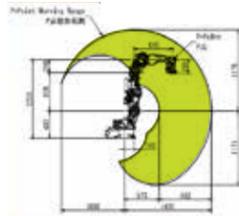
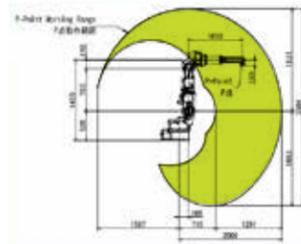


# 7-AXIS ULTRA-FLEX WELDING ROBOT



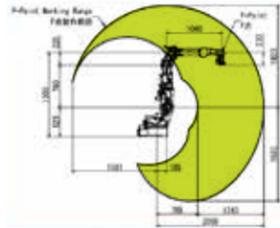
## FD-NB4S

Reach	1435mm
Payload	4 Kg
Axes	7
Repeatability	±0.08mm



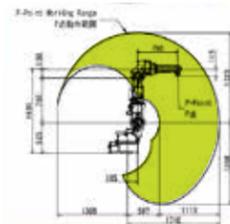
## FD-NV6LS

Reach	2006mm
Payload	6 Kg
Axes	7
Repeatability	±0.08mm



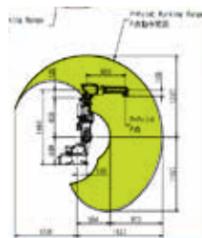
## FD-NB4SLS

Reach	2008mm
Payload	4 Kg
Axes	7
Repeatability	±0.08mm



## FD-NV20S

Reach	1710mm
Payload	20 Kg
Axes	7
Repeatability	±0.08mm



## FD-NV6S

Reach	2008mm
Payload	4 Kg
Axes	7
Repeatability	±0.08mm



## 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

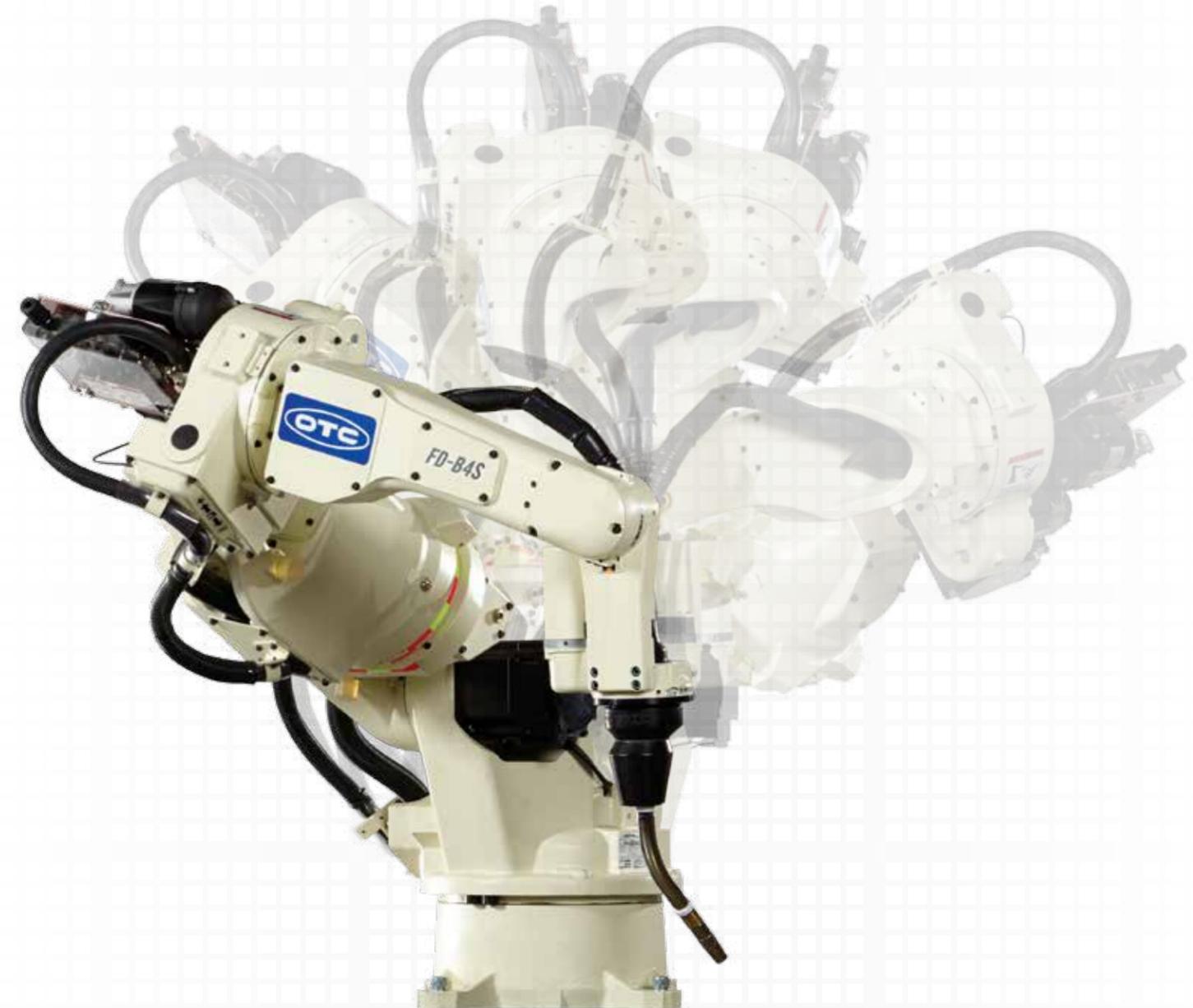
With this feature, you can now back up all data directly from the teaching pendant. A USB memory slot makes backing up data quick and easy.



## 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)

# 7-AXIS ULTRA-FLEX WELDING ROBOT



888-OTC-ROBO

[www.daihen-usa.com](http://www.daihen-usa.com)

AVOIDS INTERFERENCE

HIGH-DENSITY INSTALLATION

OPTIMUM TEACHING

SPACE & COST SAVING

BUILT-IN CABLES

## North American Corporation Headquarters

1400 Blausen Dr, Tipp City, Ohio 45371 / Phone: (937) 667-0800

## 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



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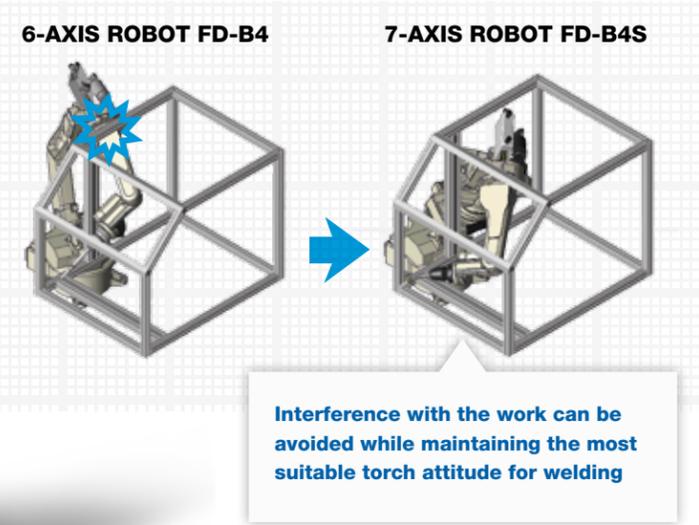
# THE 7-AXIS ROBOT PROVIDES UNMATCHED FREEDOM OF MOVEMENT



## 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.



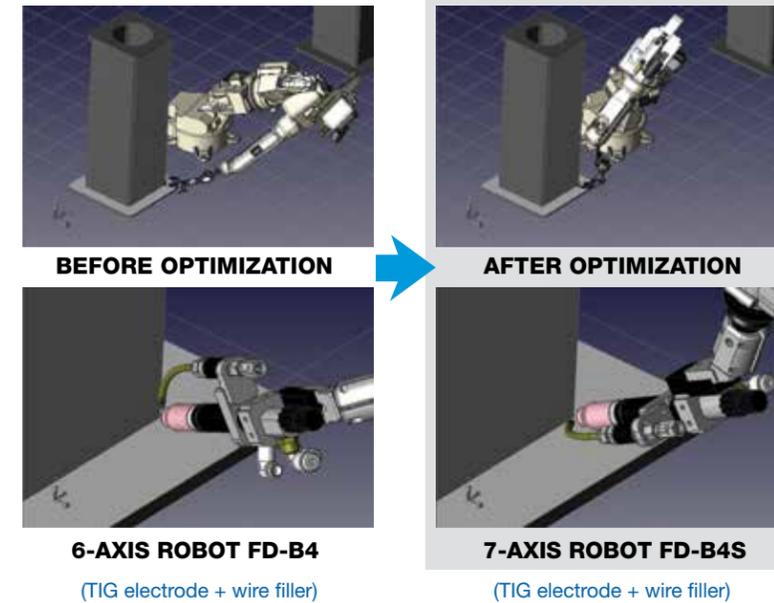
## OPTIMUM TEACHING

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

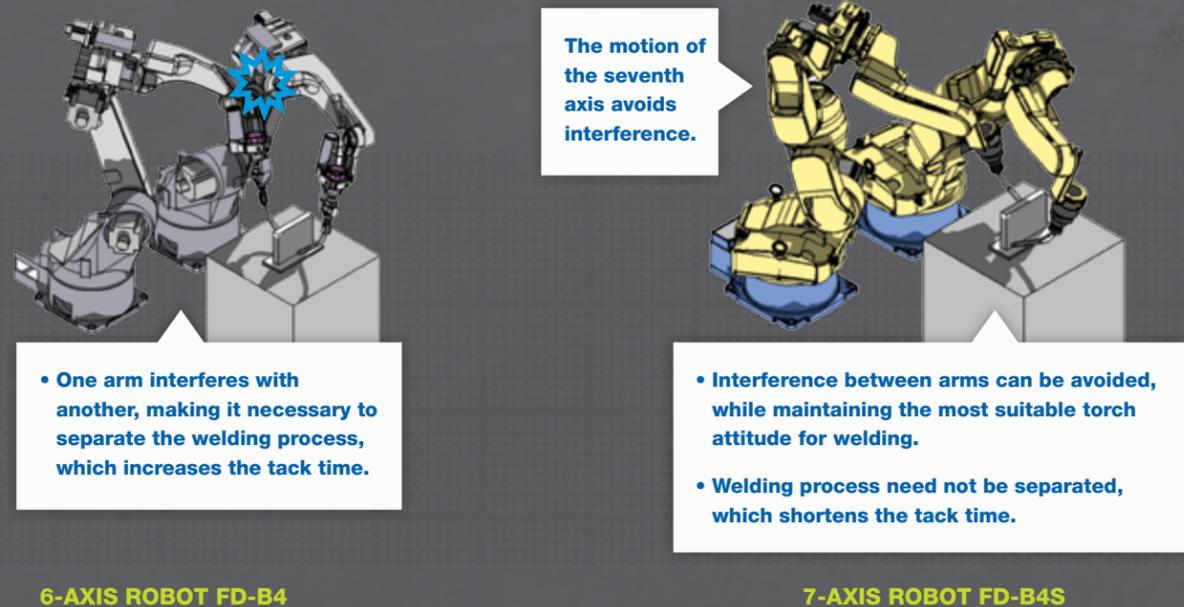


(Cold Tandem GMAW)

## 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.

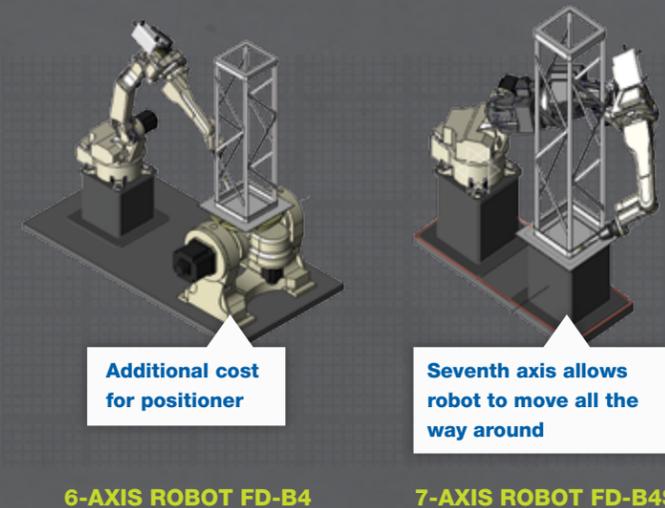


## SPACE & COST SAVING

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.



## 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.

