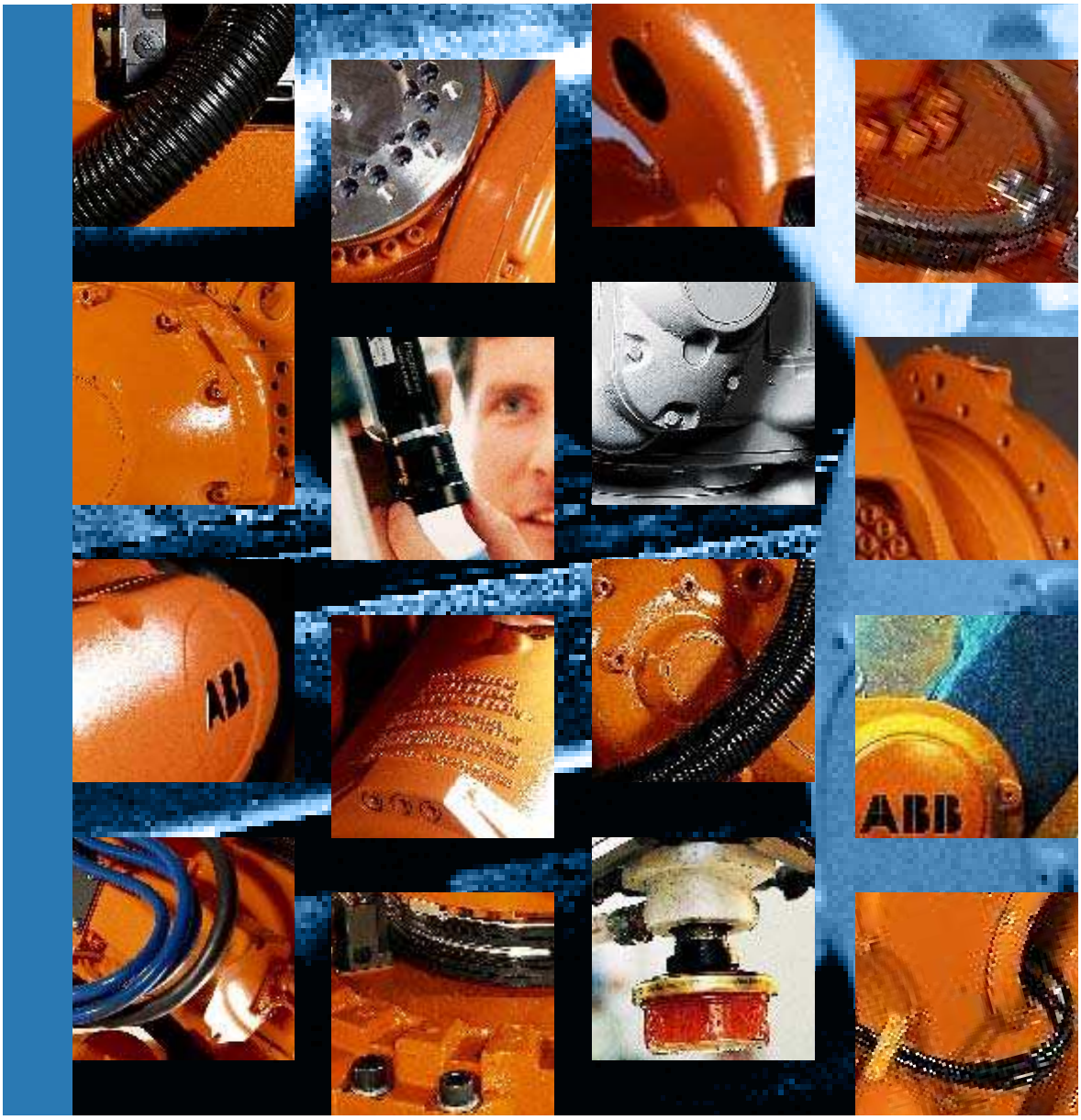
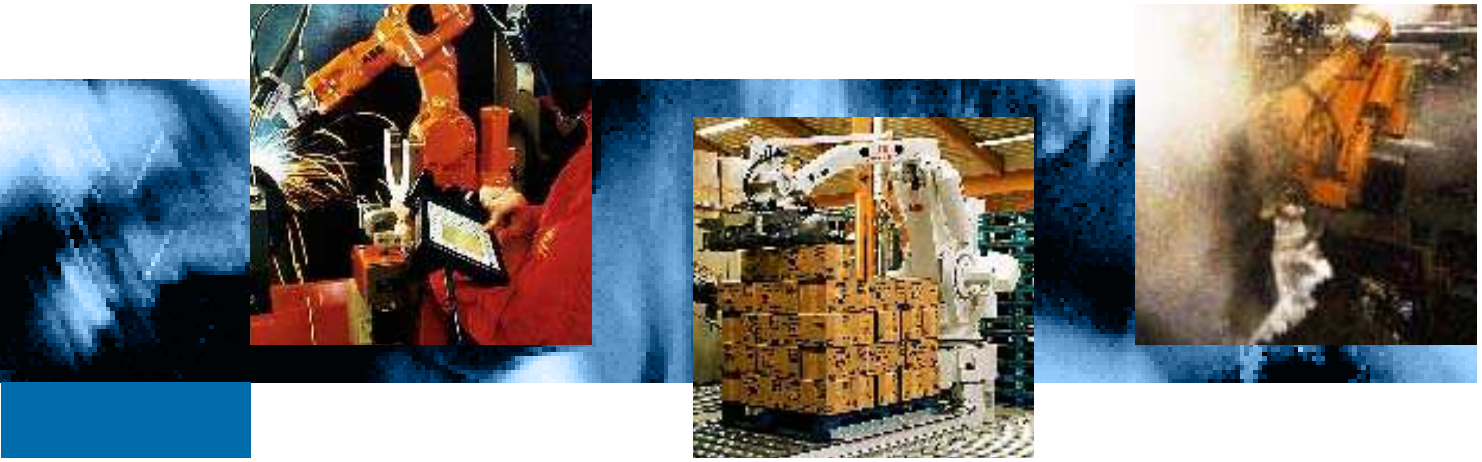
Robot Range

Industrial Robots based on 100,000 units of experience



Leading robot supplier since 1974 ...



In the early seventies ABB was first to develop the all electric, microcomputer controlled industrial robot. Today – after more than100,000 installations – we have a most competitive robot range. The ABB robots are well-known for superior performance in terms of speed, accuracy, repeatability, reliability, flexibility, reach, and payload.

Equal to any challenge

Floor mounted, wall mounted or suspended from the roof, robots from ABB promote optimum productivity and competitive edge. At our advanced manufacturing facilities every robot is tested and calibrated to arrive on site, ready to work. Whatever the application – arc welding, spot welding, machine tending, painting, picking, or palletizing – our robots are equal to any challenge.

The whole robot is IP67

To guarantee reliable performance in demanding environments, the ABB-robots are IP67 classified. A unique feature is that the classification includes the whole robot, not just the wrist. Some of the robots are Clean Room classified, to stand up to the demands from e.g. the food industry. We have also developed the Foundry Plus range of products to withstand the harsh conditions in foundries. When needed, both the clean room robots and the foundry plus robots stand a thorough wash with hot steam.

... and still ahead after 100,000 installations

Trouble-free operation

ABB is well-reputed for confidence and reliability. Our robots are designed for hard work, fast working cycles, and superior accuracy. The extremely stiff mechanical structure ensures excellent repeatability – year in and year out.

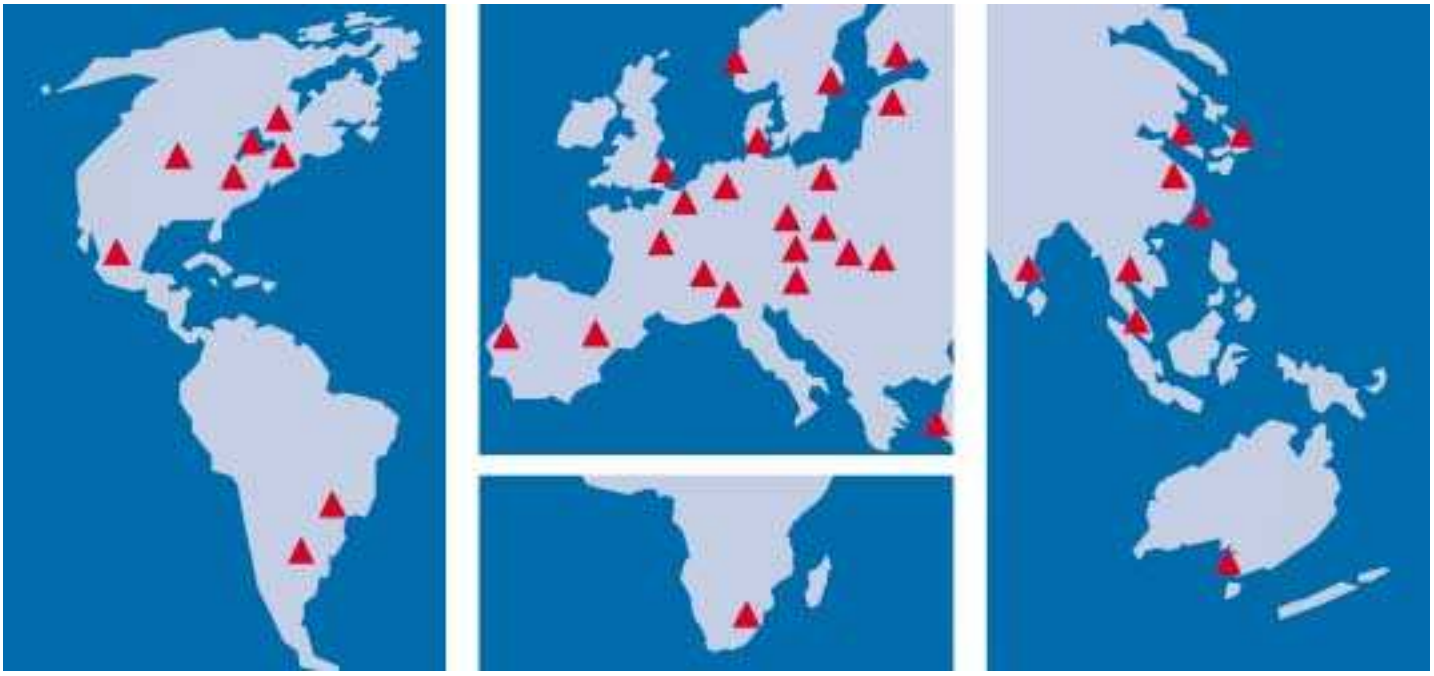
Easy to use

A wide range of controller-based and PC-based software products support the applications and enable off-line programming for training, planning, simulation, and collection of management information. For more information about our robot controller and software products, please refer to separate leaflets.

World wide customer support

Our products and services are available through ABB's global network of sales and service centers, as well as via carefully selected partners all over the world. Also, by maintaining technical and logistic support via help lines and the Internet, we are round-the-clock close at hand.

ABB can significantly improve your manufacturing process through our extensive range of robotic products



ABB

www. abb.com/robotics

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Care Of. Printed in Sweden by Westerås Media Produktion, Västerås 2002.

Applications

Arc welding	Assembly	Cleaning/Spraying	Coating/Painting	Cutting/Deburring	Glueing/Sealing	Grinding/Polishing	Machine tending	Material handling	Picking	Packing	Palletizing	Spot welding	
●	●	●		●	●		●	●		●			IRB 140
●	●			●	●		●	●					IRB 1400
●					●		●	●					IRB 1400H
●	●	●		●	●		●			●			IRB 2400L
	●	●			●	●	●	●					IRB 2400/10
		●		●		●	●	●		●			IRB 2400/16
	●							●	●				IRB 340
		●		●		●	●	●		●			IRB 4400/45
				●		●	●	●		●			IRB 4400/60
					●		●						IRB 4400L/10
	●	●		●		●	●	●			●		IRB 4400L/30
		●					●						IRB 4400FS
			●		●								IRB 5400
			●		●								IRB 580
			●		●								IRB 540
			●		●								IRB 5300
							●	●			●		IRB 640
	●	●		●	●	●	●	●			●	●	IRB 6400R
	●					●	●	●					IRB 6400S
	●			●	●	●	●	●			●	●	IRB 6600-175/2.55
	●			●	●	●	●	●			●	●	IRB 6600-225/2.55
	●			●	●	●	●	●			●	●	IRB 6600-175/2.8
	●				●		●	●					IRB 6650-125/3.2
	●			●	●	●	●	●			●	●	IRB 6650-200/2.75
							●	●				●	IRB 7600-500
							●	●				●	IRB 7600-400
							●	●					IRB 7600-150
		●		●				●					IRB 940

PC-based software products

WebWare: A comprehensive web-based software platform for production management, monitoring and control. WebWare enables you to communicate with your robot over the Internet.

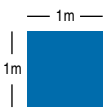
RobotStudio: A powerful software for true off-line programming and simulation on a standard Windows PC. Based on ABB Virtual Robot technology, it allows very realistic simulations, using real robot programs and configuration files identical to those used in production.

S4Cplus industrial robot controller

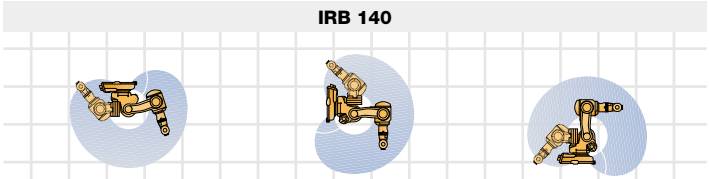
Compact, highly configurable modular system with operator-friendly interfaces. S4Cplus contains a powerful computer system including RAPID, ABB's open and highly advanced robot language. S4Cplus features a dynamic model-based control system, including QuickMove functions for self-optimizing and precision path-following capability. Other software modules can be added to control external axis.

General purpose robots

IRB 140



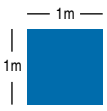
IRB 140



	Load (kg)	Reach (m)	Repeatability (mm)*
IRB 140	5	0.81	0.03

Verified for clean room class 10. Foundry Plus version available

IRB 1400

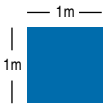


IRB 1400	IRB 1400H

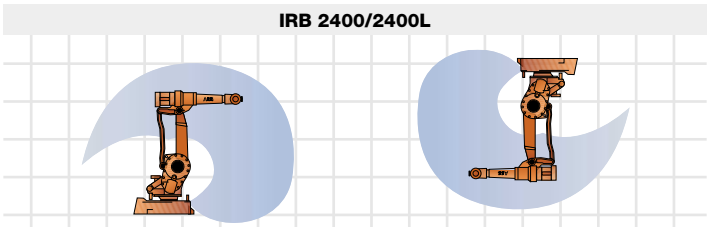
	Load (kg)	Reach (m)	Repeatability (mm)*
IRB 1400	5	1.44	0.05
IRB 1400H	5	0.73	0.05

Verified for clean room class 100

IRB 2400



IRB 2400/2400L

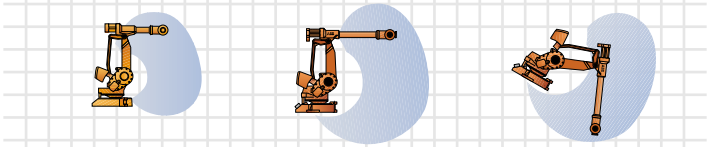


	Load (kg)	Reach (m)	Repeatability (mm)*
IRB 2400/10	10	1.5	0.06
IRB 2400/16	16	1.5	0.06
IRB 2400L	5-7	1.8	0.06

Foundry Plus version available

IRB 4400

IRB 4400	IRB 4400L	IRB 4400FS

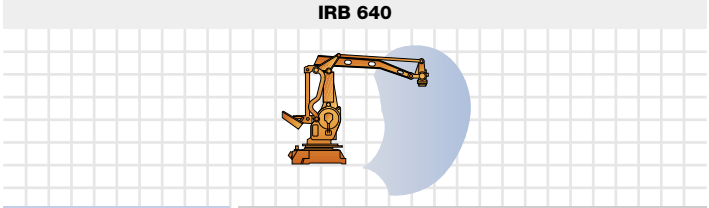


	Load (kg)	Reach (m)	Repeatability (mm)*
IRB 4400/45/60	45/60	1.95	0.07
IRB 4400L/10/30	10/30	2.55/2.43	0.1
IRB 4400FS	30	2.43	0.1

Foundry Plus version available of IRB 4400L/30

IRB 640

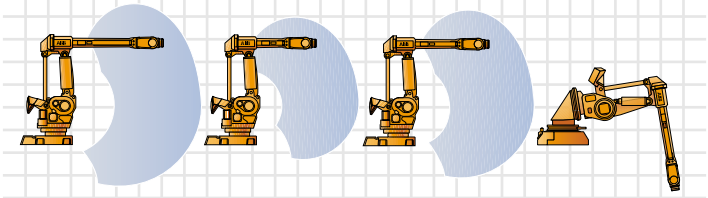
IRB 640



	Load (kg)	Reach (m)	Repeatability (mm)*
IRB 640	160	2.9	0.4

IRB 6400

IRB 6400R/3.0 –100	IRB 6400R/2.5 –120/150/200	IRB 6400R/2.8 –150/200	IRB 6400S

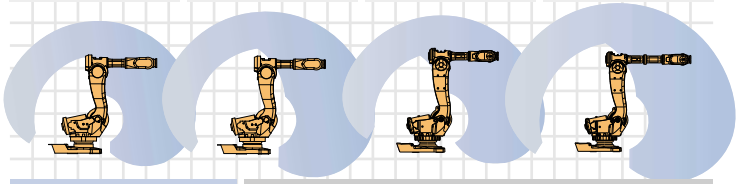


	Load (kg)	Reach (m)	Repeatability (mm)*
IRB 6400R	100-200	2.5-3.0	0.1
IRB 6400S	120	2.9	0.2

Foundry Plus version available

IRB 6600

IRB 6600/2.55	IRB 6600/2.8	IRB 6650/2.75	IRB 6650/3.2

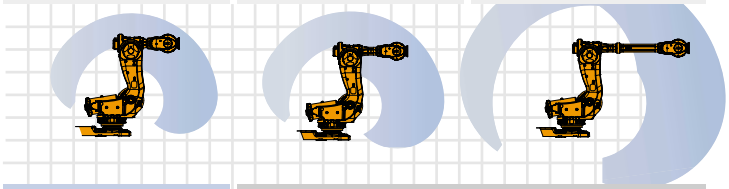


	Load (kg)	Reach (m)	Wrist torque (Nm)
IRB 6600-175/225	175/225	2.55	961/1324
IRB 6600-175	175	2.8	1206
IRB 6650-125/200	125/200	3.2/2.75	715/1135

Foundry Plus version available

IRB 7600

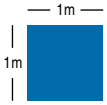
IRB 7600-500	IRB 7600-400	IRB 7600-150



	Load (kg)	Reach (m)	Wrist torque (Nm)
IRB 7600-500	500	2.30	3010
IRB 7600-400	400	2.55	3010
IRB 7600-150	150	3.50	1880

Foundry Plus version available

IRB 340

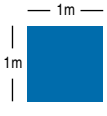


IRB 340

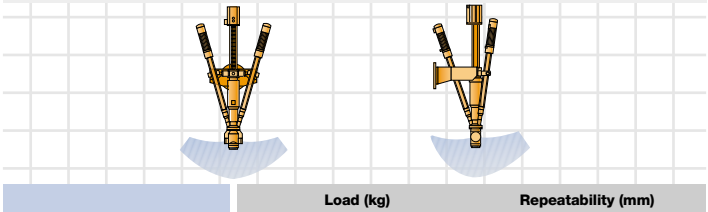
	Load (kg)	Repeatability (mm)*
IRB 340	2	0.05

Wash-Down version available

IRB 940



IRB 940

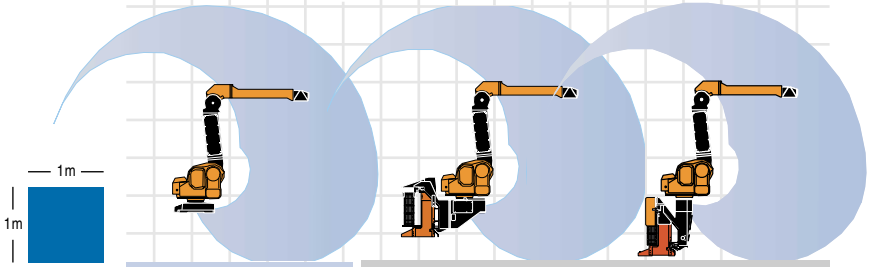


	Load (kg)	Repeatability (mm)
IRB 940	N.A.	0.02

Wash-Down version available

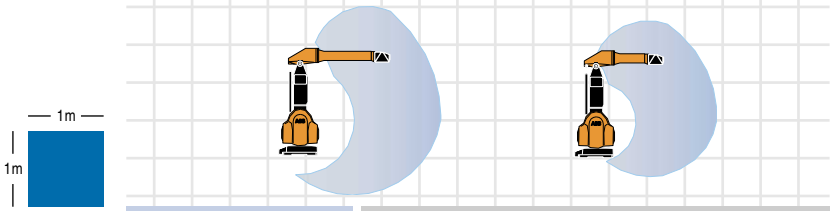
Paint robots

IRB 5400



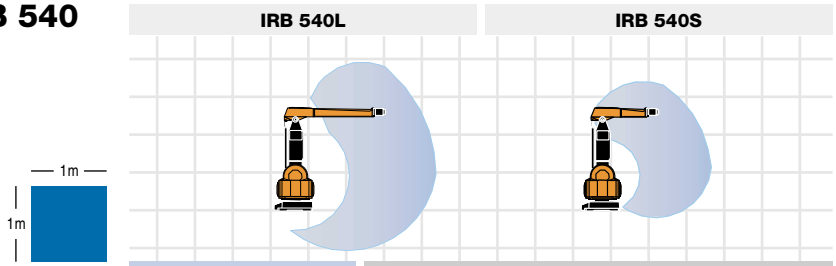
	IRB 5400-02	IRB 5400-03	IRB 5400-04
	Load (kg)	Reach (m)	Repeatability (mm)*
IRB 5400-02	15	3.1	0.15
IRB 5400-03	15	3.1 x 3.5-15	0.15
IRB 5400-04	15	3.1 x 3.5-15	0.15

IRB 580



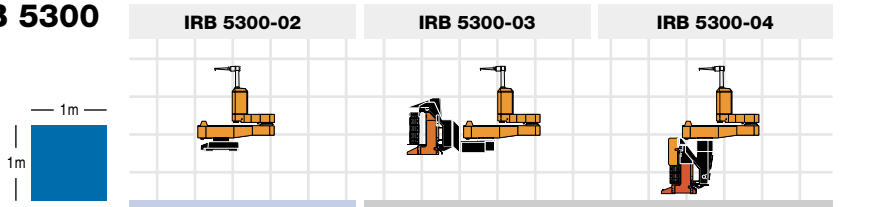
	IRB 580L	IRB 580S
	Load (kg)	Reach (m)	Repeatability (mm)*
IRB 580L	10	2.6	0.3
IRB 580S	10	2.2	0.3

IRB 540



	IRB 540L	IRB 540S
	Load (kg)	Reach (m)	Repeatability (mm)*
IRB 540L	5	2.6	2.0
IRB 540S	5	2.2	2.0

IRB 5300



	IRB 5300-02	IRB 5300-03	IRB 5300-04
	Load (kg)	Reach (m)	Repeatability (mm)*
IRB 5300-02	Door opener	1.6	0.1
IRB 5300-03	Door opener	1.6	0.1
IRB 5300-04	Door opener	1.6	0.1

* Repeatability values are average test results from a number of robots.