

Shibaura Machine

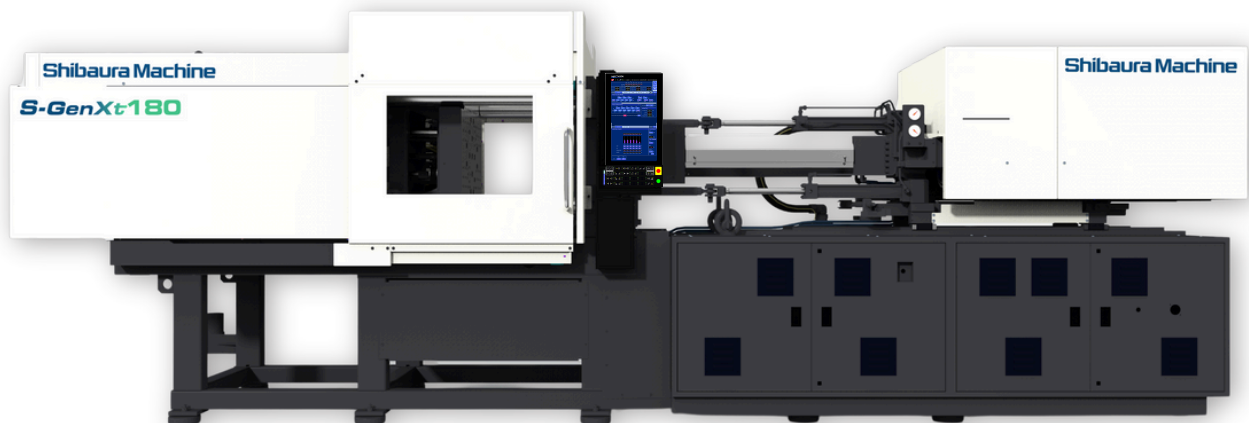
View the Future with You

HYBRID INJECTION MOLDING MACHINE

S-GenXt

Injection Molding Machine

100 - 230T



S-GenXt

S-GenXt100

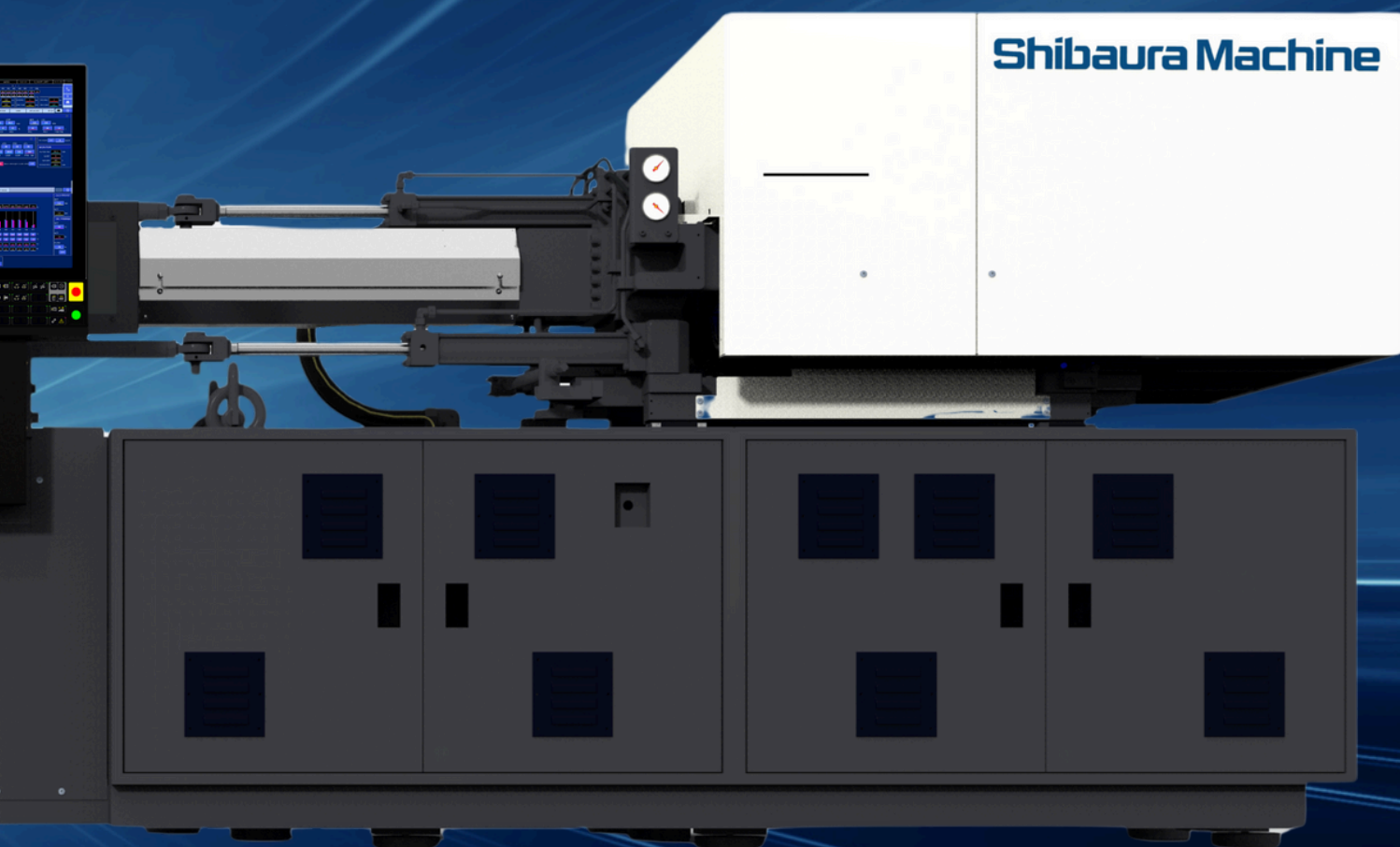
S-GenXt180

S-GenXt230

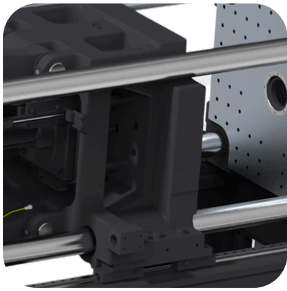




Flexibility to change any
axis to electric variant



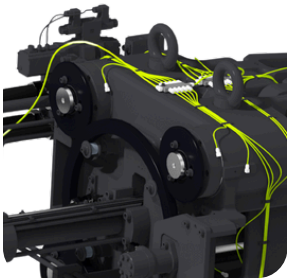
Clamping Unit



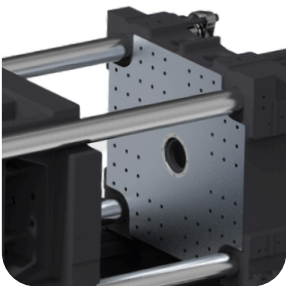
Bushless Tie Bar improved machine cleanliness, Higher machine up-time and longer component life.



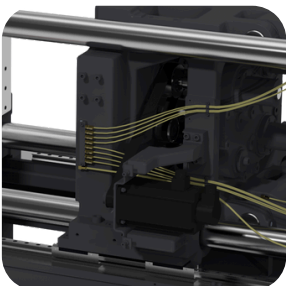
Accurate platen movement on Linear Guide maintains uniform clamping and shot consistency, resulting in high-precision molded parts.



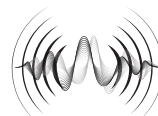
Precise clamping movement using proportional valve



Wider platen designed to accommodate larger molds



Ejector on Fly ensures faster cycles, boosting productivity without compromising part quality (*Optional*)

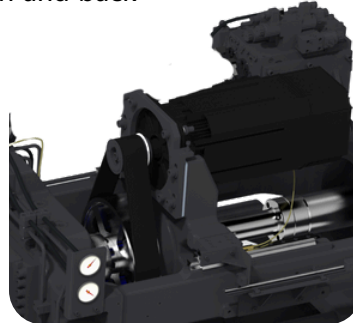


Low Noise Operation – Less than 80dB as per Industry Norms for Operator Safety and Compliance.

Injection Unit



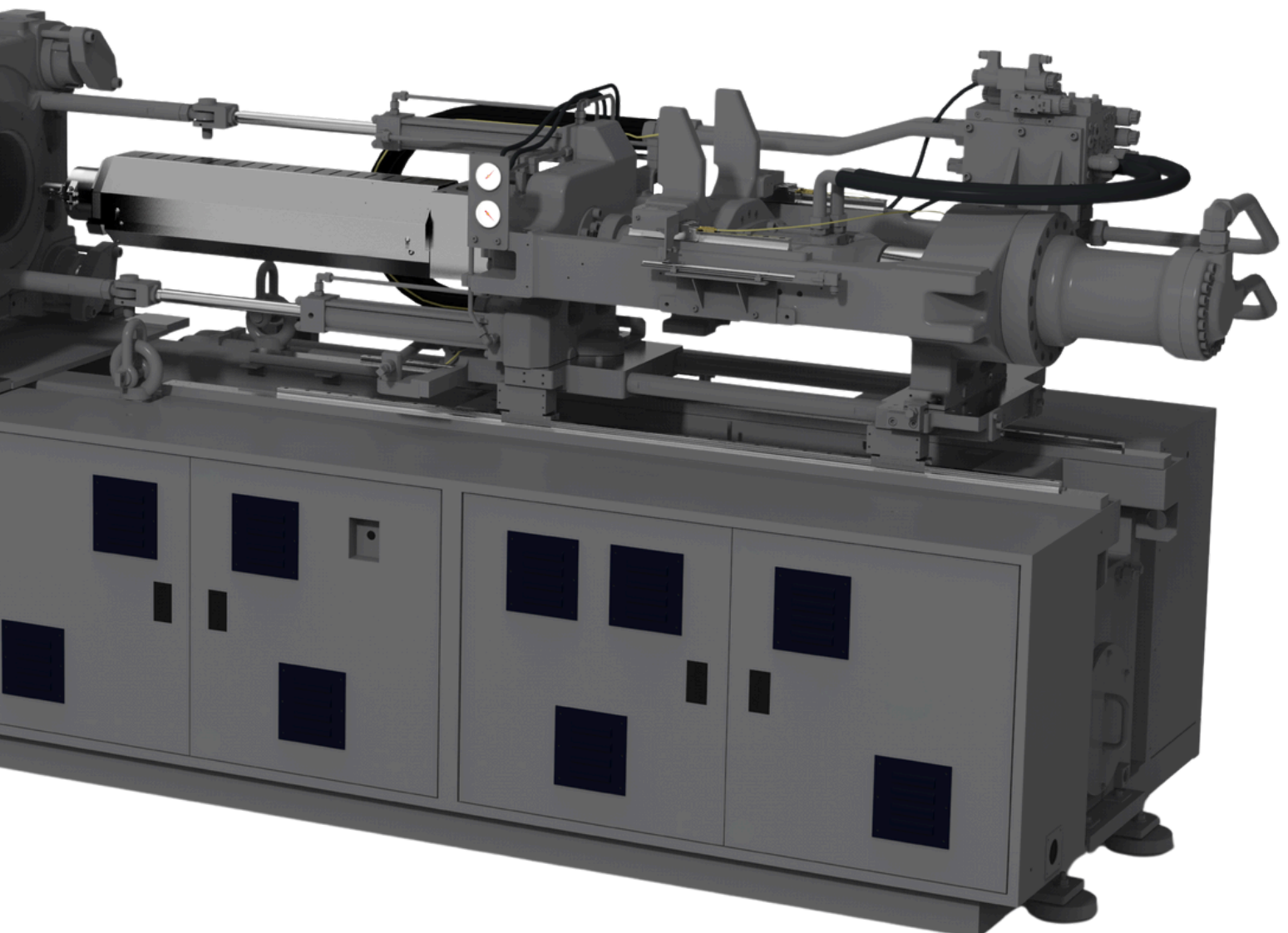
Injection unit is supported on linear guides, greatly reducing the drag of injection and back pressure.



Electric Dosing System for Precise Melt Control and Energy Efficiency — Ensures Consistent Shot Quality and Faster Cycle Times. *(Optional)*



Superior Performance Single Injection Cylinder



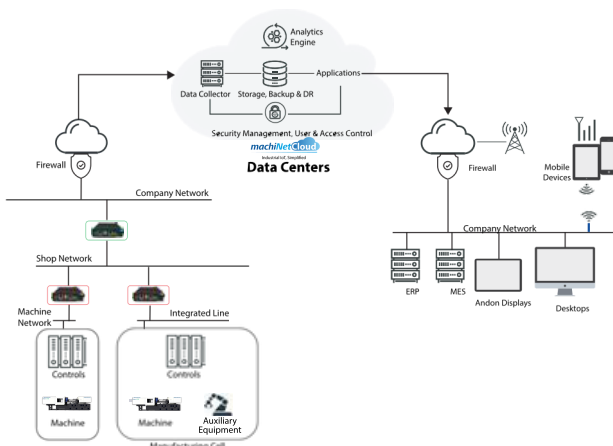
Injectvisor VH100 Controller

Smart, Reliable, Future-Ready

- ▶ **Linux-Based OS** – Flexible platform for easy integration of new devices and software updates
- ▶ **Ultra-Fast Scan Time** – Ensures precise, responsive control of speed and pressure for superior part quality
- ▶ **Multi-Fieldbus Support** – Seamless connectivity with EtherCAT, MODBUS RS485/TCP-IP, and CAN networks
- ▶ **Auxiliary Equipment Integration** – Simple connection to energy meters and auxiliary systems via MODBUS
- ▶ **Galvanic Isolation for Thermocouples** – Reliable performance even in harsh industrial environments
- ▶ **Integrated Hot Runner Controller** – Supports multiple thermocouple types for precise temperature control
- ▶ **Electrical Charging & Electrical Ejection Integration** – Optimized cycle time and energy savings
- ▶ **Euromap 77 Interface** – Ready for Industry 4.0 and smart factory connectivity
- ▶ **Remote HMI Access** – Quick troubleshooting and monitoring from anywhere
- ▶ **Built-in Diagnostic Tools** – Instant status reports for proactive maintenance
- ▶ **Flexible User Access & Multi- Language Support** – Secure operation, tailored for global teams
- ▶ **Real-Time On-Screen Graphs** – Visual, easy troubleshooting for process stability
- ▶ **Advanced Process Monitoring** – Tracks mean, range, and standard deviation for consistent quality
- ▶ **500 Mold Recipe Storage** – Fast changeovers with reliable repeatability
- ▶ **Unlimited Process Data Storage** – Complete production traceability and process history



machiNet Cloud *Optional*



Information. Monitoring. Access. From Anywhere...

machiNetCloud
Industrial IoT, Simplified

The machiNetCloud is the Industrial IoT solution that gives you the insights for achieving greater manufacturing productivity and quality.

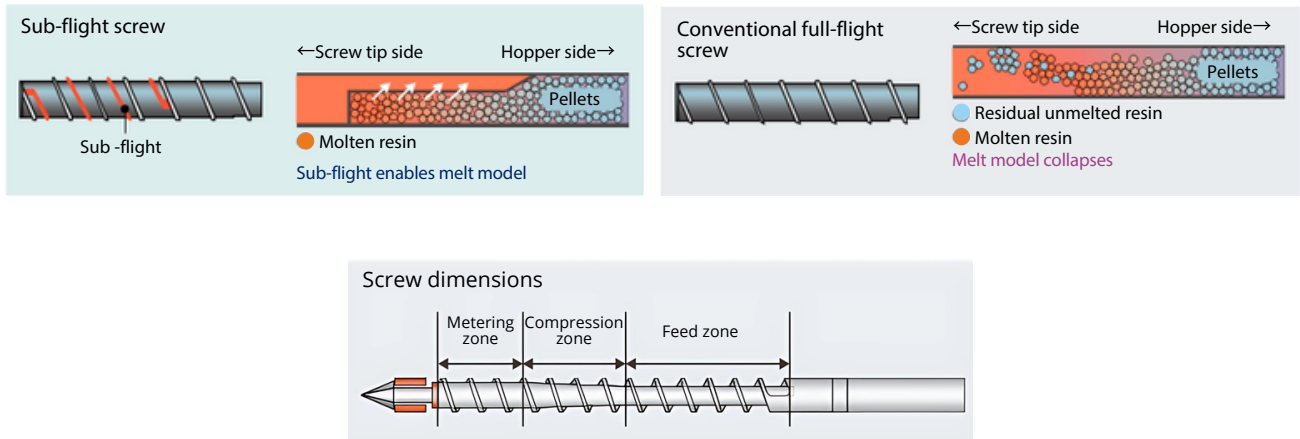
The machiNetCloud platform gives you the tools to accurately review, evaluate and make decisions to improve your Overall Equipment Effectiveness (OEE).

Complying with international security standards, with high-level end-to-end encryption, machiNetCloud captures data from all your equipment to give you the information you need to improve productivity, virtually eliminate unscheduled downtime, monitor and access equipment securely from anywhere.

DBG Screw Profile

High-performance screw for uniform plasticization of materials

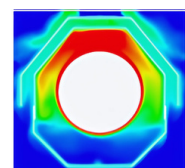
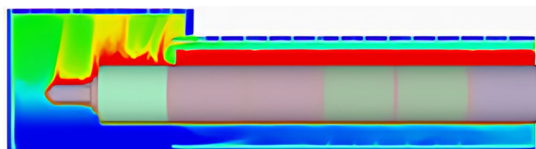
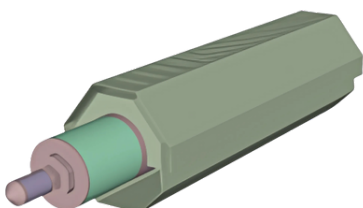
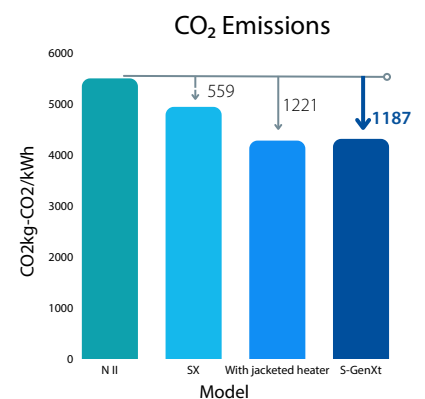
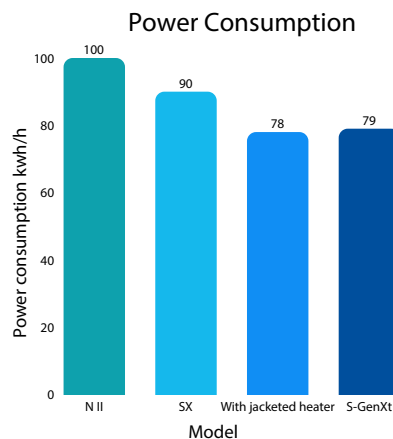
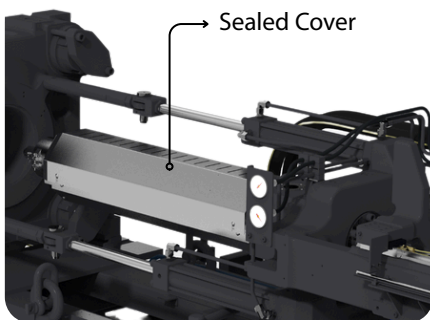
Shibaura Machine's DBG Sub flight screw separates the solid channel from the melt channel. This innovative design ensures smooth transfer of molten resin, minimizes material break-up, and delivers stable, homogenous melt quality helping customers achieve higher part quality and process reliability.



Heater Cover

New Heater Cover for Enhanced Heat Retention

- ▶ Enclosed cover structure for improved heat retention and energy-saving performance
- ▶ Thermal Analysis optimised barrel cover for energy saving



Analysis of Temperature Gradient

S-GenXt100

S-GenXt100							
Clamping Unit		Units	100 T				
Clamping Force		kN (tf)	980 (100)				
Distance Between Tie Rods (H×V)		mm	460 × 410				
Platen Dimensions (H×V)		mm	660 × 610				
Opening Stroke		mm	350				
Open Daylight (Min.～Max.) Closed		mm	530 ～ 900				
Daylight (Min.～Max. Mold)		mm	180 ～ 550				
Ejection Force		kN	49				
Ejector Stroke		mm	120				
Injection Unit			i3			i5	
Barrel Code			Y	A	B	Y	A B
Screw Diameter		mm	32	36	40	36	40 45
Injection Capacity		cm ³	129	163	201	204	251 318
Injection Capacity (Ps)		g	116	147	181	183	226 286
Plasticising Capacity		Kg/hr	61	83	110	83	110 120
Plasticising Capacity		g/s	17	23	31	23	31 33
Inj. Pressure - Std		bar	2531	2000	1620	2531	2050 1620
Inj. Pressure - Regen		bar	1758	1389	1125	1837	1488 1176
Injection Rate - Std		cm ³ /sec	119 /166	150 /210	185 /259	119 / 166	146 / 205 185 / 259
Injection Rate - Regen.		cm ³ /sec	171 /239	216 / 302	267 / 373	163 / 229	202 /282 255 / 357
Screw Rotation Speed		rpm	390	350	320	350	320 285
Screw Stroke		mm	160			200	
Power Unit (Servo Motor Driven Hyd. Pump)		kW	22 / 30				
Heater Power (Std. Noz. Dipping)		kW	7.9	7.9	7.9	11.2	11.2 11.9
Dimension	L	mm	5516				
	B	mm	1498				
	H	mm	1825 (+42～62)				
Weight		T	5.3			5.5	

S-GenXt180

Clamping Unit		Units	180T					
Clamping Force		kN (tf)	1760 (180)					
Distance Between Tie Rods (H×V)		mm	560 × 510					
Platen Dimensions (H×V)		mm	790 × 740					
Opening Stroke		mm	450					
Open Daylight (Min.～Max.)		mm	650 ～ 1050					
Closed Daylight (Min.～Max. Mold)		mm	200 ～ 600					
Ejection Force		kN	49					
Ejector Stroke		mm	160					
Injection Unit			i5			i7		
Barrel Code			Y	A	B	Y	A	B
Screw Diameter		mm	36	40	45	40	45	50
Injection Capacity		cm ³	204	251	318	281	357	442
Injection Capacity (Ps)		g	183	226	286	253	321	398
Plasticising Capacity		Kg/hr	83	110	120	110	120	160
Plasticising Capacity		g/s	23	31	33	31	33	44
Inj. Pressure - Std		bar	2531	2050	1620	2547	2004	1618
Inj. Pressure - Regen		bar	1837	1488	1176	1913	1505	1215
Injection Rate - Std		cm ³ /sec	166 / 237	205 / 293	259 / 370	165 / 236	210 / 299	260 / 371
Injection Rate - Regen.		cm ³ /sec	229 / 327	282 / 403	357 / 510	220 / 314	279 / 399	346 / 494
Screw Rotation Speed		rpm	350	320	285	320	285	255
Screw Stroke		mm	200			225		
Power Unit (Servo Motor Driven Hyd. Pump)		kW	30 / 37					
Heater Power (Std. Noz. Dipping)		kW	11.2	13.6	13.6	15.2	15.2	15.8
Dimension	L	mm	6184			6230	6230	6329
	B	mm	2066					
	H	mm	1756 (+42 ~62)					
Weight		T	8.8			9.2		

S-GenXt230

S-GenXt230								
Clamping Unit		Units	230T					
Clamping Force		kN (tf)	2250 (230)					
Distance Between Tie Rods (H×V)		mm	610 × 560					
Platen Dimensions (H×V)		mm	880 × 830					
Opening Stroke		mm	550					
Open Daylight (Min.～Max.)		mm	800 ～ 1230					
Closed Daylight (Min.～Max. Mold)		mm	250 ～ 680					
Ejection Force		kN	49					
Ejector Stroke		mm	180					
Injection Unit			i7			i10		
Barrel Code			Y	A	B	Y	A	B
Screw Diameter		mm	40	45	50	45	50	55
Injection Capacity		cm ³	281	357	442	397	492	597
Injection Capacity (Ps)		g	253	321	398	357	442	537
Plasticising Capacity		Kg/hr	110	120	160	120	160	190
Plasticising Capacity		g/s	31	33	44	33	44	53
Inj. Pressure - Std		bar	2547	2004	1618	2574	2078	1712
Inj. Pressure - Regen		bar	1913	1505	1215	1745	1409	1161
Injection Rate - Std		cm ³ /sec	236 / 289	299 / 367	371 / 454	233 / 286	289 / 354	350 / 429
Injection Rate - Regen.		cm ³ /sec	314 / 384	399 / 488	494 / 605	344 / 421	426 / 522	517 / 633
Screw Rotation Speed		rpm	320	285	255	285	255	230
Screw Stroke		mm	225			250		
Power Unit (Servo Motor Driven Hyd. Pump)		kW	37 / 45					
Heater Power (Std. Noz. Dipping)		kW	15.2	15.2	15.8	15.2	15.2	15.8
Dimension	L	mm	6585	6585	6684	6734	6734	6838
	B	mm	1984					
	H	mm	2075 (+42～62)					
Weight		T	10.3			11		

Clamping Unit Functions

Features & Options

Specification	Description	100T-230T
Advanced Toggle Mechanism	Ensures high-speed, centralized clamp force transfer for superior mold control	●
Die Plate Compatibility	Supports JIS, EUROMAP, and SPI tap standards for global mold compatibility.	EUROMAP
Linear Guide	Delivers smooth, straight mold movements	●
Pre-Machined Robot Mounting	JIS-standard tap holes on the stationary die plate for easy take-out robot integration	●
Automatic Lubrication	Ensures long-lasting performance of toggle and sliding components	●
Proportional Valve Control	Enables smooth, shock-free mold open/close operations	●
Auto Clamp Force Correction	Load cell-based auto adjustment during continuous molding	●
Flexible Speed Programming	5-stage mold opening / 3-stage mold closing control	●
Digital Clamp Force Settings	Configurable two-stage (low/high) clamping pressure	●
Smart Mold Protection	Time-based, digitally monitored system with speed and pressure control	●
Auto Mold Thickness Control	Auto-adjusts mold position with a linear sensor for efficient mold changeovers	●
Mold setup mode deceleration decompression circuit	Setup mode reduces speed and pressure automatically for safer mold handling and adjustments	●

Specification	Description	100T-230T
Ejection Operation Repetition	Programmable ejection count (1–8) with selectable timing ensures flexible handling of runner and part separation	●
Multi-Speed Ejection Control	Programmable forward/reverse speed improves part safety and reduces mold-release defects	●
Shortened Ejection Travel	Custom return midpoint minimizes stroke for quicker repeat ejection	●
Ejector Return Sensor Interface	Electrical confirmation of ejector plate return position ensures safe mold operation	●
EUROMAP/SPI Ejection Setup	Standardized ejection pin layout and sizes allow compatibility and easy replacement	EUROMAP
Digital Ejection Pressure Setting	Adjustable pressure control avoids part deformation and improves release consistency	●
Configurable Hold Timing	Set hold time to ensure proper part release and avoid sticking	●
Parallel Ejection Circuit	Enables synchronized ejector operation during mold opening to reduce cycle time	●
Clamp Sequence Customization	Tailor the sequence of core pulls, air blows, and ejectors for advanced molding setups	●
Servo-Driven Ejector with Brake	Holds ejection position securely for improved cycle consistency	●
Dry Cycle Setup Mode	Test and configure machine movements without injecting resin for maintenance and validation	●

Specifications	Description	100T-230T
Open Nozzle	Choice of tip-style nozzles (I3Y-i10B) with adjustable projection, radius, and aperture to suit different mold setups.	●
Barrel Variants	Available in standard, CR, WR, UWR, and UCR options to match resin type and process durability needs	WR
DBG High-Kneading Screw	General-purpose DBG screws offer excellent melt quality and mixing, paired with claw-tip ring screw	●
Anti-Rust Stainless Hopper Sleeve	Protects against rusting and contamination in the resin feed zone for cleaner processing	●
Ceramic Barrel Heater	Durable ceramic band heater supports temperatures up to 400°C for stable and uniform barrel heating	●
Friction-free drive	Reduces friction in screw motion, enabling faster response and high-accuracy injection pressure control.	●
Injection Pressure Sensor	Provides real-time injection pressure feedback for stable and accurate molding	●
Safety Cover for Nozzle Zone	Protects operators by containing resin during purge operations	●
Barrel Temperature Shield	Insulates and protects barrel heating from external disturbance for consistent operation	●
Automatic Barrel Purge	Digitally triggered auto-purge cleans the barrel, saving time and reducing contamination	●
Injection multi-stage program control	Independently set up to 10 stages of speed and pressure for precise filling and holding profiles.	●
Flexible Holding Pressure Mode	Switch between holding modes based on screw position or pressure for adaptable molding	●
Programmable Injection Delay	Controls injection start timing, especially useful in valve gate or hot runner applications	●

Specification	Description	100T-230T
Controlled Screw Charging	Programmable screw rotation and back pressure ensure consistent melt positioning and material stability	●
Multi-stage charging control	Flexible control of up to 6 screw speeds and pressures enhances charging consistency for critical materials	●
Configurable Decompression	Minimizes stringing and air entrapment by enabling controlled screw decompression	●
Programmable Charging Delay	Delays charging for heat-sensitive resins, improving part quality and reducing degradation	●
Screw Startup Safety Lock	Prevents premature screw movement until safe operating temperature is reached, protecting components	●
SSR-PID Heater Control	High-precision PID control ensures consistent heating with fast response time	●
Hopper Throat Cooling System	Regulates hopper throat temperature via solenoid to reduce heat creep and material softening	●
Hopper Area Temp Display	Shows real-time feed zone temperature on screen for monitoring and control	●
Scheduled Barrel Heating	Automates barrel pre-heating based on calendar timers for efficient startup	●
Uniform Barrel Heating System	Synchronizes heating across barrel zones and nozzle to prevent resin burning and hot spots	●
Idle Mode Temperature Reduction	Reduces heater temp during idle to protect resin from thermal degradation	●
Independent Back Pressure Settings	Separate control for manual and auto modes enhances process flexibility	●
Robot Interface (EUROMAP 67)	Pre-configured signal port supports robot integration for automated part handling	●

Injectvisor VH100 Controller

Features & Options

Specifications	Description	100T-230T
Numeric Input Control	Enables quick and accurate data entry using a dedicated keypad interface	●
Mold Data Storage	Store up to 500 mold setups internally for quick retrieval and changeover	●
USB Export Functionality	Export mold data and process monitoring via USB for backup or analysis	●
Real-Time Digital Display	Monitor all key process variables like position, pressure, speed, and temperature	●
Graphical display	Visualizes temperature and clamping mode in easy-to-read graphical format	●
Injection Curve Monitoring	View and export real-time injection and dosing waveforms for performance analysis.	●
Statistical Quality Tracking	Tracks trends and performs statistical evaluations to ensure consistent molding quality	●
Full Diagnostics Log	Review 2000+ events covering settings, alarms, stops, and operations for troubleshooting	●
Post-Production Behavior Control	Choose automatic stop or continued operation once production target is achieved	●
18.5" Color Touchscreen	Large interactive LCD panel improves visibility and user interaction	●
Process Action Display	Shows all core molding operations live — clamp, eject, inject — for better monitoring	●
Universal Button Layout	Icon-based buttons ensure intuitive control across any language or operator	●
Multi-Level Password Protection	Limits access to machine functions based on user roles for safety and security	●
Molding Cycle Analyzer	Breaks down cycle times by stage to identify inefficiencies and optimize processes	●
On-Screen PDF Manual Access	Read machine manuals directly from the control panel, no physical copies required	●

Injectvisor VH 100 Controller

Features & Options

Clamp Device	
High-speed, five-stage program control(Close – 3, Open – 5 stage)	●
Clamping force ton display	●
Mold protection control (low-pressure clamp)	●
Clamping force two-stage digital setting (PCL/PCH)	●
Mold thickness adjustment circuit	●
Mold setup mode deceleration decompression circuit	●
Variable control during clamp acceleration/deceleration (selection of slow/middle/fast)	●
Auto clamp force correction during running	●
Core 25 circuit	●
Air blow	●
Mold open middle location (LS100)	●

Ejection Device	
Ejection operation repetition count setting (1 to 8 times/hold)	●
Ejection speed two-stage program control (Fwd -2, Ret – 1 stage)	●
Ejection return location two-stage program control (LS32A)	●
Ejection entry/return two-location program control (LS31B)	●
Ejector B circuit (Manual parallel during mold opening)	●
Ejection pressure digital setting	●
Ejection parallel (Electric with ball screw)	●
Ejection return limit confirmation circuit	●

Control Device	
Visual display (TFT color liquid crystal)	18.5"
Screen count	73
Split screen	
Actual value monitor	●
Profiles (Injection/Charge 2 screens)	●
Operation history	●
Alarm	●
Set-up condition saving function (internal memory)	●
Data saving (monitoring, history, waveform) External memory	●
External interface (USB port 2.0 -1, USB 3.0-1)	●
Data saving (set-up condition: external memory)	●
Setting switches	●
Numeric keypad	●
OPCUA - EUROMAP 77	●
Signal customization function only output	●
Password function	●
Product take-out function connection circuit	●
Error warning buzzer	●

Injectvisor VH 100 Controller

Features & Options

Injection Device	
Injection program control 10 filling speeds 10 pressures 10 holding pressures	●
Holding pressure change mode selection (location, resin pressure)	●
Injection pressure control	●
Injection delay timer	●
Actual value waveform display(Injection speed and pressure, Screw speed and back pressure)	●
Injection peak pressure monitoring	●
Nozzle operation selectable from 3 modes: Continuous Pressure, Injection Completion, Charge Completion, or Cooling Completion	●
Auto purge circuit (Charge, Inject) 2 modes	●
Charging delay timer	●
Screw rotation speed/back pressure program control	●
Decompression control before/after charging	●
Manual back pressure settings	●
Control to prevent start-up between screw cooling	●

Production Management	
Production management free counter	●
Quality monitoring	●
Production completion operation stop circuit	●
Production management count selection (Total shots, good shots, total production)	●
Total shot count	●

Monitoring	
Monitoring data display (table/trend)	●
Filling time	●
Charging time	●
Cycle time	●
Cushion	●
Holding pressure change pressure	●
Injection start position	●
Maximum injection pressure	●
Barrel/nozzle temperature	●
Hopper-block temperature	●
Mold opening time	●
Mold closing time	●
Ejection time	●
Holding pressure change position	●
Clamping force	●
Monitoring data statistical processing	●
Process alarm (configurable)	●
Stop operation selection	●
Monitor table/trend display	●
History display	●
Setting history	●
Alarm history	●
Operation history	●
Cycle analysis function	●
I/O check function	●

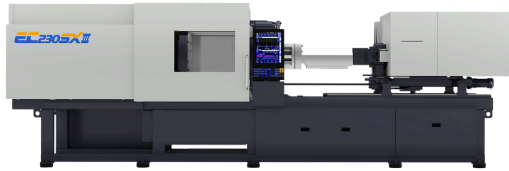
Injectvisor VH 100 Controller

Temperature Control	
Hopper-bottom temperature control device (Feed throat control)	●
Automatic heat-up circuit	●
Barrel simultaneous heat rise function	●
Barrel temperature shift operation control	●
Barrel control PID auto-tuning function	●
Screw stop temperature configuration function	●
Barrel temperature deviation display	●

Machine Specification	
Clamping unit	●
Injection unit	●
Software version	●
Date user selection	●
Version display	●
Standard language support (5 languages, English, Deutsch, Chinese, Japanese, Korean)	●
Screen copy function (PNG, PDF)	●

Our Solution

For Plastic & Metal Industries



Injection Molding Machines

All Electric | Hybrid | Hydraulic

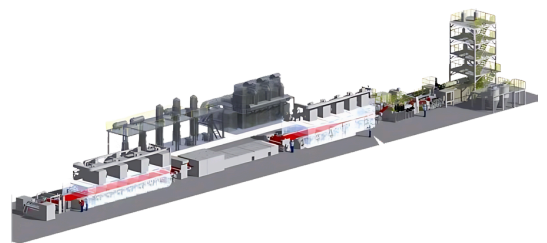


Die Casting Machines

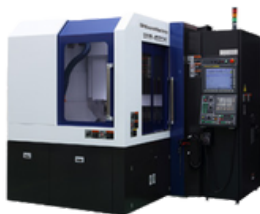
Electric | Hybrid | Hydraulic



Machine Tools



Extrusion Machines



Nano Processing System



Auxiliary Equipment



Shibaura Machine's IoT+m



Industrial Robots

Shibaura Machine

View the Future with You

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