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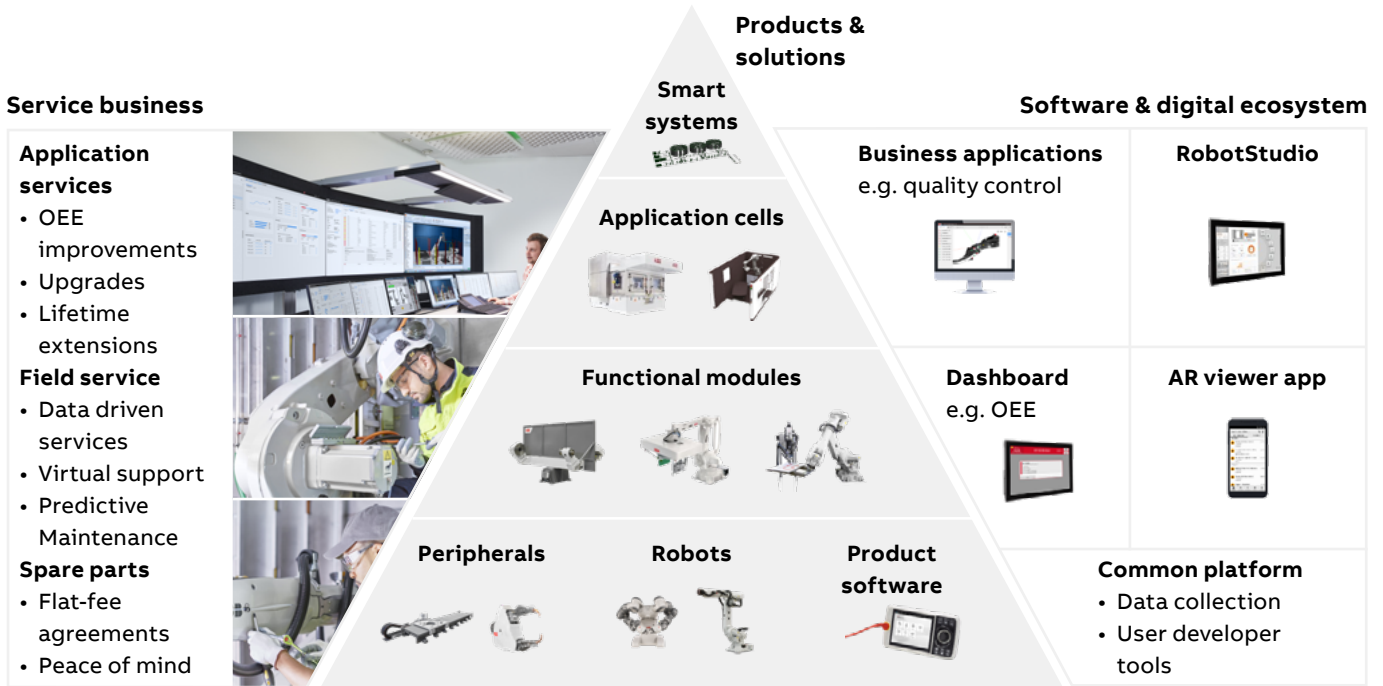
# ABB Robotics Product Range

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**ABB Robotics is a pioneer in robotics and digital services, providing innovative solutions for a diverse range of industries, from automotive to electronics to logistics. As one of the world's leading robotics suppliers, we have shipped more than 500,000 robot solutions. We help our customers of all sizes to increase productivity, flexibility and simplicity and to improve output quality. We support their transition towards the connected and collaborative factory of the future. ABB Robotics & Discrete Automation employs more than 11,000 people at over 100 locations in more than 53 countries.**

# Technology and application leadership

## “Robotics +” customer value stack



**47**

Years since we invented the first commercial microprocessor-controlled industrial robot.

**500,000+**

ABB robots shipped worldwide.

**1,500**

**people**

People working in our global service network.

# Product range

## Wide variety of robots to fit all needs

### Robot types

#### Cobots



GoFa



SWIFTI



YuMi family



IRB 390 FlexPacker

#### SCARA robots

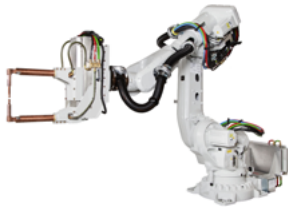


IRB 910INV

#### 6 axis robots



IRB 1100



IRB 6700

#### Palletizing robots



IRB 660

#### Paint robots



IRB 5500-27



Single-arm YuMi (7-axis)

...



IRB 1300

...



IRB 1600

...



IRB 2600

...



0.5 kg

Payload

# Value propositions and applications



Enable simplicity



Enhance flexibility



Increase productivity



Optimize performance



Ensure consistent quality production



Help employees with their tasks

### Applications according to IFR:

- Handling operations, machine tending
  - Metal casting
  - Plastic moulding
  - Stamping, forging, bending
  - Inspection, testing
  - Packaging, picking, placing
  - Palletizing
  - Material handling
- Welding:
  - Arc welding
  - Spot welding
  - Laser welding
  - Soldering
- Assembling, disassembling
- Cleanroom
- Dispensing, painting
- Processing:
  - Laser cutting
  - Water jet cutting
  - Mechanical cutting, grinding, deburring, milling, polishing



IRB 4400






















IRB 6700




















IRB 8700



→ 800 kg

Articulated robots	Payload (kg)	Reach (m)	Pos. rep. (mm)	Mounting	Protection and special design	Axes	Controller	Remark
 IRB 1100	4 4	0.475 0.58	0.01	Any angle	Std: IP40 Option: Clean Room ISO 4, IP67	6	OmniCore™	
 IRB 1200	5 7	0.90 0.70	0.025 0.02	Any angle	Std: IP40. Option: Foundry Plus 2, IP67, Clean Room ISO 3, Food Grade Lubrication	6	IRC5	
 IRB 1300	7 10 11	1.4 1.15 0.9	0.03 0.023 0.02	Any angle	Std: IP40 Option: IP67, Foundry Plus 2, Cleanroom ISO 4	6	OmniCore™	
 IRB 140 IRB 140T	6	0.80	0.03	Floor, wall, inverted, tilted	Std: IP67. Option: Foundry Plus 2, Clean Room ISO 6, SteamWash	6	IRC5	
 IRB 1410	5	1.44	0.025	Floor	Std: IP54	6	IRC5	
 IRB 1520ID	4	1.50	0.05	Floor, inverted	Std: IP40	6	IRC5	
 IRB 1600	6 10	1.20/1.45 1.20/ 1.45	0.02 0.02/0.05	Floor, wall, inverted, tilted, shelf	Std: IP54 Option: Foundry Plus 2 with IP67	6	IRC5	
 IRB 1660ID	4 6	1.55	0.02	Floor, wall, inverted, tilted	Std: IP40	6	IRC5	
 IRB 2400	12 20	1.55	0.03	Floor, inverted	Std: IP54 Option: Foundry Plus 2 with IP67	6	IRC5	
 IRB 2600	12/12 20	1.65/1.85 1.65	0.04	Floor, wall, inverted, titled, shelf	Std: IP67, IP54 (axis 4) Option: Foundry Plus 2	6	IRC5	
 IRB 2600ID	15 8	1.85 2.00	0.026 0.023	Floor, wall, shelf, titled, inverted	Std: IP67 for base and lower arm. IP54 for upper arm	6	IRC5	
 IRB 4400 IRB 4400L	60 10	1.96 2.55	0.05 0.05	Floor	Std: IP54 Option: IP67, Foundry Plus 2	6	IRC5	
 IRB 4600	20/40/ 45/60	2.5/2.55/ 2.05/2.05	0.05 - 0.06	Floor, inverted, tilted, shelf	Std: IP67 Option: Foundry Plus 2, Foundry Prime 2	6	IRC5	
 IRB 6620	150	2.20	0.03	Floor, tilted, inverted	Std: IP54 Option: Foundry Plus 2 with IP67	6	IRC5	
 IRB 6650S	90 125 200	3.90 3.50* 3.00*	0.13 0.14	Shelf	Std: IP67, Option: Foundry Plus 2. High pressure steam washable	6	IRC5	*Available with LeanID
 IRB 6660	100 130 205	3.30 3.10 1.90	0.10 0.11 0.07	Floor	Std: IP67 Option: Foundry Plus 2	6	IRC5	
 IRB 6700	150/155/175 200/205/235 245/300	3.20/2.85/3.05 2.60/2.80/2.65 3.00/2.70	0.06/0.08/0.05 0.05/0.05/0.05 0.05/0.06	Floor	Std: IP67 Option: Foundry Plus 2	6	IRC5	Available with LeanID
 IRB 6700INV	245 300	2.90 2.60	0.06 0.05	Inverted	Std: IP67 Option: Foundry Plus 2	6	IRC5	Available with LeanID
 IRB 7600	150/325/ 340/400/ 500	3.50/3.10*/ 2.80*/2.55*/ 2.55	0.19/0.10 0.27/0.19 0.08	Floor	Std: IP67 Option: Foundry Plus 2	6	IRC5	*Available with LeanID

Articulated robots		Payload (kg)	Reach (m)	Pos. rep. (mm)	Mounting	Protection and special design	Axes	Controller	Remark
	IRB 8700	550 800	4.20 3.50	0.08 0.05	Floor	Std: IP67 Option: Foundry Plus 2	6	IRC5	Available with LeanID
<b>Cobots</b>									
	CRB 15000 GoFa™	5	0.95	0.05	Any angle	Std: IP54	6	OmniCore™	Functional safety Category 3, PL d
	CRB 1100 SWIFTI™	4 4	0.475 0.58	0.01	Any angle	Std: IP40	6	OmniCore™	Functional safety Category 3, PL d
	IRB 14000 YuMi®	0.50	0.559	0.02	Table	Std: IP30 and Clean Room ISO 5	14	Embedded IRC5	Functional safety Category B, PL b
	IRB 14050 YuMi®	0.50	0.559	0.02	Any angle	Std: IP30 and Clean Room ISO 6	7	OmniCore™	Functional safety Category 3, PL d
<b>Parallel robots</b>									
	IRB 390 FlexPacker™	10 15	1.3 1.3	0.08 0.01	Inverted	Std: IP67, Food Grade Lubrication	5 4	IRC5	
	IRB 360 FlexPicker®	1 3 6 8	1.13/1.60 1.13 1.60 1.13	0.09/0.03 0.06 0.03 0.05	Inverted	Std: IP54/67/69K, Food Grade Lubrication Option: Clean Room, Wash-down, Stainless	4	IRC5 or OmniCore™	
<b>SCARA robots</b>									
	IRB 910SC	3 (max 6)	0.45 0.55 0.65	0.01	Table	Std: IP20	4	IRC5	
	IRB 910INV	1 (max 3) 3 (max 6)	0.35 0.55	0.01 0.01	Inverted	Std: IP30. Option: Clean Room ISO 1, IP54	4	OmniCore™	
<b>Paint robots</b>									
	IRB 52	7	1.20/1.45	0.15	Floor, wall, inverted, tilted	Std: IP66, Ex	6	IRC5P	
	IRB 5500-22 IRB 5500-23 IRB 5500-25 FlexPainter®	13	2.97	0.15	Floor, wall, inverted, tilted Elevated	Std: IP66, Ex	6 7 7	IRC5P	
	IRB 5500-27 FlexPainter®	13	2.97	0.15	Wall, floor, inverted	Std: IP66, Ex	7	IRC5P	
	IRB 5510	13	2.56	0.15	Floor	Std: IP66, Ex	6	IRC5P	
	IRB 5350	7	1.35 Rail travel length: 3-10	0.15	Floor, rail	Std: IP66, Ex	3/4	IRC5P	
<b>Palletizing robots</b>									
	IRB 460	110	2.40	0.20	Floor	Std: IP67	4	IRC5	
	IRB 660	180 250	3.15	0.05	Floor	Std: IP67	4	IRC5	
	IRB 760	450	3.18	0.05	Floor	Std: IP67	4	IRC5	



GoFa™ CRB 15000 go far with your new helping hand

SWIFTI™ CRB 1100 unleash the speedy robot



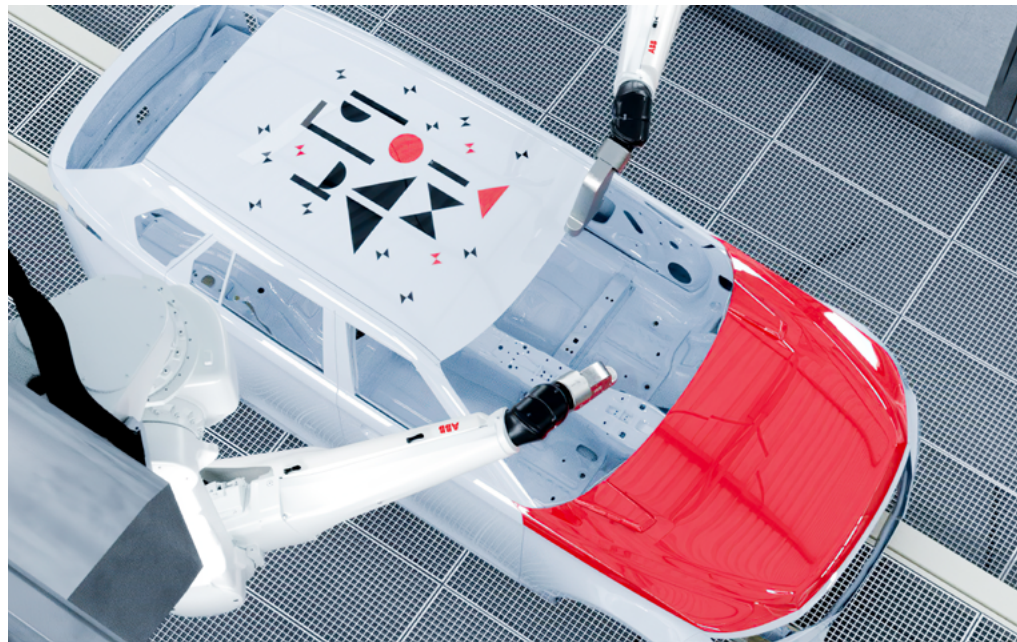
FlexPacker™ IRB 390 ultra-fast high payload picking and packing





IRB 1300 class-leading powerful performance in a compact package

PixelPaint unmasks the future of customized automotive painting



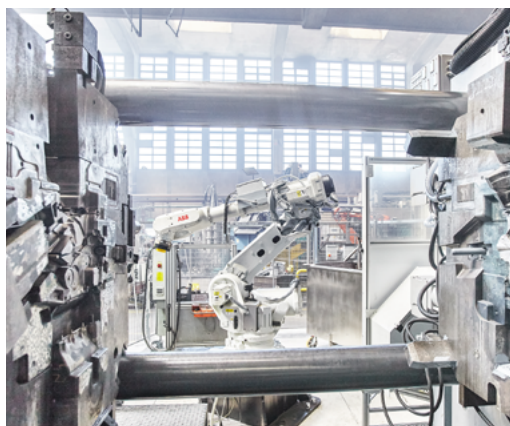
RobotStudio® AR viewer offers Augmented Reality on a smartphone

# Key innovations

Expertise and support you can rely on

ABB Robotics is a pioneer in robots, software and advanced digital services, and has supplied many breakthrough innovations since introducing the world's first micro-processor-controlled robot in 1974.

- **1974** IRB 6, the world's first micro-processor-controlled robot
- **1979** IRB 60 the world's first electrical robot for spot welding
- **1983** First joystick FlexPendant for robot control
- **1986** IRB 2000, first robot driven by AC motors
- **1994** Dynamic motion control with TrueMove and QuickMove
- **1995** The world's highest speed delta robot
- **1998** RobotStudio, first offline programming tool
- **2001** IRB 7600, first industrial robot to handle 500 kg
- **2004** MultiMove, coordinated multiple (up to four) robot control
- **2005** Remote Services, a decade before the term 'internet of things' was known
- **2010** IRB 460 - The fastest palletizing robot in the world
- **2015** YuMi, the world's first truly collaborative robot; ABB Connected Services
- **2018** OmniCore; world's first connected paint atomizer
- **2021** GoFa and SWIFTI, the next generation of cobots



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# Strongly positioned to benefit from market dynamics

## **Broadest portfolio amongst our peers**

As the only player with both a strong robotics and automation portfolio in-house, we are in an ideal position to provide our customers with flexible automation solutions from individual machines to whole plants. We have a balanced portfolio of products, cells and solutions, systems and services. Integrated solutions like machine-centric robotics and digital services open new high growth applications.

## **Innovation strength**

We are expanding our portfolio of products (e. g. track systems), solutions (e. g. machine-centric robotics), cells and systems (e. g. flexible manufacturing systems). We focus especially on our software and digital portfolio. We already monitor ~9000 installed robots remotely and are constantly adding new digital services on ABB Ability. We have established incubators to accelerate the developments in artificial intelligence, digital factory automation, collaborative robotics and healthcare.

## **A true global player**

We are very well positioned to serve our customers globally. We have local sales, service and application engineers in all relevant markets, and we produce robots in Sweden, China and the USA. With six R&D centers in Europe, Asia and the USA, we can tap into talent pools across the globe and do research close to all key markets.

## **Applied domain expertise**

Deep domain know-how is the base for the development of value creating solutions to serve our customers. Through the alignment of our organization with customer segments, we are best positioned to serve their specific needs.

