

THE FACTORY AUTOMATION COMPANY

FANUC

ROBOSHOT α -SiA series

High Precision Electric Injection Moulding

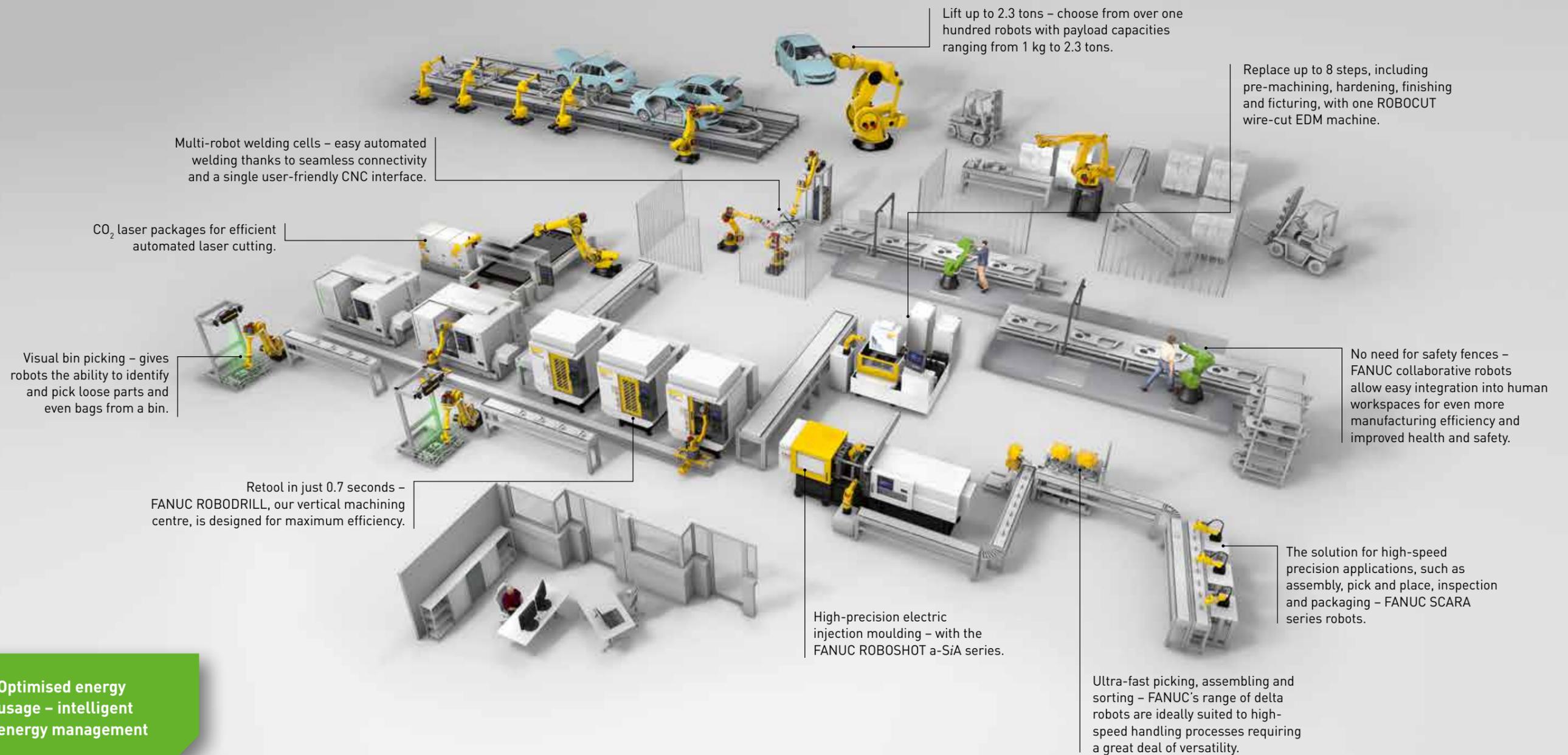
FANUC
ROBOSHOT
 α -Si100iA

**Highest precision
and reliability**

WWW.FANUC.EU

30 years of
ROBOSHOT
technology

intelligent automation – 100% FANUC



Multi-robot welding cells – easy automated welding thanks to seamless connectivity and a single user-friendly CNC interface.

Lift up to 2.3 tons – choose from over one hundred robots with payload capacities ranging from 1 kg to 2.3 tons.

Replace up to 8 steps, including pre-machining, hardening, finishing and finishing, with one ROBOCUT wire-cut EDM machine.

CO₂ laser packages for efficient automated laser cutting.

Visual bin picking – gives robots the ability to identify and pick loose parts and even bags from a bin.

No need for safety fences – FANUC collaborative robots allow easy integration into human workspaces for even more manufacturing efficiency and improved health and safety.

Retool in just 0.7 seconds – FANUC ROBODRILL, our vertical machining centre, is designed for maximum efficiency.

High-precision electric injection moulding – with the FANUC ROBOSHOT a-SiA series.

The solution for high-speed precision applications, such as assembly, pick and place, inspection and packaging – FANUC SCARA series robots.

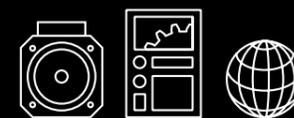
Ultra-fast picking, assembling and sorting – FANUC's range of delta robots are ideally suited to high-speed handling processes requiring a great deal of versatility.



Optimised energy usage – intelligent energy management



With three core product groups, FANUC is the only company in its sector to develop and manufacture all its major components in-house. Every detail, both hardware and software, undergoes stringent quality control checks as part of an optimised chain. Fewer parts and lean technology make FANUC solutions reliable, predictable and easy to repair. They are made to run and provide you with the highest uptime on the market.



All FANUC products – industrial robots, CNC systems and CNC machines – share a common servo and control platform, providing seamless connectivity and making full-automation scenarios really simple. Since all products share common parts, spare parts management with FANUC is fairly efficient. Plus, global standards make it very easy to go international with FANUC.

CNC precision for higher productivity

With some 23 million servomotors and 4.7 million CNC controls installed worldwide, we are not only the world's biggest producer of motors but also experts in servo technology and tooling. Long proven in FANUC machining centres, FANUC employs this same state-of-the-art CNC technology in ROBOSHOT to provide an unrivalled electric injection moulding solution. The results are huge versatility, utmost precision of movement and extremely short cycle times to produce larger quantities of consistently high-quality parts.

In-house servo technology makes the difference

ROBOSHOT's movements are entirely controlled by FANUC designed and built CNC controlled servo drives. This not only results in the fastest acceleration on the market but – in order to ensure ultimate accuracy and exceptional reliability across all processes – highly precise motion, position and pressure control as well.



Your benefits with FANUC ROBOSHOT:

- maximum precision
- proven reliability
- excellent repeatability
- ultimate process control
- very low maintenance

Perfection from your mould!

Mould validation represents an essential part of FANUC's extensive range of services and is conducted in our especially equipped technical centres. Just show us your mould and we will show you what ROBOSHOT can do with it. Always there when you need us, passionate and committed, we are your partner of choice when it comes to a wide range of injection moulding applications.

Electrically driven axes

Every FANUC ROBOSHOT comes with 4 servomotors as standard. Additional servomotors can be added as options. This enables separate control of ROBOSHOT's movements – clamp opening and closing, ejector, screw, and injection – and results in a highly precise and stable process.

World-beating CNC reliability

Drawing on 60 years of continuous development, the centrepiece of the FANUC ROBOSHOT is the most reliable CNC control in the world. User friendly and featuring all the standard interfaces, it delivers fast processing times and consistent parts quality.

Versatile clamp unit

ROBOSHOT's versatile clamp unit features generous tie bar spacing as well as auto die-height and optional extended die height functions. The automatic clamp force optimisation checks and automatically adjusts minimum clamp force, giving you increased security and eliminating the need to adjust the clamp force manually.

Other clamp unit features include:

- 5 point toggle mechanism
- very rigid platens
- ball drive ejector system
- optional linear guide rails



Extremely consistent injection moulding

with minimal weight deviation thanks to:

- precise V-P switchover
- precise pressure control in 1 bar steps
- precise temperature control in 0.1 °C steps
- precise AI pressure profile control
- precise metering control functions

Very low maintenance costs –

maximum machine uptime, fewer components and less wear

High-performance injection unit

ROBOSHOT's injection unit features an AI Metering Control that uses torque rather than speed control to achieve a variable screw rotation speed. Its AI Backflow Monitor shows what is happening inside the valve, so you can monitor the closing characteristics as well as the wear status of the check ring. The AI Pressure Trace controls the pressure curve to ensure stable injection moulding even if an internal violation occurs. Additional horizontal and vertical injection units can also be added to the ROBOSHOT for multi-component moulding.

Other ROBOSHOT injection unit features include:

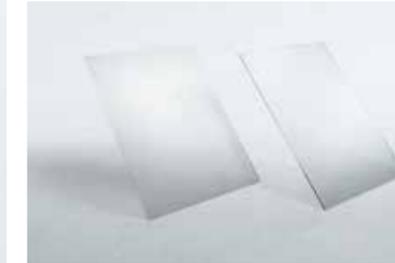
- position control in 1 micro steps
- flexible range of screws and barrels

Versatile machinery for all applications

With models capable of exerting clamping forces from 150 kN to 4500 kN, FANUC ROBOSHOT is ideally suited to a diverse range of straightforward as well as sophisticated injection moulding tasks. Offering huge versatility, ROBOSHOT's unique strength is the freedom it provides you to produce almost anything using just one machine – whether that be delicate items such as camera lenses to products, such as battery cases, that require high levels of exertive force to produce. What is more, thanks to its high level of specification, even standard ROBOSHOT machines can be used to produce specialised items such as micro components, casings and even metal and ceramic parts.



**High precision
moulding**



Thin wall moulding



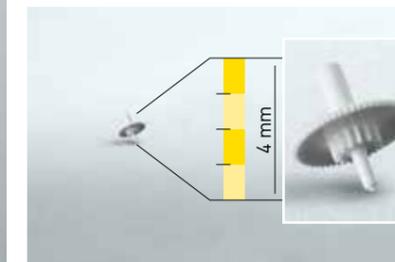
**Multi component
moulding**



Precise moulding



MIM/CIM



**Micro-injection
moulding**



LSR moulding

FANUC ROBOSHOT for the Automotive industry

With a host of functions designed specifically to resolve the issues – such as gas venting or variations in plasticising time and volume – that can impact the production of automotive parts, FANUC ROBOSHOT is ideally suited the large scale manufacture of automotive parts. The most reliable machine on the market, ROBOSHOT will just keep on producing flawless parts over the long term, delivering excellent cycle times and requiring minimum maintenance. Repeatability is also in a class of its own, with the machine delivering exactly the same quality after 50,000 cycles as it did on the first shot. What is more, because production runs in the automotive industry change frequently, ROBOSHOT comes with 6 different screw sizes, providing you with the power to adapt and enjoy outstanding versatility from a single machine.



High-duty injection units for long holding times

The production of thick-walled automotive parts, such as POM components for vehicle safety systems, often requires machines to be capable of long holding times. ROBOSHOT is available with high-duty injection units that are ideally suited to the production of these kinds of components.

Quality assurance and traceability made easy

For full transparency and superior quality management, ROBOSHOT comes with up to 16 Multi Cavity Pressure Channels, cavity balance monitoring and historical data collection. To save money, ensure easier operation and minimise external components, monitoring is done via the CNC. You just select the required part quality.

Hydraulic and fully integrated servo cores

Automotive parts frequently require cores. For these kinds of applications, ROBOSHOT is also available with hydraulic and fully CNC controlled servo cores.

Optimal networking using Euromap 63

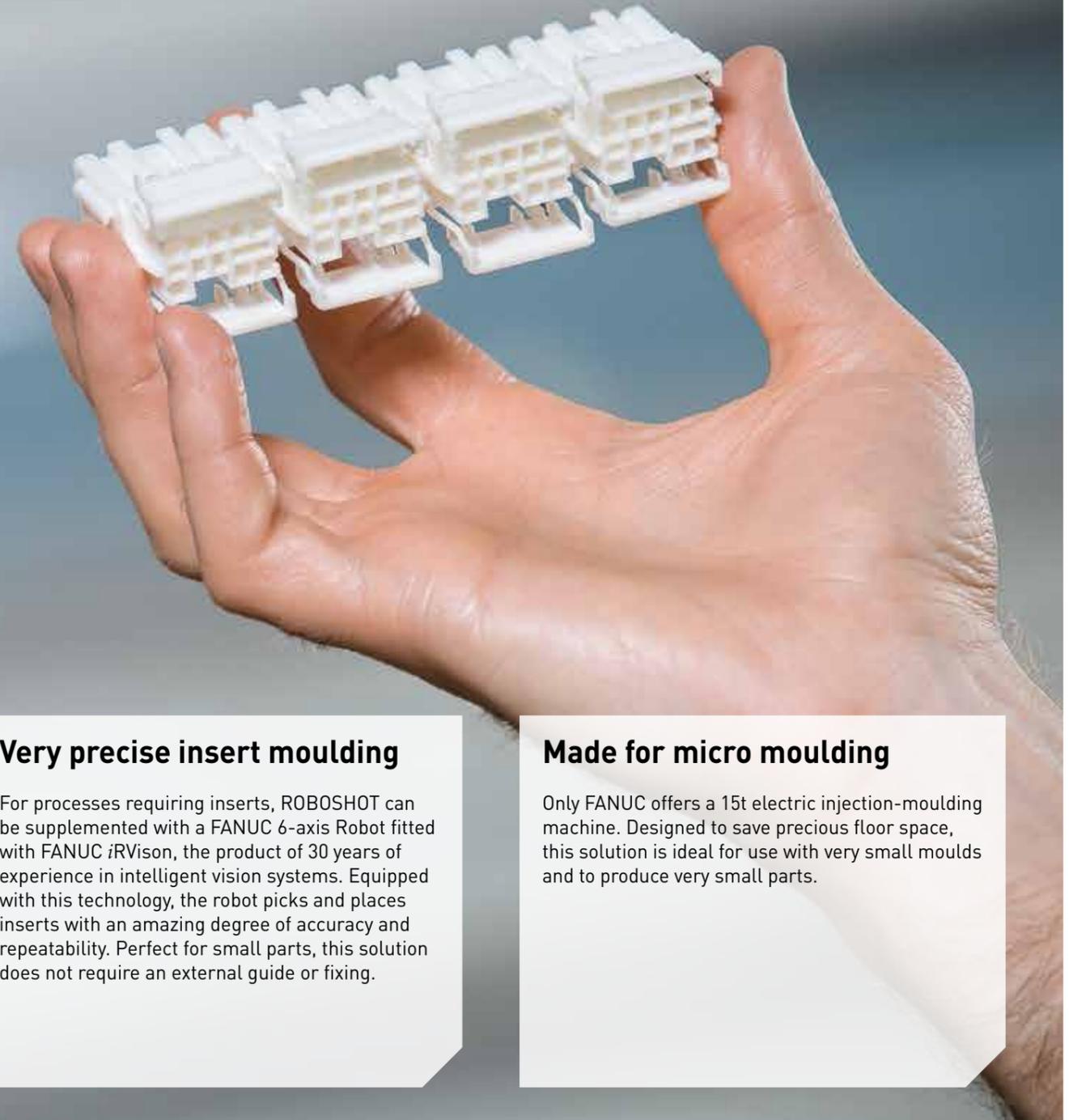
Euromap 63 is a quality information management system for globalised and larger scale of moulding plants.

- Central production monitoring
- Process data capture & extraction
- Machine status visualisation
- Customised reports



FANUC ROBOSHOT for the Electrical industry

Producing high numbers of small electrical components requires excellent cycle times and maximum repeatability. This is where ROBOSHOT comes into its own, given smart functions designed to compensate for changes in material viscosity such as Precise Metering 2+3 or AI metering control. The excellent acceleration delivered by ROBOSHOT's electric servomotors is also ideally suited to creating the thin walls that these parts often demand. Active gas venting also further enhances the quality of these components.



Absolutely constant dosing

FANUC Precise Metering 3 provides the exact dosing required to produce small high-precision parts such as liquid crystal polymer connectors for PCB boards. This function checks the volume after plasticising, automatic V-P and decompression adjustment. Product quality is improved thanks to constant plasticising volume for low viscosity materials, reduced parts weight variation and the avoidance of bubbles and silver strings.

Quality assurance and traceability made easy

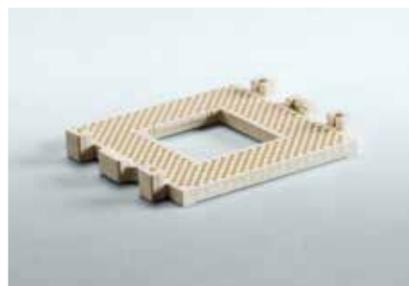
For full transparency and superior quality management, ROBOSHOT comes with up to 16 Multi Cavity Pressure Channels, cavity balance monitoring and historical data collection. To save money, ensure easier operation and minimise external components, monitoring is done via the CNC. You just select the required part quality.

Very precise insert moulding

For processes requiring inserts, ROBOSHOT can be supplemented with a FANUC 6-axis Robot fitted with FANUC iRVison, the product of 30 years of experience in intelligent vision systems. Equipped with this technology, the robot picks and places inserts with an amazing degree of accuracy and repeatability. Perfect for small parts, this solution does not require an external guide or fixing.

Made for micro moulding

Only FANUC offers a 15t electric injection-moulding machine. Designed to save precious floor space, this solution is ideal for use with very small moulds and to produce very small parts.



FANUC ROBOSHOT for the Medical industry

With human lives sometimes at stake, quality, reliability and repeatability are critical to the production of medical products. Products moulded for medical applications are also often transparent, making gas venting and changes in viscosity important issues. FANUC's highly sensitive pre-injection process resolves these issues, with ROBOSHOT's smart AI Metering Control function compensating for variations in viscosity to ensure consistent results whatever the process. What is more, because ROBOSHOT is equipped with 6 different screws as standard, manufacturers can easily alter production to accommodate different types of product.

Integrated hot runner control

Featuring up to 96 channels, this function saves time uploading new moulds by allowing machine operators to use data and parameters stored in the central monitoring control.

Quality assurance and traceability made easy

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Historical traceability

Given the nature of medical products, acquiring and storing process data is critical. To make this easy ROBOSHOT is available with smart features – such as Euromap 63 and FANUC LINK *i* – designed to capture and store data on a central server and provide complete part traceability.

Process graphics as standard

Just what you need for setting up, validation and on-going monitoring.

- Reference data curve storage
- Quality control outputs
- Multiple curve display
- Ideal Process optimisation tool



FANUC ROBOSHOT for the Optical industry

Injection moulding products for the optical industry involves some unique challenges. In contrast to standard injection moulding processes, injection speeds tend to be very slow and walls often thick. Capable of controlling slow processes with the utmost of precision, ROBOSHOT offers manufacturers huge benefits in this regard. High-pressure and precise injection speed control to as low as 0.1 mm per second as well as high-duty injection provide additional advantages. As does, optimised screw and barrel technology for transparent materials.

High-duty injection units for long holding times

The production of components for the optical industry often demands machines are capable the long holding times necessary to produce thick walls. ROBOSHOT is available with high-duty injection units that are ideally suited to the production of these kinds of components.

Increase the quality of your optical parts

For optical parts control of the mould temperature is critical for surface quality. Integrating this functionality into the control saves time and helps prevent errors. Sensitive pre-injection and active gas venting resolves venting issues resulting from high material volumes and faster compression. Consistent moulding is enabled by the clamp and ejector compression function.

Sensitive handling solutions

Avoiding surface defects is crucial when loading and unloading delicate optical parts. FANUC robots provide the dexterity to handle this kind of sensitive handling requires.

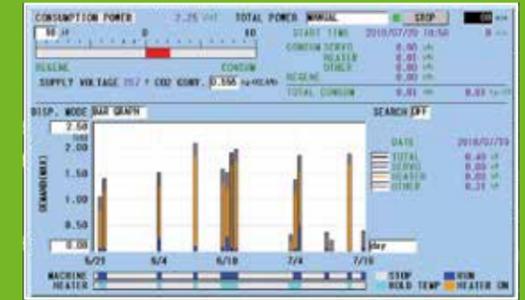
Made for micro moulding

Only FANUC offers a 15t electric injection-moulding machine. Designed to save precious floor space, this solution is ideal for use with very small moulds and to produce very small parts.



Lowest energy consumption worldwide

FANUC's superior servo technology and intelligent energy recovery reduce ROBOSHOT's energy consumption by 50–70% compared to hydraulic machines and by up to 10–15% compared to other manufacturers' electrical machines. Given very low maintenance costs, very high levels of uptime, fewer components and less wear, FANUC ROBOSHOT provides the lowest Total Cost of Ownership on the market.



Power consumption screen

Fitted as standard and including an energy analysis page, this function identifies where energy is consumed during the cycle, enabling you to optimise consumption and identify regenerative power.



Lower energy costs



Save up to 10–15%

Lower energy costs



Save up to 50–70%

Protect your valuable moulds!



Maximum mould and ejector protection

FANUC AI Mould and Ejector Protection provides the best mould protection on the market. Built to minimise downtime, it even indicates when greasing is required or the mould is worn.

Mould and ejector protection in both directions

Should an event occur, ROBOSHOT protects your mould during the full opening and closing cycle - Its unique Mould Protection function, measures the motor torque and stops the machine immediately if there is a restriction. The same technology also protects the ejector's forward and reverse movement.

Reliable protection at no cost to speed

Unlike the protection on hydraulic systems, ROBOSHOT's Mould Protection functionality has zero impact on clamp closing speeds. This kind of high-speed responsiveness is provided by its electric drives. Clamp tolerances are also programmable across the entire mould movement.

Your benefits with FANUC AI Mould and Ejector Protection:

- no damage to moulds
- no repair costs
- no costly downtime
- very easy set-up – just turn on and determine a min/max percentage of the torque
- no loss in moving speed

Optimised clamp force setting and fewer part defects

FANUC Clamp Force Adjustment checks and automatically adjusts the minimum clamp force, providing increased security and eliminating the need to adjust the clamp force manually.

Your benefits with FANUC Clamp Force Adjustment:

- reduced mould wear
- increased machine life
- reduced part defects
- less energy consumption
- reduced start-up time

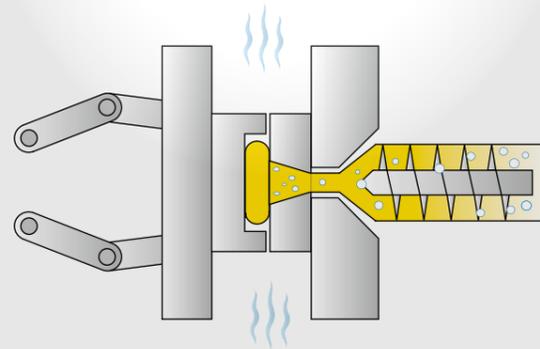


For more information:
Scan the code to see FANUC's unique mould protection system in action.

ROBOSHOT efficiency highlights

Sensitive FANUC CNC controlled pre-injection

Just right for sophisticated tasks such as the production of light guides and providing a reliable solution for air venting over the parting line, ROBOSHOT's pre-injection functionality enables the time between the beginning of injection moulding and clamping force build-up to be determined freely.



Remote monitoring with ROBOSHOT-LINK*i*

LINK*i* is a product and quality information management tool that manages up to 100 ROBOSHOT machines in real time from remote PCs or smart devices.

Status monitor

- achieves lower cost and higher operation rate
- monitors power consumption

Quality information

- provides traceability and advanced quality analysis
- investigate cause of failure and moulding repeatability

Diagnosis

- alarm history
- operation and parameter change history
- Remote operation functions

Unique process control and wear monitoring

FANUC Backflow Monitor shows you what is happening inside the valve, allowing you to monitor the closing characteristics as well as the wear status of the check ring. The injection process is also shown as a curve on the screen, enabling you to check and change your parameters should any irregularities occur. This allows the user to see the effect of process condition changes against the behaviour of the check valve. It even helps identify the onset of valve wear without disassembly of the barrel assembly.



The FANUC Backflow Monitor. On the left: stable back-flow. On the right: evidence that material is leaking and that valve slider closing times are inconsistent.

Your benefits with FANUC Backflow Monitor:

- constant process monitoring
- more transparent injection process
- easy detection of irregularities
- early scheduling of maintenance task
- predictable timing for exchanging the check ring

Constant parts weight – no need for decompression

FANUC Precise Metering 2+3 is an additional function designed to avoid uncontrolled volume flow between the end of plasticising and decompression. Precise Metering 2 provides advanced decompression control with reverse rotation of the screw after plasticising, while Precise Metering 3 checks the volume after plasticising, automatic V-P and decompression adjustment. Set to automatic mode there is no need to set various different parameters – all you need do is switch on!



Precise metering for maximum precision and stability

Your benefits with FANUC Precise Metering 2+3:

- constant plasticising volume for low viscosity materials
- reduced part weight variations
- avoidance of bubbles and silver strings
- automatic V/P adjustment (PMC)
- automatic decompression adjustment
- higher parts quality – fewer bad parts

Multi-component injection moulding

You can use ROBOSHOT for multi-component injection moulding by adding versatile and easy-to-integrate vertical and horizontal injection units. This advanced moulding technique allows you to inject three different components simultaneously. The vertical SI-20A unit fits on top of the ROBOSHOT, the horizontal SI-300HA unit slots onto the side. These additional injection units make it possible to inject two or three different components in one production run. Powered by FANUC's powerful CNC, the injection units offer the same levels of accuracy and repeatability as ROBOSHOT.

Your benefits

- fully integrated FANUC CNC
- easy to integrate
- flexible configuration
- turnkey solutions
- cost efficient

Easy switching between operation screens



Second injection unit operation screen



ROBOSHOT operation screen

Item	Unit	FANUC ROBOSHOT SI-20A					FANUC ROBOSHOT SI-300HA				
		Specification									
Screw diameter	mm	14	16	18	20	22	26	28	32	36	
Screw stroke	mm	56	56	75	75	75	95	95	128	144	
Maximum injection volume	cm ³	9	11	19	24	29	50	58	103	147	
Maximum Injection speed	mm/s	300					330				
Maximum injection pressure	MPa	200	180	140	130	120	260	240	220	190	
Maximum pack pressure	MPa	180	160	120	110	100	260	220	200	170	
Maximum injection rate	cm ³ /s	46	60	76	94	114	175	203	265	336	
Maximum screw rotation speed	min ⁻¹	250					450				
Nozzle touch force	kN	3					15				
Number of heaters	Barrel	3					3				
	Nozzle	1					1				
Heater capacity	kW	2.4	2.8	3.1	3.5	3.8	6.5	7.2	8.4	9.1	
Machine weight	ton	≈0.65 (injection unit) ≈0.15 (control unit)					1.9				



The ROBOSHOT SI-20A vertical injection unit

This vertical injection unit can be installed on top of the ROBOSHOT. Two different types of units can be adapted to a machine range of 100 ton to 300 tons. Fitted with FANUC's latest CNC, the unit offers stable, precision moulding and is encased in a space-saving electrical cabinet.

Features and benefits

- controlled by FANUC's latest CNC
- same accuracy and repeatability as any other ROBOSHOT
- can be installed on current ROBOSHOT models
- integrated screen on ROBOSHOT operation screen



The ROBOSHOT SI-300HA horizontal injection unit

This horizontal injection unit can be fitted to the side of the ROBOSHOT α-SiA models. Optional FANUC servomotors are available to control rotary tables from the ROBOSHOT SI-300HA. It is flexible and easy to integrate into your ROBOSHOT cell.

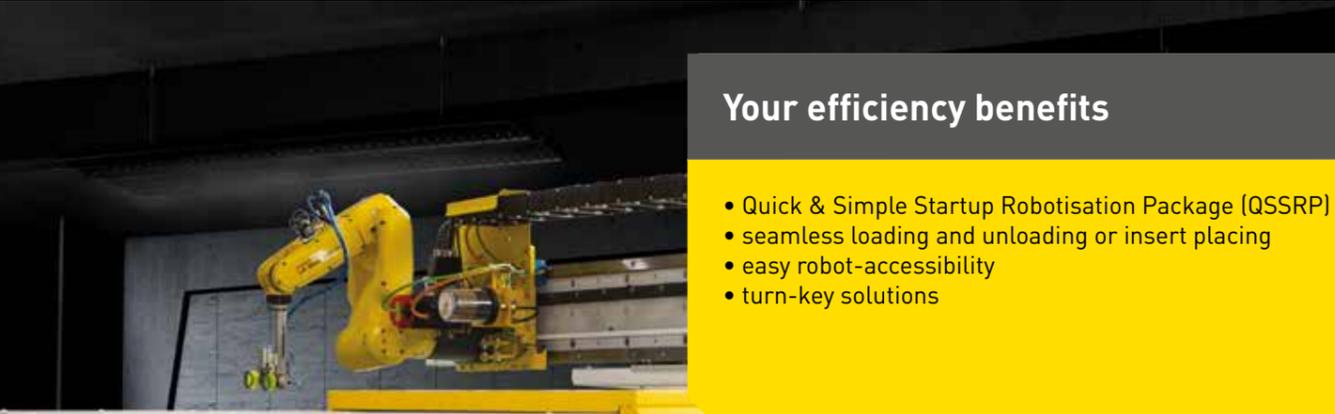
Features and benefits

- controlled by FANUC's latest CNC
- same accuracy and repeatability as any other ROBOSHOT
- exchangeable between different ROBOSHOT models

ROBOSHOT efficiency highlights

Your efficiency benefits

- Quick & Simple Startup Robotisation Package (QSSRP)
- seamless loading and unloading or insert placing
- easy robot-accessibility
- turn-key solutions



FANUC
ROBOSHOT
α-S100iA
CE

Designed for easy automation

The FANUC Quick & Simple Startup Robotisation Package (QSSRP) enables you to install tending robots in just a few steps. Easy robot access unloading components as well as an ergonomically designed work area ensures easy access to the machine. For more demanding automation scenarios, FANUC's comprehensive network of dedicated European partners possess the know-how and technical expertise you need to create the ideal solution for your production facility. Another plus: all FANUC products speak the same language and share a common servo and control platform – something that makes learning and operating them extremely easy.

Ready to integrate: Thanks to new interfaces and smart functions such as integrated hot runner and mould temperature controls, FANUC ROBOSHOT facilitates flexible integration into existing production systems. Unlike any other machine of its kind, FANUC ROBOSHOT includes an extensive package of functions for the most common injection moulding applications.



Create your FANUC Moulding Cell

The product of almost 30 years of experience in vision systems, FANUC iRVision fitted to a FANUC 6 axis Robot makes an extremely productive alternative to a gantry.

Quick and easy insert placement

- reliable visual picking and quality control prior to insertion
- very exact and highly repeatable insert placement without the need for mechanical guides
- positional accuracies of +/- 0.02mm

Visual error proofing

- FANUC's integrated vision system, iRVision, identifies part errors according to cavity
- visual identification of part defects or tiny faults such as a single dot in a group of parts
- no revalidation of the production process necessary
- saves a considerable amount of time
- only 1 camera required for multiple cavities

Part placement and orientation

- FANUC's iRVision provides a simple part placement solution
- inspection of each part on a conveyor
- identification of the cavity automatically
- an immediate decision is made



World-beating CNC reliability

Drawing on 60 years of continuous development, the centrepiece of the FANUC ROBOSHOT is the most reliable CNC control in the world. User friendly and featuring all the standard interfaces, it delivers fast processing times and consistent parts quality.

CF card

- 15" colour touchscreen display
- intuitive iHMI screen
- easy data input and minimal keypad entry
- improved interface to robot operation screen
- precise predictive maintenance
- easy-to-use control screen
- supports multiple languages



USB

Simple maintenance – early detection

The intuitive visual maintenance interface on FANUC's CNC facilitates faster recoveries after servicing. The integrated early warning system identifies errors before they occur, ensuring maximum precision and consistent quality standards.

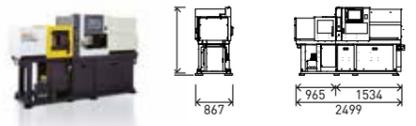
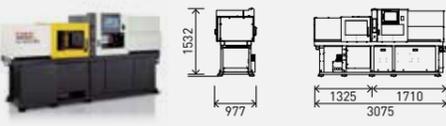
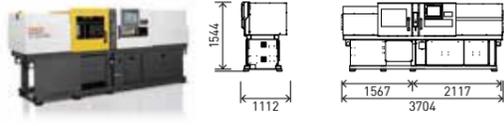
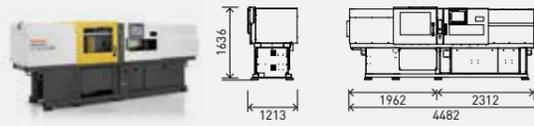
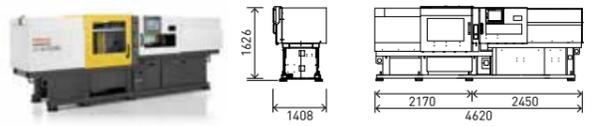
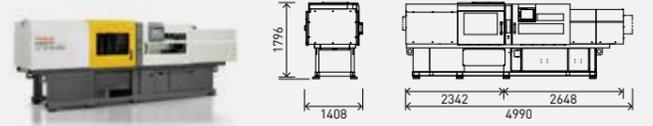
- 15" colour touchscreen display
- intuitive iHMI home screen
- quick and easy data input
- Ethernet AND USB interfaces

FANUC ROBOSHOT series

Choose the right model for your application

Clamping unit						
Tonnage	Max./min. form height	Closing stroke	Location Ring Diameter	Tie Bar Spacing (HxV)	Platen Size (HxV)	Ejector stroke
kN	mm	mm	mm	mm	mm	mm

Injection unit											Machine weight	
Screw diameter	Injection stroke	Max. injection volume	IS180 / IS200		IS525 / IS330 / IS240			IS800 / IS500 / IS270			Nozzle Contact force	
			Max. injection pressure	Max. injection speed	Max. injection pressure (high-pressure injecting)	Max. injection pressure	Max. injection speed	Max. injection pressure (high-pressure filling)	Max. injection pressure	Max. injection speed		
mm	mm	cm ³	bar	mm/s	bar	bar	mm/s	bar	bar	mm/s	kN	kg

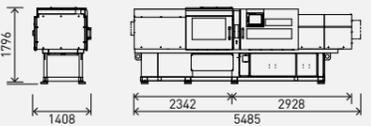
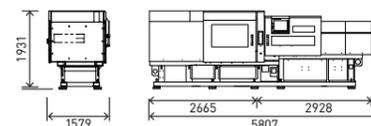
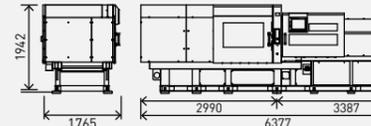
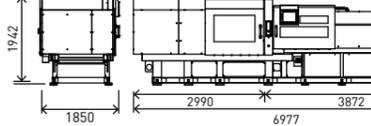
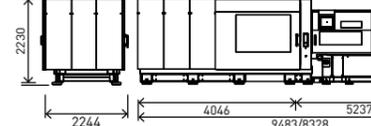
α-S15iA		150	260-130	160	Ø 60	260 x 235	355 x 340	50	14	56	9	2500	525	2500	800	5	IS525 - 1450 IS800 - 1500					
									16		11											
									18	75	19	2300										
α-S30iA		300	330-150	230	Ø 100	310 x 290	440 x 420	60	14	56	9	2500	525	2500	800	9	IS525 - 2000 IS800 - 2000					
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α-S50iA		500 / 650	Double pl. 350-150 400-150 Single pl. 410-210 460-210	250	Ø 125	360 x 320	500 x 470	70	20	75	24	3600	2800	3600	2800	500	IS300 Double pl. - 2900 IS300 Single pl. - 2850 IS500 Double pl. - 3100 IS500 Single pl. - 3050					
									22		29							3400	2600			
									26	95	50	2900	2100	500								
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α-S100iA		1000 / 1250	Double pl. 450-150 550-150 Single pl. 520-220 620-220	350	Ø 125	460 x 410	660 x 610	100	22	75	29	2600	3400	2600	3400	2600	500	IS200 Double pl. - 4400 IS200 Single pl. - 4250 IS330 Double pl. - 4400 IS330 Single pl. - 4250 IS500 Double pl. - 4550 IS500 Single pl. - 4400				
									26		50								2400			
									28	95	58	2400	200	3200	2400	330			2700	2200	2200	1900
									32		103	2200										
									36		144	147										
									40	181		1600										
α-S130iA		1300	570-200 670-200	400	125	530 x 530	730 x 730	100	26	95	50	2600	3400	2600	3400	2400	330	IS200 - 4900 IS330 - 4900				
									28		58								2400			
									32	128	103	2200	200	2700	2200	330	2200		1900			
									36		144	147								1900		
									40			181								1600		
α-S150iA (small capacity)		1500 / 1800	Double pl. 500-200 600-200 Single pl. 575-275 675-275	440	Ø 160	560 x 510	800 x 750	150	22	75	29	3400	2600	3400	2600	500	Small Capacity IS330 Double pl. - 6400 IS330 Single pl. - 6150 IS330 Double pl. - 6550 IS330 Single pl. - 6300					
									26		50											
									28	95	58	200	3200	2400	330	2700		2200	2200	1700		
									32		128										103	
									36												144	147
									40	181												

FANUC ROBOSHOT series

Choose the right model for your application

Clamping unit						
Tonnage	Max./min. form height	Closing stroke	Location Ring Diameter	Tie Bar Spacing (HxV)	Platen Size (HxV)	Ejector stroke
kN	mm	mm	mm	mm	mm	mm

Injection unit											Machine weight	
Screw diameter	Injection stroke	Max. injection volume	IS180 / IS200		IS525 / IS330 / IS240		IS800 / IS500 / IS270			Nozzle Contact force		
			Max. injection pressure	Max. injection speed	Max. injection pressure (high-pressure injecting)	Max. injection pressure	Max. injection speed	Max. injection pressure (high-pressure filling)	Max. injection pressure			Max. injection speed
mm	mm	cm ³	bar	mm/s	bar	bar	mm/s	bar	bar	mm/s	kN	kg

α-S150iA  	1500 / 1800	Double pl. 500-200 600-200 Single pl. 575-275 675-275	440	Ø 160	560 x 510	800 x 750	150	32	150	121	2800	200	3800	2800	330				30	IS300 Double pl. - 7050 IS300 Single pl. - 6800 IS500 Double pl. - 7200 IS500 Single pl. - 6950	
								36		153											3450
								40		188											2600
								44		268											2200
								48		318											1900
								52		442											1600
α-S220iA  	2200	650-250 750-250	550	160	650 x 650	900 x 900	150	32	176	121	1900	200	3800	2800	330				30	IS200 - 8700 IS330 - 8700	
								36		179											3450
								40		221											2600
								44		268											2200
								48		318											1900
								52		442											1600
α-S250iA  	2500 / 3000	650-300 750-300	600	Ø 160	710 x 635	1030 x 960	200	32	150	121	2800	200	3800	2800	330				30	IS330 - 12500	
								36		153											3450
								40		188											2600
								44		268											2200
								48		318											1900
								52		442											1600
α-S300iA  	3000 / 3500	650-300 750-300	600	Ø 160	810 x 710	1130 x 1030	200	40	150	188	2800	200	2800	2800	240				30	IS240 - 14200 IS270 - 13700	
								44		268											2700
								48		318											2700
								52	208	442	2400	260	2400	2250	2400	2250	1750	1550	1350		
								56	640	2250											
								64	836	1750											
								68	944	1550											
								72	1059	1350											
α-S450iA  	4500 (Option 5000)	1000-350	900	Ø 200	920x920	1300x1300	250	56	260	- / 640	2800	180	2250	1750	240				30	IS180 - 29700 IS240 - 24000	
								64		- / 836											1550
								68		944											1350
								72	1059	2500	360	2290 / -	2000								
								80	1810 / -	1600											
								90	2290 / -	1600											
100	2827 / -	1600																			

Efficient FANUC service worldwide

Wherever you need us, our comprehensive FANUC network provides sales, support and customer service all around the world. That way, you can be sure you have always got a local contact that speaks your language.

Efficient long-time productivity: FANUC Maintenance Services

To minimise impact on production and get the most out of your machine, we offer maintenance services designed to lower your machine's TCO. Whatever your production scenario, FANUC solutions keep your machine running via dedicated preventive, predictive and reactive maintenance procedures that maximise uptime and keep downtime to a bare minimum.

Efficient training: FANUC Academy

The FANUC Academy offers everything you need to upskill your teams and increase productivity – from introductory programs for beginners through to courses tailored to the needs of expert users and specific applications. Fast and effective learning, on-site training or cross machine training make up the extensive educational offering.

Efficient supply: Lifetime OEM spare parts

As long as your machine is in service, we will provide you with original spare parts. With more than 20 parts centres all over Europe, dedicated service engineers and direct online access to FANUC stores, availability checks and ordering, we keep you running whatever happens.



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