Safety precautions

- Before using the robots, review all documentation including operating instructions and other attached documents. Familiarize yourself with the contents in order to ensure proper robot operation.
- When a robot is to be used for an application where robot trouble or operating errors may directly threaten the life or cause physical harm to personnel, a careful examination of its intended use is required. Contact a Nachi-Fujikoshi sales representative to provide details of the intended use.
- Photos used in this document show the robots without safety fences, equipment, and devices that are required to comply with the applicable laws and regulations for ensuring safety. These photos are only provided to illustrate what is being described.
- The external appearances, specifications, etc. of the products portrayed in this catalog are subject to change without notice due to improvements in performance.
"Nimble" - performs actions with ease to create a smooth workflow.

Impressive size and mammoth strength allows for fast operations.

Designed for handling delicate processes while maintaining the flow of movement.

Applicable for handling, assembly, deburring, sealing, resistance welding, and arc welding.

Presto
MR MC VS STF LP NB NV series

"Nimble" - performs actions with ease to create a smooth workflow.

Forte
Handles heavy loads
SC series

Impresses size and mammoth strength allows for fast operations.

Artis
Glass substrate transfer
SCC STCF SJ series

Designed for handling delicate processes while maintaining the flow of movement.

Fast, Strong, and Accurate.
Handling, Assembly, De-burring, and Sealing

The Presto Series is the best partner for manufacturing. The Series support a wide range of customers’ needs such as handling, assembly, de-burring, sealing, spot welding and arc welding.

**Presto**

**LP130/180**
4-axis palletizing robot
This palletizing robot is very fast and super rigid. Wide range of loading operations packed into a small space to further increase speed and performance on packing lines.

**Presto**

**MR35/50**
Handling Robot with 7-axis Range-of-Motion
The MR35/50 Robot also employs our 7-axis structure concept. The MR35/50 robots come with an IP67 rating as standard, so they can work in various conditions to improve productivity through robotic automation.

**Presto**

**MC20/10L**
Best Handling Robot in Its Class
This robot employs the new 7-axis structure concept and 20 kg in a compact body with a powerful load capacity. The robot’s multiple positions allow for a more compact layout.

**Presto**

**MC35/50/70**
Best Handling Robot in Its Class
The smallest footprint and the widest operation range in its class. This is the latest evolution of multi-purpose robots.

**Presto**

**VS05G/B/W/BW VS05LG/B/W/BW**
Compact, High-Precision Handling Robot
With optimal speed and precision in its class, this robot is perfect for delicate processes.

**Presto**

**MR20/20L**
Handling Robot with 7-axis Range-of-Motion
The MR20/20L is your partner for improving productivity. With maneuverability at the top of its class, it has a full set of functions that support a variety of applications and jobs.

The Presto Series is the best partner for manufacturing. The Series support a wide range of customers’ needs such as handling, assembly, de-burring, sealing, spot welding and arc welding.

**Presto**

**LP130/180**
4-axis palletizing robot
This palletizing robot is very fast and super rigid. Wide range of loading operations packed into a small space to further increase speed and performance on packing lines.

**Presto**

**MR35/50**
Handling Robot with 7-axis Range-of-Motion
The MR35/50 Robot also employs our 7-axis structure concept. The MR35/50 robots come with an IP67 rating as standard, so they can work in various conditions to improve productivity through robotic automation.

**Presto**

**MC20/10L**
Best Handling Robot in Its Class
This robot employs the new 7-axis structure concept and 20 kg in a compact body with a powerful load capacity. The robot’s multiple positions allow for a more compact layout.

**Presto**

**MC35/50/70**
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**MR20/20L**
Handling Robot with 7-axis Range-of-Motion
The MR20/20L is your partner for improving productivity. With maneuverability at the top of its class, it has a full set of functions that support a variety of applications and jobs.

The Presto Series is the best partner for manufacturing. The Series support a wide range of customers’ needs such as handling, assembly, de-burring, sealing, spot welding and arc welding.
Applications

**Presto**

**ST**

133F/166F/210F
133TF/166TF/210TF

Fastest robot in its class.

The fastest operating speed in its class. Dramatically increases efficiency on any production site with environmentally friendly designs.

**Presto**

ST70L/100

Compact, Multi-Purpose Robot

A compact body and powerful load capacity offers the same wide range of operations as previous models. This robot is perfect for mounting a lightweight spot-welding gun.

**FLEXhand**

Multipurpose gripper for handling robot.

- Flexible to Various Work Shapes
- Synchronized to robot operation as an additional axis
- Big Stroke and Strong Gripping Force
  - 120 mm claw stroke allows handling of various work sizes
  - Maximum gripping force is 3,600N (total all digits)
- Do Not Drop a Work While PowerDown
  - Mounting a function to keep holding a work even during power down

**Vision**

The vision function of these robots offers a multitude of applications. The robots are capable of a wide variety of configurations for systems consisting of a variety of workpieces and work conditions.

- Synchro Vision
- Vision system tracks conveyor belt
- Laser with 3D sensor

**Seam Welding**

Features of Robot-Mounted Seam Welding

- Synchronized Rotation of Electrodes
- Synchronization of robot speed and rotation of electron rollers operations is simple
- Electron Dress Function
  - Rotation of the electrode ring can be accomplished when the robot is stopped during electron dress operation
- Weld Change for Different Speeds
  - A maximum of 5 different welds and speeds can be programmed during one continuous weld

- Mounting a function to keep holding a work even during power down

**Flexibile to Various Work Shapes**

- 120 mm claw stroke allows handling of various work sizes
- Maximum gripping force is 3,600N (total all digits)

**Servo Gun with Welding Pressure Feedback**

- Servo Gun with Welding Pressure Feedback
- Ancillary equipment for spot welding and other welding robots' management

**Offline Teaching Automatic Compensation System**

- 2-axis movement for easy installation
- High-accuracy compensation for accurate welding

**Gripping round objects**

**Gripping square objects**
Handling of Heavy Loads

The Forte Series of robots showcases NACHI’s ability to handle heavy loads with large vertical articulation. Having the largest load capacity in the world, the Forte series robots can transport heavy loads previously accomplished by special machinery.

Forte SC300F/400L/500/700

Robots for Handling Heavy Loads

These robots are the only ones in the world that can transport heavy loads, such as car bodies, previously done by specialized machinery.

Lifter

A maximum of 4 pillars can simultaneously transport heavy and long items up and down.

Unrestricted Revolving Worktable for Heavy Loads

Available standard for standard 2 ton and large capacity 4 ton.
Glass Substrate Transferring

Transferring large flat panel displays requires not only the ability to handle heavy objects, but also the dexterity to quickly and gently carry delicate glass substrates. The Artis Series has the exceptional characteristics to meet these demands.

**Artis SC400LC**
Clean Robot with 6-axis Vertical Articulation
Unique robot can transfer multiple configurations of 10th generation glass substrates.

**Artis ST133CF/166CF/210CF**
Vertical articulated clean robot has great loading capabilities
Improved damping and reduced cycle times by increasing speed and rigidity
Excellent for moving heavy items with a maximum load capability of 210 Kg (ST210CF).

**Artis SJ80C/120C**
Robots Designed for Transferring Glass Substrates
Perfect for horizontal transfer of 7th generation (SJ80C) through 9th generation (SJ120C) and other various-sized glass substrates.

**Artis SC400LC**

**Artis SJ120C**

**Artis ST133CF**

**Loading a cassette**
Substrate size: 2,500 x 2,200

**Unloading glass substrate from a cantilever pallet**
Substrate size: 2,500 x 2,200
AX Controller & SupportWare

The AX Series intelligent robot controller is based on WindowsNT™. The teach pendant centrally manages a network of visual and force sensors that allow for easy operation of robots and additional axes. Various support software provides information on robot conditions and safe operation.

AX Controller

- Easy operation using the touch panel
- Programming using the software PLC
- Built-in electronic manual for easy operation
- Ergonomic design enhances comfort

AX on Desk

Robot programming tool incorporated into your office computer!

AX on Desk allows programming to be conducted on an office computer. This software is used to:

- Conduct applicable analysis and interference checks prior to installation
- Conduct offline teaching
- Simulate precise cycle times
- Edit the sequence ladder of the software PLC
- Use as an instruction tool for robot operation

Use for a variety of other functions.
## Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>MC20</th>
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<th>MC25</th>
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<th>MC70</th>
<th>V50GB</th>
<th>V500LG</th>
<th>SC70D</th>
<th>SC50D</th>
<th>SC400S</th>
<th>SC400LC</th>
<th>SF130CF</th>
<th>SF160CF</th>
<th>SF180CF</th>
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**Note:** The table provides specifications for various models of robotic arms, including details on payload capacity, maximum velocity, loading weight, and other technical specifications. For detailed information, please refer to the respective model specifications provided by the manufacturer.
Centralized Robot Monitoring System

The centralized robot monitoring system offers monitoring of multiple robots connected by a network. The system supports preventative maintenance by collecting statistical data, operation history, and maintenance support data to keep the robots operating smoothly.

Robot Operation Monitoring System

Remote Failure Analysis

Robot Systems

System Products
Nachi's system engineering team puts its wealth of experience to work for you, providing system solutions that are easy to use along with high-cost performance.

Post-Installation Service
From Setup Through Startup
Nachi's skilled technicians provide support during the installation process, from setup to connection, teaching, movement, and supervision, until the line is fully operational.

Quick Response to Emergency Calls
Nachi's specialized technicians are "on-call" to immediately respond to customer emergencies.

Reliable Support from Remote Locations
Robots can be operated remotely when placed online, allowing specialized service professionals to provide accurate support to worldwide locations.

The Right Parts When You Need Them
Nachi's service locations are linked via a network to quickly deliver required parts. Nachi stocks important maintenance parts. All professionals to provide accurate support.

Periodic Inspections
As a trusted and reliable partner, Nachi performs periodic inspections to extend the life of your robot.

Overhauls
Nachi provides a selection of services suited to the conditions of your robot and can also provide temporary replacement robots to keep your line operating during repairs.

Offline Program System
Nachi's skilled technicians provide support during shutdown periods, until the line is fully operational.

Nachi's system engineering team puts its expertise to work for you, providing system solutions that are easy to use along with high-cost performance.

Periodic Inspections
As a trusted and reliable partner, Nachi performs periodic inspections to extend the life of your robot.

Overhauls
Nachi provides a selection of services suited to the conditions of your robot and can also provide temporary replacement robots to keep your line operating during repairs.

Remote Training Course
Nachi provides a curriculum to train operators about robot operations, daily inspections, basic maintenance, and safety regulations.

Overseas Subsidiaries

Amercia

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