03. Air blow-off unit (1 ea) 04. Safety device(for electric & hydraulic) 05. Automatic Mold thickness adjust mode 06. Mold-Open Speed & Pressure step (4 step) 07. Mold-Close Speed & Pressure step (5 step) 08. Ejector Speed & Pressure step (2 step) | 01. Standard Maintenance tools 02. Standard spare part 03. Leveling pad 04. Cooling water distribution 05. Automatic grease lubrication (Clamping) 06. Robot interface (Standard) 07. 3 Phase electric outlet (2 ea) 08. Single Phase electric outlet (1 ea) 09. Hopper throat temperature control device 10. Hydraulic oil purification device 11. Hydraulic oil temperature control device 12. Hydraulic oil level alarm 13. Hydraulic oil temperature check & alarm 14. Hydraulic oil heating mode 15. 3 color alarm light 16. Shot-data saving by external way 17. Production data statistics 18. Alarming & History save 19. Log history save 20. I/O circuit display 21. Shot data save (Internal 1,000 / External device) |
| Option | | |
| 01. Heater Disconnection check device 02. Screw & Barrel (Nitrided barrel) 03. Screw & Barrel (Anti Wear & Corrosive) 04. Valve Gate Circuit & Connector (Interior type) 05. Pneumatic Valve Gate Block (Interior type) 06. Shut-off Nozzle (Pneumatic, Hydraulic, Spring) 07. Customized Design Screw (SB, Mixing, Coating) | 01. Daylight Extension 02. Working Foot-board (Operator side) 03. Hydraulic Core Check Valve 04. Hydraulic Core Interlock Connector (EM13, WJ Standard) 05. Hydraulic Core (Rotary table type) 06. Ejector Check Valve 07. Ejector Interlock Connector (WJ Standard, EM13) 08. Mold Insulation Plate 09. Pneumatic Core Puller (1~4 Stages) | 01. Hydraulic Auto-Clamp unit 02. Heater Insulation Band 03. Robot Interface (EM12, EM67, EM67.1, SPI) 04. CMS (Central Monitoring System) 05. AVR (Automatic Voltage Regulator) on Electric Panel 06. UPS (Uninterruptable Power Supply) on Electric Panel 07. Dosing unit Interface (for Masterbatch) 08. Gas Injection Interface 09. Steam Injection Interface 10. External Temperature Display (F/P) 11. Interior type Hot Runner Controller (EM13, WJ Standard) 12. Controller Moving device |

Controller IMC 700



Compatibility

- 01. Embedded Linux
- 02. 10/100 Mbps Ethernet
- 03. USB2.0, RS-232

Display

15"

Resolution

768 X 1024

Touch screen

5-wire Resistive type

CPU

Cortex - A8

RAM

DDR2, 512MB

Memory

NAND Flash, 512MB

IP Grade

IP65(Front), IP20(Back)

Machine

DL-G5, TE-G5, NC-G5, TE-NC, TB-G5,
VH-RG5

Language

International Language

IMC 400



Compatibility

- 01. VxWorks Real-time processing system
- 02. OPC-UA(Euromap77)
- 03. Ethernet 10/100Mbps, CAN Bus Port, USB Port,
Serial Interface
- 04. Energy Monitoring and CMS System

Display

15"

Resolution

768 X 1024

Touch screen

TFT Color Touch Screen

CPU

Intel atom E3815, 1460MHz

RAM

DDR3, 1GB, SDRAM

Memory

CompactFlash 32GB

IP Grade

IP65(Front), IP20(Back)

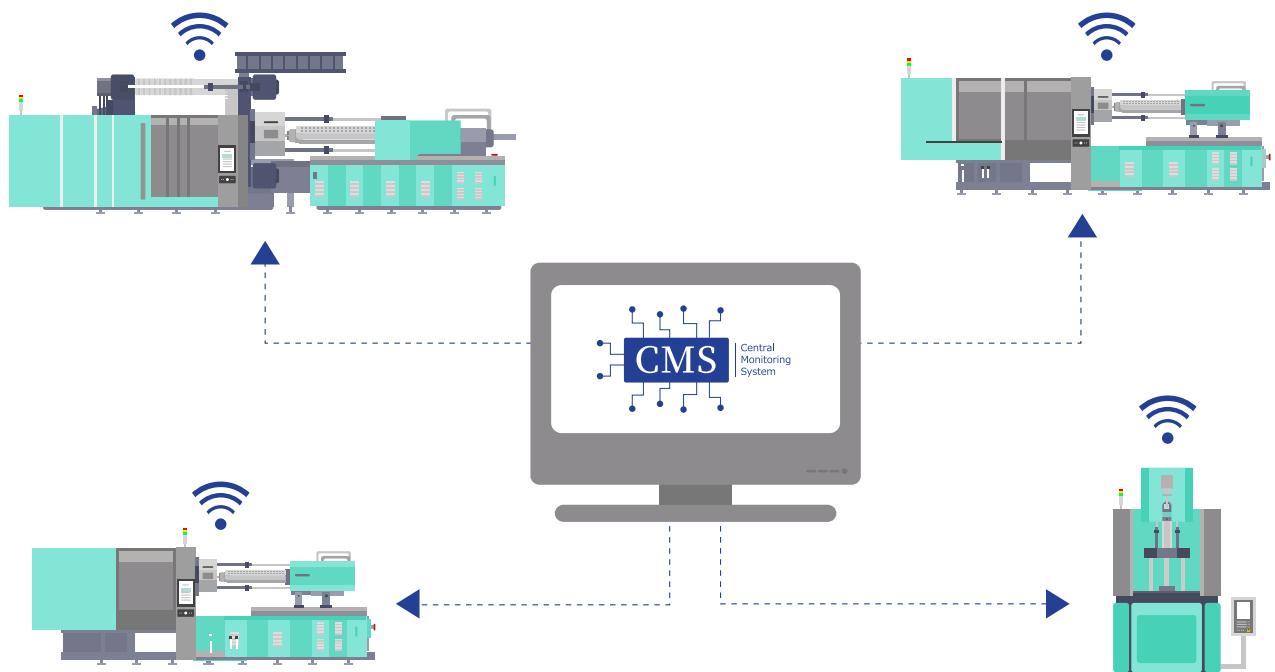
Machine

VHA-RS, DL-A5, TH-A5, VHL-RS

Language

International Language

CMS Central Monitoring System



CMS (Central Monitoring System)

01. Collection data from injection molding machine and factory facilities.
02. Provision of real-time monitoring and visualization of data.
03. Communication synchronization function between injection molding machine and auxiliaries for factory automation.
04. Provision of synchronization function with higher host systems such as EMS and ERP.
05. Provision of remote transmission of molded data.
06. Provision of user manual for easy installation and maintenance.

Effectiveness

01. Support for productivity improvement through process control and quality control functions.
02. Construction of injection process DB based on universal database.
03. Increase efficiency of injection process management through real-time monitoring.

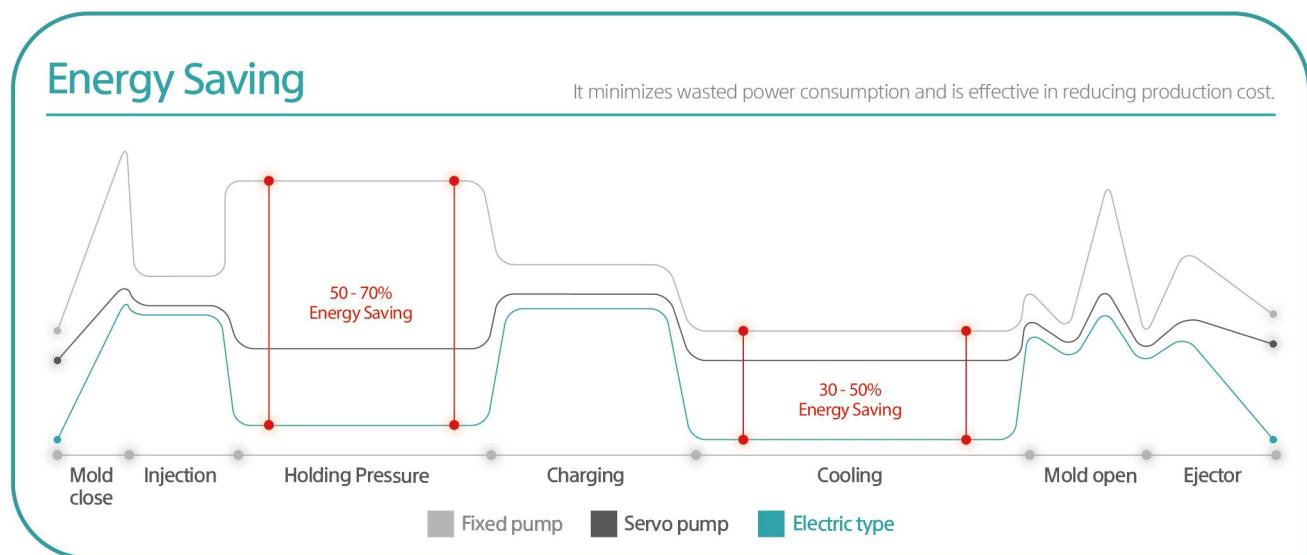
Software Requirement

01. OS: Windows 2012 server Standard
02. Database: MS SQL Server 2012 Standard

Energy Saving

Energy-saving solutions

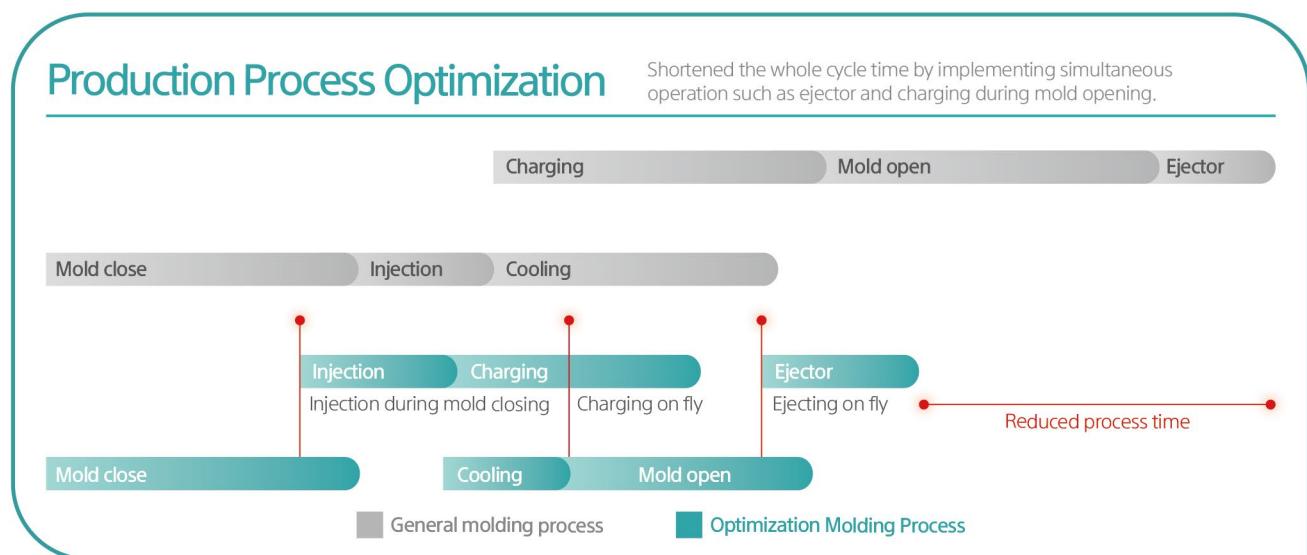
Servo systems precisely control the energy consumption of motors for each process and reduce unnecessary power and resource consumption to ease user's burden.



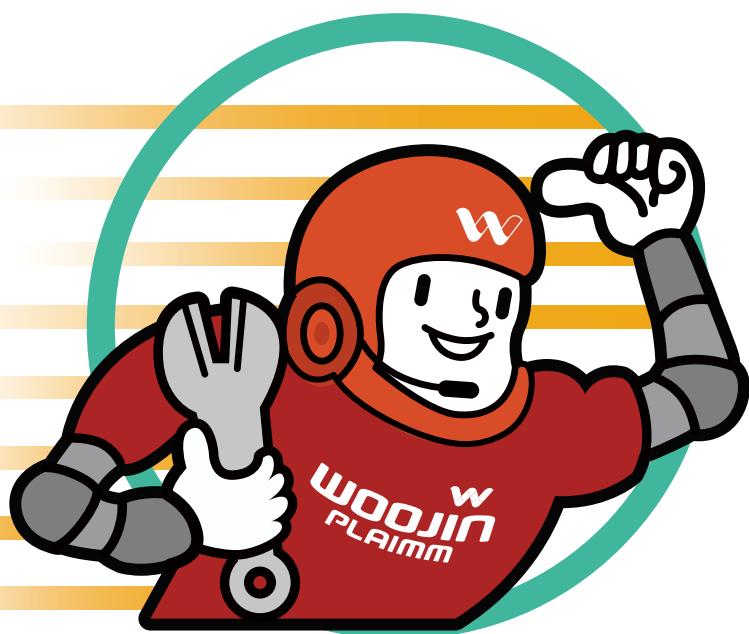
Production process optimization

Efficient production process optimization solution

Reducing overall process time means improving productivity and saving energy, and reducing process time by implementing simultaneous operations such as charging on the fly and ejecting on the fly.



SPEED CLUB



Dispatches A/S team within 24 hours

Our A/S experts will immediately diagnose the issue by the APP and reach your place within 24 hours.

Dedicated B/S(Before service) team

Our B/S experts routinely visit customers to check condition of machine and to provide them with technical advice, so that we can ensure maximized productivity of the machines we supplied.

Mobile phone based APP support

Customers can review A/S progress in real time and manage the process.

Warranty extension

We insure quality of main parts.

Service Center



We operate an integrated AS control tower for real-time monitoring of SPEED CLUB mobile application and efficient service. Experts from each field are always on standby to assign technically qualified engineers through real-time meetings.

CONTACT

Woojin Plaimm worldwide (Sales & Service)

HQ

WOOJIN PLAIMM
100, woojinplaimm-ro, jangan-myeon, boeun-gun,
chungcheongbuk-do, Korea

T.+82. 43. 540. 9000
F.+82. 43. 543. 1420
E.info@wjpim.com

International sales department

| | | | | | |
|--------------------|---|----------------------|--|-----------------------|---|
| U.S.A Incorp. | Chicago. +1. 312. 718. 6780 Atlanta. +1. 334. 339. 2212 Detroit. +1. 224. 500. 5085 E.us@wjpim.com | Mexico Incorp. | Monterrey. +52. 81. 1090. 8726 Queretaro. +52. 181. 1555. 4286 Tijuana. +52. 166. 4281. 3001 E.mx@wjpim.com | Austria Incorp. | T.+43. 2256. 20413 E.office@woojin.at |
| China Incorp. | T. +86. 574. 8680. 6088 E.cn@wjpim.com | Vietnam Branch | Hanoi. +84. 222. 3906. 797 Hochiminh. +84. 28. 3772. 0028 E.vn@wjpim.com | Poland Branch | T.+48. 513. 211. 177 E.ploffice@wjpim.com |
| Turkey Branch | T. +90. 216. 290. 1483 E.tr@wjpim.com | Russia Branch | T. +7. 495. 245. 0073 E.ru@wjpim.com | Philippines Branch | T.+63. 2. 822. 2979 E.ph@wjpim.com |
| Thailand Branch | Bangkok. +66. 2. 745. 4146 Chonburi. +66. 3. 303. 1743 E.thailand1@wjpim.com | Egypt Branch | T. +20. 10. 9796. 9733 E.eg@wjpim.com | Japan Branch | T.+81. 52. 919. 7775 E.jp@wjpim.com |
| India Branch | Chennai. +91. 44. 4280. 9744 Anantapur. +91. 938. 406. 0148 E.in@wjpim.com | Bangladesh Branch | T. +88. 170. 852. 3802 E.bd@wjpim.com | Slovakia Branch | T.+421. 903. 207. 420 E.sk@wjpim.com |
| | | Indonesia Branch | Jakarta. +62. 21. 8370. 1281 Cikarang. +62. 21. 8992. 4411 E.id@wjpim.com | Malaysia Branch | Kuala Lumpur. +60. 12. 345. 3590 Johor Bahru. +60. 7. 212. 322 E.my@wjpim.com |

MEMO



MEMO



CopyRight©2021, WOOJIN PLAIMM Co.,Ltd

The brochure is protected by copyright.
Any utilization, which is not expressly permitted under copyright legislation,
requires the previous approval of WOOJIN PLAIMM

* The product images and specifications might be changed without any prior notice for optional purpose and/or quality improvement.
* This is an updated content as of January 29, 2021. (The specifications may differ from the actual selling device.)