Introduction

As one of the most innovative robotics automation market leaders today, we offer unique solutions with a full line of robotics systems. Our broad robotics line range enables us to offer precisely the right solution, even for highly specialized tasks with top load and side load options. HYRobotics has developed and manufactured robots for plastics injection molding machines since 1988. HYRobotics offers a diverse line of products, from 30 tons to 4,000 tons, providing automation from simple to complex for customers. The products line up include robots for sprue and parts removal, to fully integrated factory automation for insert molding, de-gating and in-mold labeling, and parts stacking. We offer turnkey custom-designed machines to supplement your automation needs. The HYRobotics staff is fully trained and knowledgeable about plant automation, and know the value of productivity. HYRobotics is a dedicated robotics manufacturing company with an ISO 9001 certified environment for high quality control system and an enterprise Resource Planning System has been implemented to maximize customer satisfaction with fast technical support. Our technical innovation and consistency will strengthen the value of your manufacturing productivity in every corner of the world.
History of HYROBOTICS

- 1988.02 Established company.
- 1993.10 Acquired “Q Mark”(Quality assured company).
- 1996.07 Increase the productivity a tourney — a gold statue(Inchon).
- 1996.09 Established “Technical Research Institute”.
- 1997.04 Awarded 21th “Productivity Grangprize” by the President of South Korea.
- 2000.07 Developed 4000 tons Servo Robot for the first time in Korea.
- 2002.04 Developed intelligent 7 axis take-out robot.
- 2003.09 ERP Success Story Presentation for Incheon Chamber of commerce and industry.
- 2004.04 Traverse take out robot developed for 2 Color injection molding machine.
- 2004.04 Establishment HYRobotics USA (St.Louis Missouri, USA) “HYRobotics Corp.”
- 2004.11 Acquired CE Mark (TOPIV Series).
- 2005.03 An office building moving.
- 2005.04 Patent Registration “Insert Molding Take of Automation”.
- 2007.05 Patent Registration “Inspection method and Inspection equipment for pre-insert molded products”.
- 2007.05 CE Certification acquired for all line of HYRobotics Take Out Robot.
- 2008.04 Establishment HYRobotics Indonesia (Jakarta, Indonesia) “HYRobotics Corp”.
- 2009.06 Participated NPE2009 in Chicago,USA.
- 2012.06 Selected “Family Company” by Industrial Bank of Korea (IBK).
- 2012.07 Make an agreement with the train technical professional center about consortium.
- 2012.10 Selected Visionary company, Incheon.
NEXIA-W Series
NEXIA-E-600S, 800S, 1300S, 2000S

Features
- Injection Molding Machine: 300 ~ 4000 tons
- Servo Motor Axis: Max 5 Axis
- Guide: High Strength Linear Motion Guide
- Vertical: Telescopic
- Vertical Arm Structure: Telescopic Arm (2 Step)
- Controller: HVNC-700 (Body Attached control box)
HYNC-700 realized easy and simplified motion control for sophisticated injection molding robot automation and provides color touch screen, servo jog button, and play back step by step motion control.

Function and reliability approved by North America automotive molders like supplier for Ford, Chrysler and Hyundai, Kia, Samsung and LG electronics.

**General Description**

**Servo Origin**
Initial screen for searching origin point for servo motor.
As motion order of ascent, kick, traverse. Possible to keep the robot away from crashing to the mold and machine with jog button before searching origin.

**Main Screen**
Easy robot maintenance, setup and sample collection, Mold management, and showing auto mode for fore working job after searching origin of servo motor. Error history list included.

**Mold Management**
Mold programs can be made, opened, saved, restored, copied, edited easily. Connected to the step setting mode. Mold program can be stored up to 99 with standard 20 step size (1 mold program can go up to 80 steps)

**Manual Mode**
Vacuum, chucking, grip, nipper can be manually operated, In/Out/Interlock signal can be monitored in the screen. On the right slide, jog membrane button move the robot arm to the required position.

**Step Screen**
Step selection screen can add each step position, motion, edit with standard 4 main position easily, simplified step by step motion system. Step can be added with add position and motion up to 80 steps. Jog button stop robot between servo position.

**Take out method screen**
Take out method can be selected by suction, chucking, gripping with simplified icon. Also spare output can be selected during any step.

**Position selection**
EOAT position can be selected by membrane jog button with easy speed adjustment, also additional position can be added easily with "Add Position" icon.

**Palletizing screen**
From one cavity to multi cavity product can be palletized from default release position with adding pitch and numbers by traverse, kick, and ascent layer at the main and sub position. (Release 2, 3, 4 need optional release valve)

**Insert grip position**
This screen is for multi cavity insert loading application with traverse pitch to kick pitch stroke. Specially designed for pre-insert molding application.

**Delay time input**
Delay time can stabilize the operation of each motion in the auto mode.
## Dimension

<table>
<thead>
<tr>
<th>Model</th>
<th>Traverse Stroke mm (Inches)</th>
<th>Vertical Stroke mm (Inches)</th>
<th>Kick Stroke mm (Inches)</th>
<th>Electric Consumption</th>
<th>Air Consumption (normal/cycle)</th>
<th>Maximum payload kg (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEXIA-600SW</td>
<td>2000 (78.7)</td>
<td>1300 (51.2)</td>
<td>800 (31.5)</td>
<td>Single Phase AC220V 11.8A</td>
<td>8</td>
<td>10 (22)</td>
</tr>
<tr>
<td>NEXIA-800SW</td>
<td>2500 (98.4)</td>
<td>1600 (63.0)</td>
<td>900 (35.4)</td>
<td>Single Phase AC220V 13.7A</td>
<td>10</td>
<td>15 (33)</td>
</tr>
<tr>
<td>NEXIA-1000SW</td>
<td>3000 (118.1)</td>
<td>1800 (70.9)</td>
<td>900 (35.4)</td>
<td>Single Phase AC220V 13.7A</td>
<td>10</td>
<td>15 (33)</td>
</tr>
<tr>
<td>NEXIA-1300SW</td>
<td>3500 (137.8)</td>
<td>1800 (70.9)</td>
<td>1200 (47.2)</td>
<td>3 Phase AC220V 17.7A</td>
<td>19</td>
<td>20 (44)</td>
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<tr>
<td>NEXIA-1800SW</td>
<td>3500 (137.8)</td>
<td>2100 (82.7)</td>
<td>1200 (47.2)</td>
<td>3 Phase AC220V 17.7A</td>
<td>19</td>
<td>20 (44)</td>
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<tr>
<td>NEXIA-2000SW</td>
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<td>1500 (59.1)</td>
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<td>27</td>
<td>40 (88)</td>
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<tr>
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<td>2500 (98.4)</td>
<td>1500 (59.1)</td>
<td>3 Phase AC220V 31.4A</td>
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<td>50 (110)</td>
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<td>NEXIA-3000SW</td>
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<td>3000 (118.1)</td>
<td>2000 (78.7)</td>
<td>3 Phase AC220V 25.5A</td>
<td>100</td>
<td>80 (176)</td>
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