7-AXIS ULTRA-FLEX WELDING ROBOT

FD-NB4S
Reach: 1435mm
Payload: 4 Kg
Axes: 7
Repeatability: ±0.08mm

FD-NV6S
Reach: 1427mm
Payload: 6 Kg
Axes: 7
Repeatability: ±0.08mm

FD-NV20S
Reach: 1710mm
Payload: 20 Kg
Axes: 7
Repeatability: ±0.08mm

FD-NV6LS
Reach: 2006mm
Payload: 6 Kg
Axes: 7
Repeatability: ±0.08mm

FD-NV6LS
Reach: 2006mm
Payload: 6 Kg
Axes: 7
Repeatability: ±0.08mm

FD11 Robot Controller
- Windows XP based open architecture
- Large memory capacity and 40 Input / 40 Output control signals
- Advanced PLC functions allow for ladder diagram editing directly through the teaching pendant
- Network capabilities – connects to Ethernet, DeviceNet, and PROFIBUS connections (may require additional hardware)

FD TEACHING PENDANT
Small And Light
The FD Teaching Pendant is 27% lighter and 40% smaller than our previous model, making tight spaces a non-issue and teaching sessions easier.

Simple Backup
With this feature, you can now back up all data directly from the teaching pendant. A USB memory slot makes backing up data quick and easy.

7-AXIS ULTRA-FLEX WELDING ROBOT

888-OTC-ROBO

www.daihen-usa.com

AVOIDS INTERFERENCE  HIGH-DENSITY INSTALLATION  OPTIMUM TEACHING  SPACE & COST SAVING  BUILT-IN CABLES

Demonstration Centers
Novi, MI Branch Office
Davenport, IA Branch Office
Atlanta, GA Branch Office

Charlotte, NC Branch Office
Monterrey, Mexico Branch Office
Leon, Mexico Branch Office

DAIHEN Inc.  www.daihen-usa.com

BUILT-IN CABLES

North American Corporation Headquarters
1400 Blauser Dr, Tipp City, Ohio 45371 / Phone: (937) 667-0800
THE 7-AXIS ROBOT PROVIDES UNMATCHED FREEDOM OF MOVEMENT

AVOIDS INTERFERENCE
Interference with tooling and/or work is easily avoided.
- Rotation of the seventh axis enables interference avoidance without changing the position and/or attitude of the tool.
- Maintaining the optimum attitude at all times results in the enhancement of weld quality.

6-AXIS ROBOT FD-B4
7-AXIS ROBOT FD-B4S

Interference with the work can be avoided while maintaining the most suitable torch attitude for welding.

OPTIMUM TEACHING
Easy teaching, even for a two-electrode torch.
Teaching a welding line only to the leading torch automatically corrects the position and attitude of the robot so the following torch will also follow the same welding line.
Changing the torch attitude without changing the arm attitude provides freedom from interference even after the automatic correction.

Example of optimum attitude teaching with a two-electrode torch

6-AXIS ROBOT FD-B4
7-AXIS ROBOT FD-B4S

HIGH-DENSITY INSTALLATION
Multiple 7-axis robots create a compact production line.
Thanks to flexible attitude changes by using the seventh axis, robots can easily move around obstructions.
Placing multiple robots in close proximity allows for efficient integration and can shorten the manufacturing process.

6-AXIS ROBOT FD-B4
7-AXIS ROBOT FD-B4S

• One arm interferes with another, making it necessary to separate the welding process, which increases the tack time.
• Interference between arms can be avoided, while maintaining the most suitable torch attitude for welding.
• Welding process need not be separated, which shortens the tack time.

SPACE & COST SAVING
The seventh axis may eliminate the need for additional positioners.
Rotation of the seventh axis enables a flexible attitude change when moving around obstructions.
Access to a proper welding position is possible without using a positioner, reducing installation area and costs compared with a conventional 6-axis system.

6-AXIS ROBOT FD-B4
7-AXIS ROBOT FD-B4S

• Rotation of the seventh axis enables interference avoidance without changing the position and/or attitude of the tool.
• Maintaining the optimum attitude at all times results in the enhancement of weld quality.

BUILT-IN CABLES
Weld cables are housed in the J7-axis to avoid interference.
Both internal robot cables and weld cables are built into the J7-axis, making it possible to use the movable full range without interference affecting peripheral devices due to the irregular movement of externally wired cables.

6-AXIS ROBOT FD-B4
7-AXIS ROBOT FD-B4S

Additional cost for positioner
Seventh axis allows robot to move all the way around
Welding cables
Use of a hollow decelerator

6-AXIS ROBOT FD-B4
7-AXIS ROBOT FD-B4S

(7-axis robot)