

ABB ROBOTICS

## **Workpiece Positioners**

IRBP A, B, C, D, L, K, R



ABB offers a comprehensive range of Workpiece Positioners which enable the fully coordinated movement of the robot while programing; and during operations.

The positioners are easy to use with clear, simple instructions for programing. They employ the same drive systems and software as ABB robots.

The dynamic High Performance Positioner (HPP) software automatically compensates for the effects of gravity, inertia and friction to provide fast movements and accurate path following.

The built-in robot software, Load Identification (LoadID), is used for calculating the dynamic performance of the positioners complete with parts and tooling. The positioners are ideal for manipulating workpieces during applications such as Arc Welding and Cutting.

#### **Shorter cycle times**

The new range of workpiece positioners uses dynamic modeling software to keep cycle times to a minimum. The dynamic model automatically compensates for the effects of gravity, inertia and friction. The built-in Load Identification function (LoadID) calculates both the center of gravity and the inertia of the workpiece and fixture. These calculations ensure fast movements with rapid acceleration, reorientation and accuracy when following programmed paths.

### Service-friendly

ABB workpiece positioners can also be supplied with all the necessary safety equipment – and with a modular design and just a few robust moving parts, these service-friendly positioners require very little maintenance.

# Various projects are requesting Non-Standard Positioners

In order to fulfill specific requests from customers, ABB has the capacity to design and build customized positioners through our worldwide network of Regional Application Centers.

- Stiff, and reliable structure
- 100% load unbalance
- · High accuracy in positioning

#### Welding of Large and Heavy parts

More and more parts with complex dimensions and heavier payloads are robot welded. As a result, a robot's working volume and positioner capacity, in terms of load and dimensions, must be increased.



Variants	Handling capacity (kg)	Max. working envelope ø (mm)	Max. length (mm)	Max. height (mm)
IRBP A	,	,	,	,
IRBP A-250	250	1000	-	900
IRBP A-500	500	1450	-	950
IRBP A-750	750	1450	-	950
IRBP B				
IRBP B-250	250 (each side)	1180	_	900
IRBP B-500	500 (each side)	1450	-	900
IRBP B-750	750 (each side)	1450	-	900
IRBP C				
IRBP C-500	500 (each side)	-	_	-
IRBP C-1000	1000 (each side)	-	-	-
IRBP D				
IRBP D-600	600 (each side)	1200	2000	-
IRBP K			'	
IRBP K-300 /1000	300	1000	4000	-
IRBP K-300/1200	300	1200	4000	-
IRBP K-600/1200	600	1200	4000	-
IRBP K-600/1400	600	1400	4000	-
IRBP K-1000/1200	1000	1200	4000	-
IRBP K-1000 /1400	1000	1400	4000	-
IRBP L		'	,	'
IRBP L-300	300	1500	4000	-
IRBP L-600	600	1500	4000	-
IRBP L-1000	1000	1500	4000	-
IRBP L-2000	2000	1500	4000	-
IRBP L-5000	5000	2200	-	-
IRBP R	•			
IRBP R-300	300 (each side)	1000	1600	-
IRBP R-600	600 (each side)	1200	2000	-
IRBP R-1000	1000 (each side)	1200	2000	-