

# IRBP X Positioner Range



ABB's new IRBP X positioner is ideal for arc welding of high volume parts such as automotive cross members, sub frames, suspension modules, exhaust systems and seating assemblies.

It is also well-suited for a range of applications working on the same work piece in one set-up, for example arc welding, spot welding, laser cutting and marking.

Compared with conventional positioners, the IRBP X positioner offers: one work piece set up for all operations, reduced floor space and the number of welding fixtures required and improves efficiency without the cost of increased labor.

The positioner is arranged with one loading/unloading station and three stations for other operations. Each station can be equipped with two, three or four robots, of the same or different models, working together using ABB's MultiMove.

The IRBP X positioner also offers advanced motion control by using ABB's QuickMove and TrueMove technology. All robots are fully coordinated, with the rotation of the work piece ensuring high quality and maximum welding speeds. The technology offers the highest acceleration and retardation in any application, thus minimizing cycle time.

The interchange axis is sturdy, accurate, fast and has infinite rotation for high quality and short cycle time.

The IRBP X offers powerful and unique functions for automatic cell calibration, weld error handling and restart after any stop, including emergency stops, ensuring a fast set up and high up-time.

ABB's new IRBP X positioner is available with several options including a operator panel, swivels and slip rings for the positioner axes and extra current collectors.

# IRBP X

## General

|                               | Unit | IRBP 750 X    | IRBP 1000 X   |
|-------------------------------|------|---------------|---------------|
| Handling capacity per station | kg   | 750           | 1000          |
| Work piece, length x diameter | mm   | 2,000 x 1,200 | 2,000 x 1,200 |
| Work piece, length x diameter | mm   | 2,200 x 1,500 | 2,200 x 1,500 |

## Station Interchange

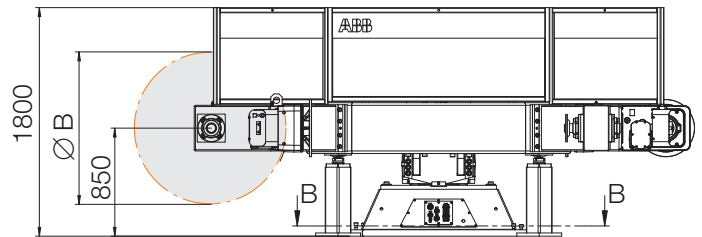
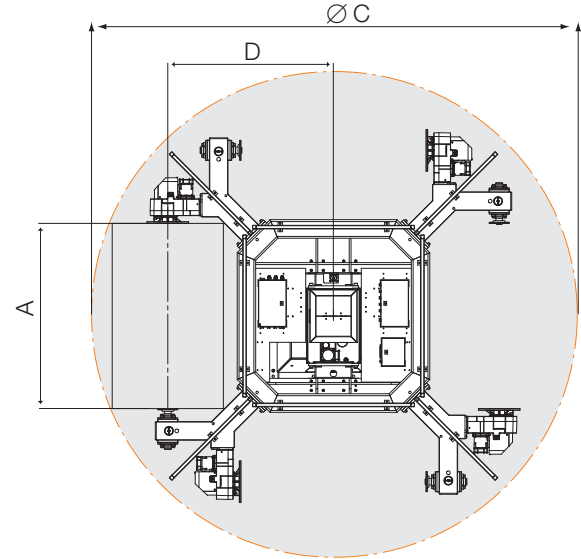
|                            |       |       |       |
|----------------------------|-------|-------|-------|
| Max speed                  | deg/s | 60    | 60    |
| Index 90 deg. motion       | s     | 3.6   | 3.8   |
| Index 90 deg. weld to weld | s     | 5.4   | 5.6   |
| Emergency-stop time        | s     | < 1,4 | < 1,7 |

## External Axis

|                                 | Unit  | MTC 750 | MTC 750 |
|---------------------------------|-------|---------|---------|
| Continuous torque               | Nm    | 900     | 900     |
| Max offset to Centre of Gravity | mm    | 122     | 92      |
| Max bending torque              | Nm    | 5 000   | 5 000   |
| Repeatability at 500 radius     | mm    | < 0,1   | < 0,1   |
| Max speed                       | deg/s | 150     | 150     |
| Pos to pos time 45 deg          | s     | 0,6-0,7 | 0,6-0,7 |
| Pos to pos time 90 deg          | s     | 0,9-1,0 | 0,9-1,0 |
| Pos to pos time 180 deg         | s     | 1,5-1,6 | 1,5-1,6 |

## Positioner IRBP X

| A    | B    | C    | D    |
|------|------|------|------|
| 2000 | 1200 | 5180 | 1789 |
| 2200 | 1500 | 5998 | 2040 |



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