



ABB ROBOTICS

IRB 910INV

Product Management, ABB Robotics

September 2018



Outline

Overview

Features

Advantages and benefits

Targeted industry

Dimensions

Specifications

Others

OmniCore™ Controller

Targeted applications

Summary

Overview

Differentiated Value Proposition



Fast, cost-effective and, because it's from ABB, accurate.

Release working cell active area to achieve even better productivity

Features

IRB 910INV Preview

| Item | Specification |
|-----------------------------|----------------|
| Reach (mm) | 350/550 |
| Payload (kg) | 3/6 (Max) |
| Position repeatability (mm) | TBC |
| Protection | IP30 |
| Cleanroom | CR4 (Optional) |
| Footprint (mm) | 200x 200 |
| Mounting | Inverted |



Advantages and benefits

Smaller and yet perform better

Advantages

Internal cable design

The best repeatability in the class¹

Fast cycle time

Compact and lightweight

Cleanroom support & IP54 support²

The only model in the class³ offers 3 $\Phi 6$ air channels

Benefits

Productivity achieved in narrow space

Running the most accurate manufacturing process given limited space

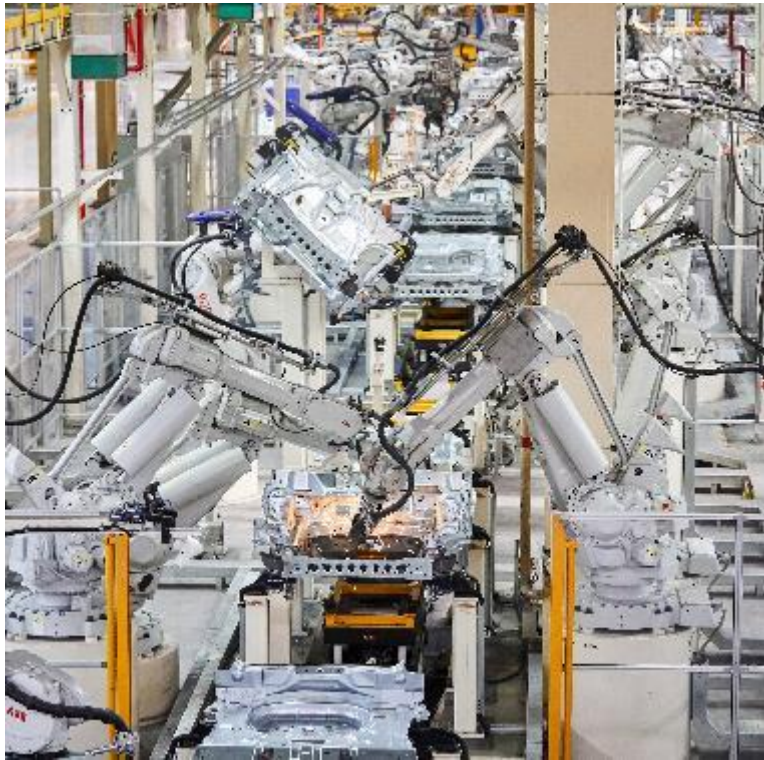
Up to 16 I/Os for more sophisticated applications

To be able to have a more sophisticated tool with larger air flow control

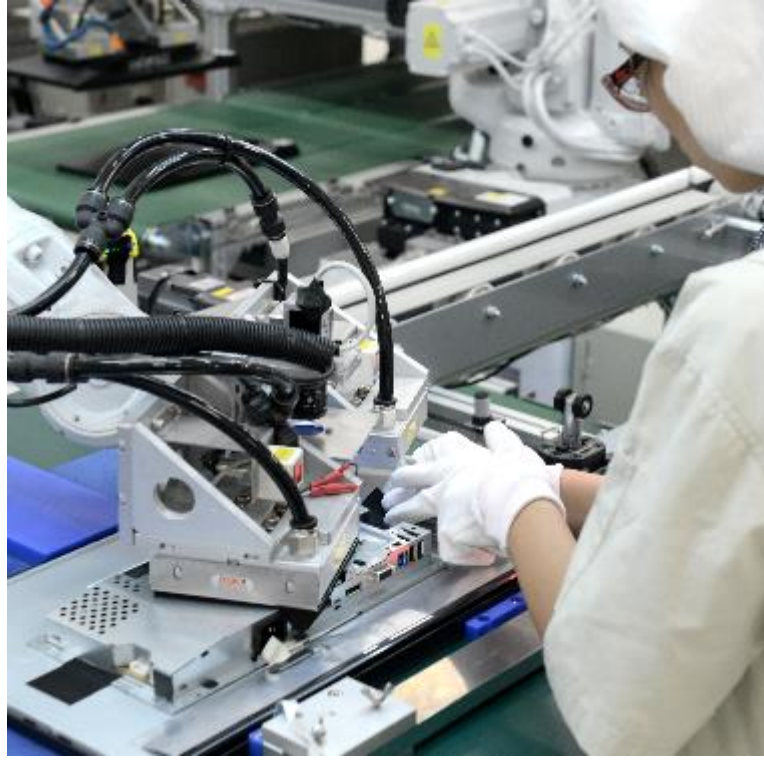
Targeted industry

Automotive, electronics and other general industries

Automotive



Electronics (3C)



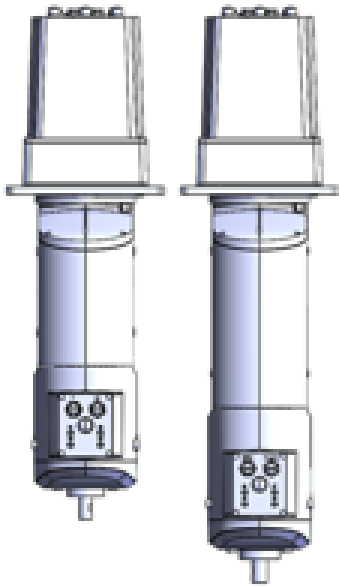
Others (General Industries)



Dimensions

Outline Manipulator

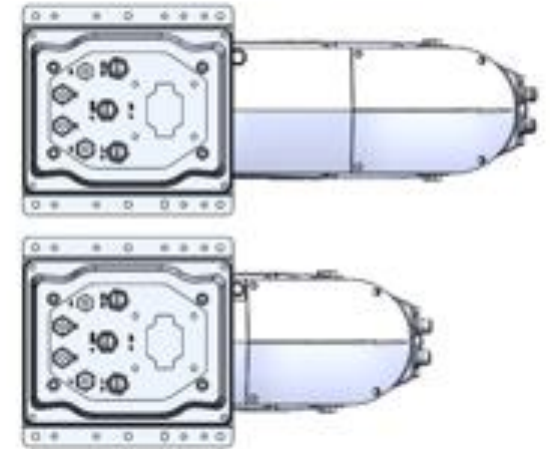
Front view



Side view



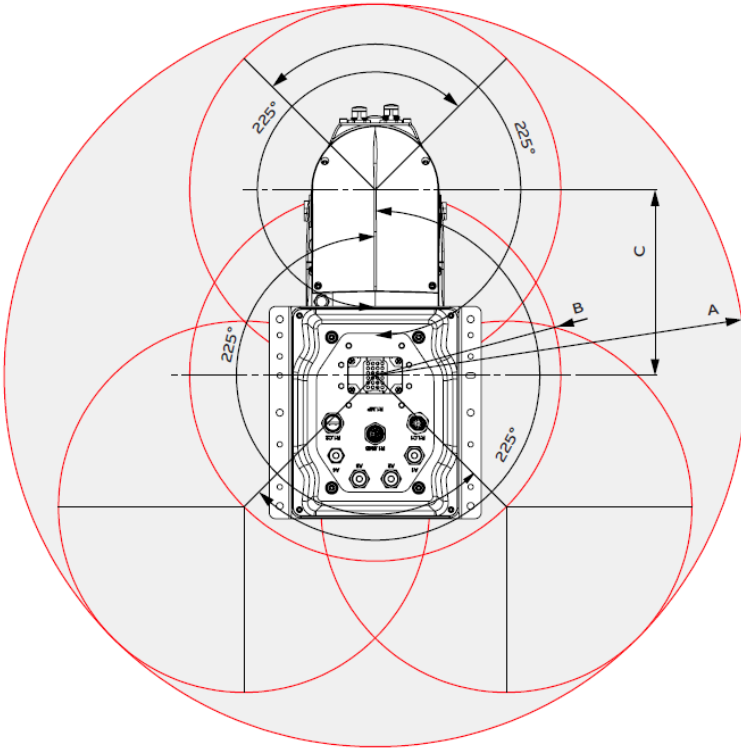
Top view



Dimensions

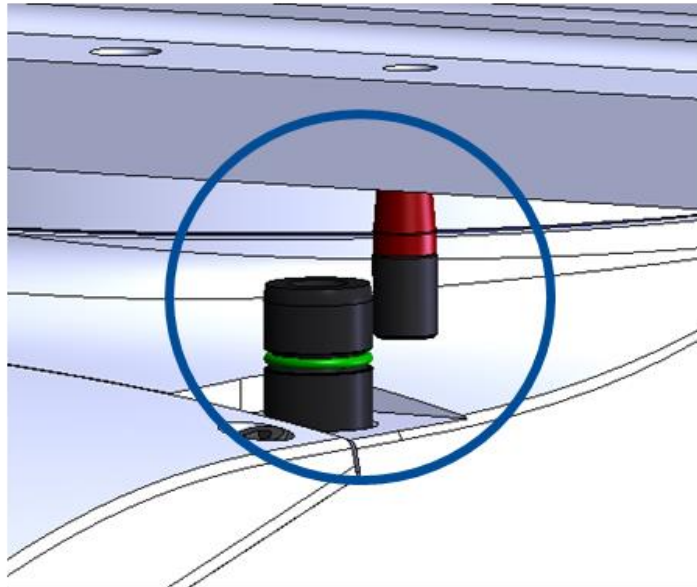
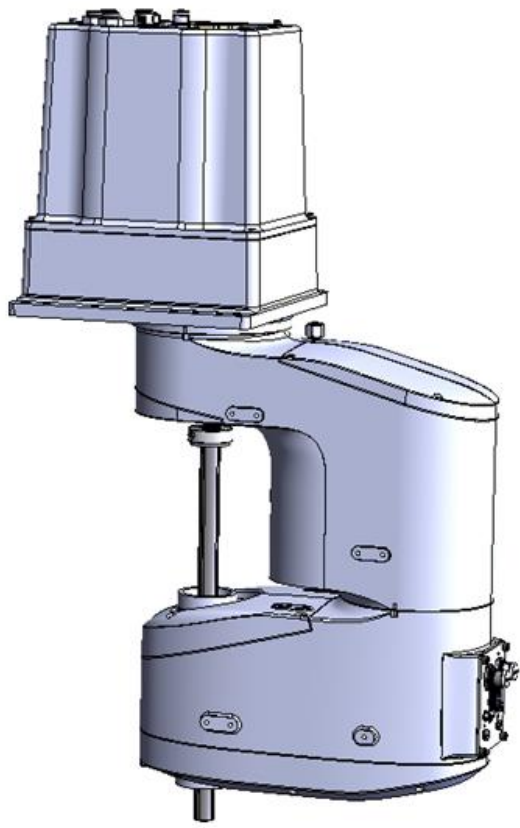
Working Range

IRB 910INV

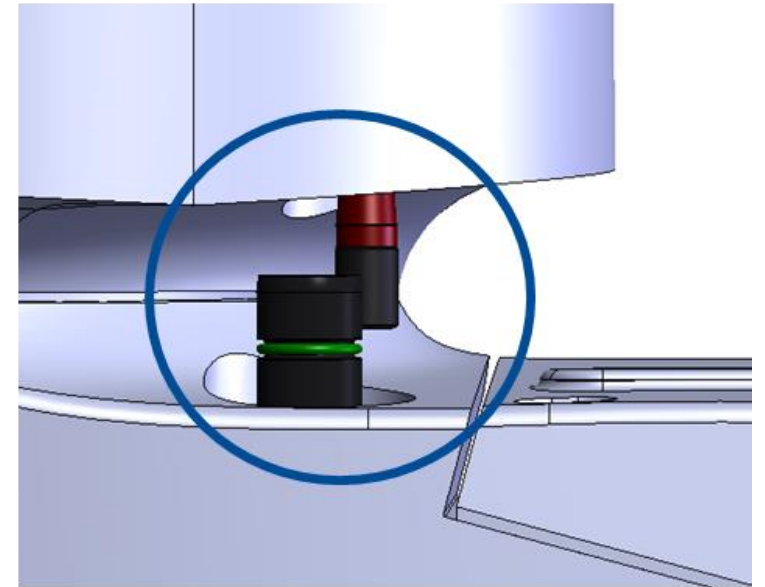


Others

Calibration



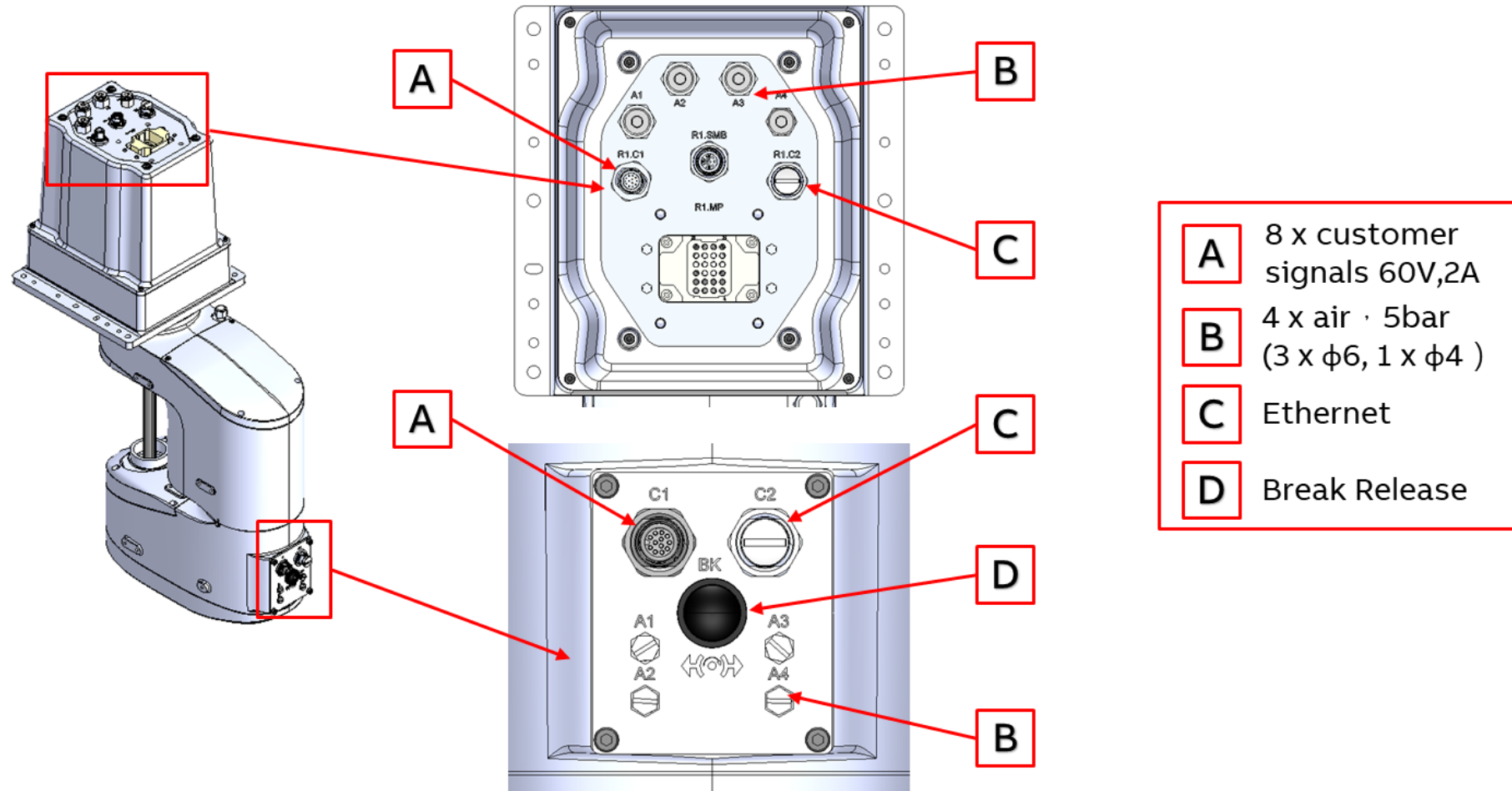
Axis 1



Axis 2

Others

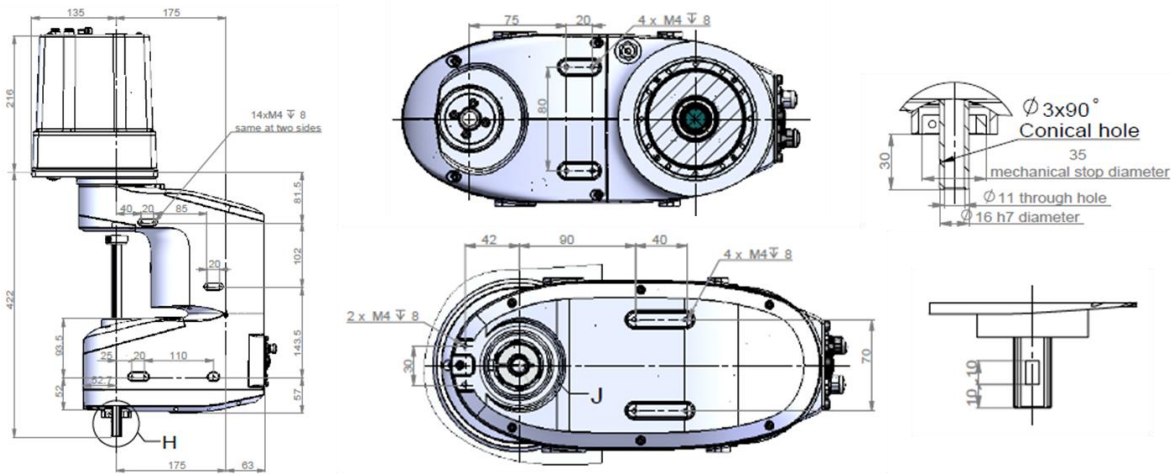
Customer Interfaces



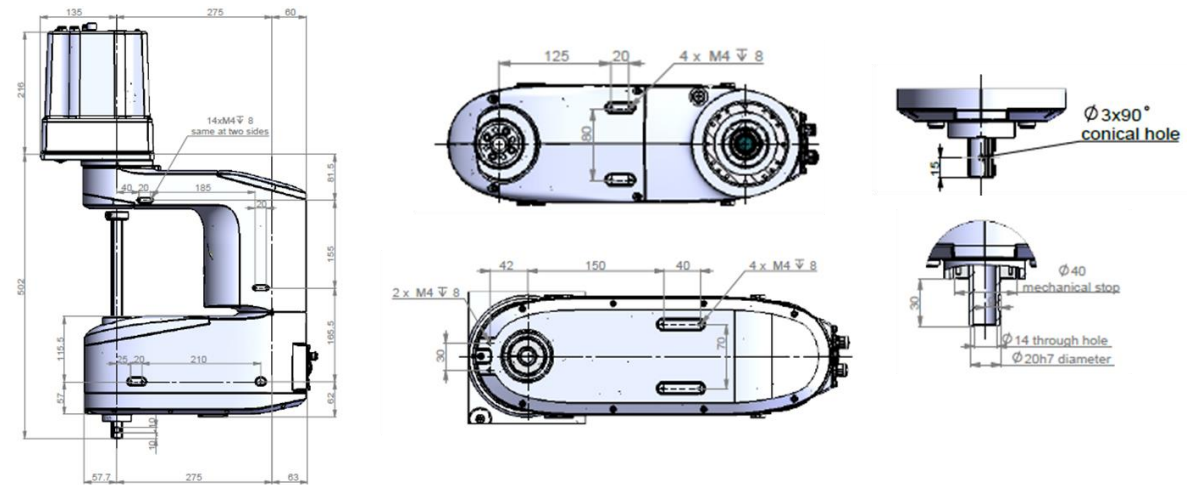
Others

Mounting Interfaces

IRB 910INV – 3/0.35



IRB 910INV – 6/0.55



Specifications

| Robot version | Reach (mm) | Payload (kg) | Armload (kg) |
|------------------------------------|--------------------------------------|--------------|--------------|
| IRB 910INV-3/0.35 | 350 | 3 (max.) | - |
| IRB 910INV-6/0.55 | 550 | 6 (max.) | - |
| Protection | IP30 | | |
| Mounting | Inverted | | |
| Controller | OmniCore | | |
| Integrated signal and power supply | 8 signals on wrist ¹ | | |
| Integrated air supply | 4 air outer arm (5 Bar) ¹ | | |
| Integrated Ethernet | 1 Gbit/s port ¹ | | |

| Performance (according to ISO 9283) | |
|--------------------------------------|--------|
| 1 kg picking cycle | |
| IRB 910INV-3/0.35 25 x 300 x 25mm | 0.35 s |
| IRB 910INV-6/0.55 25 x 300 x 25mm | 0.40 s |

| Technical information, physical | |
|---------------------------------|--------------|
| Dimensions robot base | 200 x 200 mm |
| Weight IRB 910INV-3/0.35 | 19 kg |
| Weight IRB 910INV-6/0.55 | 22 kg |

OmniCore™ Controller

IRB 910INV is Equipped with The State-of-the-art Controller



The first offering from ABB's new era of flexible, intelligent and tailored solutions

A impressive range of controllers to deliver the ideal solution for every need

Designed for the rigorous performance and reliability needed to support 24/7 production of high-mix, low-volume products in shorter product cycles

Significant size reduction for installation space savings.

With the same superior precision, cycle times and speed that ABB is renowned for the new controllers can tackle the toughest challenges

Fast time to market

Smaller

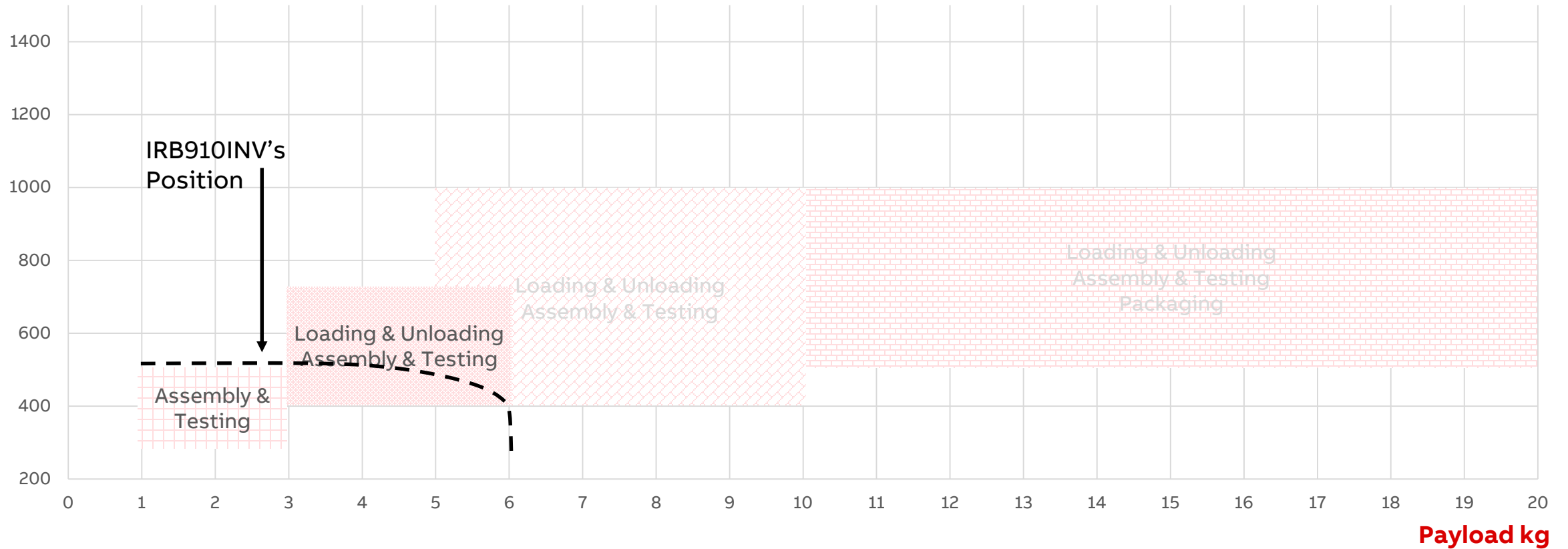
High throughput

The ABB Ability™ for the connected “Factory of the Future”

Targeted Applications

Loading & Unloading/Assembly & Testing

Reach mm



Targeted applications

Application Examples

1. Assembly
2. Screw Driving
3. Rubber Insertion
4. Labeling
5. Soldering
6. Tampon Printing
7. Dimension Measuring
8. Function Testing
9. Filming
10. LCD Panel Stacking
11. Picking & Placing
12. Sealing
13. Packaging
14. Loading & Unloading
15. Sorting
16. Testing
17. More...

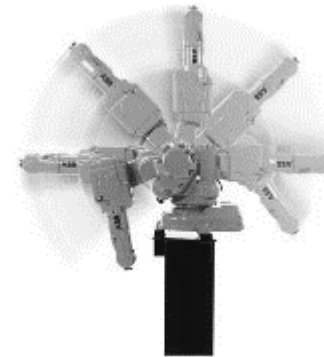
Flexibility



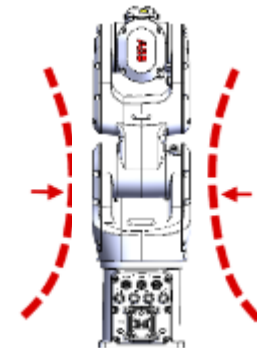
Higher Payload



Better Performance



Slimmer Body Smaller Footprint



Summary

Outstanding Performance Without Space Headaches

Productivity Without Worrying About Space

Flexibility & productivity within very limited space

Running the most accurate manufacturing process given very limited space

Handling heavier operations with more complex tool or end effector

Up to 16 I/Os for more sophisticated applications



ABB