



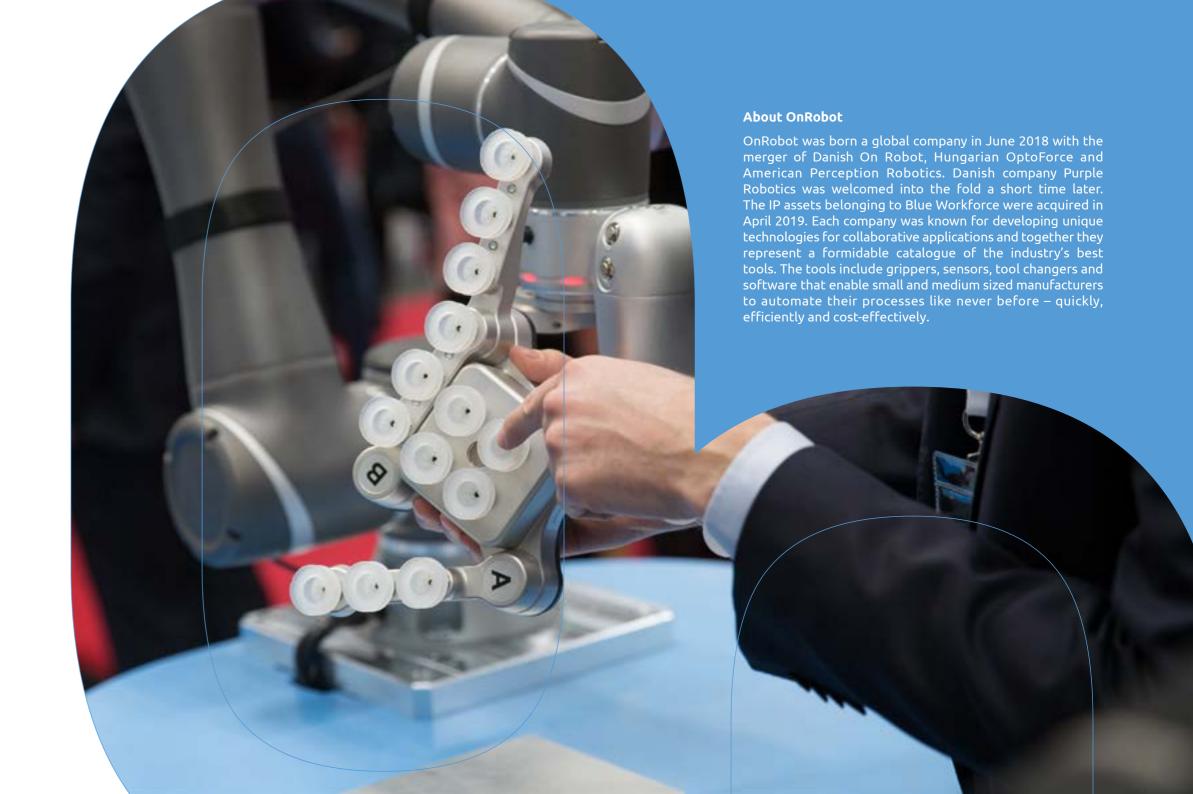


Collaborative applications are the future of automation, enabling rapid deployment, easy changeovers, and safe operation alongside human workers. Manufacturers gain true value from innovative collaborative applications that are enabled by a full range of Plug & Produce grippers, sensors, vision, and the software that drives them.

We offer the industry's broadest range of end-of-arm tooling and software solutions for collaborative applications, using a unified mechanical interface that helps manufacturers automate quickly and efficiently. Our innovative, manufacturer-focused approach saves you time and money so you can get on with the business of production.

We are excited to show you what you can accomplish with flexible, cost-effective collaborative applications.

Enrico Krog Iversen, CEO OnRobot





Any robot you choose. One **OnRobot** system.

Save integration time and simplify deployment with our complete solution.







ANY APPLICATION

– What do you want to automate?

Now you can automate processes that were previously too complicated













Machine Tending



^{*}If your robot arm is not represented above, contact your local partner for information on compatibility on other robot brands.



RG2/RG6

Plug & Produce grippers for multiple purposes

RG2 TECHNICAL SPECIFICATIONS

General Properties	Minimum	Maximum	Unit
Payload Force Fit	-	2 4.4	[kg] [lb]
Total stroke (adjustable)	0 0	110 4.33	[mm] [inch]
Gripping force (adjustable)	3	40	[N]
Gripping speed	38	127	[mm/s]
Gripping time	0.06	0.21	[s]
IP Classification	IP54		

RG6 TECHNICAL SPECIFICATIONS

General Properties	Minimum	Maximum	Unit	
Payload Force Fit	-	6 13,2	[kg] [lb]	
Total stroke (adjustable)	0	160 6.3	[mm] [inch]	
Gripping force (adjustable)	25	120	[N]	
Gripping speed	51	160	[mm/s]	
Gripping time	0.05	0.15	S	
IP Classification	54			

POWER UP PRODUCTION

- Flexible grippers can be used for a wide range of part sizes and shapes.
- Plug & Produce design reduces deployment time from a day to an hour.
- Easy deployment with out-of-the box grippers reduces programming time by 70%

Applications:













2FG7

Parallel gripper for tight spaces and demanding payloads

TECHNICAL SPECIFICATIONS

General Properties		Minimum	Typical	Maximum	Unit	
Payload Force Fit		-	-	7 [15.5]	kg [lb]	
Payload	Form Fit		-	-	11 [24.3]	kg [lb]
Total st	roke		-	38	-	mm
	External	Fingers inwards	1 [0.039]	-	39 [1.53]	mm [inch]
Grip	External	Fingers outwards	35 [1.37]	-	73 [2.87]	mm [inch]
Width range	1-5	Fingers inwards	11 [0.43]	-	49 [1.92]	mm [inch]
	Internal	Fingers outwards	45 [1.77]	-	83 [3.26]	mm [inch]
Grippin	g force		20	-	140	N
Grippin	g speed		16	-	450	mm/s
Grippin	g repeatab	ility	-	+/-0.1 [+/-0.004]	-	mm [inch]
Hold wo	orkpiece if	power loss?	Yes			
IP Classification		IP67				
Dimensions [L, W, D]					mm [inch]	
Weight				1.14 [2.4]		kg [lb]

POWER UP PRODUCTION

- Complete, easy-to-program, collaborative parallel gripper gets to work fast in a wide range of applications
- Strong parallel gripper is easy to deploy in tight spaces and handles even demanding payload requirements
- Get fast ROI with a single flexible, intelligent, and precise gripper that can be easily customized and adapted for many different tasks
- Ready for use almost anywhere, with IP67 rating for harsh environments and ISO Class 5 certification for cleanroom use

Applications:











2FG7













3FG15 Flexible, large-stroke 3-finger gripper

TECHNICAL SPECIFICATIONS

General Properties		Minimum	Typical	Maximum	Unit	
Payload Force Fit		-	-	10/22	[kg] / [lb]	
Payload Form Fit		-	-	15 / 33	[kg] / [lb]	
Grip Diameter*	External	4/0.16	-	152 / 5.98	[mm] / [inch]	
Grip Diameter	Internal	35 / 1.38	-	181 / 7.12	[mm] / [inch]	
Finger position	resolution	-	0.1 / 0.004	-	[mm] / [inch]	
Repetition a	ссигасу	-	0.1 / 0.004	0.2 / 0.007	[mm] / [inch]	
Gripping f	огсе	10	-	240	[N]	
Gripping force (adjustable)	3	-	100	[%]	
Gripping s (diameter c	-	-	125	[mm/s]		
Gripping (including brake		-	500	-	[ms]	
Hold work if power l		Yes				
IP Classific	ation	IP67				
Dimensions [L, W, Ø]	156 x 158 x 180 / 6.14 x 6.22 x 7.08 [mm] / [inch				
Weigh	t	1.15 / 2.5 [kg] / [lb]				

POWER UP PRODUCTION

- Flexible production large-stroke **optimizes** CNC lathe-tending for multiple part sizes with a single 3-finger gripper
- Accurate centric positioning drives higher quality, consistency, and output with minimal programming
- Strong, stable grip and 3 contact points makes gripper fast and easy to redeploy for multiple processes
- Accomplish more with customizable fingertips to flexibly grip a wide range of part sizes and shapes

Applications:























Soft Gripper

Explore new automation possibilities with certified food-grade soft gripper

TECHNICAL SPECIFICATIONS

General Properties	Minimum	Typical	Maximum	Unit	
Material	Two-component silicone rubber				
Food approval	FDA 2	1 CFR 177.260	00 & EC/EU - 1	935/2004	
Operation cycles		2.000.000		[cycles]	
Operation temperature	-20 / -4		80 / 176	[C] / [F]	
SG-tool attachment mechanism		Quick-lock	and Smart-loo	:k	
Weight Base Part		0.77 /1.69		[kg] / [lb]	
SG-a-H / SG-a-S					
Max payload	-	-	2.2 / 1.5 4.85 / 3.3	[kg] [lb]	
Work range, Grip dimensions (A)	11 / 0.43	-	75 / 2.95	[mm] / [inch]	
Work range, Grip depth (B)	-	38 / 1.496	-	[mm] / [inch]	
Soft part (SG-a-S) (C)	-	16 / 0.63	-	[mm] / [inch]	
Dimensions (HxØmax)	7	76x112 / 3 x 4	.4	[mm] / [inch]	
Weight (smart lock included)		0.168 / 0.37		[kg] / [lb]	
SG-b-H					
Max payload	-	-	1.1 / 2.42	[kg] / [lb]	
Work range, Grip dimensions (A)	24 / 0.94	-	118 / 4.65	[mm] / [inch]	
Work range, Grip depth (B)	-	40 / 1.57	-	[mm] / [inch]	
Dimensions (HxØmax)	77:	x109 / 3.03 x	4.29	[mm] / [inch]	
Weight (smart lock included)		0.172 / 0.379)	[kg] / [lb]	

POWER UP PRODUCTION

- Explore new possibilities for food and beverage automation with certified food-grade soft gripper
- Easily handle a wide array of irregular shapes and delicate objects with flexible silicon-molded gripper
- Safely handle fragile and delicate objects for higher production quality and reduced waste
- No external air supply means no dust, no noise, no complexity, and no additional costs

Applications:



Soft Gripper



Can be used with products of various sizes and materials, including:



Organic material



















OnRobot Eyes

Adding vision to robotic applications has never been easier

TECHNICAL SPECIFICATIONS

Camera Characteristics						
Interface	USB-C 3.x					
Output Resolution	1280 x 720				[px]	
Working distance	400-1000 [15.75 – 3	400-1000 [15.75 – 39.37]				
Operating Temperature	0 – 35 [32 – 95]				°C [°F]	
IP rating	IP 54					
Weight	0.260 [0.57]				kg [lb]	
Eyes Features					Unit	
Type of vision system	2.5 D					
Minimum part size	10x10 or 15 diamet	er [0.39x0.39 or 0.5	59 diameter]		mm [inch]	
Applications Supported	Detection, Sorting, Inspection, Landmark					
Mounting options supported	Robot and External					
	12 configurations (4	l x 3)				
Reconfigurability when Robot mounted	Around robot's flan	ge	Tilt orientations			
	0 - 90 - 180 - 270		0 - 45 - 90	[degrees]		
Detection Repeatability	< 2 [< 0.078]				mm [inch]	
Detection Accuracy (typical)	External Mount		Robot Mount			
measured at 500 mm	2 [0.078]		2 [0.078]		mm [inch]	
Minimum Inspection Defect Size	5 [0.197]				mm [inch]	
	Waypoint distance from Landmark	Minimum error	Typical error	Maximum error		
Landmark accuracy **	200 [7.874]	0.2635 [0.0104]	0.6596 [0.0260]	0.9500 [0.0374]	mm [inch]	
	500 [19.68]	0.6586 [0.0259]	1.6490 [0.0649]	2.3750 [0.0935]	mm [inch]	
	1000 [39.37]	1.3173 [0.0519]	3.2981 [0.1298]	4.7500 [0.1870]	mm [inch]	

POWER UP PRODUCTION

- Adding vision to robotic applications has never been easier, with one-picture calibration, fast programming and seamless gripper integration
- Flexible, adaptable vision system with on-robot or external mounting is ideal for almost any collaborative application
- Affordable, efficient 2.5D vision offers depth perception for varying heights or stacked objects
- Easily sort, pick and place unstructured applications with high reliability using any robot arm
- One-shot detection for multiple objects minimizes cycle time
- Inspect objects using color and contour detection with or without a robot, and ensure consistent quality
- Automatic landmark enables dynamic working environments and mobile robot setups

Applications:





Machine Tendir





OnRobot



















Robot wrist mount

External mount



OnRobot Screwdriver Smart screwdriving solution for multiple processes

TECHNICAL SPECIFICATIONS

General Properties		Minimum	Typical	Maximum	Unit
Screw size range		M1.6	-	M6	
	Torque range	0.15 / 0.11	-	5 / 3.68	[Nm] / [lbft]
Torque	If torque < 1.33Nm/0.98lbft	-	0.04 / 0.03	-	[Nm] / [lbft]
accuracy	If torque > 1.33Nm/0.98lbft	-	3	-	[%]
	Output speed	-	-	340	[RPM]
Screw length within full safety		-	-	35 / 1.37	[mm] / [inch]
Shank stroke (screw axis)		-	-	55 / 2.16	[mm] / [inch]
Shan	k preload (adjustable)	0	10	25	[N]
Sa	afety feature force	35	40	45	[N]
	Motor (x2)	Integrated, electric BLDC			
	IP Classification	IP54			
Dimensions		308x86x114 12.1x3.4x4.5		[mm] [inch]	
Weight		2.5 / 5.51		[kg] / [lb]	
Sc	rew presenter sizes	M1.6; M2;	M2.5 ; M3 ; M4	; M5 ; M6	

POWER UP PRODUCTION

- Smart screwdriver easily automates multiple screwdriving processes with no downtime for manual changeovers
- Get the job done right—consistently and faster—with dynamic force control and intelligent error detection
- Expand your collaborative automation possibilities with built-in protective functions
- Get fast and easy deployment with automatic screw-feeding system and OnRobot's easy One System setup for any leading robot

Applications:



OnRobot Screwdriver





















OnRobot Sander

Complete surface finishing solution with fast and easy setup reduces complexity

TECHNICAL SPECIFICATIONS

General Properties		Minimum	Typical	Maximum	Unit	
Pad diamete		-	-	127 [5]	mm [inch]	
Pad height		-	-	9.5 [0.37]	mm [inch]	
Orbit size		-	-	5 [3/16]	mm [inch]	
Rotation spe	eed	1,000	-	10,000	RPM	
Ped type (31	л : 20353)		Clean San	ding Disc Pad		
Pad media t	ype		Но	okit™		
Pad weight			0.1 [0.22]		kg [lb]	
Weight		1.2 [2.645]]	kg [lb]	
IP rating			ı	P54		
Dimensions	(outer)	87 x 123 x 214 [3.42 x 4.84 x 8.42] mm		mm [[inch]	
Operating (Conditions	Minimum	Typical	Maximum	Unit	
Sanding pov	ver	-	150	-	W	
	External voltage	-	30	-	V	
Operation	External power	-	150	-	W	
voltage	Tool connector voltage	-	24	-	V	
	Tool connector power	-	2.4	-	W	
Operation to	emperature	0 [32]	-	50 [122]	°C [°F]	
Noise level a	at 10,000 RPM (3,000 RPM)	-	74 [44]	-	[dB]	

POWER UP PRODUCTION

- Powerful and durable electric sander requires no compressed air, significantly reducing running and maintenance costs
- Cost-effective Grit Changer allows automatic switching between sanding grits without operator intervention for increased efficiency
- Flexible tool can be used on a wide range of part geometries and materials
- Sensing capabilities ensure precise adaptation to surface variations or part misalignment, improves product quality and consistency while reducing scrap
- Eliminates operator fatigue and hazards for easy compliance with local health and safety regulations

Applications:



Sanding, Polishing, Buffing





OnRobot Sander















SP1/SP3/SP5 Gecko Single Pad Gripper

TECHNICAL SPECIFICATIONS

General Properties			Unit	
SP1		1 / 2.2	[kg] / [lb]	
Maximum payload	SP3	3 / 6.6	[kg] / [lb]	
	SP5	5/11	[kg] / [lb]	
	Minimum	SP1: 2.8 SP3: 8.2 SP5: 11.6	[N]	
Preload required	Preload required Medium SP1: 8.2 SP3: 23.4 SP5: 33		[N]	
	Maximum	SP1: 13.3 SP3: 38.6 SP5: 54.4	[N]	
Detachment time		100-1000 (dependent on robot speed)	[msec]	
Holds workpio power los		Yes. How long? Potentially days if well centered and undisturbed		
IP Classifica	tion	IP42		
Dimensions (HxW)	69 x 71 / 2.7 x 2.8	[mm] / [inch]	
	SP1	0.267 / 0.587	[kg] / [lb]	
Weight	SP3	0.297 / 0.653	[kg] / [lb]	
	SP5	0.318 / 0.7	[kg] / [lb]	

Pads general properties		Unit		
Material	Proprietary silicone blend			
Wear properties	Depends on surface roughness			
Change-out interval	~200.000	[cycles]		
Cleaning systems	1) OnRobot cleaning station 2) Silicone roller 3) Isopropyl Alcohol and lint-free cloth			
Cleaning interval	variable			
Recovery	100%			

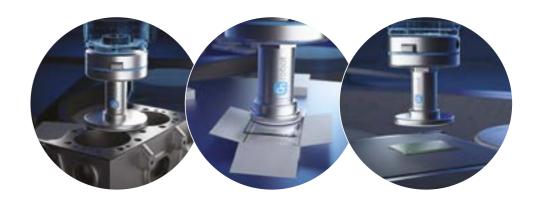
POWER UP PRODUCTION

- Compact, lightweight Gecko Single Pad Gripper requires no cables, electricity, air, or programming for cost-effective, plug-and-play performance
- Innovative adhesive gripper for flat, smooth, or perforated objects **automates** tasks that were previously not possible
- No-mark gripping even for shiny surfaces means no cleaning step is required, **saving** time and improving productivity
- No requirement for external air supply reduces noise and dust, lowers maintenance costs, and speeds deployment

Applications:



Gecko Single Pad Gripper









Can be used with products of various sizes and materials, including:



Plastic













Pick & Collaborate helping hand with a sense of touch

The world's first gripper that can detect objects using built-in force/torque and proximity sensors.

RG2-FT TECHNICAL SPECIFICATIONS

General Properties	Minimum	Maximum	Unit
Payload Force Fit	-	2 4.4	[kg] [lb]
Total stroke (adjustable)	0	100 3.93	[mm] [inch]
IP Classification	IP54		

Force Sensor Properties	Fxy	Fz	Тху	Tz	Units
Nominal capacity (N.C.)	20	40	0.7	0.5	[N] [Nm]
Noise free resolu- tion	0.1	0.4	0.008	0.005	[N] [Nm]

POWER UP PRODUCTION

- Accurate sensing improves production quality by reducing defect rate as much as 60% in delicate Pick & Place processes.
- Easy-to-program sensing allows robot to act like an operator's third arm, with human-like part hand-offs.
- Ability to automate insertion tasks **that** weren't previously possible can reduce operation costs by 40%.

Applications:

























VGP20

Industry's most powerful electric vacuum gripper

TECHNICAL SPECIFICATIONS

General Properties	Minimum Typical Maximum		Unit		
	5%	-	60%	[Vacuum]	
Vacuum	-0.05	-	-0.607	[Bar]	
	1.5	-	17.95	[inHg]	
Air flow in total	0	-	48	[L/min]	
Air flow on each channel	0	-	12	[L/min]	
Payload (with default attachments)	-	10 ⁽¹⁾	20 ⁽²⁾	[kg]	
	-	22.04	44.09	[lb]	
Vacuum cups	1	16	16	[pcs.]	
Gripping time (measured with vacuum target 40%)	-	0.25 ⁽³⁾	-	[s]	
Releasing time	-	0.4 ⁽³⁾	-	[s]	
Noise level ⁽⁴⁾	-	67	71	[dB(A)]	
Vacuum pump	Integrated, electric BLDC				
Dust filters	Integrated 50µm, field replaceable				
IP Classification	IP54				
Dimensions	2	[mm]			
	10.	[inch]			
		[kg]			
Weight		[lb]			

POWER UP PRODUCTION

- Industry's most powerful electric vacuum gripper saves up to 90% over pneumatic grippers
- Ideal for palletizing cardboard boxes and other irregular shapes and porous surfaces
- Highly versatile gripper with unlimited customization fits any application
- Built-in intelligence and multichannel functionality ensure failsafe, flexible operation
- Complete out-of-the-box vacuum gripper offers fast, easy deployment with any leading robot

Applications:









Cardboard







Glossy packaging







Grab & Go - flexible, adjustable electrical vacuum gripper

VG10 TECHNICAL SPECIFICATIONS

General Properties	Minimum Maximum			Unit	
Vacuum	5 % -0.05 1.5	80 % -0.810 24		[Vacuum] [Bar] [inHg]	
Air flow	0	12		[Nl/min]	
Payload	0 0	15 33		[kg] [lb]	
Recommended workpiece size	10x10 0.5x0.5	500x500 20x20		[mm] [inch]	
Vacuum cups	1	16		[pcs.]	
Gripping time	-	0.35	-	[s]	
Releasing time	-	0.20	-	[s]	
Vacuum pump	Integrated, electric BLDC				
Arms	4, adjustable by hand, 2 vacuum channels				
IP Classification	IP54				
Dimensions (folded)				[mm] [inch]	
Dimensions (unfolded)				[mm] [inch]	
Weight			[kg] [lb]	[kg] [lb]	

POWER UP PRODUCTION

- Out-of-the-box deployment plug into the robot arm and configure the gripper to fit the product provides fast productivity and ROI.
- No external air supply required **reduces** maintenance costs and speeds deployment.
- Dual gripping functionality **enables shorter** cycle time.

Applications:





Can be used with products of various















VGC10 Compact vacuum gripper for all your needs

VGC10 TECHNICAL SPECIFICATIONS

General Properties	Minimum	Typical	Maximum	Unit
Vacuum	5 % -0.05 1.5	- - -	80 % -0.810 24	[Vacuum] [Bar] [inHg]
Air flow	0		12	[Nl/min]
Payload	0	-	15 33	[kg] [lb]
Recommended workpiece size	Unlimited, depends on custom arms			
Vacuum cups	1	-	7	[pcs.]
Gripping time	-	0.35	-	[s]
Releasing time	-	0.20	-	[s]
Vacuum pump	Integrated, electric BLDC			
Arms	Replaceable, customizable			
Dust filters	Integrated 50µm, field replaceable			
IP Classification	IP54			
Dimensions (folded)	101 x 100 x 100 [mm] 3.97 x 3.94 x 3.94 [inch]			
Weight	0.814 1.79			[kg] [lb]

POWER UP PRODUCTION

- Flexible electric vacuum gripper with unlimited customization fits all your application needs
- Small, lightweight gripper is perfect for tight spaces but with plenty of power for objects up to 15kg
- No external air supply needed for reduced maintenance costs and faster deployment

Applications:













VGC10

Can be used with products of various



















Touch & Go – automation made simple with a sense of touch

HEX-E QC TECHNICAL SPECIFICATIONS

General Properties	6-Axis Force/Torque Sensor		Unit		
	Fxy	Fz	Txy	Tz	
Nominal Capacity (N.C)	200	200	10	5.5	[N] [Nm]
Single axis deformation at N.C (typical)	± 1.7 ± 0.067	± 0.3 ± 0.011	± 2.5 ± 2.5	±5 ±5	[mm] [°] [inch] [°]
Resolution (Noise- free)	0.2	0.8	0.01	0.002	[N] [Nm]
IP Classification	67				
Dimensions	50 x 71 x 93 1.97 x 2.79 x 3.66			[mm] [inch]	

HEX-H QC TECHNICAL SPECIFICATIONS

General Properties	6-Axis Force/Torque Sensor		Unit		
	Fxy	Fz	Txy	Tz	
Nominal Capacity (N.C)	200	200	20	13	[N] [Nm]
Single axis deformation at N.C (typical)	± 0.6 ± 0.023	± 0.25 ± 0.009	± 2 ± 2	± 3.5 ± 3.5	[mm] [°] [inch] [°]
Resolution (Noise-free)	0.5	1	0.036	0.008	[N] [Nm]
IP Classification	67				
Dimensions	50 x 71 x 93 1.97 x 2.79 x 3.66			[mm] [inch]	

POWER UP PRODUCTION

- Flexible sensor extends automation possibilities to processes that weren't previously possible.
- Out-of-the-box integration reduces deployment time for precise insertion tasks from months to days.
- High-accuracy sensor technology **provides 95%** better quality in insertion and assembly tasks.
- Sensor-based applications speed cycle time by up to 60% to produce more with the same number of employees.
- Easy programming gets even complex polishing tasks up and running in less than a day.

Applications:



















Quick Changer & Dual Quick Changer Bracket

With the Dual Quick Changer, you can now use two tools in one cycle, achieving higher utilization of your robots.



Quickly switch between tools to meet changing production needs.

One Stop Shop for Collaborative Applications

All the tools you need at one place to automate more





Find an OnRobot partner near you

We sell our products through a global network of valued partners – who have the tools, software, inspiration and training to develop any collaborative application their customers can imagine. Find a partner near you at https://onrobot.com/en/partners.



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