

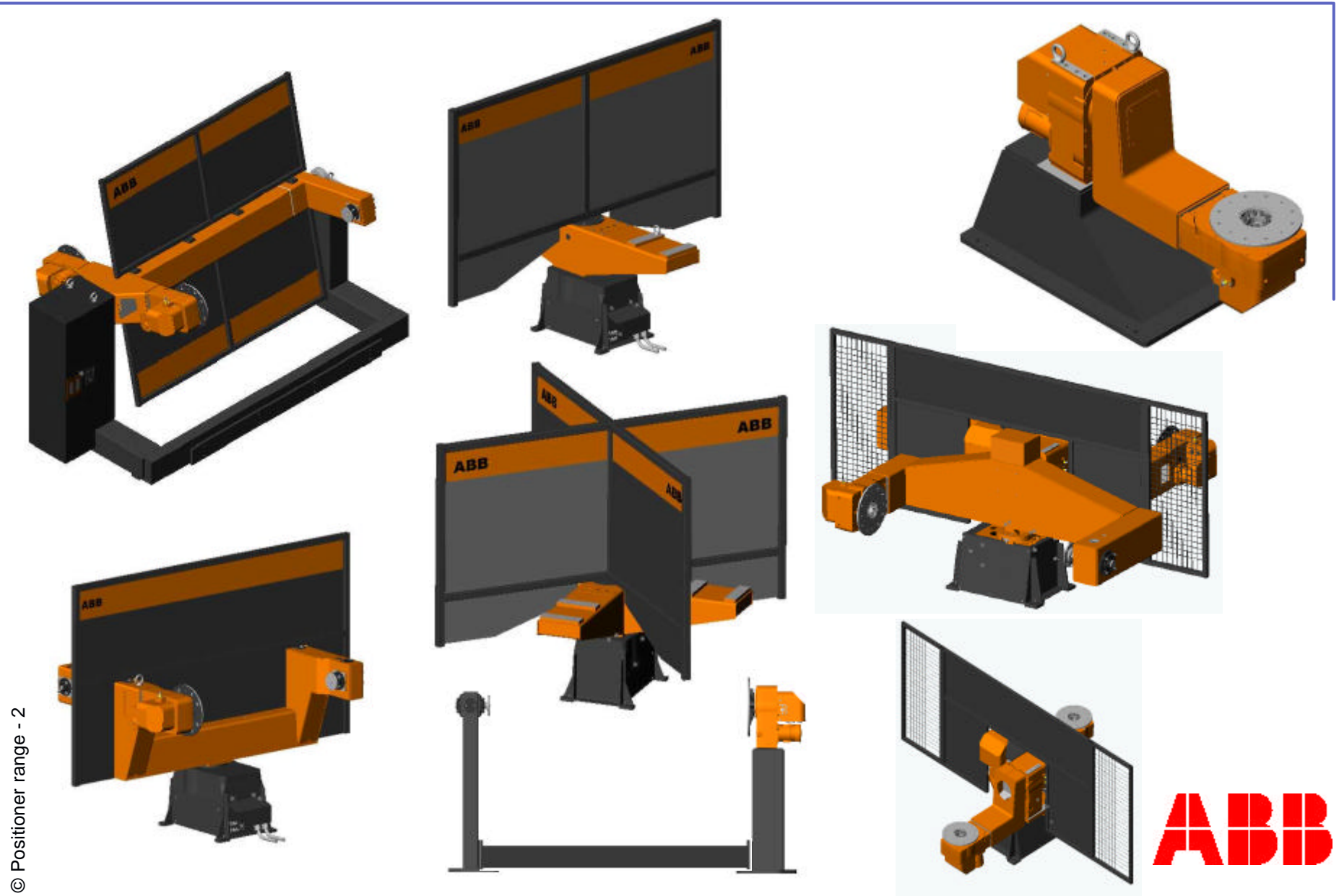


# ABB Positioners

- reliability
- quality
- performance



# Positioner range



© Positioner range - 2



# General features

All ABB positioners are of robust construction to ensure excellent stability.

They use the same drive systems and software as the robots. The dynamic software automatically compensates for the effects of gravity, inertia and friction to provide fast movements and accurate following of the programmed path.

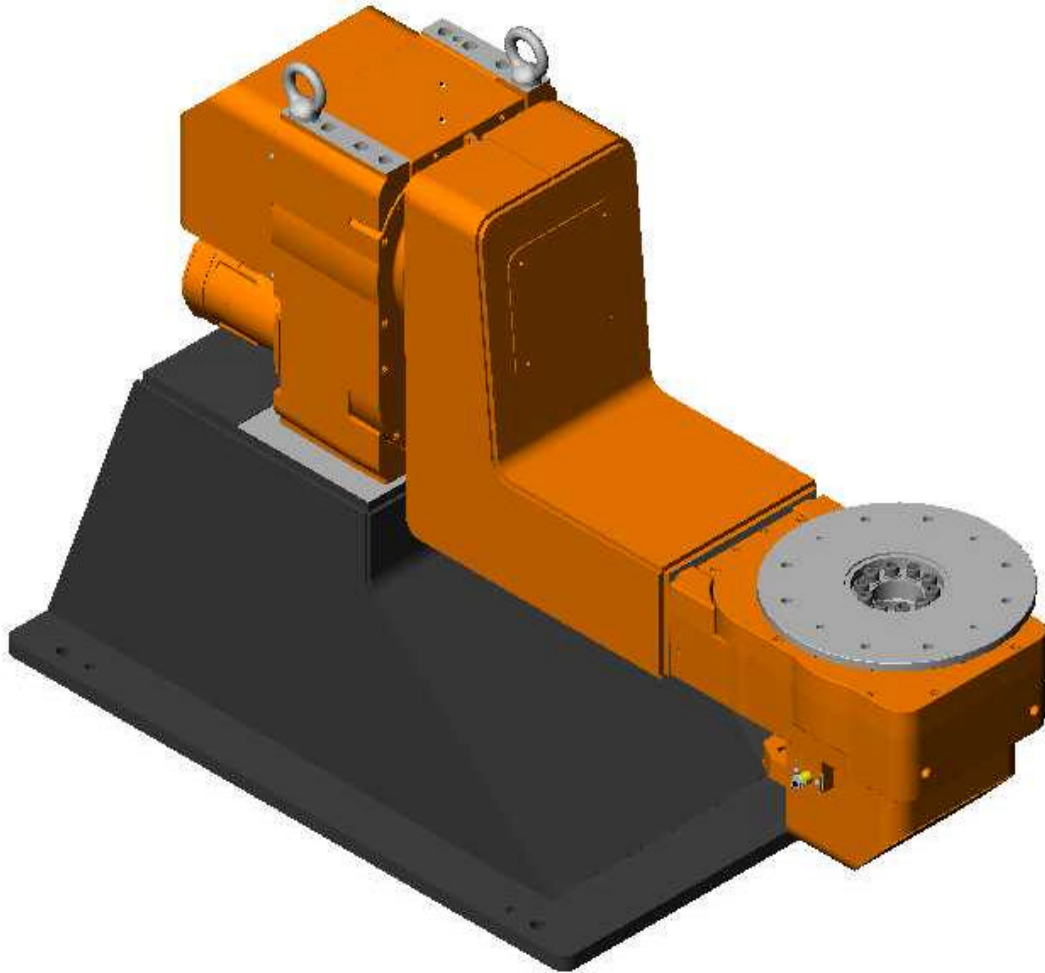
ABB's positioners are designed to be highly functional yet compact thus making maximum use of available floor space.

Standardised dimensions for all rotating plates greatly simplifies exchanging fixtures.

ABB positioners can be supplied with all necessary safety equipment.

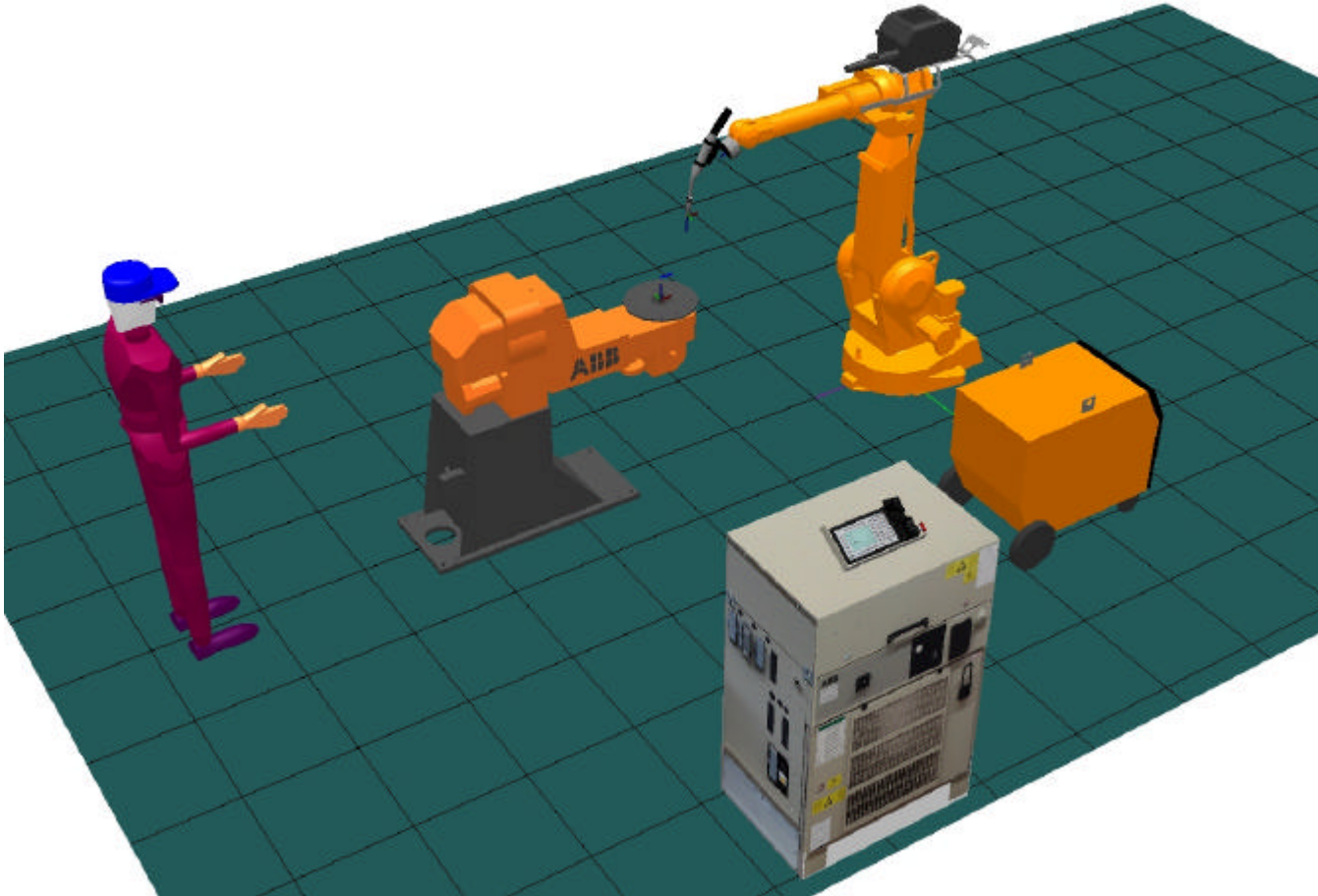


# IRBP A-type

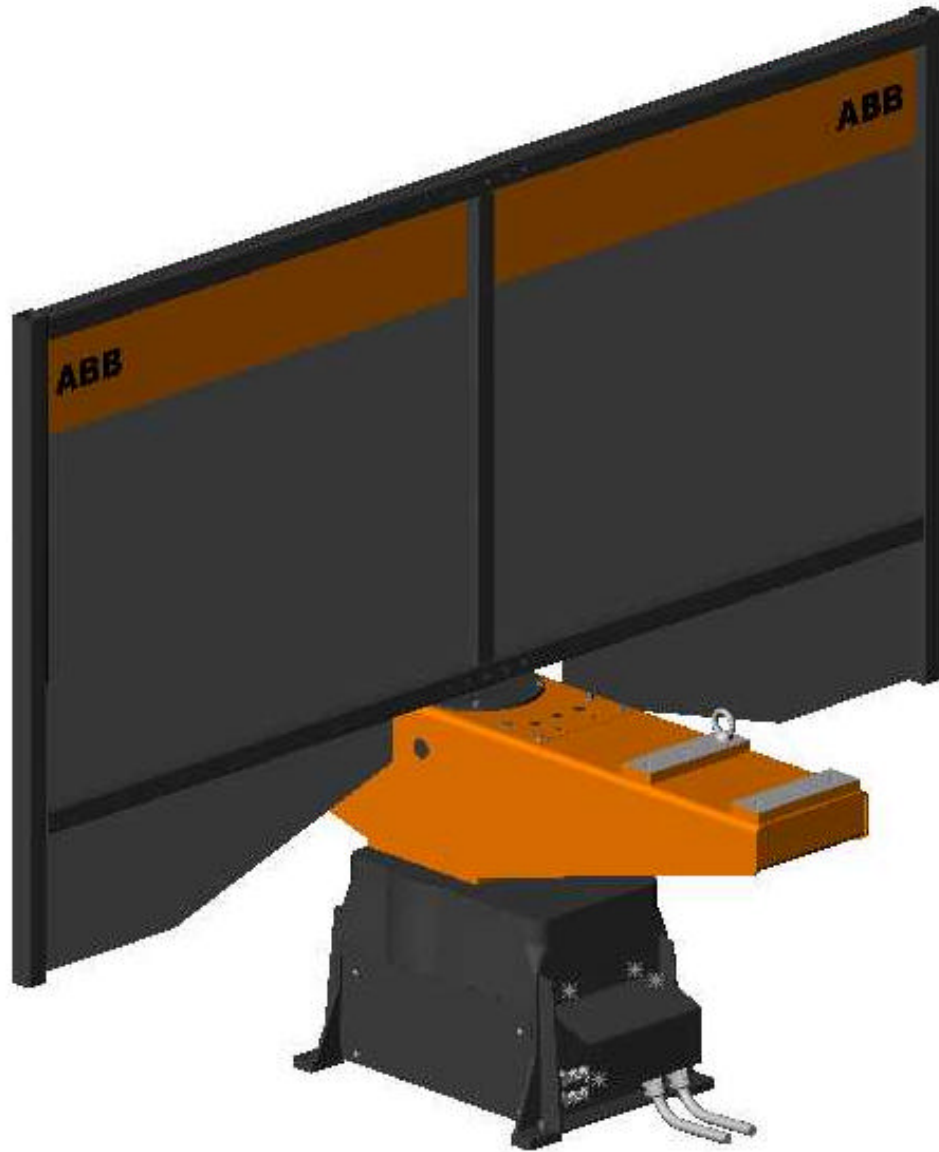


- Two axes manipulation
- One or two station solution
- optimize for solutions for work pieces with complex geometry
- 250, 500 or 750 kg payload

# Cell solutions Function Package A

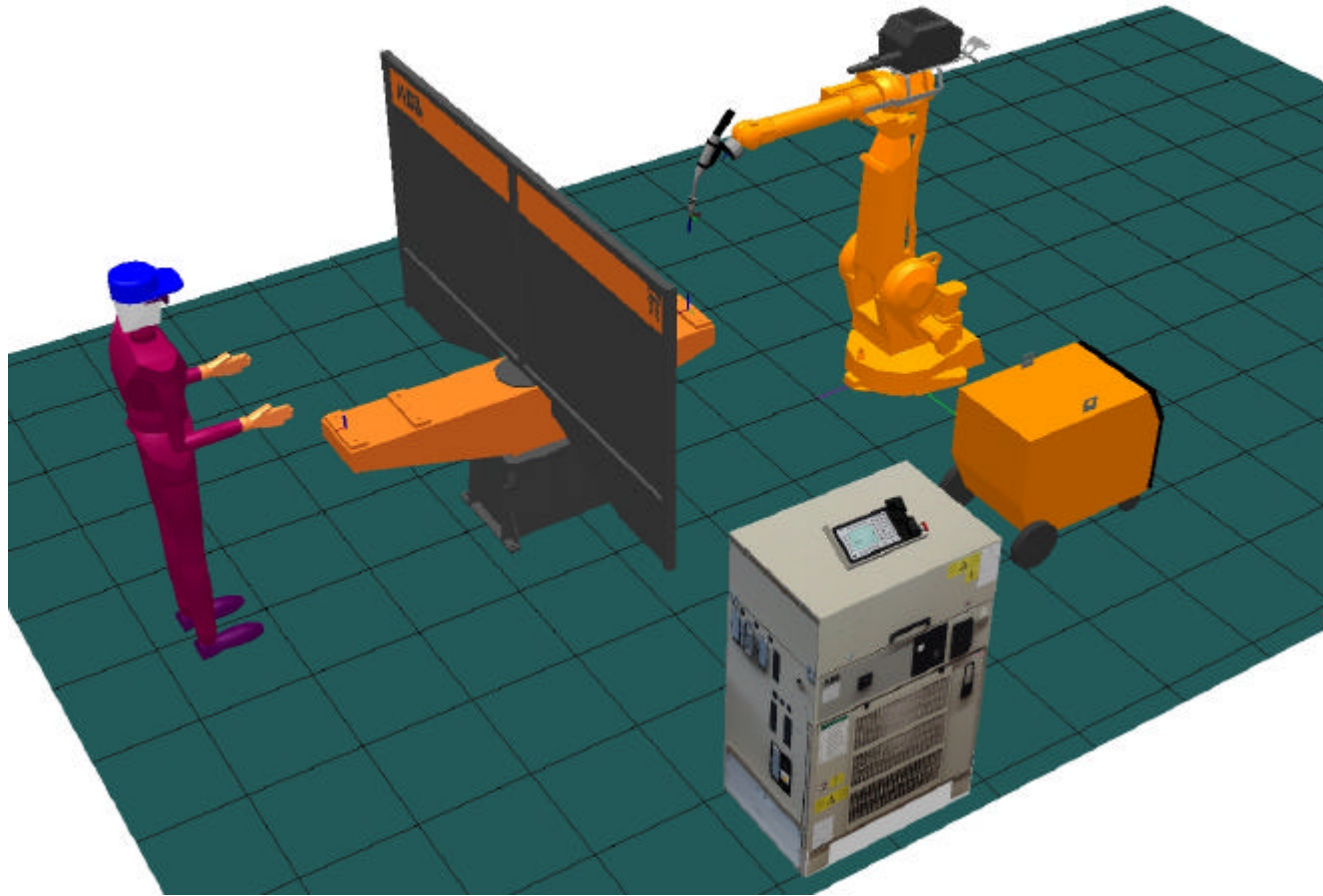


# IRBP C-type



- Two station solution
- Fast interchange motion
- 500 or 1000 kg payload

# Cell solutions Function Package C



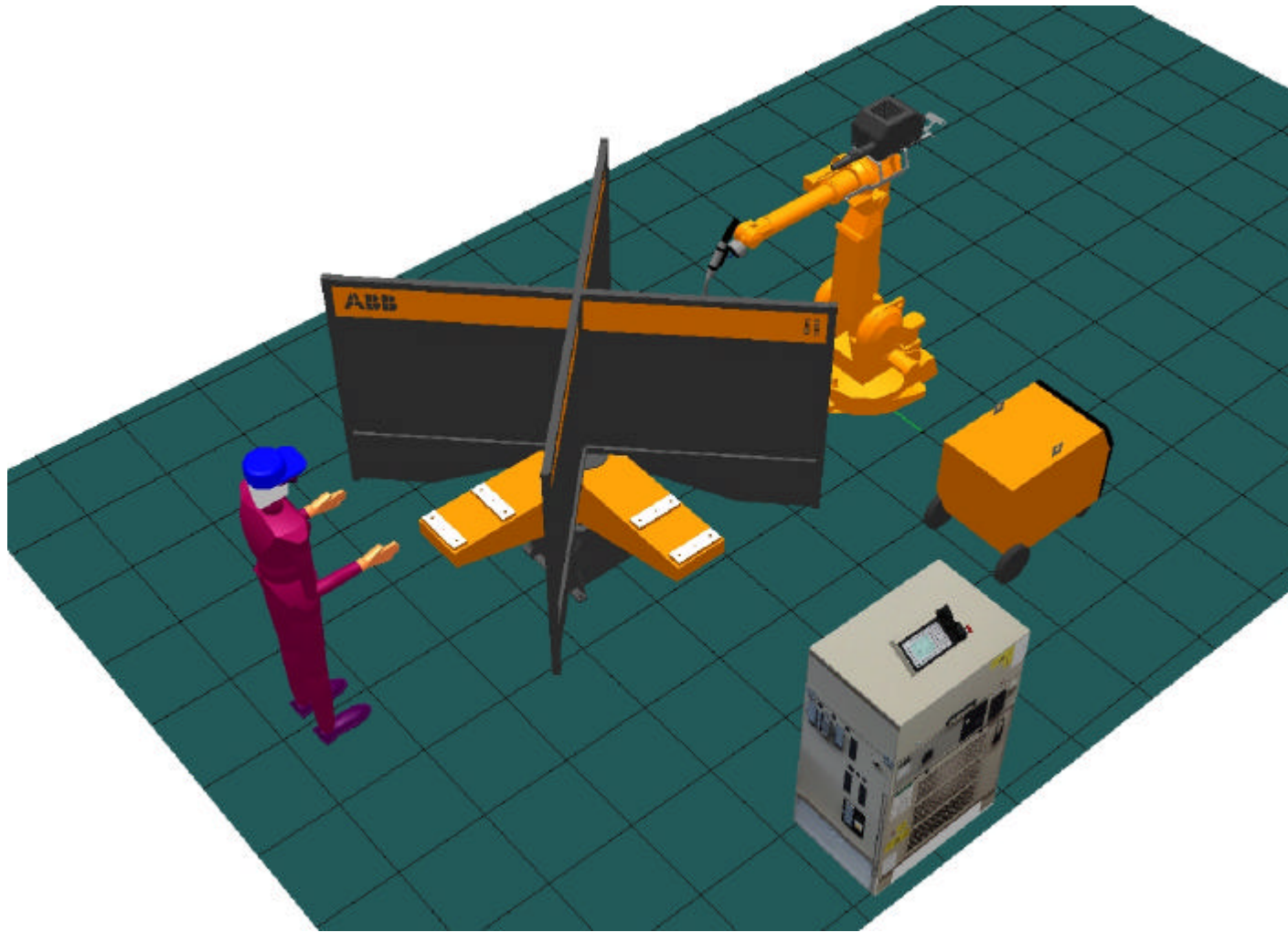
# IRBP C INDEX-type



- Multi station solution
- Fast index motion
- 250 or 500 kg payload



# Cell solutions Function Package Index

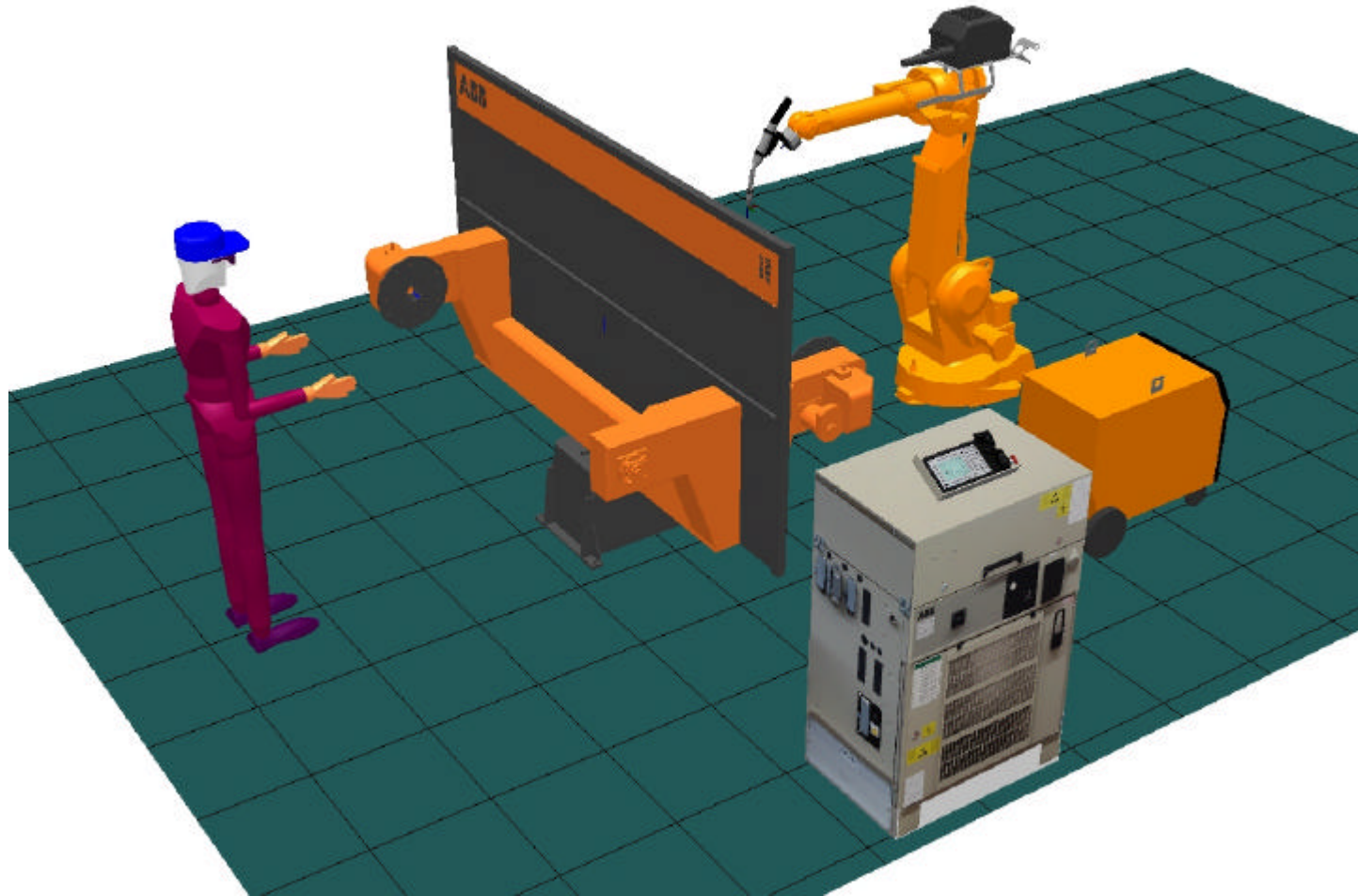


# IRBP R-type

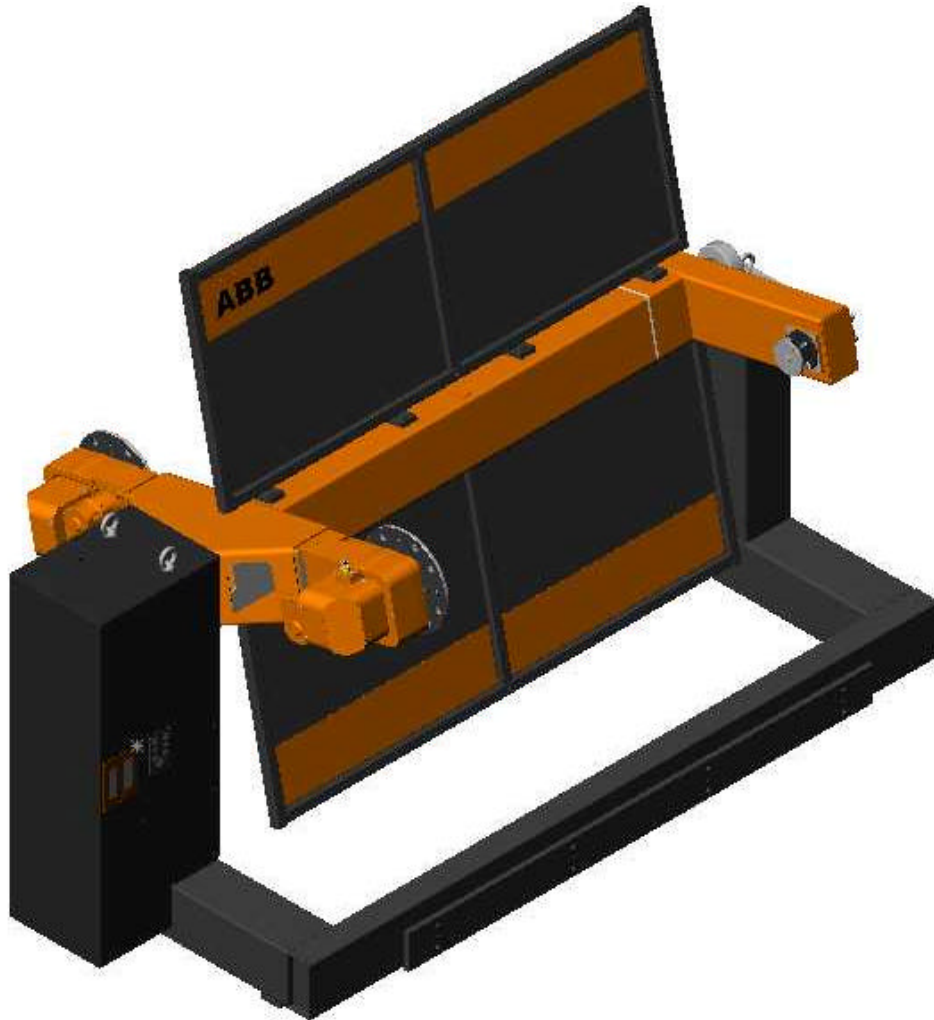


- Two station solution
- Full co-ordination with robot for external axes
- 250, 500 or 750 kg payload
- Length up to 2000 mm
- Three simultaneously used drive units during interchange

# Cell solutions Function Package R



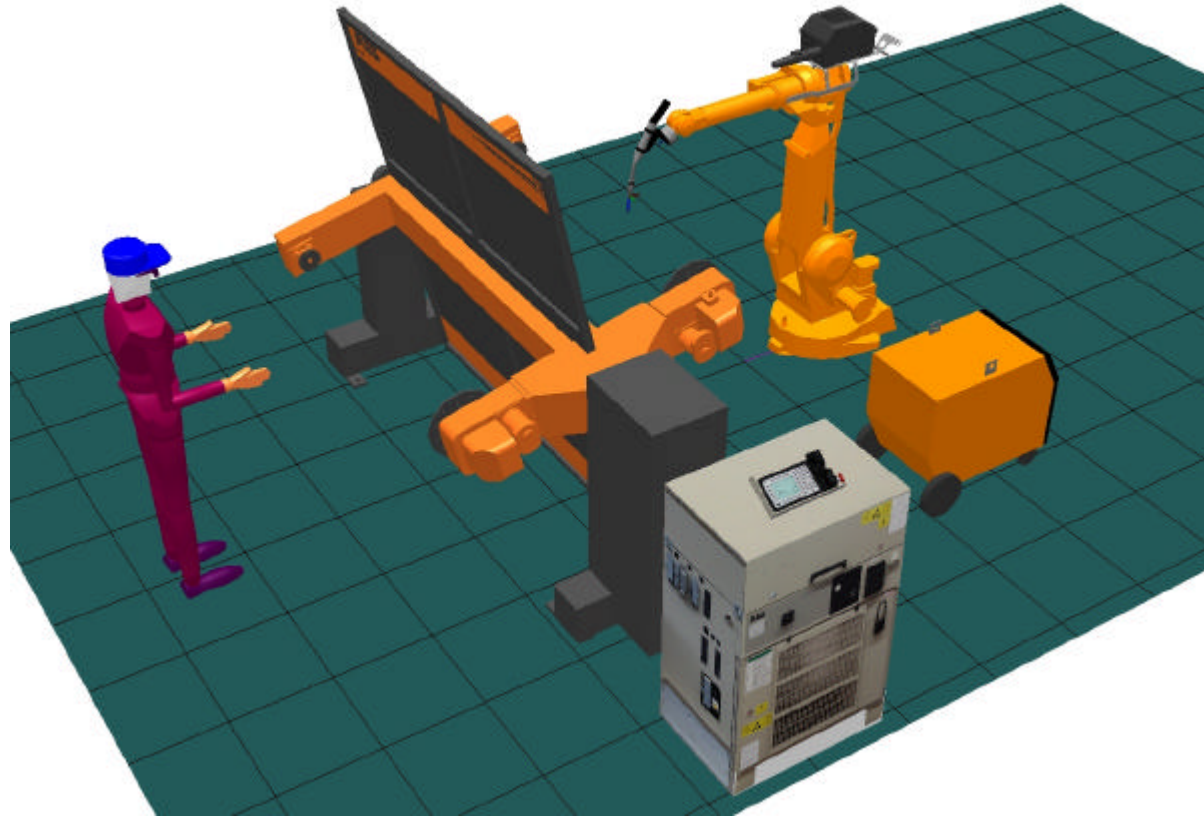
# IRBP K-type



- Two station solution
- Full co-ordination with robot for external axes
- 250, 500 or 750 kg payload
- Length up to 4000 mm
- Can be used with two robots
- Three simultaneously use drive units during interchange



# Cell solutions Function Package K



# Interchange operation

**There are two different ways of using the three simultaneously drive units for B,D,R and K positioners**

- **Dynamic move:**

- The fastest way to do the interchange operation**
  - Maximal torque on at least one motor during the motion**

- **Independent move:**

- Enable torch cleaning during interchange.**
  - Extend the interchange time approx. 1.0s**

**Both ways of motion is allowed in the same system**

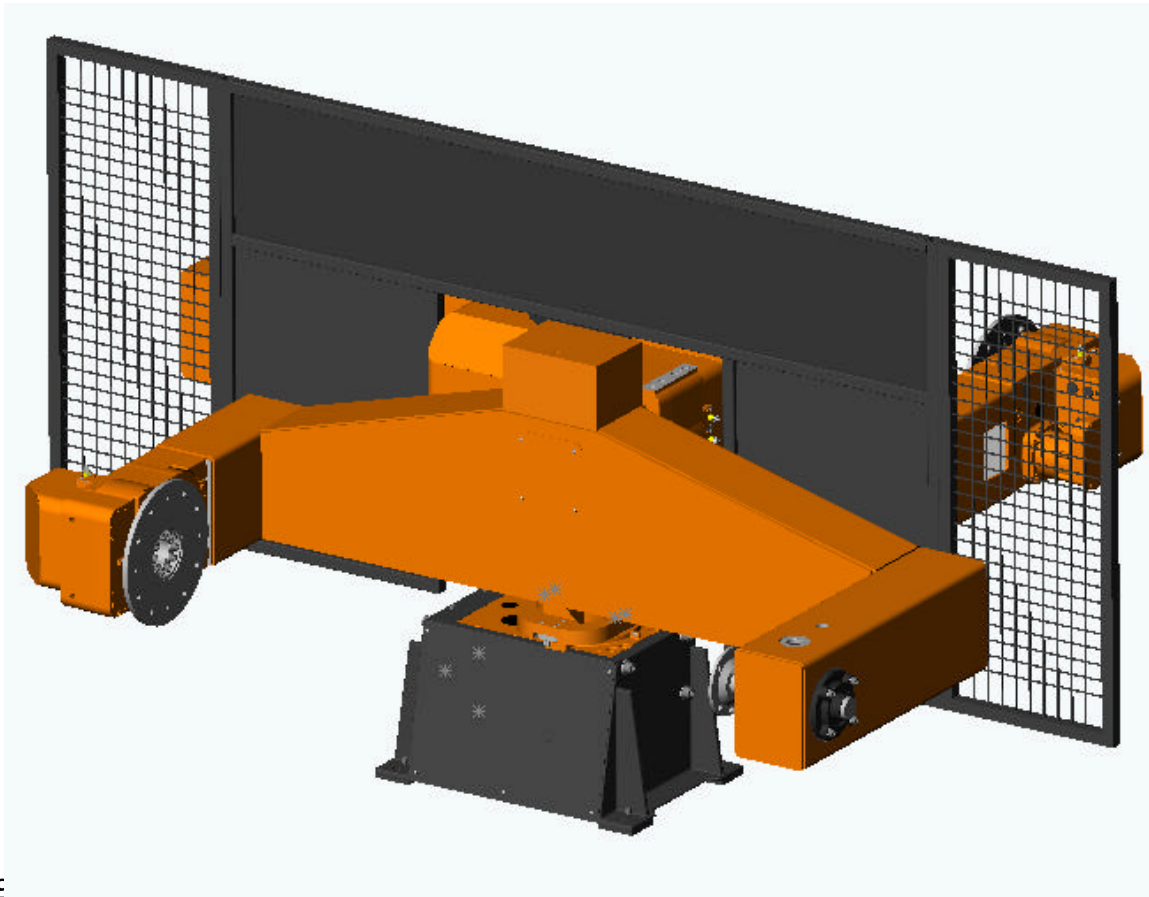


# IRBP L-type



- One axes manipulation
- One or two station solution
- Can be used in different setups (head,tail & beam)
- 250, 500, 750, 2000 and 5000 kg payload

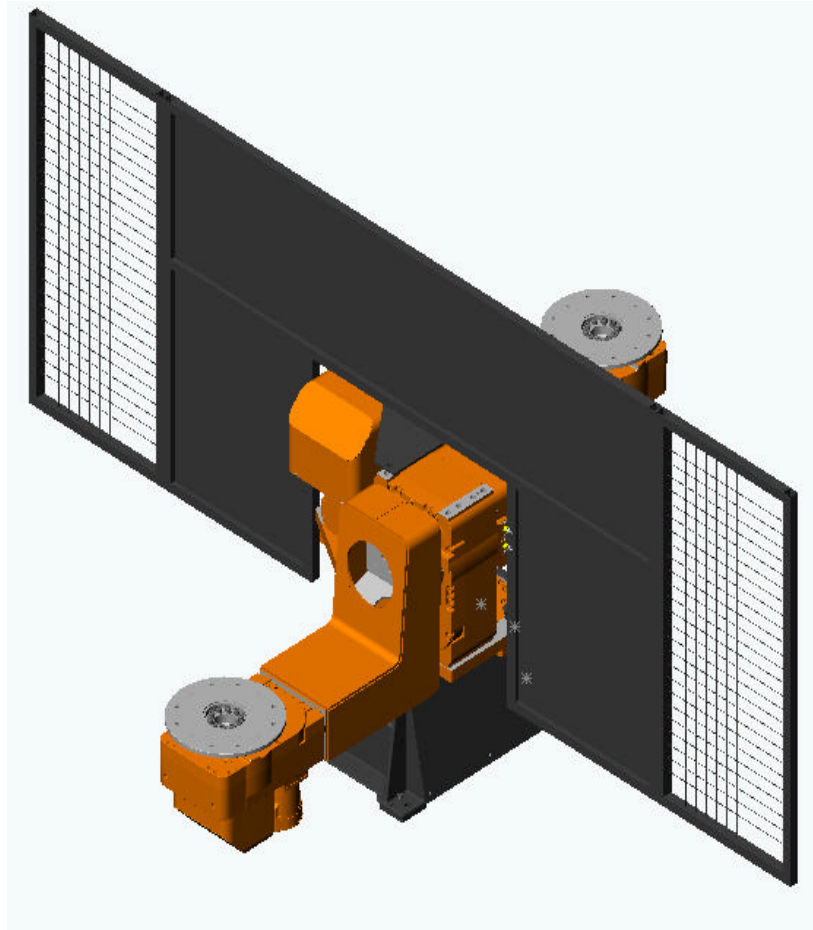
# IRBP D-type



- Two axes manipulation
- Two station solution
- Can be used in different setups (one or two robots)
- 250 or 500 kg payload



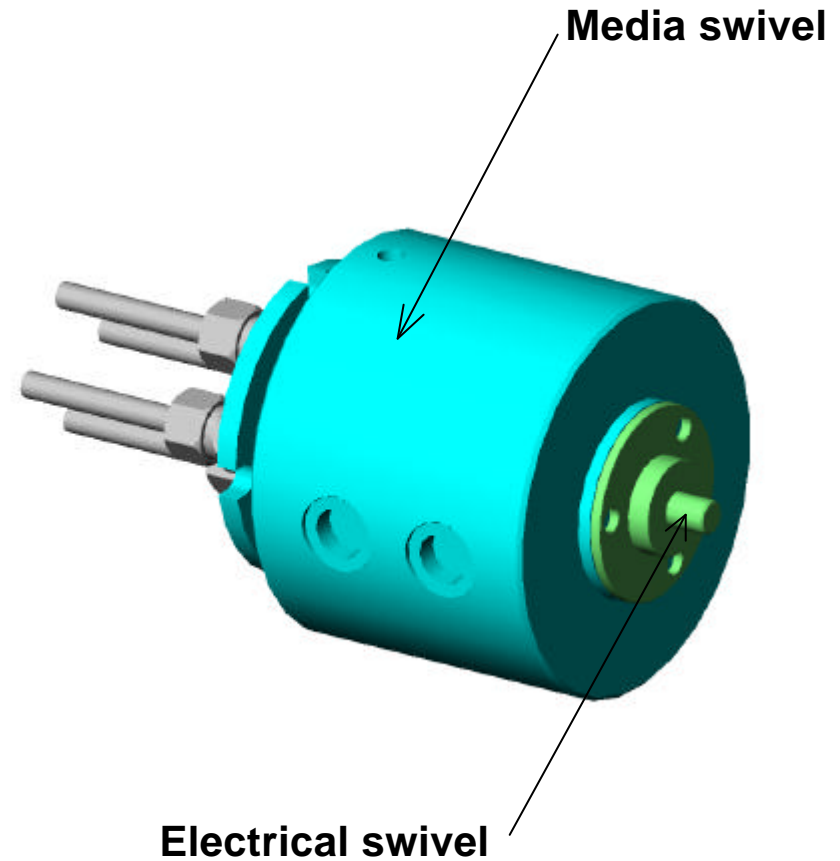
# IRBP B-type



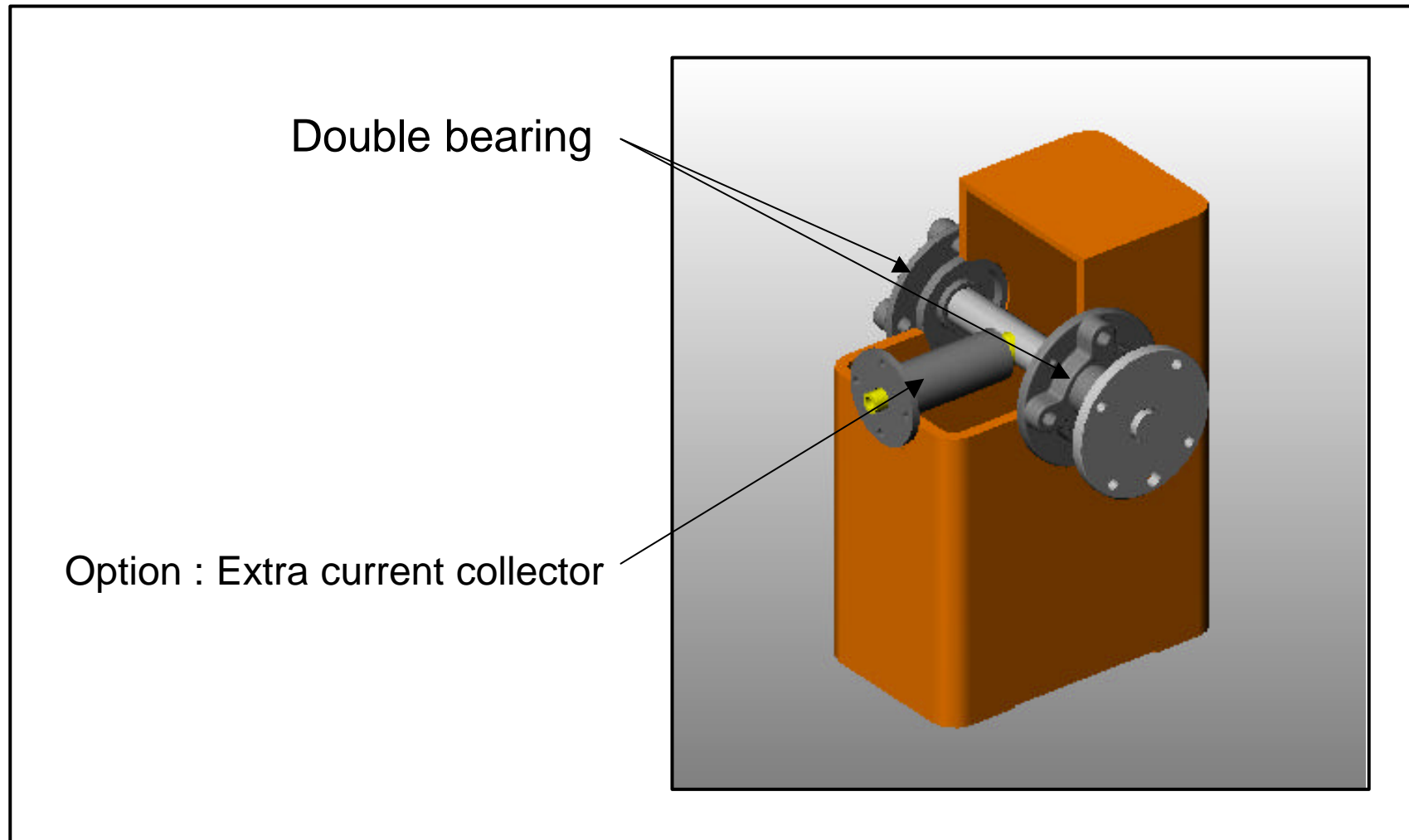
- Two axes manipulation
- Two station solution
- Can be used in different setups (one or two robots)
- 250, 500 or 750 kg payload

# swivels / media supply

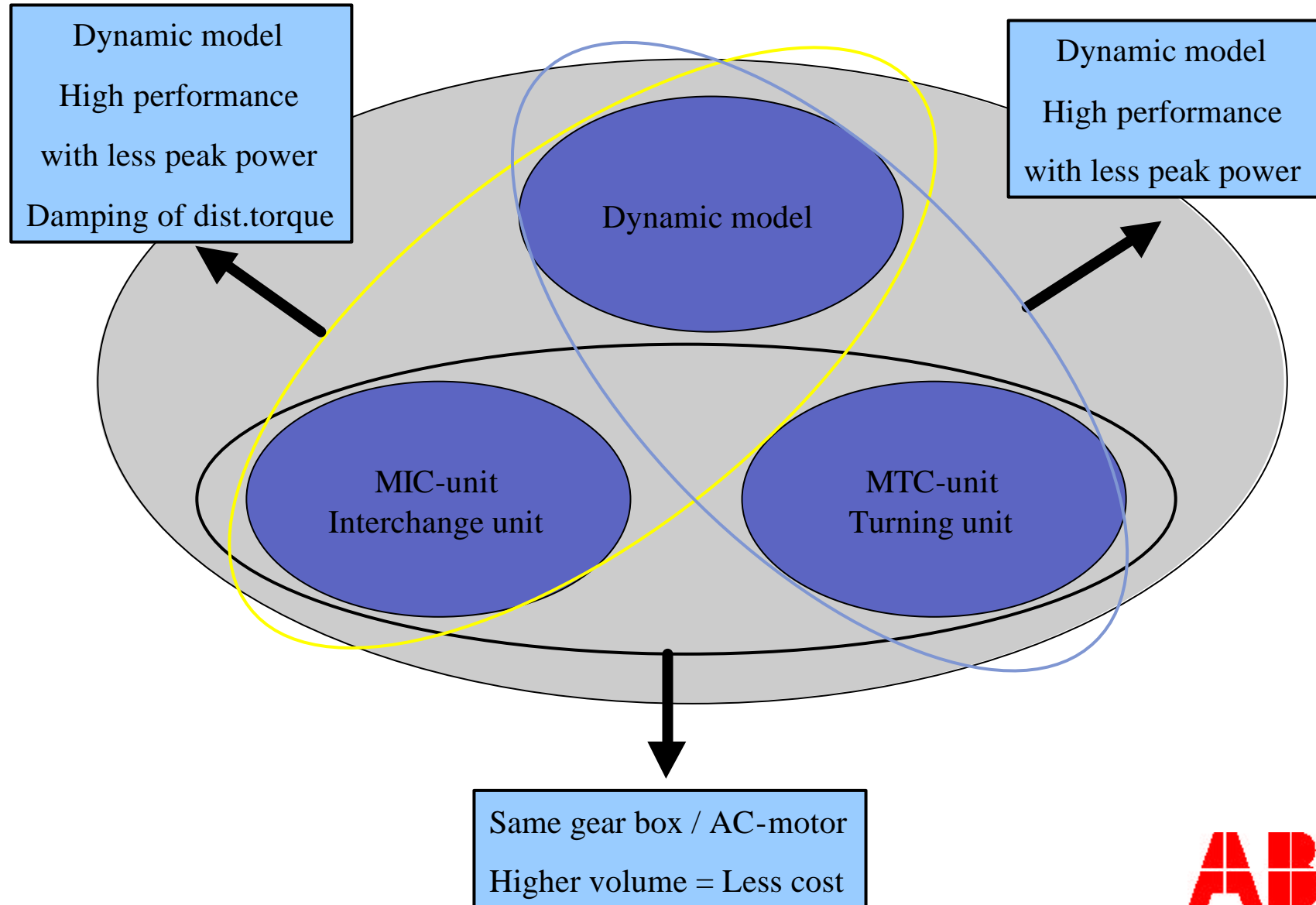
<u>Description of media</u>		<u>MTC 250</u>
Air	Max 8 bar	
Water	Max 10 bar	
Oil	Max 200 bar	
		<u>&gt; MTC 500</u>
Air	Max 8 bar	
Water	Max 10 bar	
Oil	Max 200 bar	
Electric	Max 2 Amp Max 48 Volt	
	Signal quality :	CAN-bus ProfiBus Interbus



# Support bearing



# Modules



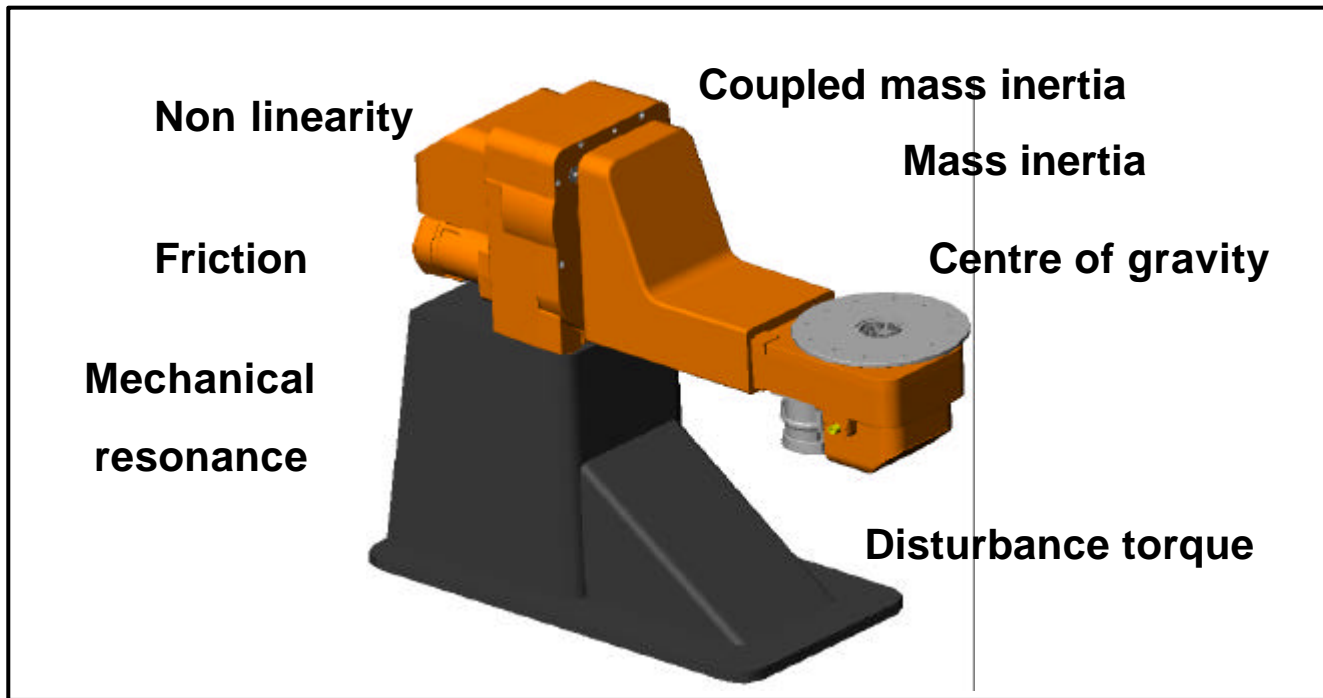
# MTC / Technical data

Technical data MTC				
	Unit	MTC 250	MTC 500	MTC 750
Handling capacity	kg	250	500	750
Cont. Torque	Nm	350	650	900
Max inertia	kgm <sup>2</sup>	40	170	300
Max bending torque	Nm	650	5000	5000
Max speed	rpm	30	25	25
Max acc	rad/s <sup>2</sup>	3,2	2,9	2,7
Repeatability	mm	0,1	0,1	0,1
	Unit	MTC 2000	MTC 5000	
Handling capacity	kg	2000	5000	
Cont. Torque	Nm	3800	9000	
Max inertia	kgm <sup>2</sup>	1200	3500	
Max bending torque	Nm	25000	60000	
Max speed	rpm	15	6,5	
Max acc	rad/s <sup>2</sup>	0,8	0,5	
Repeatability	mm	0,1	0,1	



# Dynamic model - HPP

- Load Id
- True Move
- Quick Move



# Dynamic model - HPP

Gives the user:

- Reduced cycle time ( 5-15 % approx )
- Improved quality (better path performance)
- Reduced interchange time (three drive units during interchange)

**STANDARD FOR ALL POSITIONERS !!**

**ABB**