

ABB ROBOTICS

Product Range of Industrial
Robots and Cobots

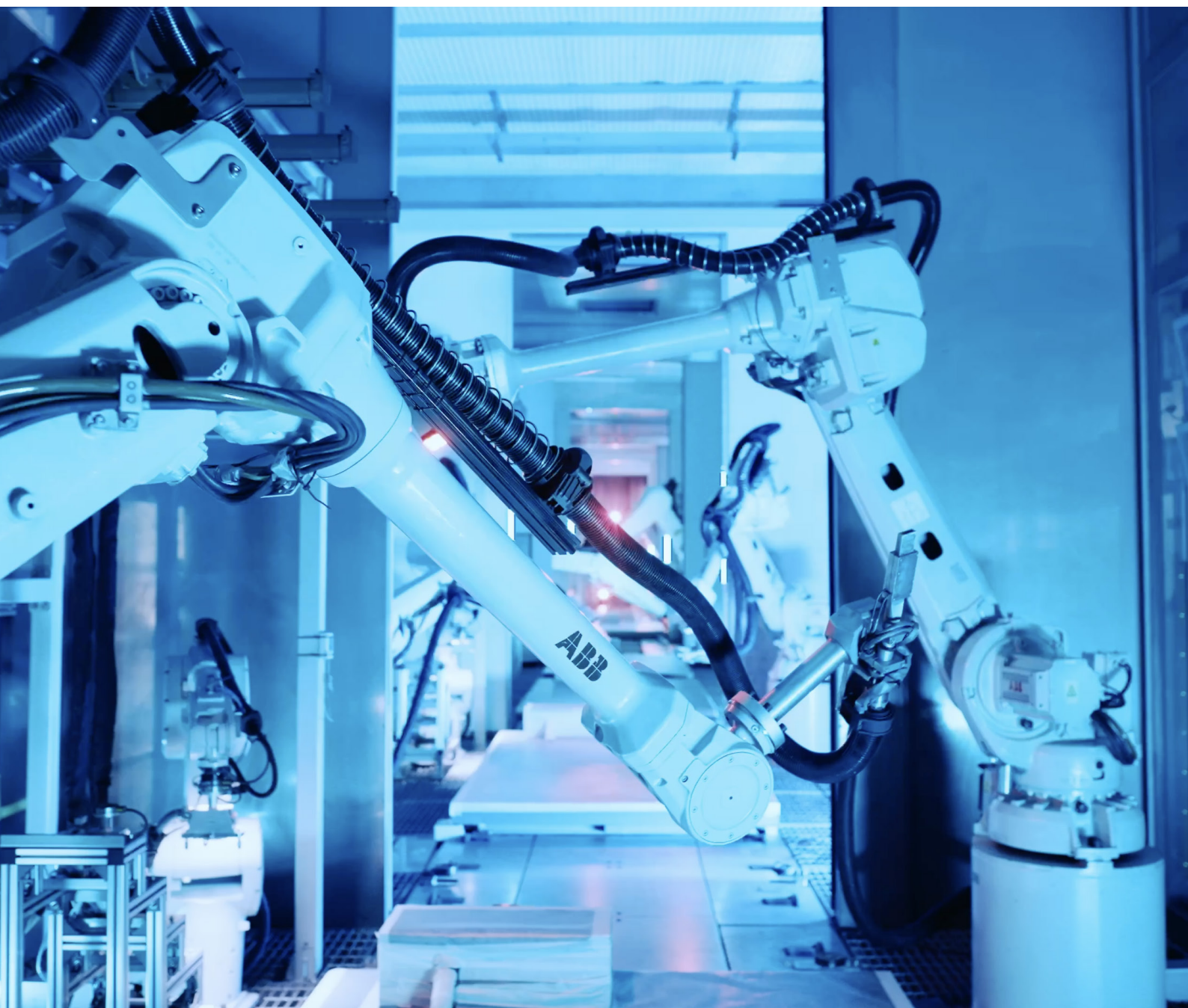


ABB Robotics as one of the world's leading robotics companies, is the only company with a comprehensive and integrated AI-powered portfolio covering robots, cobots and Autonomous Mobile Robots (AMRs), designed and orchestrated by our value-creating software. We help companies of all sizes and sectors – from automotive to electronics and logistics – to outperform by becoming more resilient, flexible and efficient. ABB Robotics is at the forefront of developing and commercializing a new generation of Autonomous Versatile Robotics (AVR), leading a global innovation ecosystem of partners in advancing efficient hardware and intelligent software with industrial performance. The business employs approximately 7,000 people.

go.abb/robotics

VALUE ARCHITECTURE

A unique architecture designed to boost productivity and flexibility, tailored to meet all of your needs.

—
Most comprehensive mechatronics platform



Domain expertise

—
Leading software & technology stack



Smart systems

—
Intelligent future – ready controller platform



Application cells

Functional modules

Most comprehensive mechatronics platform

ABB Robotics offers the most comprehensive product portfolio on the market, including controllers, best-performing collaborative and industrial robot families, and a full portfolio of AMRs powered by market-leading AI Visual SLAM.

Leading software & technology stack

RobotWare is ABB's robotic operating system, offering extensive value creation through its RAPID language, automatic path planning, intuitive Wizard Easy Programming, AppStudio, and AI-built skills. RoboStudio® is the best tool to simulate systems, from accurate cell simulation to layout and fleet management.

Intelligent future-ready controller platform

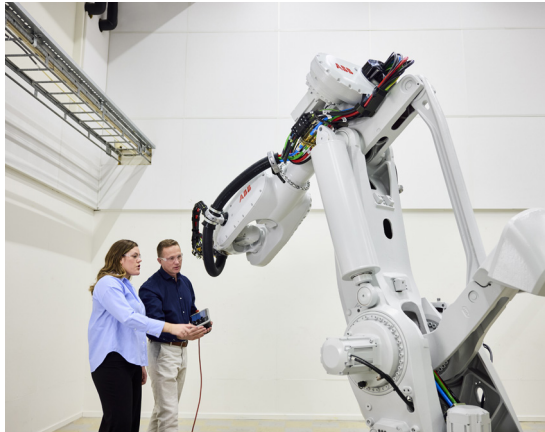
Bundling more value than any other robotic controllers, OmniCore™ delivers on our hallmark promise of robust motion control and safety while integrating top-tier cyber security, connectivity, integrated sensor and AI processing.

PRODUCT RANGE

Wide variety of robots to fit all needs

Articulated robots

Leveraging our profound expertise in industry automation and domain knowledge, ABB excels in the creation of high-performance articulated robots designed to elevate our customers' productivity and quality. Featuring ABB's TrueMove and QuickMove motion control technology, the robots can achieve class-leading repeatability and cycle time.



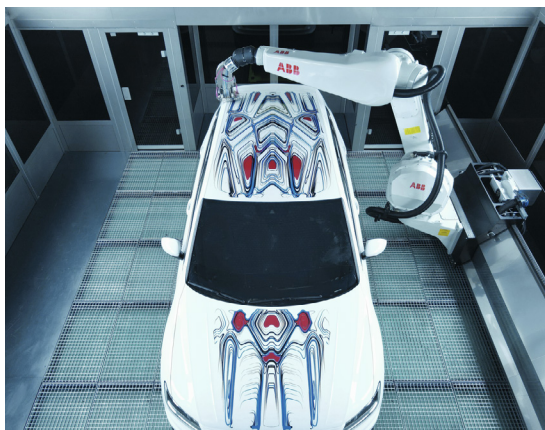
Collaborative robots

ABB's collaborative robots are made for a wide range of tasks, in operations of every size. They're easy to set up, program, operate, and scale. Built by industry-leading experts. And serviced by the broadest service network in the industry. Whatever you need, we're here to support every step of your automation journey.



Paint robots

A complete range of paint robots to help you increase the productivity and quality of your paint shop operations. Designed for automotive interior & exterior painting, tiers, and general small & medium parts painting applications.



Delta robots

ABB's Delta robot portfolio is the leader in state-of-the-art high-speed robotic picking and packing technology for use in the picking, packing, and packaging applications. Our delta robots offer the greatest flexibility in a compact footprint.

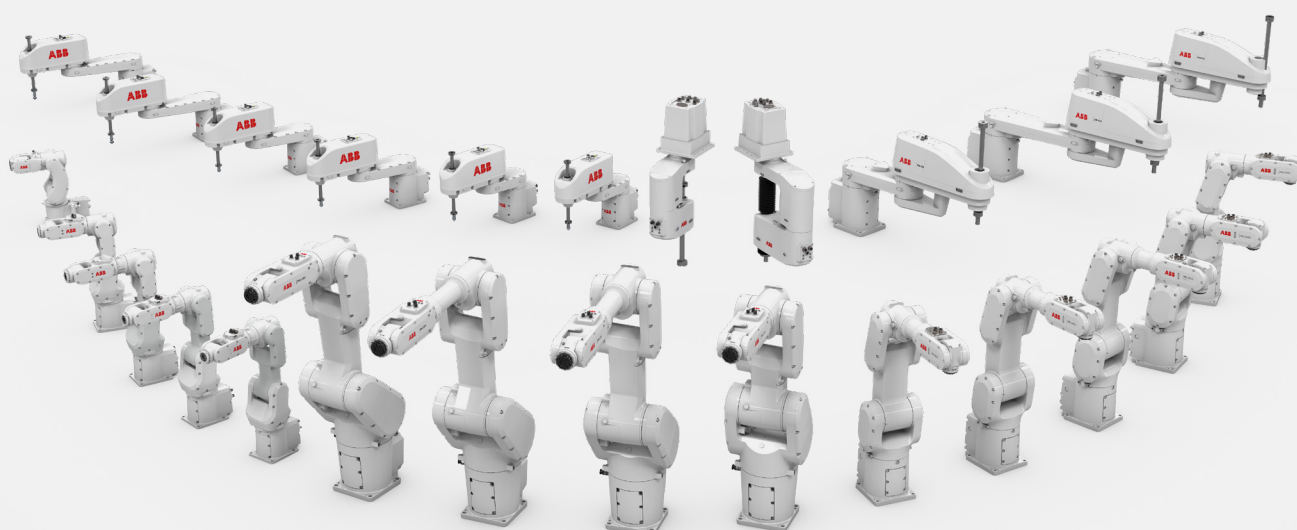


SCARA robots

Quick, precise, and reliable, ABB's SCARA robots are ideal for customers requiring rapid cycle times, high precision, and high reliability for material handling, loading & unloading, picking & placing, and small part assembly & testing applications.

**Palletizer robots**

ABB's 4-axis palletizer robots are the fastest in the market. Designed for shortening cycle times and raising productivity for end-of-line, multi-feed-in/-out, and bag palletizing.



Articulated: small robots



Model Name	IRB 1010	IRB 1090	IRB 1100	IRB 1200 Gen 2	IRB 1300
Payload (kg)	1.5	3.5	4 4	5-9	7-12
Reach (m)	0.37	0.58	0.475 0.58	0.7-0.9	0.9-1.4
Variants	IRB 1010-1.5/0.37	IRB 1090-3.5/0.58	IRB 1100-4/0.475 IRB 1100-4/0.58	IRB 1200-9/0.7 Gen2 IRB 1200-8/0.9 Gen2 IRB 1200-7/0.7 Gen2 IRB 1200-5/0.9 Gen2	IRB 1300-11/0.9 IRB 1300-10/1.15 IRB 1300-7/1.4 IRB 1300-12/1.4
Pose rep. (mm)*	0.01	0.05	0.01	0.011-0.019	0.02-0.05
Mounting	Floor, Inverted, Tilted	Floor, Suspended	Floor, Table, Wall, Inverted, Tilted	Floor, Table, Wall, Suspended, Tilted	Floor, Wall, Inverted, Tilted
Protection and special options	Std: IP40	Std: IP40	Std: IP40 Option: Clean Room ISO 4, IP67	Std: IP40 Option: IP67 and Foundry Plus 2, Clean Room ISO 4, Food grade oil	Std: IP40 Option: IP67, Foundry Plus 2, Clean Room ISO 4
Axes	6	6	6	6	6
Remark	Compliant with ISO 9283.				*Pose repeatability

Articulated: medium robots



Model Name	IRB 1520ID		IRB 1600	IRB 1660ID
Payload (kg)	4		6 10	4 6
Reach (m)	1.50		1.20/1.45 1.20/ 1.45	1.55
Variants	IRB 1520ID-4/1.5		IRB 1600-6/1.2 IRB 1600-6/1.45 IRB 1600-10/1.2 IRB 1600-10/1.45	IRB 1660ID-4/1.55 IRB 1660ID-6/1.55
Pose rep. (mm)*	0.05		0.02-0.05	0.02
Mounting	Floor, inverted	Floor, Wall, Inverted, Tilted (Up to 55°)		Floor, Wall, Inverted, Tilted (Up to 45°)
Protection and special options	Std: IP40		Std: IP54 Option: Foundry Plus 2	Std: IP67 (Axis 4: IP40)
Axes	6		6	6
Remark				
Compliant with ISO 9283.				*Pose repeatability

Articulated: medium robots



Model Name	IRB 2600	IRB 2600ID	IRB 4400 IRB 4400L	IRB 4600
Payload (kg)	12/12 20	15 8	60 10	20-60
Reach (m)	1.65/1.85 1.65	1.85 2.00	1.96 2.55	2.05-2.55
Variants	IRB 2600-20/1.65 IRB 2600-12/1.65 IRB 2600-12/1.85	IRB 2600ID-15/1.85 IRB 2600ID-8/2.00	IRB 4400/60-1.96 IRB 4400L/10-2.55	IRB 4600-60/2.05 IRB 4600-45/2.05 IRB 4600-40/2.55 IRB 4600-20/2.50
Pose rep. (mm)*	0.04	0.026 0.023	0.05-0.06	0.05 - 0.06
Mounting	Floor, Wall, Tilted (Up to 45°. Suspended not supported)	Floor, Wall, Inverted, Tilted (Up to 45°)	Floor, default 0° (Tilting not allowed)	Floor, inverted, tilted
Protection and special options	Std: IP67, IP54 (axis 4) Option: Foundry Plus 2	Std: IP67 for base and lower arm. IP54 for upper arm	Std: IP54 Option: IP67, Foundry Plus 2	Std: IP67 Option: Foundry Plus 2, Foundry Prime 2 for 60kg, Clean Room ISO 5
Axes	6	6	6	6
Remark				

Compliant with ISO 9283.

*Pose repeatability

Articulated: large robots



Model Name	IRB 5710	IRB 5720	IRB 6730S	IRB 6750S	IRB 6760
Payload (kg)	70-110	90-180	130-270	185-350	150 200
Reach (m)	2.3-2.7	2.6-3.0	3.1-4.0	3.2-3.9	3.5 3.2
Variants	IRB 5710-110/2.3 IRB 5710-90/2.7 IRB 5710-90/2.3 LID IRB 5710-70/2.7 LID	IRB 5720-180/2.6 IRB 5720-125/3.0 IRB 5720-155/2.6 LID IRB 5720-90/3.0 LID	IRB 6730S-270/3.1 IRB 6730S-210/3.5 IRB 6730S-150/4.0 IRB 6730S-220/3.1 LID IRB 6730S-180/3.5 LID IRB 6730S-130/4.0 LID	IRB 6750S-350/3.2 IRB 6750S-270/3.6 IRB 6750S-215/3.9 IRB 6750S-270/3.2 LID IRB 6750S-220/3.6 LID IRB 6750S-185/3.9 LID	IRB 6760-200/3.2 IRB 6760-150/3.5
Pose rep. (mm)*	0.04-0.05	0.04-0.05	0.06~0.07	0.06-0.10	0.06-0.08
Mounting	Floor, tilted, inverted	Floor, tilted, inverted	Shelf	Shelf	Floor
Protection and special options	Std: IP67 Option: Foundry Plus 2	Std: IP67 Option: Foundry Plus 2	Std: IP67 Option: Foundry Plus 2	Std: IP67 Option: Foundry Plus 2	Std: IP67
Axes	6	6	6	6	6
Remark					

Compliant with ISO 9283.

*Pose repeatability



The lineup of 11 next-generation large robot families comprising 60 variants offers customers new levels of flexibility and choice as well as class-leading performance and sustainability benefits.

Articulated: large robots



Model Name	IRB 6710	IRB 6720	IRB 6730	IRB 6740
Payload (kg)	175–210	140–240	190–270	220–310
Reach (m)	2.65–2.95	2.65–3.2	2.7–3.1	2.8–3.2
Variants	IRB 6710-210/2.65 IRB 6710-200/2.95 IRB 6710-175/2.65 LID IRB 6710-175/2.95 LID	IRB 6720-240/2.65 IRB 6720-210/2.8 IRB 6720-170/3.1 IRB 6720-160/3.2 IRB 6720-215/2.65 LID IRB 6720-200/2.8 LID IRB 6720-150/3.1 LID IRB 6720-140/3.2 LID	IRB 6730-270/2.7 IRB 6730-240/2.9 IRB 6730-210/3.1 IRB 6730-220/2.9 LID IRB 6730-190/3.1 LID	IRB 6740-310/2.8 IRB 6740-260/3.0 IRB 6740-240/3.2 IRB 6740-270/2.8 LID IRB 6740-230/3.0 LID IRB 6740-220/3.2 LID
Pose rep. (mm)*	0.04–0.06	0.04–0.07	0.03–0.06	0.04/0.05/0.06
Mounting	Floor	Floor	Floor	Floor
Protection and special options	Std: IP67 Option: Foundry Plus 2	Std: IP67 Option: Foundry Plus 2	Std: IP67 Option: Foundry Plus 2	Std: IP67 Option: Foundry Plus 2
Axes	6	6	6	6
Remark				

Compliant with ISO 9283.

*Pose repeatability

Articulated: large robots



Model Name	IRB 6790	IRB 7710	IRB 7720	IRB 8700
Payload (kg)	205/235	280–500	400–620	550 800
Reach (m)	2.80/2.65	2.85–3.5	2.9–3.5	4.20* 3.50*
Variants	IRB 6790-235/2.65 IRB 6790-205/2.80	IRB 7710-500/2.85 IRB 7710-430/3.1 IRB 7710-360/3.3 IRB 7710-310/3.5 IRB 7710-400/2.85 LID IRB 7710-390/3.1 LID IRB 7710-325/3.3 LID IRB 7710-280/3.5 LID	IRB 7720-620/2.9 IRB 7720-530/3.1 IRB 7720-510/3.3 IRB 7720-450/3.5 IRB 7720-560/2.9 LID IRB 7720-480/3.1 LID IRB 7720-400/3.3 LID IRB 7720-400/3.5 LID	IRB 8700-800/3.50 or LID IRB 8700-550/4.20 or LID
Pose rep. (mm)*	0.05	0.06–0.1	0.05–0.06	0.05–0.08
Mounting	Floor	Floor	Floor	Floor
Protection and special options	Std: IP69, Foundry Prime 3	Std: IP67 Option: Foundry Plus 2	Std: IP67 Option: Foundry Plus 2	Std: IP67 Option: Foundry Plus 2
Axes	6	6	6	6
Remark				*Available with LeanID

Compliant with ISO 9283.

*Pose repeatability

Cobots



Model Name	GoFa™ CRB 15000	PoWa CRB 1910	PoWa CRB 1920
Payload (kg)	5/10/12 (Payload wrist down: 6, 12 and 14kg)	PoWa 10: up to 11 kg ² PoWa 13: up to 14 kg ²	PoWa 16: up to 17 kg ² PoWa 20: up to 22 kg ² PoWa 30: up to 32 kg ²
Reach (m)	0.95 (1.05 TCP) 1.27 (1.37 TCP) 1.52 (1.62 TCP)	1.52 (1.67 TCP) 1.34 (1.49 TCP)	1.96 (2.1 TCP) 1.67 (1.82 TCP) 1.35 (1.52 TCP)
Variants	CRB 15000-5/0.95 CRB 15000-12/1.27 CRB 15000-10/1.52	CRB 1910-10/1.52 CRB 1910-13/1.34	CRB 1920-16/1.96 CRB 1920-20/1.67 CRB 1920-30/1.35
Pose rep. (mm) ¹	0.02	0.03	0.03
Mounting	Any angle	Any angle	Any angle
Protection and special options	Std: IP54 for GoFa 5, IP67 for GoFa 10 and 12, Clean Room ISO 4	IP65 (body), IP67 (wrist) Clean Room up to ISO4 ³ Plug-and-play CPCS	IP67 Clean Room ISO Class 4 Plug-and-play CPCS
Axes	6	6	6
Remark	Functional safety PL d Ca t3	PL d Ca t3. TCP speed up to 8.3m/s	PL d Ca t3. TCP speed up to 7.2m/s

¹Compliant with ISO 9283.²Wrist-down configuration³ISO Class 4 at 50% speed with rated payload.

ISO Class 5 at 100% speed with rated payload

Parallel / Delta robots



Model Name	IRB 390 FlexPacker®		IRB 360 FlexPicker®		IRB 365 FlexPicker®
Payload (kg)	10	15	1	3	1.5
			6	8	
Reach (m)	1.3	1.3	1.13/1.60	1.13	0.8
			1.60	1.13	1.1
					1.3
Variants	IRB 390-15/1300	IRB 390-10/1300	IRB 360-1/1130	IRB 360-1/1600	IRB 365-1.5/1100
			IRB 360-3/1130	IRB 360-8/1130	IRB 365-1.5/1300
				IRB 360-6/1600	IRB 365-1.5/800
Pose rep. (mm)*	0.02-0.07		0.03-0.09		0.05
Mounting	Inverted		Inverted		Inverted
Protection and special options	Std: IP67, FGL		Std: IP54/67/69K, FGL		Std: IP54, FGL
			Option: Clean Room, Wash-down, Stainless		
Axes	5	4	4		5
Remark					
Compliant with ISO 9283.					*Pose repeatability

SCARA robots



Model Name	IRB 910INV		IRB 920/IRB 920T		IRB 930
Payload (kg)	1 (max 3)	3 (max 6)	6		12
					12
					22
Reach (m)	0.35	0.55	0.45	0.55	0.85
			0.65		1.05
					1.05
Variants	IRB 910INV-3/0.35	IRB 910INV-6/0.55	IRB 920-6/0.45	IRB 920-6/0.55	IRB 930-12/0.85
			IRB 920-6/0.65	IRB 920T-6/0.45	IRB 930-12/1.05
			IRB 920T-6/0.55	IRB 920T-6/0.65	IRB 930-22/1.05
Pose rep. (mm)*	0.01	0.01	0.009-0.02		0.01-0.02
Mounting	Inverted		Floor		Floor
Protection and special options	Std: IP30.		Std: IP 30		Std: IP30
	Option: Clean Room ISO 1, IP54		Option: IP54, Clean Room ISO 5		Ball screw area IP20
Axes	4		4		4
Remark					
Compliant with ISO 9283.					*Pose repeatability

Paint robots



Model Name	IRB 5500	IRB 5510	IRB 5350
Payload (kg)	13	13	7
Reach (m)	2.97	2.56	1.35 Rail travel length: 3-10
Variants	IRB 5500-22. 6 axes IRB 5500-23. 7 axes floor IRB 5500-25. 7 axes elevated IRB 5500-27. 7 axes rotative		
Pose rep. (mm)*	0.15	0.15	0.15
Mounting	Floor, wall, inverted, tilted Elevated	Floor	Floor, rail
Protection and special options	Std: IP66, Ex	Std: IP66, Ex	Std: IP66, Ex
Axes	6 7	6	3 4
Remark			
Compliant with ISO 9283.			*Pose repeatability

Palletizing robots



Model Name	IRB 460	IRB 660	IRB 760
Payload (kg)	110	180 250	450
Reach (m)	2.40	3.15	3.18
Variants	IRB 460-110/2.4	IRB 660-180/3.15 IRB 660-250/3.15	IRB 760-450/3.2
Pose rep. (mm)*	0.20	0.05	0.05
Mounting	Floor	Floor	Floor
Protection and special options	Std: IP67	Std: IP67	Std: IP67
Axes	4	4	4
Remark			
Compliant with ISO 9283.			*Pose repeatability

OMNICORE™

POWERING FUTURE-READY, SUSTAINABLE ROBOTS TODAY



The OmniCore platform powers our extensive robot portfolio, providing future-proof, scalable control to automate almost any imaginable application.

The OmniCore platform stands out for its capacity to enable motion, force, and sensor applications, all out of a single unified system. OmniCore delivers the full value provided by the ABB Robotics hardware and software portfolio in any combination, offering boundless potential for customer innovation and value creation. With its unprecedented pairing of accuracy and speed to robotics motion control, for efficient operations.

E10

Ultra-slim



C30

Compact



C90XT

Rugged yet compact



V250XT

Versatile



V400XT

Large and flexible



Applicable robots

Articulated

SCARA

Cobot

Delta

Articulated

Delta

Articulated

Delta

Articulated

Delta

Cobot

Articulated

SCARA

SCARA

Palletizer

Palletizer



Designed to power robots with payloads

Up to 22 kg
(IRB 1300, IRB 930)

Up to 22 kg
(IRB 1600, IRB 930)

Up to 22 kg
(IRB 1600, IRB 930)

Up to 620 kg
(IRB 77X0)

Up to 800 kg
(IRB 8700)



Width × Depth × Height

449 × 338 × 89 mm

449 × 443 × 170 mm

500 × 355 × 520 mm

650 × 480 × 960 mm

650 × 480 × 1140 mm



#ADU (additional drive unit) Up to...

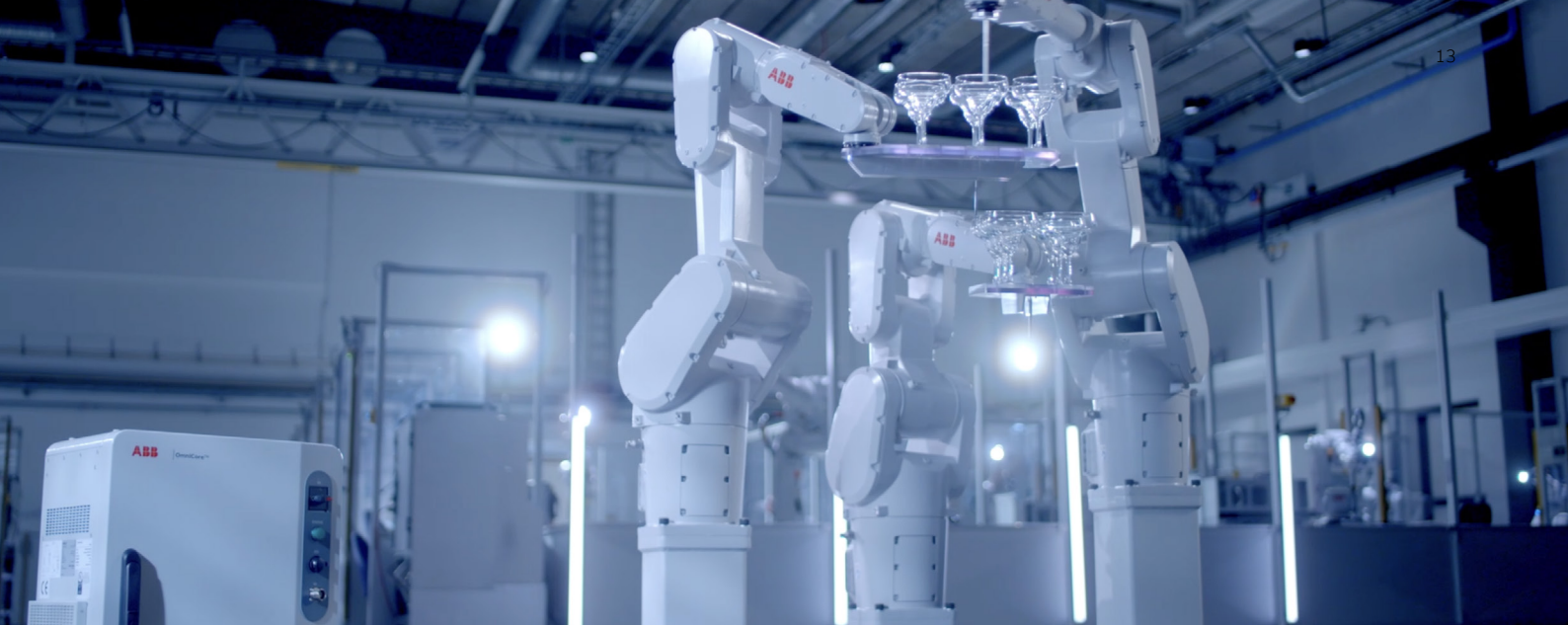
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1

3

6



Highest productivity and quality

With OmniCore, robots achieve class-leading motion control with path accuracies down to 0.6 mm, even with multiple robots operating at maximum speeds of 1600 mm/s.



Cybersecurity and full traceability

Built-in cybersecurity and traceability features allow businesses to increase quality and productivity by reducing downtime.



Unmatched scalability

OmniCore powers the market's most extensive range of robots and manipulators, providing 5 different controllers that run on the same platform.



Safety

OmniCore complies with future safety standards and includes up to 100 safety configurations to meet the needs of diverse use cases.



Commitment to sustainability

Featuring built-in power back into the grid and regeneration technology to achieve up to 20% energy savings compared to its predecessor.



Future proof design

Designed for easy integration of market-leading computing power, enabling AI, Cloud, and advanced vision systems.



Easy integration

The integration of all major communication protocols in a single controller platform accelerates commissioning times from weeks to days, with additional gains from the leading number of pre-engineered application software tools and over up to 1000 time-saving features.



OmniCore EyeMotion

Intelligent, hardware-agnostic vision system gives ABB robots the power to see and adapt in real time with advanced perception skills, through any camera or sensor.

ROBOTS POWERED BY OmniCore™

Controller	Articulated robots																					Palletizer robots			SCARA robots		Delta robots		Cobots						
OmniCore		IRB 1010	IRB 1090	IRB 1100	IRB 1200	IRB 1200 Gen2	IRB 1300	IRB 1510	IRB 1520	IRB 1600	IRB 2400	IRB 2600	IRB 4400	IRB 4600	IRB 57x0	IRB 6650S	IRB 6660	IRB 67x0S	IRB 67x0	IRB 6790	IRB 77x0	IRB 8700	IRB 460	IRB 660	IRB 760	IRB 910 INV	IRB 920	IRB 930	IRB 360	IRB 365	IRB 390	CRB 15000	CRB 1910	CRB 1920	
	E10	●	●	●	●	●	●																			●	●	●					●	●	
	C30	●		●	●	●	●	●	●	●																●	●	●	●	●		●	●	●	
	C90XT			●	●	●	●	●	●	●																●	●	●							
	V250XT					●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●						●				
	V400XT						●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●					●				

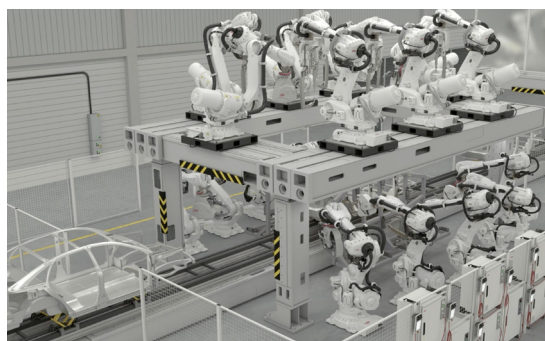
KEY INNOVATIONS

Expertise and support you can rely on

ABB evolves IRB 1200 family, with greater speed, precision and choice



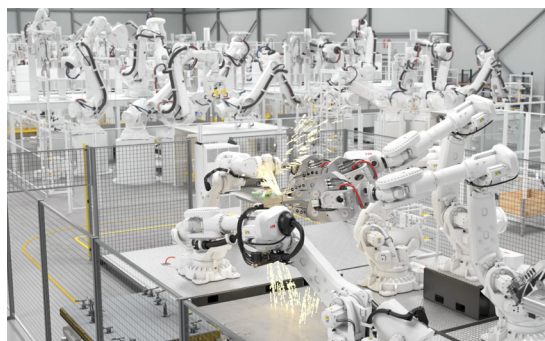
Increased productivity: up to 80 spot welds in 15 seconds using ten IRB 67X0S shelf and eight floor-mounted IRB 67X0 robots



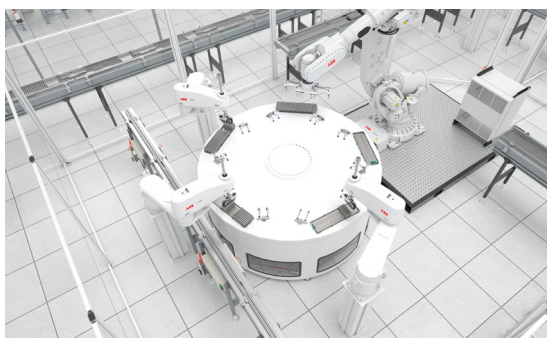
IRB 365 FlexPicker® is both flexible and the fastest in its class for reorienting packaged lightweight products



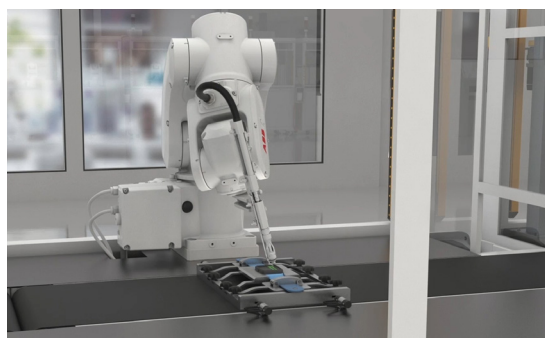
IRB 5710 ~ IRB 7720 support a wide range of applications such as spot welding, material handling, dispensing and gluing



IRB 930 high-payload SCARA robots are designed for rapid pick-and-place tasks in electronics and EV battery cell production.



IRB 1010, ABB's smallest industrial robot, unlocks new opportunities for faster, high-quality production of wearable smart devices



AUTONOMOUS VERSATILE ROBOTICS



We're moving beyond fixed procedures and repeatable tasks – to a new era where robots plan, adapt, and perform complex work in real time, uniting vision, precision, speed, dexterity, and mobility – all powered by generative AI.

ROBOT-HUMAN INTERACTION

AVR means no-code programming and a world where robots learn from lead-through, speak through training and natural language programming.

SENSING & PERCEPTION

AVR means robots with integrated AI vision that can see the world around them and through machine learning and force sensing have the power to move and handle objects with precision and care.

INTELLIGENCE, AUTONOMOUS REASONING

AVR means robots that use generative AI for real-time decision making and to break a mission into executable steps.

MOTION CONTROL & SAFETY

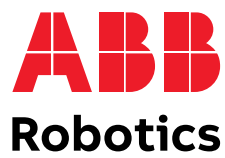
AVR means robots with adaptable, precise, high-speed motion with safe live-rerouting and obstacle avoidance.

NAVIGATION

AVR means mobile robots with the intelligent navigation to map the world while moving.

GRASPING & DEXTERITY

AVR means robots that can learn how and where to pick, hold and sort objects, through their color, shape and size.



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