

EXTERNAL USE


ABB ROBOTICS

IRB 5510

Medium size painting robot based on IRB5500 platform

Carrie Zou, Global Paint Product Manager



Content

Introduction

Target customer and markets

Specification

IRB 5510 vs IRB 580

Working envelope

Technical information

Introduction

IRB5510 replaces IRB580, consolidate the medium size painting robot at IRB5500 platform

More compact foot print



Target customer and markets

Target Market

Tier 1, 2

General industry

Some dedicated use cases for Automotive OEMs



Application

Painting for small work piece

Flaming

Opener



Product features

Specification

Share ~70% parts with IRB5500

Foot print is 15.8% less than IRB580

5% less weight than IRB580

Reuse the design of IRB5500, eliminate the parallel rod to control the horizontal arm up/down

Pump cabinet solution is available

One variant is available with 2.6m reach instead of IRB580
2.2&2.6m reach

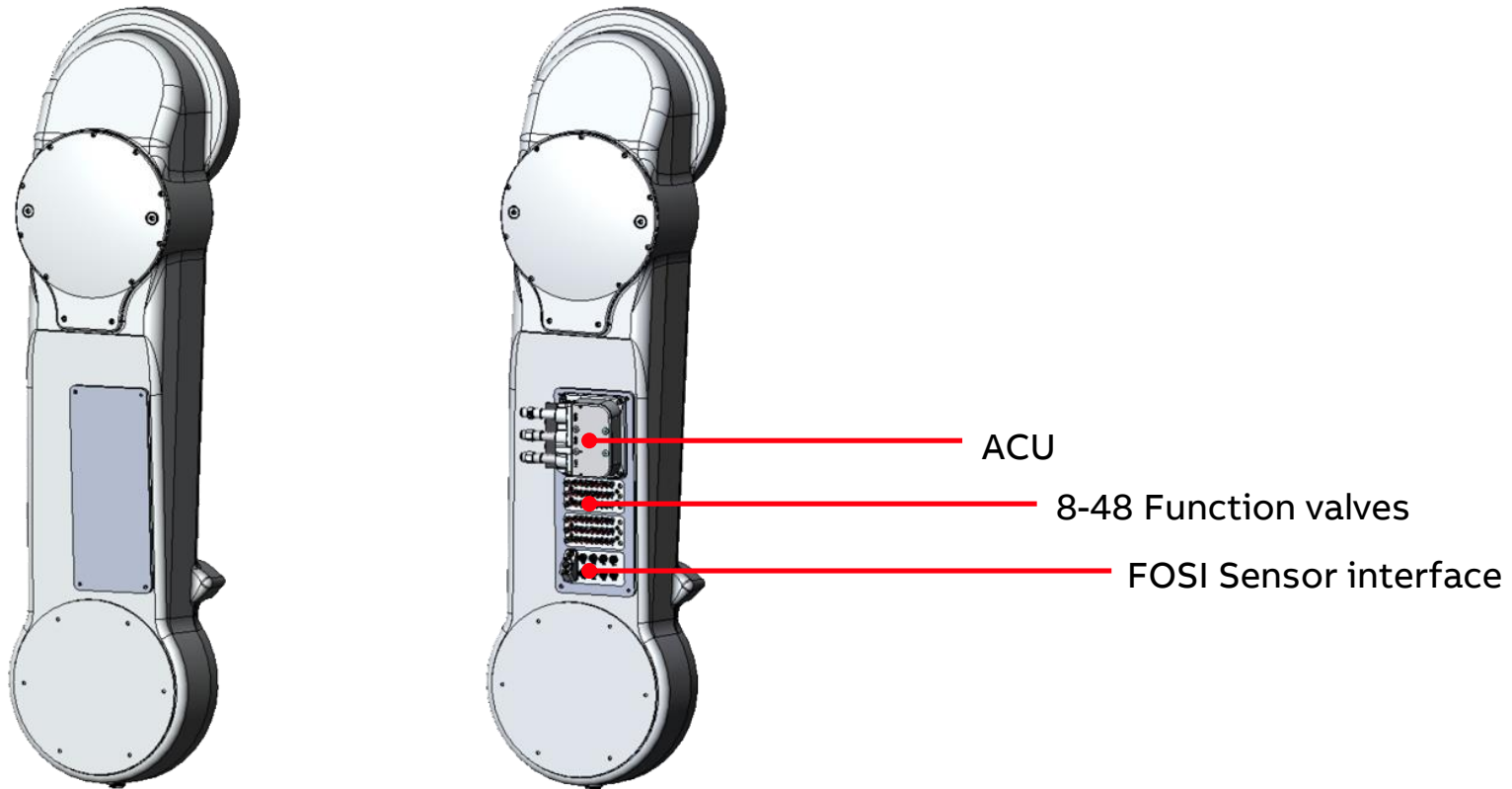
Options on manipulator

- Single Hose guide
- ACU on vertical arm (axis 2)
- Function valves (8-48) on vertical arm (axis 2)
- FOSI sensor interface including bell rotation sensor
- Prepared for assembly of PA components on horizontal arm, no process arm plate (slim arm)



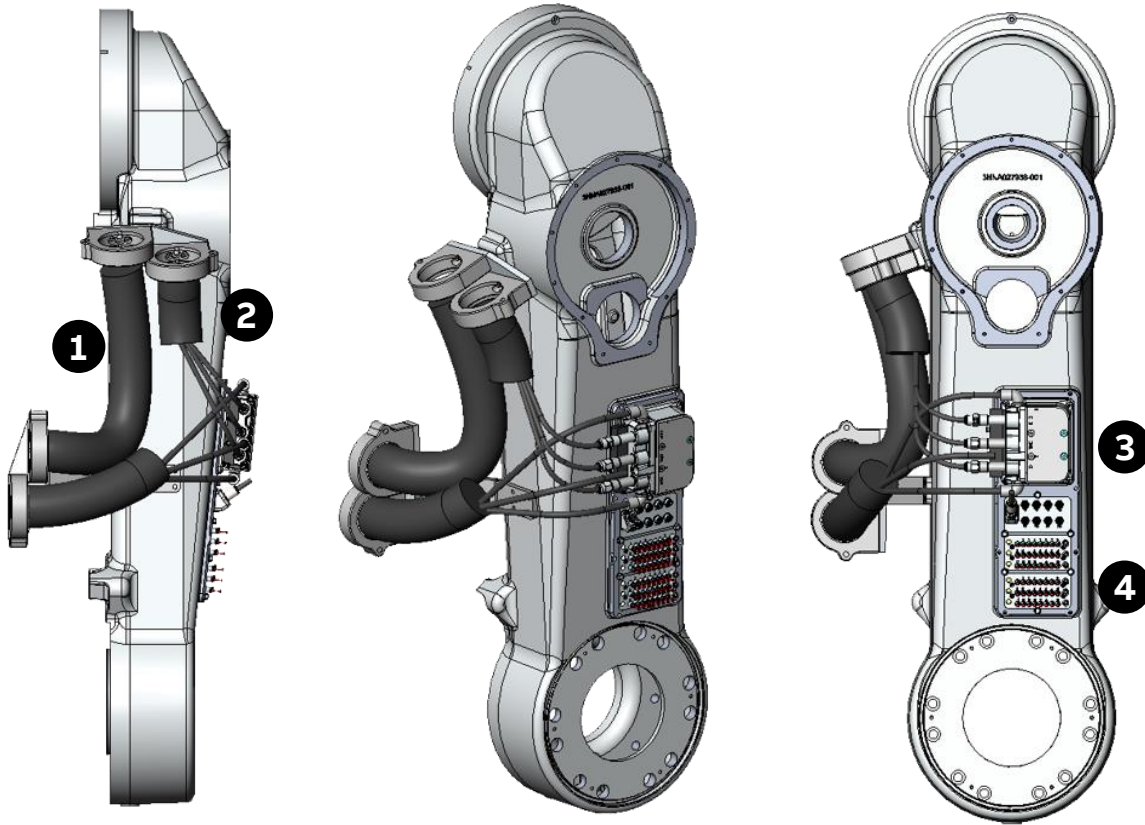
Vertical arm – 1100 mm

Specification



Puno – IRB 5510, Hose routing on vertical arm

Specification



1. Attachment prepared for dual hose guide (DTO)
2. Single hose guide will be standard option
3. PA components shifted to the right for optimized hose routing
4. Only "robot configuration A"

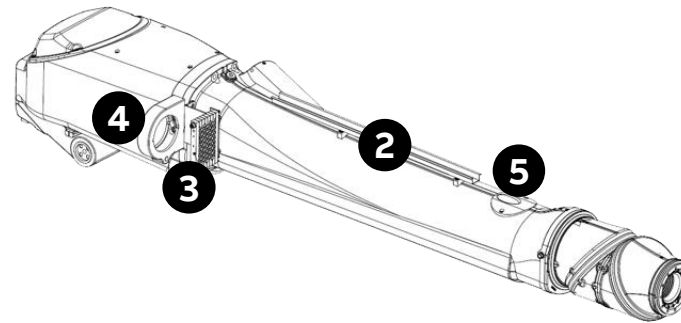
Horizontal arm 1500 mm

IRB 5510 vs IRB 580

IRB5510



IRB 580

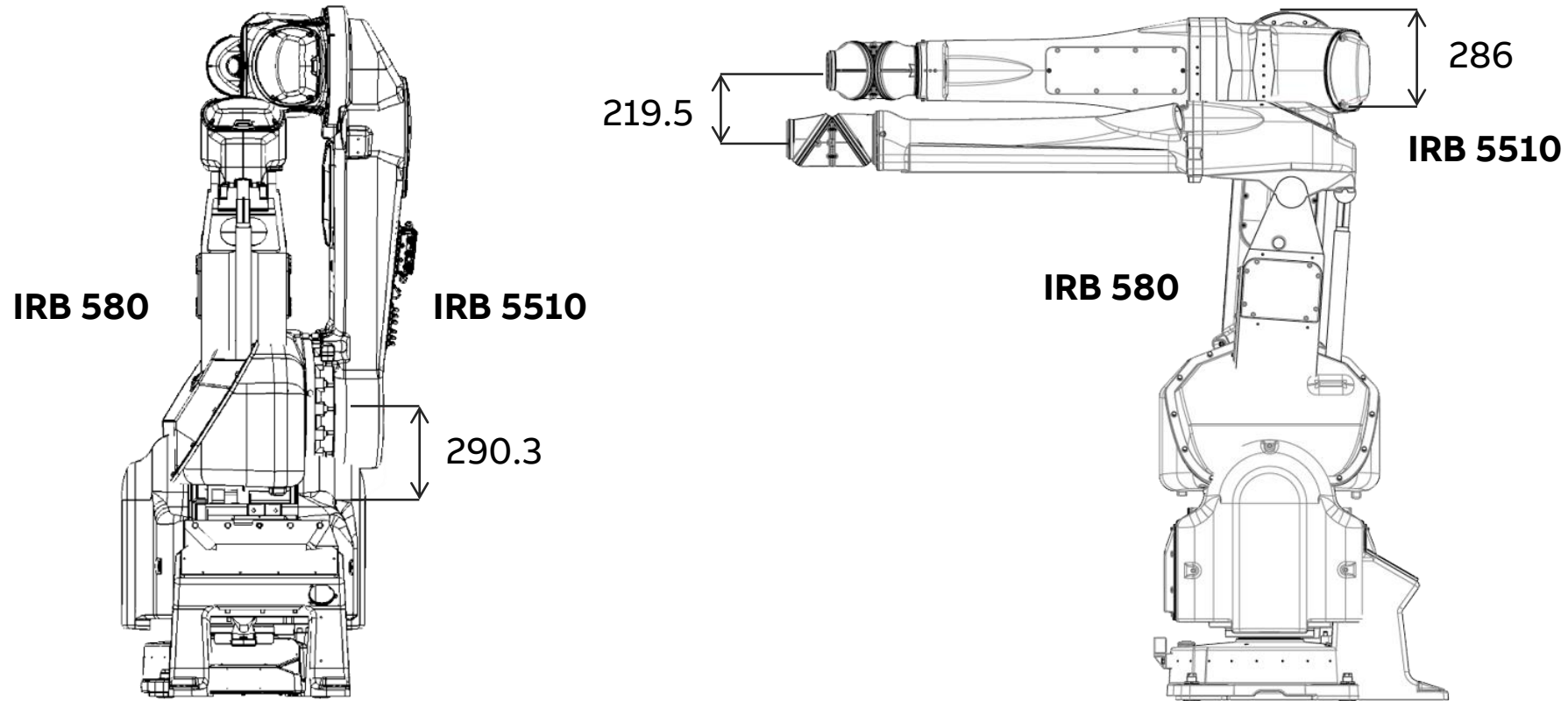


IRB5510 & IRB 580

1. Re-use of cover from IRB 5500 slim arm. Cover is used as mounting plate for PA.
2. Clamp for hose guide
3. Clamp for hoses
4. Din rail for assembly of PA components
5. Paint inlet

Height compared to IRB 580

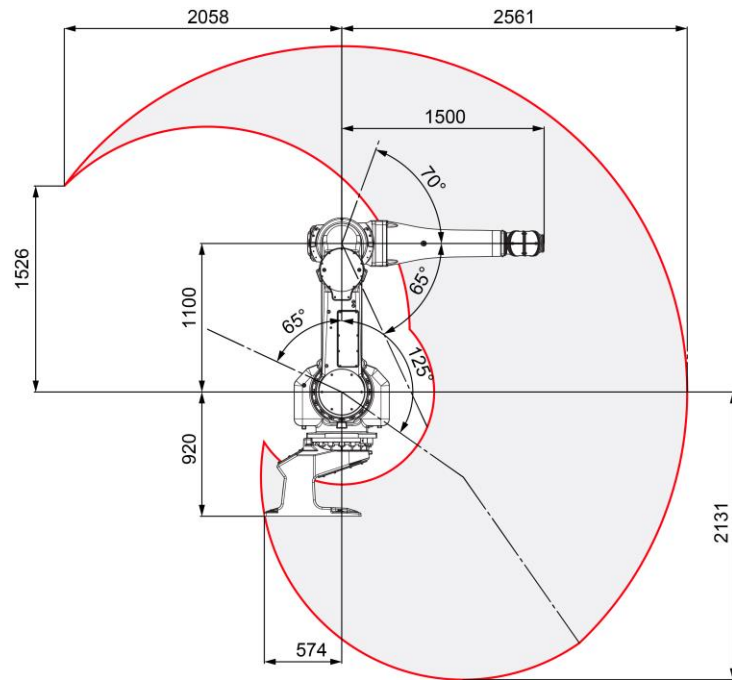
IRB 5510 vs IRB 580



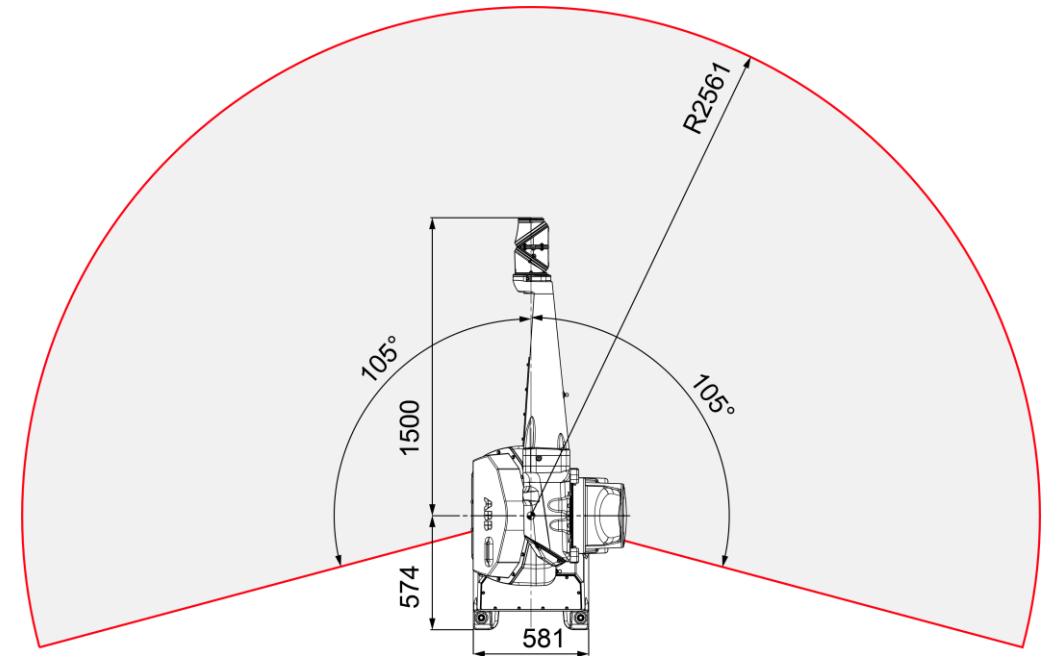
IRB 5510

Working area

Working area



Working area axis 1 ($\pm 105^\circ$)



Technical information

Specification

Payload (kg)	13
Protection	IP67 (wrist IP54)
Ex approval	Explosion protected Ex i/Ex p/ Ex c for installation in hazardous area Zone 1 & Zone 21 (Europe) and Division I, Class I & II.
Mounting	Floor, elevated, inverted
Main voltage	200 - 600VAC, 3-phase, 50/60 Hz
Robot footprint (mm)	581 x 717,5
Robot controller (mm)	1450 x 725 x 710
Robot unit weight (kg)	587
Robot controller (kg)	180
Static repeatability (mm)	0.15

ABB