

ROBOSHOT α -SiB series

Available features

Data storage, features and software	Standard	Option
Mould file storage - 500 files	•	
Mould file storage to USB device	•	
Screen image capture to USB device	•	
Process monitoring - Cycle alarms, part rejection for 40 items trend charts 100,000 cycles process monitoring	•	
Process monitoring judgement alarm	•	
Alarms log - 50,000 logs exportable to CSV format	•	
Log Management - Parameter change log 100,000 events, exportable to CSV format	•	
Log Management - Operational change log 100,000 events, exportable to CSV format	•	
Production management - Container management, counter stop function, production completion calculation	•	
Good product rate alarm - Cycle end stop		•
Preventive maintenance - load & temperture of the machine	•	
AI Backflow monitoring through machine learning - Check valve wear indication		•
Cycle time analysis & display - timing chart	•	
Process graphics - wave form display with selectable parameters	•	
Power consumption monitoring & display	•	
Signal output for sampling manually or by designated interval (count or time)	•	
Interfaces / Inputs / Outputs (other interfaces are available)		
12 machine status inputs	•	
8 machine status outputs	•	
2 Ethernet ports - 100Base-TX/1000Base-T	•	
Ethernet Hub 5 ports		•
2 USB ports - 3.0/2.0/1.1	•	
Custom signal Function 32 points character input of signal name	•	
Configurable core function - maximum 6 systems available	•	
E67 Rbot interface	•	
E67/73 Robot interface for non operator's side parts removal		•
VNC (Virtual network computing)		•
Core interface 12 outputs & 8 inputs	•	
Valve gate interface 8 circuits	•	
Valve gate interface 16 circuits		•
Monitor camera interface interlocked to ejector is available	•	
Data communication auxiliary device SPI protocol - Mold temperature, materail dryers, hopper loaders & chillers	•	
Data communication auxiliary device SPI protocol - Hot runner		•
Bad parts reject function	•	
Cycle stop by external signal. Immediate stop, cycle end stop or dispay only	•	
Alarm signal input - cycle stop by external signals	•	
Shot counter output by 4 binary points of binary data		•
Mold ID Signal output by 8 points of binary data		•
Analog Input External sensor connection Voltage or Current, max 2 boards and 4 input signals		•
Process graphics data output by voltage - Analog outputs max 4 signals selectable		•
Additional axis control - Up to 4 servo cores control & positioning via FANUC servo technology		•
Linki 2 Product & Quality management system available in 20 device or 1000 device versions		•

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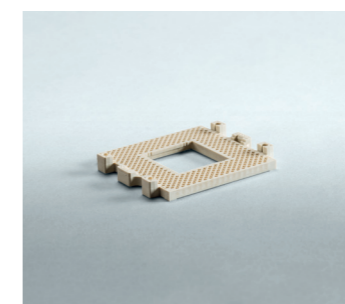
FANUC

Discover the new all electric plastic injection moulding machine

ROBOSHOT α -SiB series - Highest precision, repeatability and reliability.



Like all of the FANUC ROBOSHOT machines, the α -SiB Series offers proven power, quality and reliability. It offers numerous upgrades for companies looking for a plastic injection moulding machine with the most flexibility with lower overall life cycle costs, increased productivity, high precision and overall business success.



Highlights:

- High-performance FANUC PANEL iH Pro user interface, which features a large 21.5" display with full HD resolution
- Quicker set-ups, improved graphics and data viewing
- Seamless integration of plug-and-play FANUC robots
- Wide screen multi functional display with pinch and swipe functionality
- Fully conforms to ISO 20430, the international safety standard for injection moulding machines
- Increased data storage, event logging history and connectivity comes as standard
- Enhanced AI functions for predictive check valve assembly wear
- New software features as standard

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Technical data summary & overview

Specifications	α -S50iB	α -S100iB	α -S130iB	α -S150iBs	α -S150iB	α -S220iB
Clamp force [kN]	500	1000	1300	1500	1500	2200
Increased tonnage option [kN]	650	1250	-	1800	1800	-
Tie bar spacing HxV [mm]	360x320	460x410	530x530	560x510	560x510	650x650
Platen size HxV [mm]	500x470	660x610	730x730	800x750	800x750	900x900
Max/min die height [mm]	350-150	450-150	570-200	500-200	500-200	650-250
Extended die height option [mm]	+50	+100	+100	+100	+100	+100
Clamp stroke [mm]	250	350	400	440	440	550
Ejector stroke [mm]	70	1000	1000	150	150	150
Ejector force [std/increased]	20/60	25/60	25/60	35/80	35/80	35/80
Available injection speeds						
200 mm/s	-	●	●	-	●	●
270 mm/s (high duty)	-	-	-	-	●	●
350 mm/s	●	●	●	●	●	●
550 mm/s	●	●	●	●	-	-
Available screw diameters						
14	○	○	-	-	-	-
16	○	○	○	○	-	-
18	●	○	○	○	-	-
20	●	○	○	○	-	-
22	●	●	○	○	-	-
26	●	●	●	●	○	○
28	●	●	●	●	○	○
32	●	●	●	●	●	●
36	-	●	●	●	●	●
40	-	●	●	●	●	●
44	-	-	-	-	●	●
48	-	-	-	-	●	●
52	-	-	-	-	●	●
56	-	-	-	-	-	●

● standard - not available ○ with hardware and/or software option

* Screws available in PAL Nitride, wear & corrosion, high wear & corrosion plus high temperature versions. Further screw & barrel configurations are available on request. Please get in touch with your local office. Please refer to the technical data sheets for all injection specific data



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Display & Input	Standard	Option
21.5" HD Touch screen display	●	
Simultaneous Display of setting screen, monitoring screen & Linki2	●	
23 languages - selectable	●	
Numerical Input, incremental input & character inputs in 23 languages	●	
Managed entry - 200 operators with password and storage in operator log	●	
Operator management with ID card instead of password		●
Customisation of menu buttons	●	
Setting profile displays - injection, packing, plasticising, clamp open/close ejection & temperature	●	
Enhanced graphical user interface - home screen	●	
Context sensitive help function for setting, signals & alarms	●	
Operator & maintenance manual displayed on HMI screen	●	
VNC client function for remote operation of VNC available device		●
Injection & Plasticising		
10 stages of Injection pressure & speed control	●	
4 modes of Injection response mode - selectable	●	
Switchover mode by position, pressure, time, cavity pressure, nozzle pressure signal or filling position	●	
6 Stages of holding pressure & time control including holding speed control	●	
6 stages of plasticising - screw speed and back pressure control	●	
Automatic purge function	●	
Change of auto purge condition sequentially		●
Back flow prevention control - precise metering two modes	●	
AI (Artificial Intelligence) metering control	●	
AI (Artificial Intelligence) pressure profile trace control - Injection pressure	●	
AI (Artificial Intelligence) pressure profile trace control - Cavity & nozzle pressure		●
Automatic start up parameter mode	●	
Clamp / Ejector		
6 stages of closing & 5 stages of opening via speed & position control - auto acceleration control	●	
10 stages of ejector control, 2 stage ejector and 4 patterns of ejector motion control	●	
In mould degating - Pre ejector function	●	
Pre ejector function with 0.001 resolution of position & time		●
Automatic die height adjustment with clamp force sensor 0kN - max clamp force	●	
Precise clamp force control - automatic adjustment & optimisation	●	
Clamp compression function		●
Ejector compression function		●
Auto production set up function - reduced set up time		●
AI Mould protection, complete mould open & close stroke	●	
AI Ejector protection, complete forward & backward stroke	●	
Pre Injection - Simultaneous clamp & injection movement	●	
Pre Injection function with 0.001 sec setting resolution		●
Simultaneous Ejector forward with clamp opening	●	
Simultaneous clamp open and plasticising	●	
Ejector override function - Simultaneous ejector retract during clamp closing		●