



OTC DAIHEN EUROPE GmbH

Joining Forces

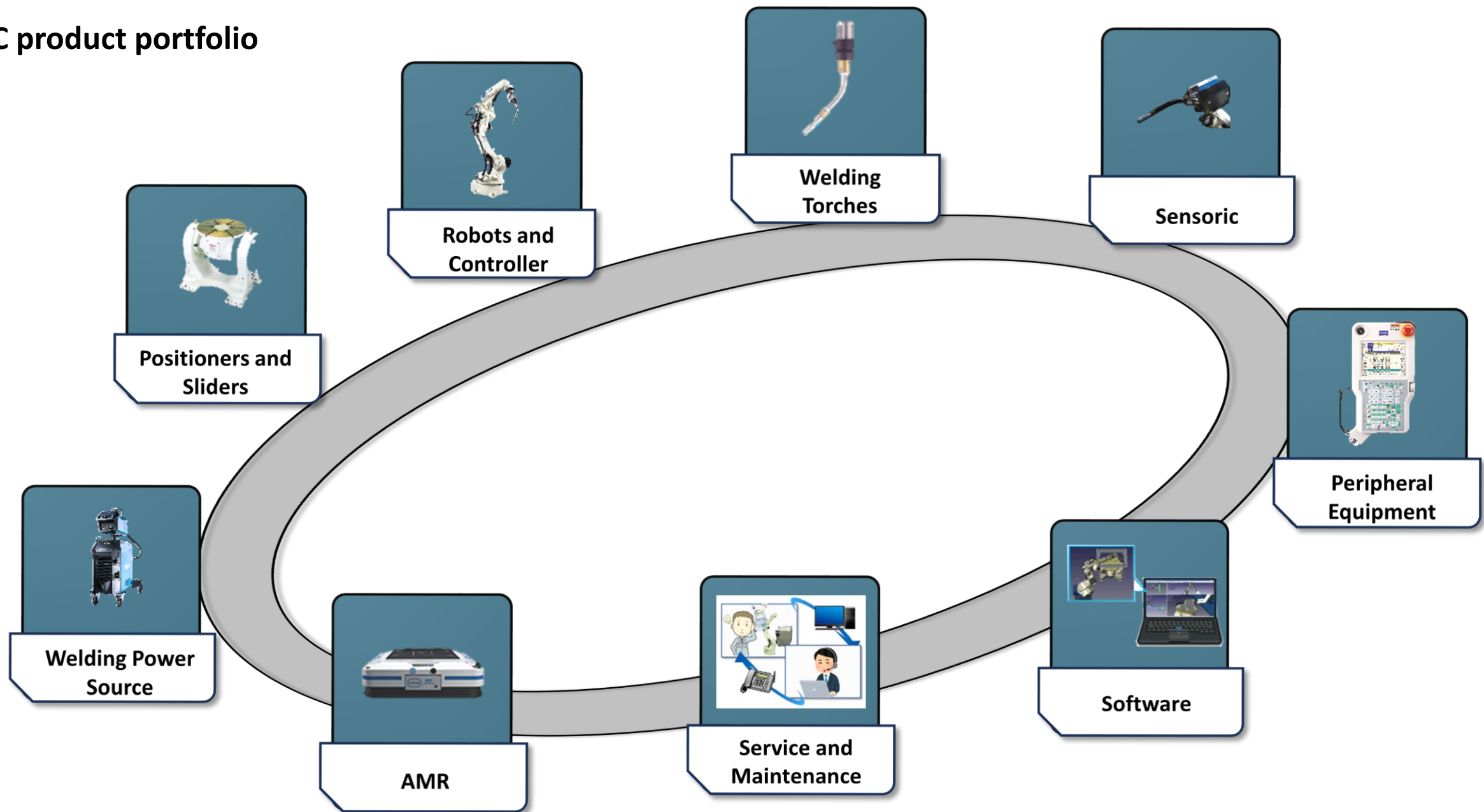
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## Compact robot station

02-2024

CUBE 01-05

# OTC product portfolio



**6-Axis arc robots**

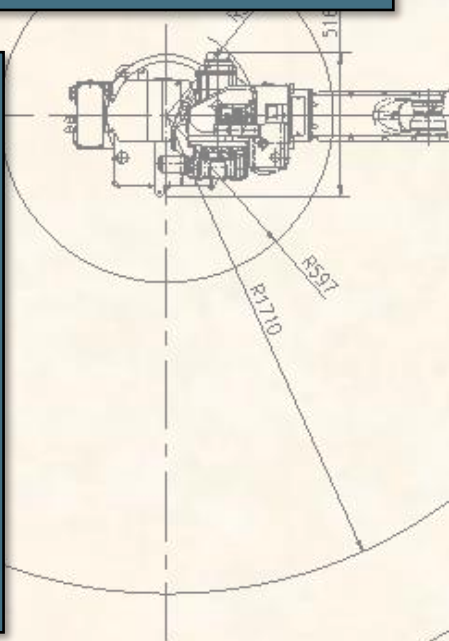
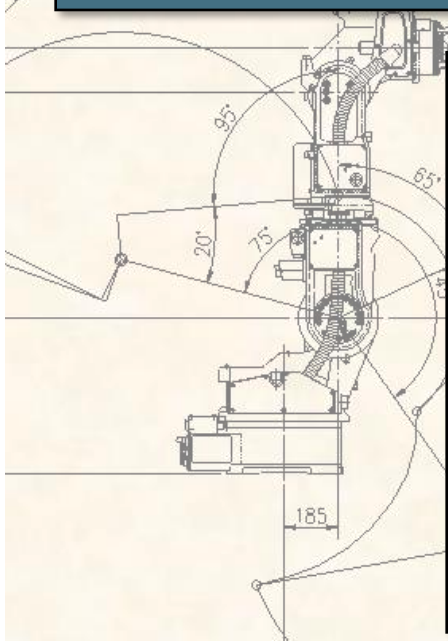


Type	FD-H5	FD-B6	FD-V8	FD-B6L	FD-V8L	FD-V25	FD-A20
Working range	R 866 mm	R 1445 mm	R 1437 mm	R 2008 mm	R 2006 mm	R 1710 mm	R 1664 mm
Max. payload	5 kg	6 kg	8 kg	6 kg	8 kg	25 kg	20 kg
Repetition accuracy	+/- 0.05 mm	+/- 0.08 mm	+/- 0.08 mm	+/- 0.08 mm	+/- 0.08 mm	+/- 0.07	+/- 0.07

**7-Axis arc robots**



Type	FD-BT6	FD-VT8	FD-BT6L	FD-VT8L	FD-VT20
Working range	R 1435 mm	R 1427 mm	R 2008 mm	R 2006 mm	R 1710 mm
Max. payload	6 kg	8 kg	6 kg	8 kg	20 kg
Repetition accuracy	+/- 0.08 mm	+/- 0.08 mm	+/- 0.08 mm	+/- 0.08 mm	+/- 0.08 mm



## 11. CUBE 01



- **Compact arc robot station**
- **Ready for use and cost-efficient**
- **CE / UVV / VDI / DIN**

This compact cell is developed as entry model for the welding automation of OTC DAIHEN EUROPE.

The OTC arc robot and the two fixed working tables ensure a highly effective welding production at cyclic operation on optimized cycle time.

Due to the compact cell design is a shipment by a standard lorry possible. The already assembled and ready for use delivered robot station ensure a prompt production start without a complex installation at customer plant.



### OTC 6-axes-arc-robot, type: FD19-V8

Payload	: 8 kg
Positional repeatability	: ± 0,08 mm
Max. working range (P-Point)t	: ∅ 2804 mm
Mass (weight)	: 140kg



### OTC robot controller, type: FD-19

Max. no. of task programs	: 9999 programs
Max. no. of axes	: 54 axes
General purpose physical I/O	: 40 Input / 40 output
Mass (weight)	: 62 kg (without transformer)
Digital CAN-BUS communication with the OTC welding technology	

### OTC welding technology, type: Welbee WB-P402

Welding current range	: 30 – 400 A
Output voltage range	: 12 – 34 V
Duty cycle	: 280A / 100 %
Mass (weight)	: 62 kg
Digital Inverter technology with a significant improvement of arc stability over the entire performance range	

### OTC robot welding torch, type: RTW5000H (Fe/SuS)

Torch position	: 45°
Max. welding current	: 500 A / water-cooled
Shock sensor	: type SSV

### OTC positioning technology

Type	: fixed working
Payload	: 200 kg
Working height	: 700 mm
Work surface (LxW)	: 1000x800 mm



## 12. CUBE 02



- **Compact arc robot station**
- **Ready for use and cost-efficient**
- **CE / UVV / VDI / DIN**

This compact cell is developed as entry model for the welding automation of OTC DAIHEN EUROPE.

The OTC arc robot and the electrical 180° cycle table ensure a highly effective welding production at cyclic operation on optimized cycle time.

Due to the compact cell design is a shipment by a standard lorry possible. The already assembled and ready for use delivered robot station ensure a prompt production start without a complex installation at customer plant.



### OTC 6-axes-arc-robot, type: FD19-V8

Payload	: 8 kg
Positional repeatability	: ± 0,08 mm
Max. working range (P-Point)t	: ∅ 2804 mm
Mass (weight)	: 140kg



### OTC robot controller, type: FD-19

Max. no. of task programs	: 9999 programs
Max. no. of axes	: 54 axes
General purpose physical I/O	: 40 Input / 40 output
Mass (weight)	: 62 kg (without transformer)
Digital CAN-BUS communication with the OTC welding technology	

### OTC welding technology, type: Welbee WB-P402

Welding current range	: 30 – 400 A
Output voltage range	: 12 – 34 V
Duty cycle	: 280A / 100 %
Mass (weight)	: 62 kg
Digital Inverter technology with a significant improvement of arc stability over the entire performance range	

### OTC robot welding torch, type: RTW5000H (Fe/SuS)

Torch position	: 45°
Max. Belastung	: 500 A / water-cooled
Shock sensor	: type SSV

### OTC positioning technology

Type	: RST-250
Payload	: 2 x 125 kg
180° pivot drive	: Frequency controlled
180° slewing time	: 7 s
Working height	: 700 mm
Work surface (LxW)	: 1000x500 mm

## 13. CUBE 03



- **Compact arc robot station**
- **Ready for use and cost-efficient**
- **CE / UVV / VDI / DIN**

This compact cell is developed as entry model for the welding automation of OTC DAIHEN EUROPE.

The OTC arc robot and the two headstock positioner ensure a highly effective welding production at cyclic operation on optimized cycle time.

Due to the compact cell design is a shipment by a standard lorry possible. The already assembled and ready for use delivered robot station ensure a prompt production start without a complex installation at customer plant.



### OTC 6-axes-arc-robot, type: FD19-V8

Payload	: 8 kg
Positional repeatability	: ± 0,08 mm
Max. working range (P-Point)t	: Ø 2804 mm
Mass (weight)	: 140kg

### OTC robot controller, type: FD-19

Max. no. of task programs	: 9999 programs
Max. no. of axes	: 54 axes
General purpose physical I/O	: 40 Input / 40 output
Mass (weight)	: 62 kg (without transformer)
Digital CAN-BUS communication with the OTC welding technology	



### OTC robot software, Sychromotion

Sychromotion control is a control process in which multiple mechanisms (manipulator, auxiliary axes, etc.) operate simultaneously and the position, posture and speed of the tools is controlled relative to the work. It is also sometimes referred to as cooperative control. F.e. in an arc welding system the manipulator could maintain at all times the optimal torch posture and speed, relative to the work mounted on the positioner.



### OTC welding technology, type: Welbee WB-P402

Welding current range	: 30 – 400 A
Output voltage range	: 12 – 34 V
Duty cycle	: 280A / 100 %
Mass (weight)	: 62 kg
Digital Inverter technology with a significant improvement of arc stability over the entire performance range	

### OTC robot welding torch, type: RTW5000H (Fe/SuS)

Torch position	: 45°
Max. Belastung	: 500 A / water-cooled
Shock sensor	: type SSV



### OTC 1-axis-headstock

Type	: A2PB252-E
Payload (tilt axis)	: 250 kg
Drive	: AC Servo motor
Vmax. Rotary axis	: 150° /s
Mass (weight)	: 110 kg



## 14. CUBE 04



- **Compact arc robot station**
- **Ready for use and cost-efficient**
- **CE / UVV / VDI / DIN**

This compact cell is developed as entry model for the welding automation of OTC DAIHEN EUROPE.

The OTC arc robot and the 180° positioner with a horizontal rotary axis ensure a highly effective welding production at cyclic operation on optimized cycle time.

Due to the compact cell design is a shipment by a standard lorry possible. The already assembled and ready for use delivered robot station ensure a prompt production start without a complex installation at customer plant.



### OTC 6-axes-arc-robot, type: FD19-V8

Payload	: 8 kg
Positional repeatability	: ± 0,08 mm
Max. working range (P-Point)t	: Ø 2804 mm
Mass (weight)	: 140kg

### OTC robot controller, type: FD-19

Max. no. of task programs	: 9999 programs
Max. no. of axes	: 54 axes
General purpose physical I/O	: 40 Input / 40 output
Mass (weight)	: 62 kg (without transformer)
Digital CAN-BUS communication with the OTC welding technology	



### OTC robot software, Sychromotion

Synchronomotion control is a control process in which multiple mechanisms (manipulator, auxiliary axes, etc.) operate simultaneously and the position, posture and speed of the tools is controlled relative to the work. It is also sometimes referred to as cooperative control. F.e. in an arc welding system the manipulator could maintain at all times the optimal torch posture and speed, relative to the work mounted on the positioner.

### OTC welding technology, type: Welbee WB-P402

Welding current range	: 30 – 400 A
Output voltage range	: 12 – 34 V
Duty cycle	: 280A / 100 %
Mass (weight)	: 62 kg
Digital Inverter technology with a significant improvement of arc stability over the entire performance range	



### OTC robot welding torch, type: RTW5000H (Fe/SuS)

Torch position	: 45°
Max. Belastung	: 500 A / water-cooled
Shock sensor	: type SSV

### OTC 2-axis-H-positioner

Type	: HP-1500
Payload (tilt axis)	: 2x200 kg
180° rotary unit	: frequency controlled
Drive	: AC Servo motor
Distance between centers	: 1500mm
Mass (weight)	: 900 kg



## 15. CUBE 05



- **Compact arc robot station**
- **Ready for use and cost-efficient**
- **CE / UVV / VDI / DIN**

This compact cell is developed as entry model for the welding automation of OTC DAIHEN EUROPE.

The OTC arc robot and the two double-support positioner ensure a highly effective welding production at cyclic operation on optimized cycle time.

Due to the compact cell design is a shipment by a standard lorry possible. The already assembled and ready for use delivered robot station ensure a prompt production start without a complex installation at customer plant.



### OTC 6-axes-arc-robot, type: FD19-V8

Payload	: 8 kg
Positional repeatability	: ± 0,08 mm
Max. working range (P-Point)t	: Ø 2804 mm
Mass (weight)	: 140kg

### OTC robot controller, type: FD-19

Max. no. of task programs	: 9999 programs
Max. no. of axes	: 54 axes
General purpose physical I/O	: 40 Input / 40 output
Mass (weight)	: 62 kg (without transformer)
Digital CAN-BUS communication with the OTC welding technology	



### OTC robot software, Sychromotion

Synchronomotion control is a control process in which multiple mechanisms (manipulator, auxiliary axes, ect.) operate simultaneously and the position, posture and speed of the tools is controlled relative to the work. It is also sometimes referred to as cooperative control. F.e. in an arc welding system the manipulator could maintain at all times the optimal torch posture and speed, relative to the work mounted on the positioner.

### OTC welding technology, type: Welbee WB-P402

Welding current range	: 30 – 400 A
Output voltage range	: 12 – 34 V
Duty cycle	: 280A / 100 %
Mass (weight)	: 62 kg
Digital Inverter technology with a significant improvement of arc stability over the entire performance range	



### OTC robot welding torch, type: RTW5000H (Fe/SuS)

Torch position	: 45°
Max. Belastung	: 500 A / water-cooled
Shock sensor	: type SSV

### OTC 2-axis-double-support

Type	: A2PF301-ECN
Payload (tilt axis)	: 300 kg
Drive	: AC Servo motor
Vmax. rotary axis	: 180° /s
Vmax. tilt axis	: 125° /s
Mass (weight)	: 260 kg







***Thank you for your attention***