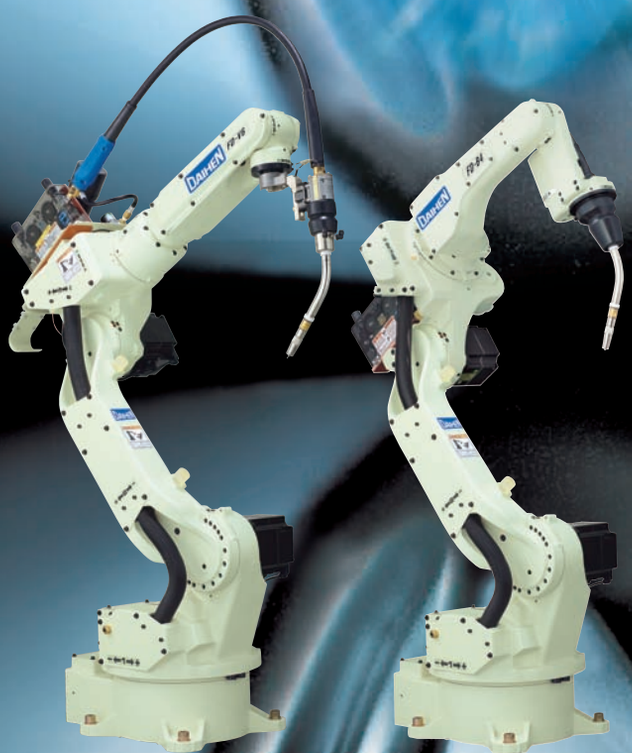
OTC DAIHEN EUROPE

ROBOTER

Welding

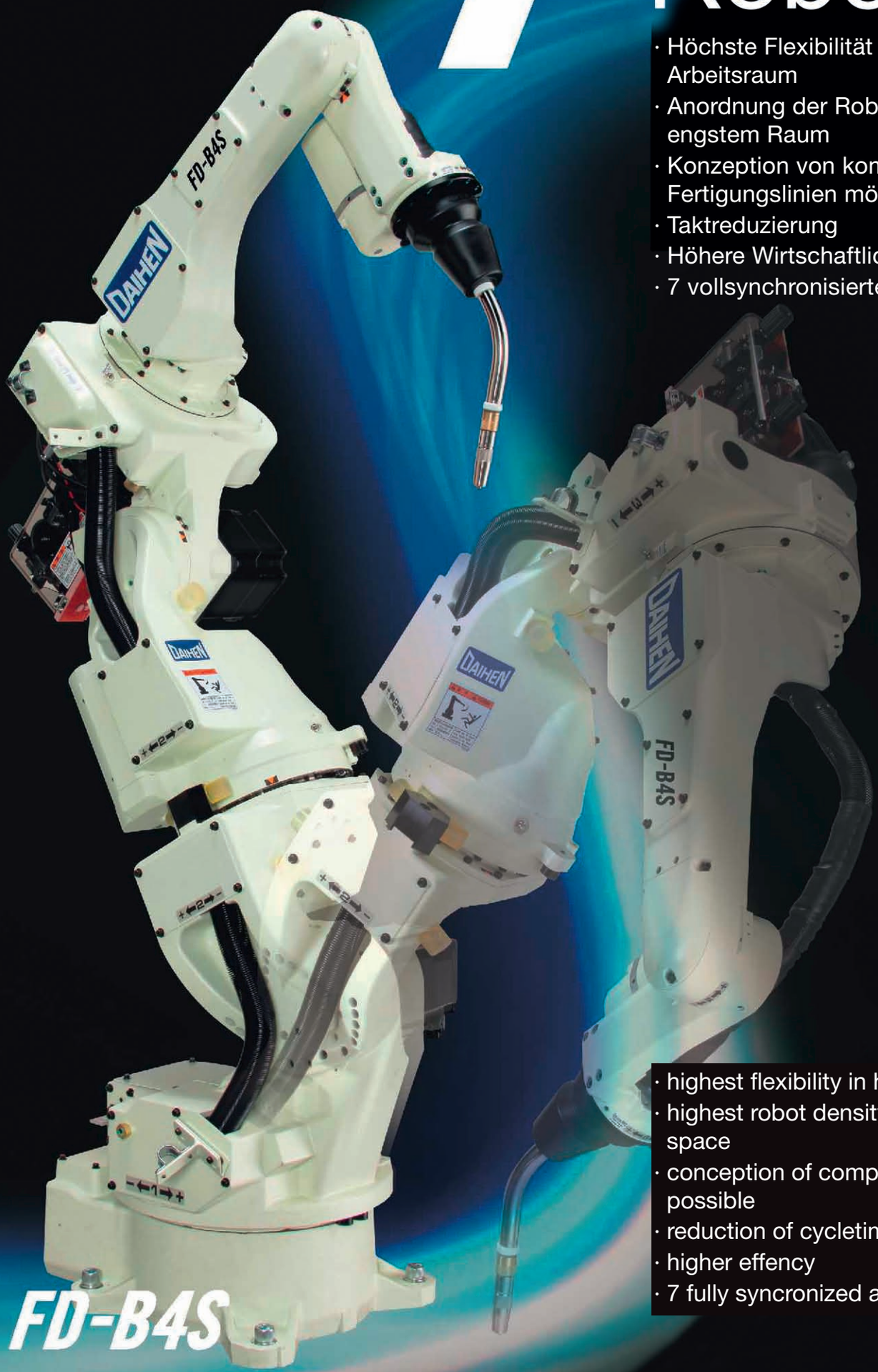


7-Achs-Roboter

OTC DAIHEN EUROPE GmbH

7-Achs-Roboter

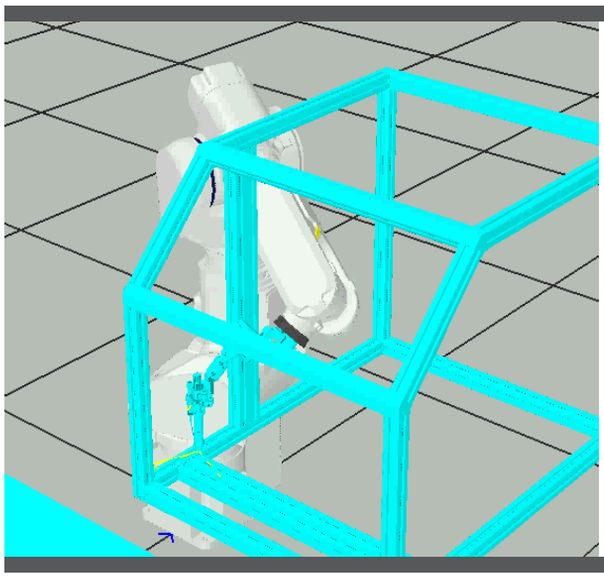
- Höchste Flexibilität in seinem Arbeitsraum
- Anordnung der Roboter auf engstem Raum
- Konzeption von kompakten Fertigungslinien möglich
- Taktreduzierung
- Höhere Wirtschaftlichkeit
- 7 vollsynchronisierte Achsen



- highest flexibility in his working range
- highest robot density per installation space
- conception of compact lines are possible
- reduction of cycletime
- higher effency
- 7 fully syncronized axes

FD-B4S

Konventioneller 6-Achs-Roboter
Conventional 6-Axes Robot

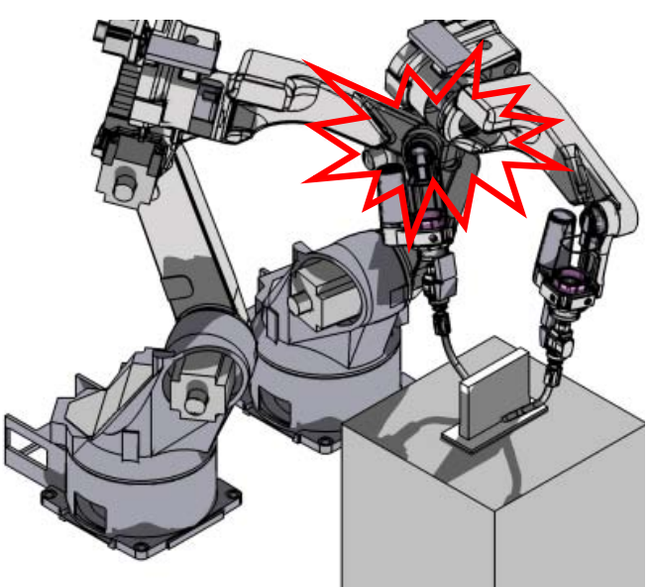


Mit der typischen 6-Achs-Kinematik ist es schwierig bis unmöglich, in enge Bauteile einzutauchen.

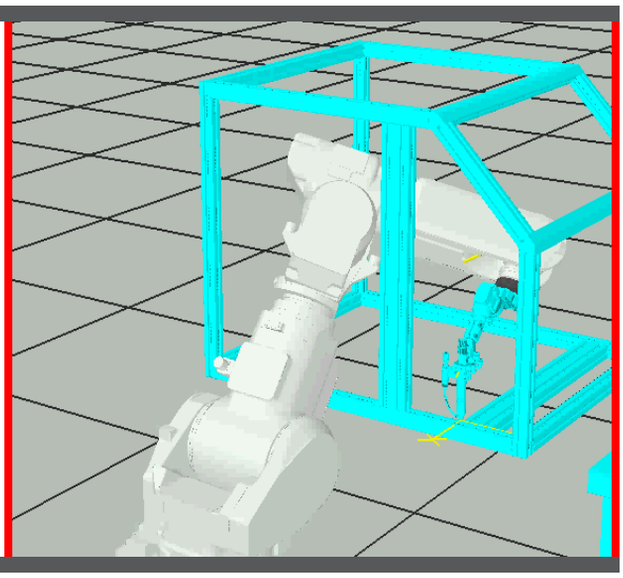
With the typical 6 axes kinematic, it is difficult to impossible to dive into narrow components.

Der durch die typische 6-Achs-Kinematik erforderliche relativ große Einbauabstand zwischen den Robotern ermöglicht auch nicht in allen Fällen das simultane Arbeiten an einem Bauteil.

The required relatively large installation distance between typical 6 axes kinematic does not allow in all cases the simultaneous work on a component.



7-Achs-Roboter
7-Axes Robot

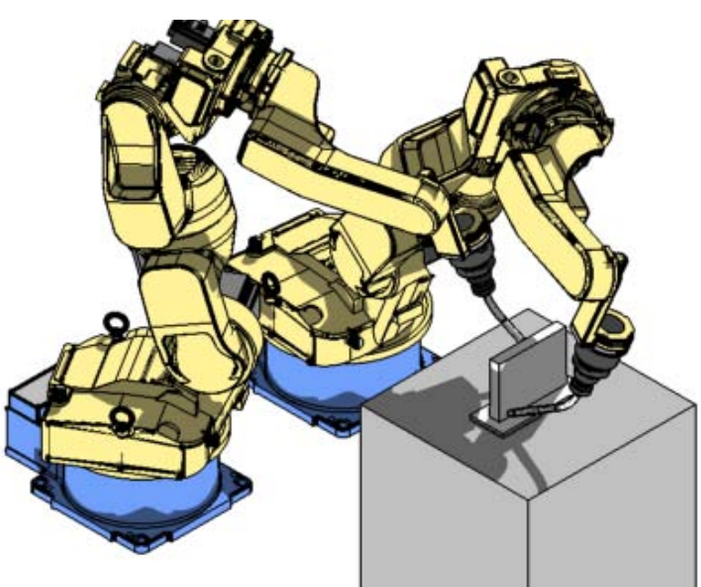


Der erweiterte Freiheitsgrad ermöglicht eine konstante Brennerorientierung beim Eintauchen in enge Arbeitsräume.

The enhanced degree of freedom allows a constant torch orientation when dipping into narrow spaces.

Durch die hohe Flexibilität können Roboter in Fertigungszellen enger zueinander aufgestellt werden, was eine Erhöhung der Roboterzahl pro Bauteil vereinfacht.

The high flexibility of robots in manufacturing cells can be closely situated to each other, which facilitates an increase in the number of robots per part.



Roboter – Technische Daten

Manipulator Specifications

Model			FD-B4S	FD-B4LS	FD-V20S	FD-V6S	FD-V6LS
Kinematic			Vertical artic. type	<	<	<	<
No. of Axes			7	7	7	7	7
P-Point (Working Range)			R 1.411 mm	R 2.008 mm	R 1.710 mm	R 1.427 mm	R 2.006 mm
Maximum Payload Capacity			4 kg	4 kg	20 kg	6 kg	6 kg
Positional Repeatability(*1)			± 0,08 mm	± 0,08 mm	± 0,08 mm	± 0,08 mm	± 0,08 mm
Driving Method			AC Servo Motor	<	<	<	<
Working range	Arm	J1 (Rotation)	± 170°	± 170°	± 170°	± 170°	± 170°
		J2 (Vertical)	-145° ~ +70°	-145° ~ +70°	-145° ~ +70°	-145° ~ +70°	-145° ~ +70°
		J7	± 90°	± 90°	± 90°	± 90°	± 90°
		J3 (Rotation)	-170° ~ +142.6°	-170° ~ +154°	-170° ~ +160°	-170° ~ +149°	-170° ~ +160°
	Wrist	J4 (Rotation)	± 155°	± 155°	± 180°	± 180°	± 180°
		J5 (Bending)	-45° ~ +225°	-45° ~ +225°	-50° ~ +230°	-50° ~ +230°	-50° ~ +230°
		J6 (Rotation)	± 205°	± 205°	± 360°	± 360°	± 360°
Max. speed	Arm	J1 (Rotation)	210°/s	195°/s	195°/s	210°/s	195°/s
		J2 (Vertical)	210°/s	200°/s	190°/s	210°/s	200°/s
		J7	180°/s	160°/s	160°/s	180°/s	160°/s
		J3 (Rotation)	210°/s	200°/s	180°/s	210°/s	200°/s
	Wrist	J4 (Rotation)	420°/s	420°/s	400°/s	420°/s	420°/s
		J5 (Bending)	420°/s	420°/s	400°/s	420°/s	420°/s
		J6 (Rotation)	600°/s	600°/s	600°/s	620°/s	620°/s
Max. playload	Allowable Moment	J1 (Rotation)	10.1 Nm	10.1 Nm	43.7 Nm	11.8 Nm	11.8 Nm
		J2 (Vertical)	10.1 Nm	10.1 Nm	43.7 Nm	9.8 Nm	9.8 Nm
		J3 (Rotation)	2.94 Nm	2.94 Nm	19.6 Nm	5.9 Nm	5.9 Nm
		J4 (Rotation)	0.38 kg/m²	0.38 kg/m²	1.09 kg/m²	0.30 kg/m²	0.30 kg/m²
		J5 (Bending)	0.38 kg/m²	0.38 kg/m²	1.09 kg/m²	0.25 kg/m²	0.25 kg/m²
		J6 (Rotation)	0.03 kg/m²	0.03 kg/m²	0.24 kg/m²	0.06 kg/m²	0.06 kg/m²
Ambient Temp./Humidity			0 ~ 45°, 20 ~ 80%	<	<	<	<
Mass (weight)			189 kg	321 kg	321 kg	178 kg	316 kg
Upper arm max. Carrying capacity(*2)			10 kg	10 kg (Note 3)	20 kg (Note 2)	10 kg	20 kg (Note 2)
Origin Return			Note 3	Note 3	Note 3	Note 3	Note 3
Installation Position			Floor type	Floor type	Floor type	Floor type	Floor type

Note 1: Measured value obtained after sufficient repetition of automatic operation for stabilizing conditions.
Note 2: When the output flange of the wrist axes is loaded with maximum payload capacity.
Note 3: Positional data protected by battery-backed storage inside the manipulator.
F = Floor W = Wall C = Ceilling

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