JANOME

Industrial Equipment Catalog

European Edition

CE

Realizing the Future

Meeting customer needs with new functionality.
Our responsiveness and flexibility pave the way toward your manufacturing future.

Contents

JANOME: The Answer to Your Manufacturing Needs

Building on technology refined through years of precision sewing machine development, we forge ahead in the high function industrial equipment field. Always on the cutting edge in manufacturing, we devote ourselves to offering the finest quality in everything we do from product development to after sales service.
Our main products, namely servo presses and desktop, Cartesian and SCARA robots are valued by customers worldwide for precision work in a variety of fields, including the automotive parts, IT and electronics industries.

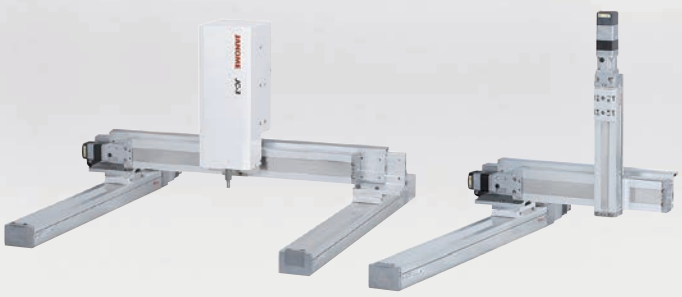
Headquarters

Head Office and R&D Division

Company Overview

Address	1463 Hazama-machi, Hachioji-shi, Tokyo 193-0941 Japan
Established	October 1921
Incorporated	June 1950
Capital	11.37 Billion Yen (as of 31 March 2023)
Main Businesses	•Manufacture and sale of sewing machines and related products •Manufacture and sale of industrial equipment •Sale of sewing machine products and educational materials for schools, etc. •Real estate leasing, etc.

Main Products



Desktop Robots

Dispensing, screw-tightening, soldering, PC board cutting, and more, our versatile desktop robots handle a variety of jobs. Highly rigid construction ensures stable movement. Our simple teaching method makes using the robots easy.

Cartesian Robots

3 or 4-axes Cartesian robots feature smooth movement, precise traceability and high repeatability. The standard model features multiple interface ports; ideal for inline installation. Combine stroke sizes to fit your needs; we offer a wide selection of size configurations.

Manufacturing Facilities

Overseas Repair Service Center

Japan

Tokyo Factory

International

Janome Taiwan Co., Ltd

Janome (Thailand) Co., Ltd.

Training Center

Our products are on display at our Training Center located in our Tokyo Headquarters. We sometimes hold seminars and are available to assist customers who want to test our machines. We also have product showrooms at all of our sales offices.

History

1984	4	Sold our first servo press, the JP-20 Electro Press
1986	12	JP1 Series Electro Press released
1993	4	JR500 Desktop Robot released
	8	JP2 Series Electro Press released
1994	11	JR750 Desktop Robot released
1996	5	JP3 Series Electro Press released
1998	5	JSR4400 Series SCARA Robot released
2000	8	JR2000 Series Desktop Robot released
2003	10	JS Series SCARA Robot released
2004	2	JPE Series Electro Press released
	9	JR2000N Series Desktop Robot released
	10	JSTH Series SCARA Robot released
2005	7	JP Series 4 Electro Press released
2006	6	Nagoya Sales Office opened
	7	JSR4400N Series SCARA Robot released
2007	8	Janome Industrial Equipment USA, Inc. established in Chicago
2008	2	Acquired CAST Series Desktop Robot business from SONY
	2	CAST Series Desktop Robot released
	3	JR2000NE Series Desktop Robot released
	4	Janome Industrial Equipment Europe GmbH established in Frankfurt
	5	Fukuoka Sales Office opened
2009	2	JR2000NERT Series Depaneling Desktop Robot released
	10	Osaka Sales Office opened
2010	8	JP-S Series Electro Press released
2011	4	Janome Industrial Equipment (Shanghai) Co. Ltd established
	11	JR-V2000 Series Desktop Robot released
2013	5	JC-2 Series Cartesian Robot released
	11	Janome Industrial Equipment (Taiwan) Co. Ltd established
2014	10	JR3000 Series Desktop Robot released
2015	4	JC-3 Series Cartesian Robot released
	9	Janome Industrial Equipment (Shanghai) Co. Ltd Shenzhen Office opened
2016	9	JP Series 5 Electro Press released
2017	4	JR3000ERT Series Desktop Robot released
	12	JR3000F Heavy Duty Robot released
2018	4	JS3 Series SCARA Robot released
2019	4	Multifunctional Inspection Device i22X Series released
	8	JR3303EBV Desktop Robot released
	10	JP-S2 Series Electro Press released
	11	Janome Mexico, S. de R.L. de C.V., Querétaro branch opened
2021	2	JP Series 5 T/F Stand Alone Type Electro Presses released
	9	Tangless Insert Automatic Insertion Machine released
	10	JR3000T Series Twin Table Desktop Robot released
	10	Adopted a new company name: JANOME Corporation
2023	1	Automatic Screw Presenters released
	9	Yamagata Sales Office Opened

SCARA Robots

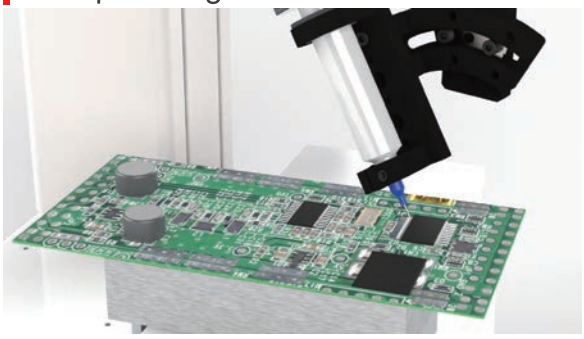
Equipped with a powerful servomotor, our user-friendly, vertical multi-jointed robot is useful for a wide range of jobs, from high-speed small parts pick-and-place to high-precision component assembly.

Servo Presses (Electro Press)

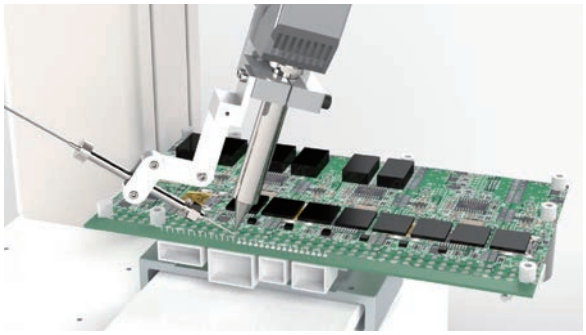
Our high-precision servo presses offer exact control of speed, position and pressure with result data traceability and many sensor functions for effective quality control. We offer a broad lineup from 0.5kN to 200kN, in both unit types for line installation and stand alone column types. Clean room compatible models also available.

Application Index

Dispensing

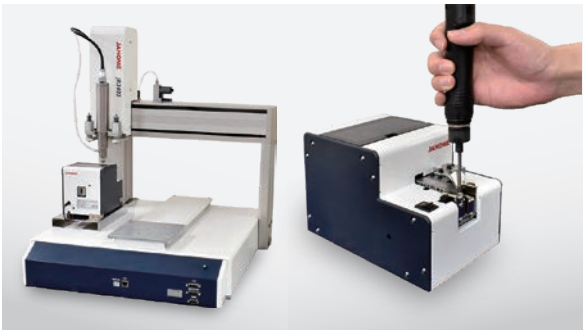


Soldering

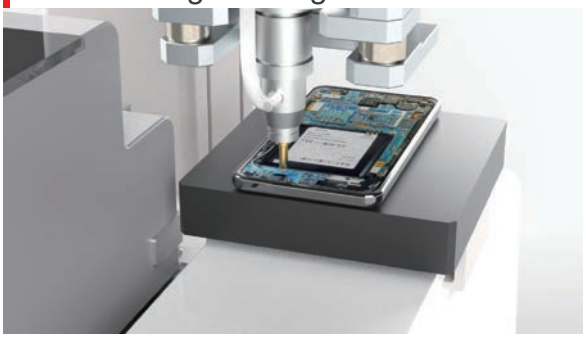


Inspection

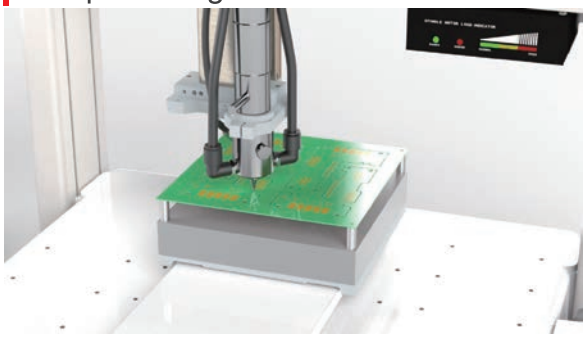
Screw Presentation



Screw Tightening

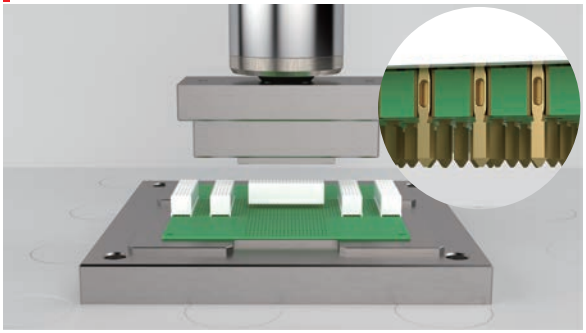


Depaneling



Pick & Place

Press Insertion

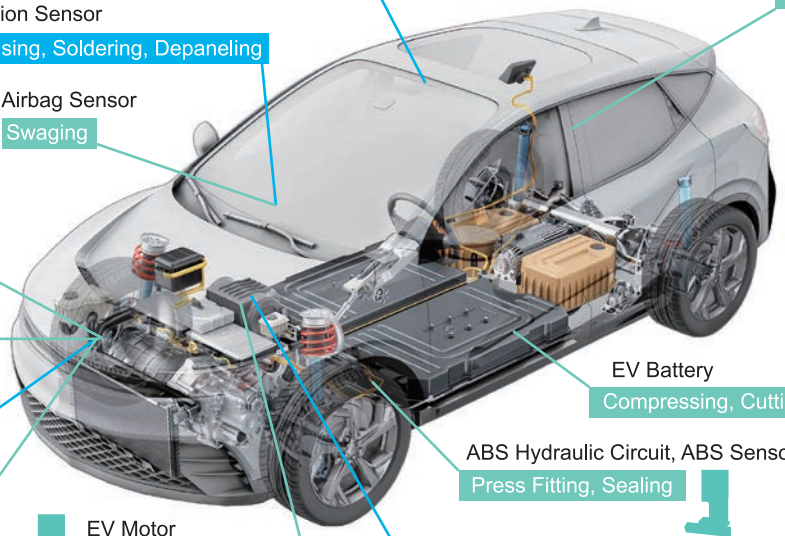


Robots & Servo Presses
Serving at the Production Site

Robot Application

Servo Press Application

Automobiles



Built-in Camera
Dispensing, Soldering, Depaneling

Seatbelts
Bending, Swaging

Car Audio, Airbag, Navigation Sensor
Dispensing, Soldering, Depaneling

Airbag Sensor
Swaging

Gear Box, Bearings
Press Fitting

Engine Cover
Thermal Pressure Welding

Wire Harness, Connectors
Soldering

Bending, Cutting

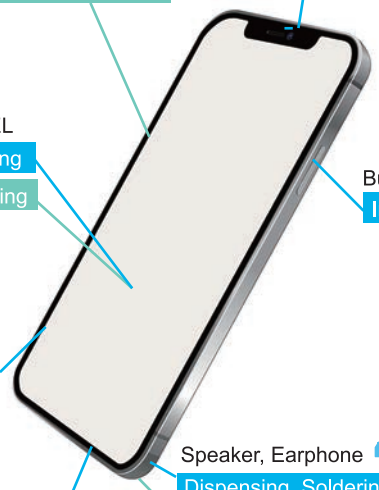
EV Motor
Swaging, Press Fitting

EV Battery
Compressing, Cutting, Bending, Swaging

ABS Hydraulic Circuit, ABS Sensor
Press Fitting, Sealing

EV Inverter Board
Dispensing, Screw Tightening, Depaneling

Smart Phones



Camera Module
Dispensing

Vibration Motor
Swaging, Press Fitting

Organic EL
Dispensing

Pressure Bonding

Button Testing
Inspection

Battery Case
Dispensing

Speaker, Earphone
Dispensing, Soldering

Forming

Miniature Screws in Assembly
Screw Tightening

Wireless Earphones

Sealant
Dispensing

Wearable Devices

Miniature Screws in Assembly
Screw Tightening

Sealant
Dispensing

Printed Circuit Boards

Board Surface
Plasma Treatment

Lead Frames
Cutting, Bending, Swaging

Connectors
Press Fitting

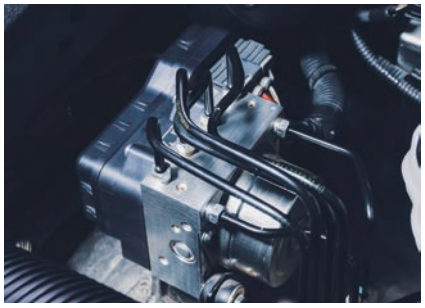
Depaneling

Special Focus: EV Parts Production

Janome Industrial Equipment products are used in the manufacture of these EV parts and more...

Altenators

ABS (Anti-Locking Brake Systems)



Buckles & Clasps

Compressors

Crossbars

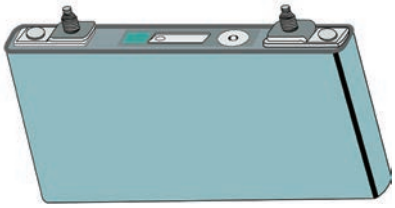
Cylinder Heads

EV Power Axles (eAxles)

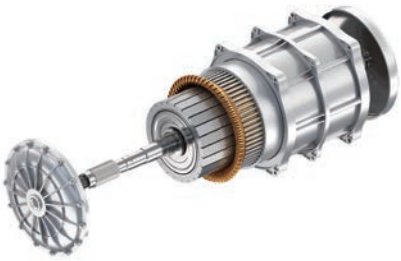
Engine Components

4WD Headlights & Tail Lamps

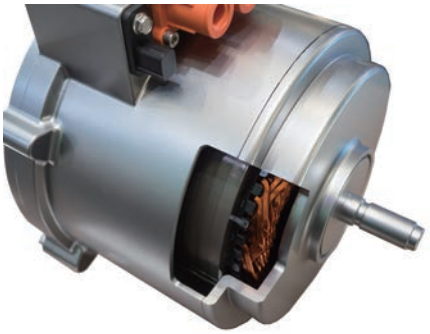
Lithium Ion Batteries



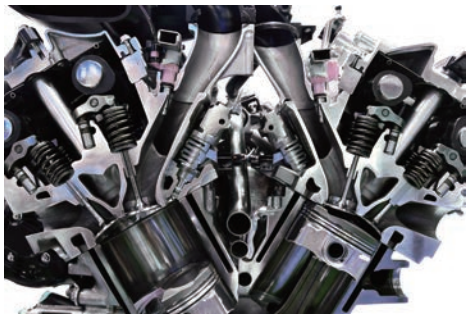
Motor Core Components



Mounted Motors (for HEV)

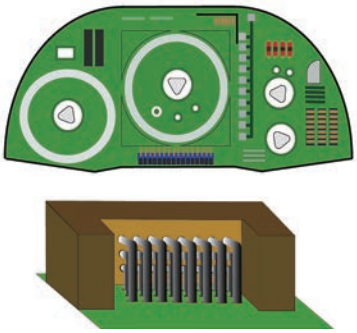


Pistons & Cylinders



Power Steering

PC Boards & Components



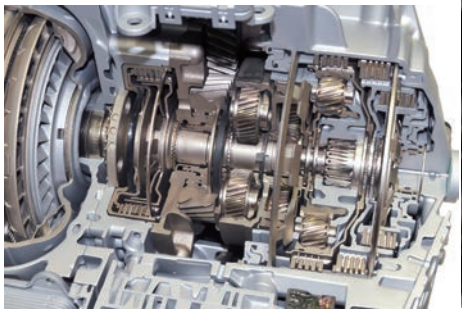
Shock Absorbers

Spark Plugs

Speedometers

Starter Motors

Transmission Assemblies



Transmission Sleeves

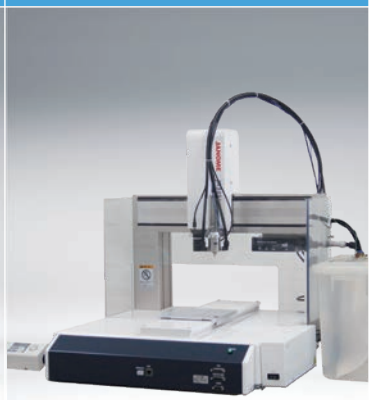
Turbochargers

Water Pumps

Zirconia Oxygen Sensors

Robot Lineup

High precision, user-friendly, with a wealth of applications,
styles and operating ranges, our robots dramatically improve productivity.

		Desktop Robots		
		JR3000	JR3000AP-D	JR3000ERT/EBV
Product Image				
Pages		pp.11-12	pp.13-14	pp.15-16
Features		Versatile flagship model desktop robot broadens your manufacturing potential.	The JR3000 Series equipped with a powerful sensor and camera combination for fine dispensing.	Router type printed circuit board depaneling robot.
Software	Standard*1	●		
	Dispensing	●	●	
	Screw Tightening	●		
	Depaneling			●
	Pick & Place			

		i22X	Automatic Screw Presenter
Product Image			
Pages		pp.19-20	pp.27-28
Features		Multifunctional desktop inspection device automates post-process visual inspections.	Automatic screw presenter compatible with a wide variety of screws.

*1 Standard models are adaptable for creating specialized software for other manufacturing applications.

	Cartesian Robots		SCARA Robot
JR3000F	JC-3	JC-3-X2	JS3
			
pp.17-18	pp.21-22	pp.23-24	pp.25-26
High payload specialist JR3000 Series robot carries a tool mass up to 15kg.	Multifunctional, user-friendly Cartesian robot.	Long stroke model utilizes two X-Axis motors for precise, uniform movement over a broad work area.	SCARA robot featuring a highly rigid arm for high speed, precision and payload capacity.
●	●	●	●
●	●	●	●
	●		
			●

Icon Key

Fieldbus — Fieldbus Compatible (Optional)

USB — USB memory port included as standard equipment

PLC — Includes a built-in simple PLC function

LAN — LAN port included as standard equipment

I/O-MT — I/O-MT Auxiliary Axes Compatible (Optional)

CE Declared Model

JR3000 Series

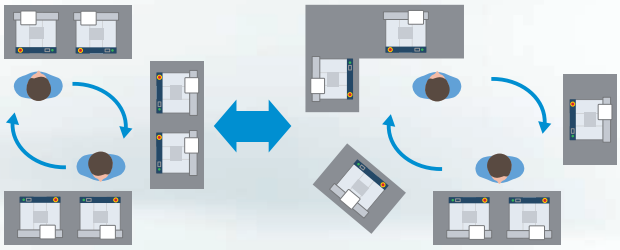
Loaded with useful functions, this high performance desktop robot excels at many different manufacturing roles.

Easy Teaching

No need to learn a programming language.
Simply create programs by moving the tool to the position you want and choosing the job you want.

Layout Changeover Flexibility

No need for permanent installation mounts*, making process changeover easy.
Desktop setup also ideal for cell production.



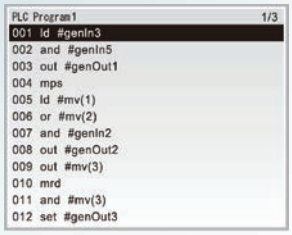
*Mounted installation also available.

Control Up to 4 Axes and 2 Motors

Add up to 2 pulse string input type external devices, such as stepping motors or servomotors and control them together with the robot axes. Expand the robot's functionality by installing a turntable to rotate the work; add a conveyer to control from the robot, etc.

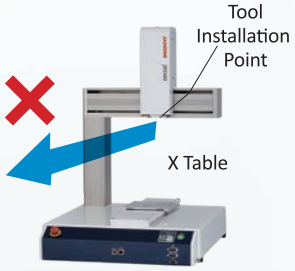
Simple PLC Function

A simple PLC which operates independent of the robot is already built-in, so you do not need to purchase a separate PLC to handle simple interfacing with external devices.



Safe Tool Movement

The X table carries the work under the robot arm away from the operator's head and hands. The tool does not project outward, but moves left to right for greater safety.



High Precision Traceability

Separate X table configuration for fine control. Highly rigid diecast base reduces oscillation for faster, more accurate movement. When changing direction, the robot automatically calculates the best route to maintain speed while minimizing oscillation.

Model Name

JR3 20 3 E - B C

JR3000 Series	X, Y Axes Strokes	No. of Axes	Encoder*1	Operation Panel	Power Supply*2
	20: 200×200mm 30: 300×320mm 40: 400×400mm 50: 510×510mm 60: 510×620mm	2: 2*3 3: 3 4: 4	E: Included N: Not Included F: Heavy Duty Model	A: Installed Switch B: Switchbox C: Basic Switchbox	C: 100-120/200-240V 50/60Hz (No Outlet) 200-240V 50/60Hz(200V Outlet) J: 100-120V 50/60Hz(100V Outlet)

*1 Motor Step-out Detection Function
*2 JR3200 Type is No Outlet only.
*3 For details about the 2 Axes Type, please contact us.

Compatible Applications

- Standard
- Dispensing
- Screw Tightening

Specifications

3 Axes Specifications

Item	Model*1	3 Axes (Synchronous Control)				
		JR3203	JR3303	JR3403	JR3503	JR3603
Operating Range	X & Y Axes (mm)	200×200	300×320	400×400	510×510	510×620
	Z Axis (mm)	50	100	150	150	150
Maximum Portable Load	X Axis (Work) (kg)	7	15	15	15	15
	Y Axis (Tool) (kg)	3.5	7	7	7	7
Maximum Speed (PTP Drive)*2 ( )=Settable Speed Range	X & Y Axes (mm/sec)	700 (7~700)	900 (9~900)	900 (9~900)	900 (9~900)	900 (9~900)
	Z Axis (mm/sec)	250 (2.5~250)	400 (4~400)	400 (4~400)	400 (4~400)	400 (4~400)
Maximum Speed (CP Drive)*2 ( )=Settable Speed Range	X, Y, Z Combined (mm/sec)	600 (0.1~600)	850 (0.1~850)	850 (0.1~850)	850 (0.1~850)	850 (0.1~850)
Repeatability*3	X & Y Axes (mm)	±0.006	±0.007	±0.007	±0.008	X:±0.008 Y:±0.01
	Z Axis (mm)	±0.006	±0.007	±0.007	±0.008	±0.008
Open Height(mm)*7		125	200	300	300	300
External Dimensions W×D×H (Excluding Protrusions) (mm) ( )=Double Column Type		323×387×554	560×535×659	584×631×807 (615×631×807)	678×731×807	790×731×807
Robot Weight(kg) ( )=Double Column Type		20	35	42 (45)	44	45

4 Axes Specifications

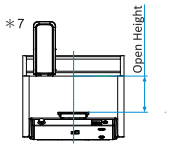
Item	Model*1	4 Axes (Synchronous Control)				
		JR3204	JR3304	JR3404	JR3504	JR3604
Operating Range	X & Y Axes (mm)	200×200	300×320	400×400	510×510	510×620
	Z Axis (mm)	50	100	150	150	150
	R Axis (°)	±360	±360	±360	±360	±360
Maximum Portable Load	X Axis (Work) (kg)	7	15	15	15	15
	Y Axis (Tool) (kg)	3.5	7	7	7	7
Maximum Speed (PTP Drive)*2 ( )=Settable Speed Range	X & Y Axes (mm/sec)	700 (7~700)	900 (9~900)	900 (9~900)	900 (9~900)	900 (9~900)
	Z Axis (mm/sec)	250 (2.5~250)	400 (4~400)	400 (4~400)	400 (4~400)	400 (4~400)
	R Axis (°/sec)	600 (6~600)	900 (9~900)	900 (9~900)	900 (9~900)	900 (9~900)
Maximum Speed (CP Drive)*2 ( )=Settable Speed Range	X, Y, Z Combined (mm/sec)	600 (0.1~600)	850 (0.1~850)	850 (0.1~850)	850 (0.1~850)	850 (0.1~850)
Repeatability*3	X & Y Axes (mm)	±0.01	±0.01	±0.01	±0.01	±0.01
	Z Axis (mm)	±0.01	±0.01	±0.01	±0.01	±0.01
	R Axis (°)	±0.008	±0.008	±0.008	±0.008	±0.008
Open Height(mm) *7		205	350	350	350	350
External Dimensions W×D×H (Excluding Protrusions) (mm) ( )=Double Column Type		323×387×676	560×535×844	584×631×894 (615×631×894)	678×731×894	790×731×894
Robot Weight(kg) ( )=Double Column Type		22	38	46 (49)	47	48

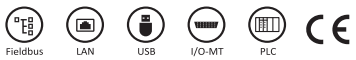
JR3000 Series Common Specifications

Item		Content
Program Capacity		999 Programs
Database Capacity*4		Up to 32,000 points
External Input/Output	I/O-SYS*5	16 Inputs / 16 Outputs
	I/O-1*5 *6	8 Inputs/ 8 Outputs (including 4 relay outputs) (optional)
	I/O-MT*5 *6	Controls up to 2 external motors (optional)
	I/O-S	Safety device connector (optional)
	Fieldbus	EtherNet/IP / PROFINET / CC-Link / DeviceNet / PROFIBUS / CANopen (optional)
	COM1	RS232C (for external devices, COM commands)
	COM2・COM3	RS232C (for external devices) (optional)
	MEMORY	USB memory connector (for saving/reading out teaching & customizing data, system software upgrades)
	LAN	Ethernet connector for PC (for operating the robot using control commands and connecting to "JR C-Points II" PC software)
Power Source (V)		AC100~120/AC200~240 (single phase)
Power Consumption (W)		200

<Notes>
*1 2 Axes Specifications also available. Please contact us for details.
*2 Maximum speed can vary depending upon conditions.
The robot cannot reach maximum speed when bearing the maximum portable load.
*3 Repeatability was measured at a constant temperature and does not represent a guarantee of absolute precision.
*4 Point data memory capacity reduces as additional function data settings/point job data/PLC program data are added, due to the shared data storage area.
*5 Please choose the I/O polarity: NPN or PNP.
*6 For the JR3200 type, choose only one optional add-on: I/O-1 or I/O-MT.

<Standard Accessories>
・Operation Manual (CD-ROM) ・Power Cable ・Switchbox (standard equipment for robots with B type operation panels)
・Basic Switchbox (standard equipment for robots with C type operation panels)

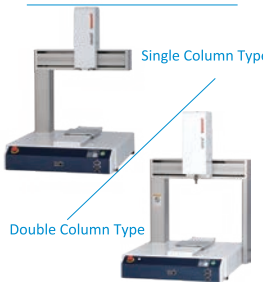




JR3200

JR3300

JR3400



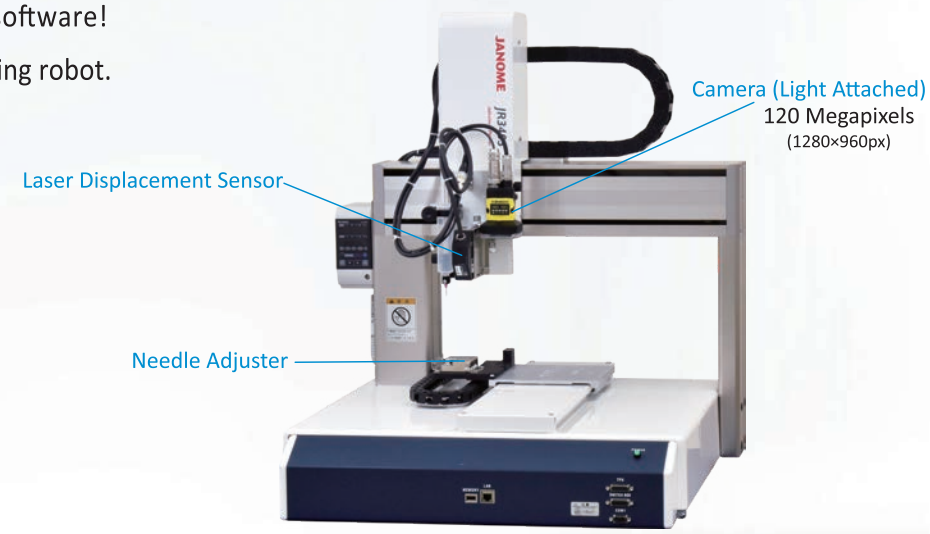
JR3500

JR3600

JR3000AP-D Adjustment Package for Dispensing

Make all your settings on the same software!

Dynamic adjustment package dispensing robot.



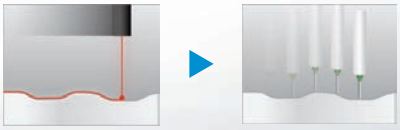
Adjustment Functions for High Precision Dispensing

1 Camera Adjustment

Robot dispenses while adjusting for displaced workpieces.

2 Continuous Position Adjustment

Laser displacement sensor measures workpiece height gradations as the robot moves.



3 Needle Adjustment

Robot automatically finds the current needle position, adjusting for any tip displacement that comes after changing needles, etc.

Making settings from start to finish is easy with our dedicated “JR C-Points II” software interface.

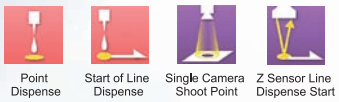
All the settings for precision dispensing on a clear, single screen interface anyone can use.

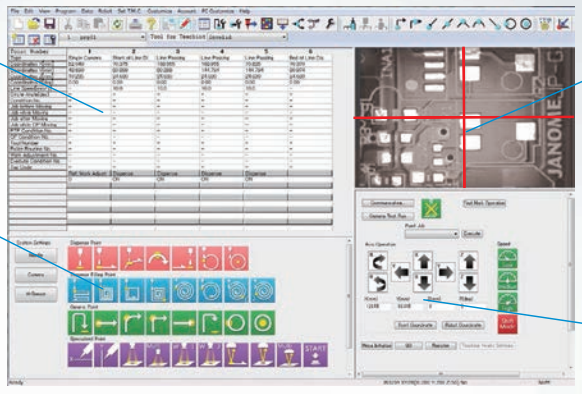
Programming Area

Shows programming data point by point. Choose and edit the point values directly.

Basic Operation Icons

Teach the program just by choosing the icons you want!





Camera Imaging Area

Use magnified camera images to designate precise positions. JR C-Points II makes camera settings easy.
Select a position by clicking on the camera image. The robot moves to recenter itself on the position you clicked.

Robot Operations Area

Make JOG movements while viewing the camera image.

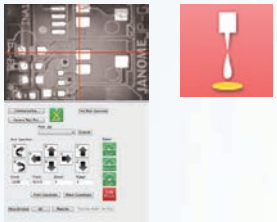
Needle Adjuster
Set the Needle Standard Position

Camera Adjustment
Set Exposure Time and Other Image Settings

Calibration
Match up the Robot and Camera Coordinates

Displacement Sensor
Set the Laser Displacement Sensor Position

Teaching
Capture the image
Choose the icon



Default Settings

Programming

Model Name

JR3 30 3 AP-D

JR3000 Series	X, Y Axes Strokes	No. of Axes	Adjustment Package for Dispensing
	30 : 300×320mm 40 : 400×400mm	3: 3 4: 4	

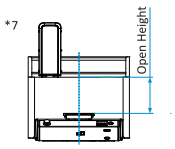
Compatible Application

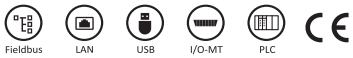
Dispensing

Specifications

Item \ Model*1		JR3303	JR3403	JR3304	JR3404
Number of Axes		3 Axes (Synchronous Control)	3 Axes (Synchronous Control)	4 Axes (Synchronous Control)	4 Axes (Synchronous Control)
Operating Range	X & Y Axes (mm)	300×320	400×400	300×320	400×400
	Z Axis (mm)	100	150	100	150
	R Axis (°)	-	-	±360	±360
Maximum Portable Load	X Axis (Workpiece) (kg)	14	14	14	14
	Y Axis (Tool) (kg)	5	5	5	5
Maximum Speed (PTP Drive)*2	X Axis (mm/sec)	900	900	900	900
	Y Axis (mm/sec)	800	800	800	800
	Z Axis (mm/sec)	400	400	400	400
	R Axis (°/sec)	-	-	900	900
Maximum Speed (CP Drive)*2	X, Y, Z Combined (mm/sec)	850	850	850	850
Repeatability*3	X & Y Axes (mm)	±0.007	±0.007	±0.01	±0.01
	Z Axis (mm)	±0.007	±0.007	±0.01	±0.01
	R Axis (°/sec)	-	-	±0.008	±0.008
Open Height (mm) *7		200	208	275	300
External Dimensions W×D×H (Excluding Protrusions)(mm)		628×608×657	651×668×715	628×608×769	651×668×844
Robot Weight (kg)		42	51	44	55
Program Capacity		999 Programs			
Database Capacity*4		Up to 32,000 points			
External Input/Output	I/O-SYS*5 *6	16 Inputs / 16 Outputs			
	I/O-1*5 *6	8 Inputs / 8 Outputs (including 4 relay outputs)			
	I/O-MT*6	Controls up to 2 external motors (optional)			
	I/O-S	Safety device connector (optional)			
	Fieldbus	EtherNet/IP / PROFINET / CC-Link / DeviceNet / PROFIBUS / CANopen (optional)			
	COM*5	RS232C 3ch (for external devices, COM commands)			
	MEMORY	USB memory connector (for saving/reading out teaching & customizing data, system software upgrades)			
	LAN	For PoE industrial hub connection			
Power Source (V)		AC100~120/AC200~240 (single phase)			
Power Consumption (W)		280			

<Notes>
*1 All robots are double column types
*2 Maximum speed can vary depending upon conditions.
*3 Repeatability was measured at a constant temperature and does not represent a guarantee of absolute precision.
*4 Point data memory capacity reduces as additional function data settings/point job data/ PLC program data are added, due to the shared data storage area.
*5 Some I/O are preassigned for system configuration purposes.
*6 Please choose the I/O polarity: NPN or PNP.





<Standard Accessories>
•Power Cable •Switchbox (also available with optional switch or mode changing switch)
•Operation Manual (CD-ROM) •PC Software JR C-Points II (Windows® 10, Windows® 11 compatible)

JR3303AP-D

JR3403AP-D

JR3304AP-D

JR3404AP-D

JR3000ERT/EBV Depaneling Robot

We added original specialized depaneling software and a router-based cutting system to the JR3000 Series Desktop Robot to create a dedicated depaneling machine.

Topside Dust Collection JR3000ERT

Specialized dust collection nozzle in blade tip collects dust and swarf upward from the board surface.

Underside Dust Collection JR3303EBV

Underside collection nozzle moves together with the Z-Axis, collecting dust and swarf below the PCB.

System Setup (Camera attachment is optional.)

External Dust Collection Unnecessary

No need for a separate dust collection device. All-in-one depaneling system saves space at a lower startup cost.

Handles Complex Board Shapes

The robot's high precision CP (continuous path) control smoothly cuts curved lines and angles.

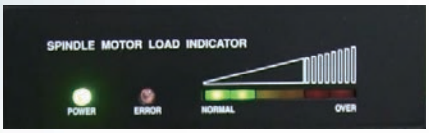
Tool Offset Function

We've added an editing function for offsetting the router bit diameter. You can also incorporate DXF files, Gerber data and JPEG file for easy and precise cutting.

Router Bit Wear Signal

An indicator displays router bit sharpness. When the robot's cumulative work hours exceed the limit you set*, the switchbox LED shows it is time to replace the bit.

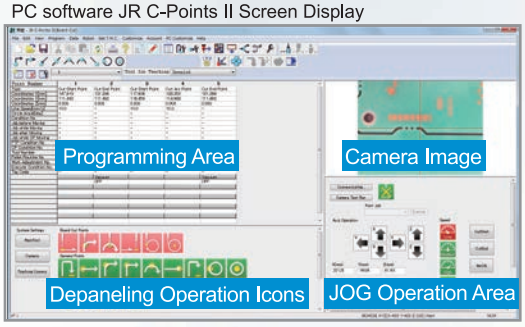
*With the JR3303EBV you can set either cumulative work hours, total distance cut or total number of program runs.



USB Camera Teaching (optional)

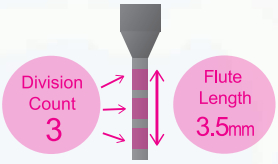
Set points using a camera image on your PC screen. Teaching is easy: just choose the job you want from among the icons.

PC software JR C-Points II Screen Display



JR3303EBV Extended Router Bit Life*

Set your flute length (default setting is 3.5mm) and division count (from 2 to 9) and increase your router bit operating life up to 9 times*



JR3303EBV Lower Maintenance

Underside dust removal method reduces the burden on the spindle motor, thereby reducing the frequency of spindle maintenance compared with the topside dust collection method.

*Varies according to the division count setting.

Model Name

JR3 30 3 ERT

JR3000 Series	X, Y Axes Strokes	No. of Axes	Depaneling
	20: 200×200mm 30: 300×320mm 40: 400×400mm	3: 3	ERT: Topside Dust Collection Method EBV: Underside Dust Collection Method

Compatible Applications

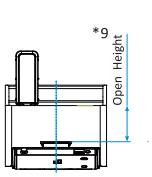
Depaneling

Specifications

Item		JR3203ERT	JR3303ERT	JR3403ERT	JR3303EBV
Number of Axes		3 Axes			
Depaneling Range Limit	X & Y Axes (mm)	195×190	295×315	395×395	295×315
	Z Axis (mm)	35	90	82	-*7
Maximum Speed (PTP Drive)*1	X Axis (mm/sec)	700	900	900	800
	Y Axis (mm/sec)	700	900	900	800
	Z Axis (mm/sec)	250	400	400	400
Maximum Speed (CP Drive)*1	X, Y, Z Combined (mm/sec)	600	850	850	850
Repeatability*2	X Axis (mm)	±0.006	±0.007	±0.007	±0.007
	Y Axis (mm)	±0.006	±0.007	±0.007	±0.007
	Z Axis (mm)	±0.006	±0.007	±0.007	±0.007
Cutting Trajectory Precision(mm)		0.2 (nominal standard)			
Open Height (mm)*9		205	200	208	200
External Dimensions W×D×H (Excluding Protrusions)(mm)		350×439×632	618×586×657	647×640×665	618×602×659
Robot Weight (kg)		26	42	51	50
Program Capacity		999 Programs			
Database Capacity*3		Up to 32,000 points			
External Input/Output	I/O-SYS	16 Inputs / 16 Outputs (using a dedicated I/O for depaneling*8)			
	I/O-1*4	8 Inputs / 8 Outputs (including 4 relay outputs) (optional)			
	I/O-MT*4	Controls up to 2 external motors (optional)			
	I/O-S	Safety device connector			
	Fieldbus	EtherNet/IP / PROFINET / CC-Link / DeviceNet / PROFIBUS / CANopen (optional)			
	COM1	RS232C 1ch (for external devices, COM1)			
	MEMORY	USB memory connector (for saving/reading out teaching & customizing data, system software upgrades)			
	LAN	Ethernet connector for PC (for operating the robot using control commands and connecting to "JR C-Points II" PC software)			
Power Source (V)		AC100~120/AC200~240 (single phase)			
Power Consumption (W)		250			
Supplied Air Pressure*5(Mpa)		0.5~1.0 (5~10kgf/cm²) *Dry Air			
Air Consumption Volume*6(Nℓ/min)		200			
Spindle Motor	Drive Method	DC Brushless Motor			
	Rated Output (W)	21			
	Rated Rotating Speed(r/min)	40,000			
	Chuck	Collet Chuck Method (φ3.175mm)			
Router Bit Gauge (mm)		φ0.8			
Vacuum		Ejector Method			
Filter Box Size (mm)		W215xD305xH305			
Applicable Board Materials		Glass Epoxy, Paper Phenol, etc. (maximum board thickness 1.6mm)			

<Notes>
*1 Maximum speed can vary depending upon conditions.
*2 Repeatability was measured at a constant temperature and does not represent a guarantee of absolute precision.
*3 Point data memory capacity reduces as additional function data settings/point job data/PLC program data are added, due to the shared data storage area.
*4 For the JR3203ERT choose only one optional add-on I/O-1 or I/O-MT.
*5 Be sure to use dry air. Supplying air containing moisture or oil can damage the device.
*6 If the air volume is low, the vacuum will lose pressure, thereby reducing its dust collection efficiency.
*7 The workpiece mounting height is fixed with the JR3303EBV, therefore the Z-Axis moving range is not set.
*8 The JR33030EBV is connected via I/O-1.

<Standard Accessories>
•Power Cable •Spindle Motor Set •Router Bits (cutters) •Filter Unit •Vacuum Nozzle (Spare)
•I/O-S Connector •Safety Cover •Switchbox •Operation Manual (CD-ROM) •I/O-S Connector •Wrench

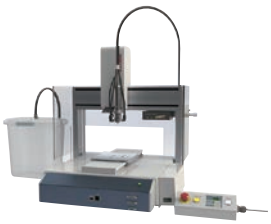


Fieldbus LAN USB I/O-MT PLC CE

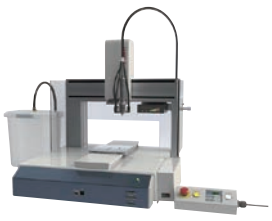
Topside Dust Collection Type

JR3203ERT
Single Column Type only

JR3303ERT
Double Column Type Only



JR3403ERT
Double Column Type only



Underside Type

JR3303EBV
Double Column Type only

JR3000F Heavy Duty Robot

This robot is equipped with a feedback motor to carry heavy tool and workpiece payloads.

Ideal for Heavier Tools & Work

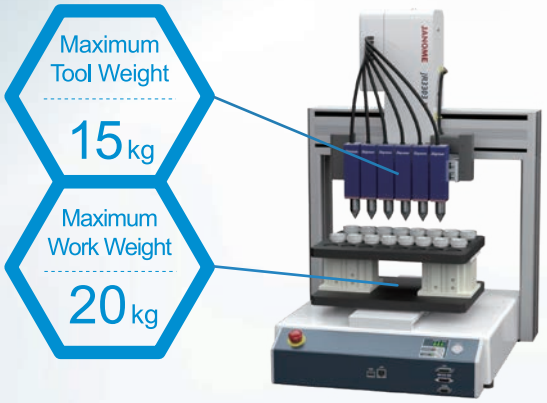
Feedback motor-driven for higher payloads. Ideal for operations with higher tool and work weights including:

Dispensing Applications

- ➡ Multiple Coat
- ➡ Dual Component Agents
- ➡ High Viscosity Agents
- ➡ Hot Melt
- ➡ Plasma Treatment

Welding Applications

- ➡ Ultrasonic
- ➡ High Resistance



6 Coat Dispensing Example

Control Up to 4 Axes and 2 Motors

Add up to 2 pulse string input type external devices, such as stepping motors or servomotors and control them together with the robot axes. Expand the robot's functionality by installing a turntable to rotate the work; add a conveyer to control from the robot, sliding motors for work positioning and more.

Dual Component Dispensing Example
Using I/O-MT Auxiliary Axes Function

Built-in Z-Axis Brake

Keeps the Z-Axis from falling during emergency stops or if the main power supply is cut, preventing damage to the tool & work.

Vision System Functionality

Available with either Standard Model or Dispensing Model system software, the JR300F is compatible with USB camera teaching and position adjustment functions for greater precision and traceability.

Model Name

JR3 30 3 F

JR3	30	3	F
JR3000 Series	X, Y Axes Strokes 30 : 300×320mm 40 : 400×400mm	No. of Axes 3 : 3	Heavy Duty Robot

Compatible Applications

- Standard
- Dispensing

Specifications

Item			JR3303F	JR3403F
Number of Axes			3 Axes (Synchronous Control)	3 Axes (Synchronous Control)
Operating Range	X & Y Axes (mm)		300×320	400×400
	Z Axis (mm)		150	150
Maximum Portable Load	X Axis (Workpiece) (kg)		20	20
	Y Axis (Tool) (kg)		15	15
Maximum Speed (PTP Drive)	X Axis (mm/sec)	up to 5kg	1000	1000
		up to 10kg	800	800
		up to 20kg	600	600
	Y Axis (mm/sec)	up to 1kg	900	900
		up to 5kg	800	800
		up to 10kg	600	600
		up to 15kg	500	500
	Z Axis (mm/sec)	up to 5kg	400	400
		up to 10kg	300	300
		up to 15kg	200	200
Maximum Speed (CP Drive)*1	X, Y, Z Combined (mm/sec)		850	850
Repeatability*2	X, Y, and Z Axes (mm)		±0.01	±0.01
External Dimensions W×D×H (Excluding Protrusions)(mm)			560×535×807	615×631×807
Robot Weight(kg)			36	45
Program Capacity			999 Programs	
Database Capacity*3			Up to 32,000 points	
External Input/Output	I/O-SYS*4		16 Inputs/ 16 Outputs	
	I/O-1*4		8 Inputs/ 8 Outputs (including 4 relay outputs) (optional)	
	I/O-MT*4		Controls up to 2 external motors (optional)	
	I/O-S		Safety device connector (optional)	
	COM1		RS232C (for external devices, COM commands)	
	COM2･COM3		RS232C (for external devices) (optional at time of order)	
	MEMORY		USB memory connector (for saving/reading out teaching & customizing data, system software upgrades)	
	LAN		Ethernet connector for PC (for operating the robot using control commands and connecting to "JR C-Points II" PC software)	
Power Source(V)			AC100~120/AC200~240(single phase)	
Power Consumption(W)			200	

<Notes>
*1 These figures are the maximum settable values. Maximum speed can vary depending upon conditions. Maximum speed cannot be reached when the robot is bearing its maximum load.
*2 Repeatability was measured at a constant temperature and does not represent a guarantee of absolute precision.
*3 Point data memory capacity reduces as additional function data settings/point job data/PLC program data are added, due to the shared data storage area.
*4 Please choose the I/O polarity: NPN or PNP.

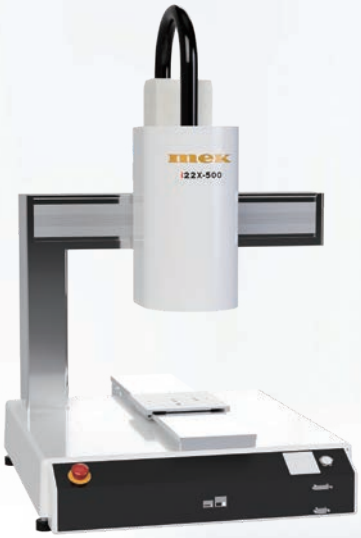
<Standard Accessories>
･Operation Manual (CD-ROM) ･Power Cable ･Switchbox (included as standard equipment for robots with B type operation panels) ･Basic Switchbox(included as standard equipment for robots with C type operation panels)

JR3303F

JR3403F

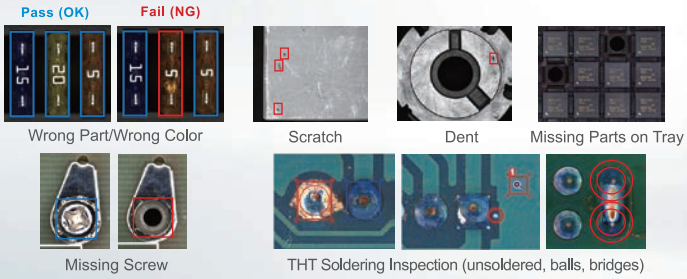
i22X Series Multi-Functional Desktop AOI

Automate Your Post-Process Visual Inspection!



Wide Variety of Inspection Types

Check soldering quality, look for wrong or missing parts, read characters, find scratches or dents and more.



No Teaching Pendant Needed

Intuitive Operation

Just click and drag with your mouse to move the XYZ Axes.

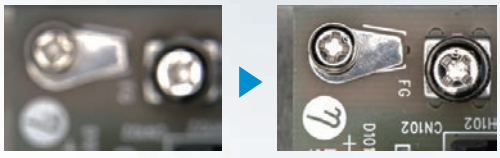
Comprehensive Barcode Reading

Send inspection results to “Catch System” production management software and link each workpiece to its inspection result data.

Built-in Z-Axis

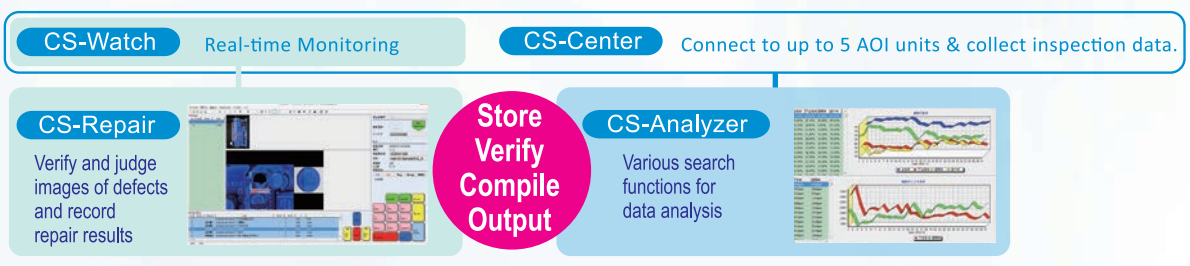
3D Object Inspection

Focus adjustable for optimal image acquisition.



Establish Inspection Result Traceability

Dedicated PC software stores aquired inspection result data in a database and verifies images. Compile and analyze cumulative data to grasp the operational status of each AOI unit and improve product quality by reducing defects. The Catch System collects all available information to ensure reliable production traceability.



Model Name

i22X - 200

- i22X Series
- X,Y Axes Strokes
  - 20: 200×200mm
  - 30: 300×320mm
  - 50: 510×510mm

Compatible Applications

Standard

Specifications

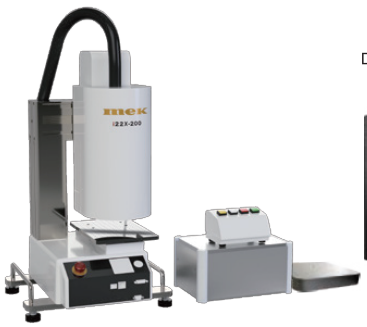
Item		i22X-200	i22X-300	i22X-500
Operating Range	X & Y Axes (mm)	200×200	300×320	510×510
	Z Axis (mm)	50	100	150
Inspection Range W×D×H (mm)		200×200×80*3	320×300×100	510×510×150
Maximum Weight Capacity (kg)*1		5		
Maximum Speed	X & Y Axes (mm)	600		
	Z Axis (mm)	250	400	400
External Dimensions W×D×H (including handling bar)(mm)*2		420×434×696	560×587×722	678×731×822
Main Unit Weight (kg)		26	43	53
Controller Dimensions W×D×H (mm)		300×200×150		
Controller Weight (kg)		3		
Power Supply (V)		AC100~120/AC200~240 (Single Phase)		
Power Consumption (W)		350		
Motor		5 phase pulse motor×3		
Camera		5 Mega pixel top camera		
Lens		DL Lighting•ML Lighting: Telecentric Lens 15μm / UV Lighting: Macro Lens 19μm / White Lighting: Macro Lens 25μm		
Field of View		15μm:36×30mm / 19μm:46×38mm / 25μm:60×50mm		
Lighting System		DL Lighting (White+Side Red+DOAL) or ML Lighting (RGB+DOAL) or White Lighting		
Clearance		DL Lighting 60mm / ML Lighting 30mm / UV Lighting 60mm / White Lighting 60mm		
Inspection Algorithm		Pattern Matching / Histogram / Color Matching		
Inspection Items		Missing Part/Wrong Color/Missing Label/Wrong Part/Polarity/Bridge/Soldering Area/Foreign Object/Characters/Scratches/Contamination/Bar Code Readout		
Usage Environment	Temperature	15~30 °C		
	Relative Humidity	15~80 %		

<Notes>
*1 Total weight for fixture and work combined.
*2 Dimensions exclude movable duct.
*3 For the i22X-200 the lowest point of focus is H30mm. If the inspection target work height is less than 30mm, please elevate the work.

USB CE

System Configuration

- Inspection Unit
- PC
- Display
- Controller
- Switchbox



DL Lighting 60mm / ML Lighting 30mm / UV Lighting 60mm / White Lighting 60mm

i22X-200

i22X-300

i22X-500

•Manufactured in Japan by Marantz Electronics, Ltd.

JC-3 Series

The User-friendliness and Functionality of Our Desktop Robots
Loaded into Versatile 3 & 4 Axes Cartesian Robots

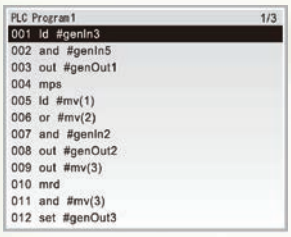
*Cable carrier is optional.

All-in-One & Easy Teaching

The controller comes with our user-friendly teaching software installed. Use our teaching pendant for simple, interactive teaching without the hassle of making a lot of complex settings.

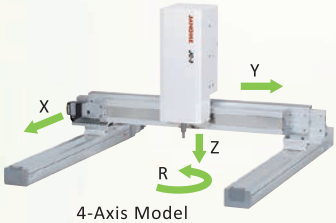
Simple PLC Function

A simple PLC which operates independent of the robot is already built-in, so you do not need to purchase a separate PLC to handle simple interfacing with external devices.

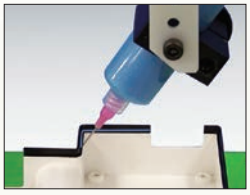


Full Lineup

Choose a single- or double-sided X-Axis type with a wide range of X, Y, Z combinations. The 4-Axis (rotary axis) model features synchronous control for handling jobs difficult for a 3-Axis robot such as dispensing or soldering on the wall of a cylinder. The optional 3-Axis absolute encoder model does not need to make a homing movement when you turn ON the power.



4-Axis Model



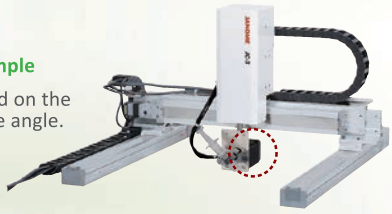
Dispensing with 4-Axis Model

Control up to 2 External Motors (optional)

Control up to 2 external motors to function as auxiliary axes. For example, add a motor to angle the tool, or use a conveyor to transport the work.

Auxiliary Axes Function Example

An external motor is mounted on the 4th axis to change the syringe angle.



Comprehensive Interfacing

An Ethernet port (LAN) and 3 COM ports (RS232C) are standard equipment. Install an optional Fieldbus port. Not only can you specify a program and run it from the PLC, you can also specify position coordinates and move the robot axes, as well as rewrite the position coordinates in existing programs.

Absolute Encoder Model (optional)

Using the encoder, the robot memorizes its current position. Homing movements between program runs are unnecessary, allowing for even shorter cycle times.

Model Name

JC-3 A00 - 0 T 3

JC-3 Series	Model	Support Configuration	No. of Axes
	C0N-0: Incremental (2 Axes) *1 A00-0: Incremental (3 Axes) B01-0: Incremental (4 Axes) D00-0: Absolute (3 Axes) A12-0: SMC Incremental (3 Axes) B11-0: SMC Incremental (4 Axes) D12-4: SMC Double X-Axis (4 Axes: X1, X2, Y, Z)	T: Single-sided H: Double-sided W: Double-sided (Double X-Axis)	2: 2 *1 3: 3 4: 4

*1 For details about the 2 Axes Type, please contact us.

Compatible Applications

- Standard
- Dispensing
- Screw Tightening

Specifications

Item		3 Axes		4 Axes
		JC-3A00-0T3 (Single-sided)	JC-3A00-0H3 (Double-sided)	JC-3B01-0H4 (Double-sided)
Control Axes Directions		3 (X, Y, Z)		4 (X, Y, Z, R)
Operating Range	X Axis (mm)	200/300/400/500/600	300/400/500/600	300/400/500/600
	Y Axis (mm)	200/300	200/300/400/500	200/300/400/500
	Z Axis (mm)	50/100/150/200	50/100/150/200/300	100/150
	R Axis (°)	-	-	±360
Maximum Portable Load (kg)		4	8	3
Maximum Speed (PTP Drive)*1	X(mm/s)	800		800
	Y(mm/s)	800		800
	Z(mm/s)	400		400
	R (°/s)	-		900
Repeatability*2	X & Y Axes (mm)	±0.02		±0.02
	Z Axis (mm)	±0.02		±0.01
	R Axis (°)	-		±0.008
External Dimensions (mm)	Robot Unit	W: Y Axis Stroke +319	W: Y Axis Stroke +426	W: Y Axis Stroke +426
		D: X Axis Stroke +309	D: X Axis Stroke +309	D: X Axis Stroke +309
		H: Z Axis Stroke +357	H: Z Axis Stroke +357	H: Z Axis Stroke +334
	Controller	W170×D310×H300		W170×D310×H300
Program Capacity		999 Programs		
Database Capacity*3		Up to 32,000 points		
External Input/Output	I/O-SYS*4	16 Inputs/ 16 Outputs		
	I/O-1*4	8 Inputs/ 8 Outputs		
	I/O-MT*4	Controls up to 2 external motors (optional)		
	Fieldbus	EtherNet/IP / PROFINET / CC-Link / DeviceNet / PROFIBUS / CANopen (optional)		
	COM1・COM2・COM3	RS 232C (for external devices)		
	EMG OUT	Emergency stop signal input for external safety circuit connection (set up by end user)		
	MEMORY	USB memory connector (for saving/reading out teaching & customizing data, system software upgrades)		
	LAN	Ethernet connector for PC (for operating the robot using control commands and connecting to "JR C-Points II" PC software)		
Power Source*5(V)		AC90~240 (single phase) + external DC48 (depending upon facility power supply)		
Power Consumption (W)		150 (AC power supply), 300 (DC48V, motor drive power supply)		

<Notes>
*1 There are limitations depending upon driving conditions and stroke lengths.
*2 Repeatability was measured at a constant temperature and does not represent a guarantee of absolute precision.
*3 Point data memory capacity reduces as additional function data settings/point job data/PLC program data are added, due to the shared data storage area.
*4 Please choose the I/O polarity: NPN or PNP.
*5 Please contact us regarding the DC48V power supply.

Fieldbus LAN USB I/O-MT PLC CE

<Standard Accessories>
・Power Cable ・Teaching Pendant Short Connector ・Switchbox Short Connector ・EMG-OUT Connector ・Operation Manual (CD-ROM) ・Controller Wall Mounting Plate

JC-3A00-0T3
Single Sided Type

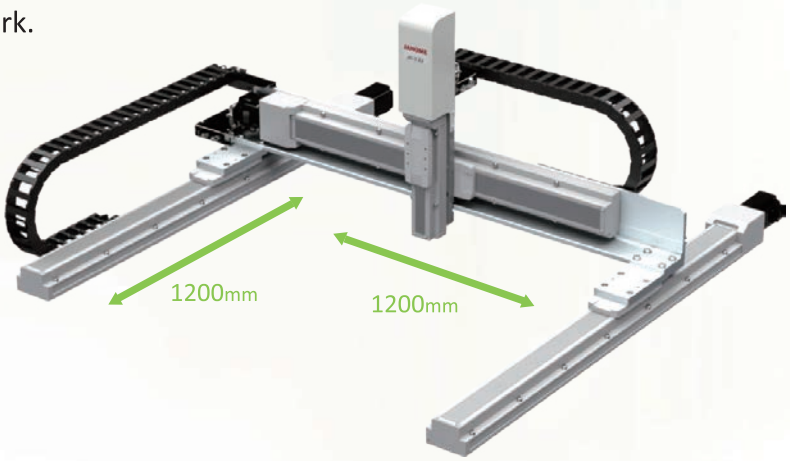
JC-3A00-0H3
Double Sided Type

JC-3B01-0H4
4-Axes Model

Controller

JC-3-X2 Long Stroke Model

Two X-Axis motors synchronize the robot's movements for precision jobs on large work.



Maximum Strokes
X-Axis: 1200mm
Y-Axis: 1200mm
Z-Axis: 300mm

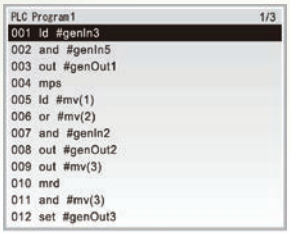
Ideal for Dispensing

Using our dedicated dispensing application software, choose where and how you want to dispense, including point (dot), line and area fill-in.

Fill-in Dispensing Function

Simple PLC Function

A simple PLC which operates independent of the robot is already built-in, so you do not need to purchase a separate PLC to handle simple interfacing with external devices.



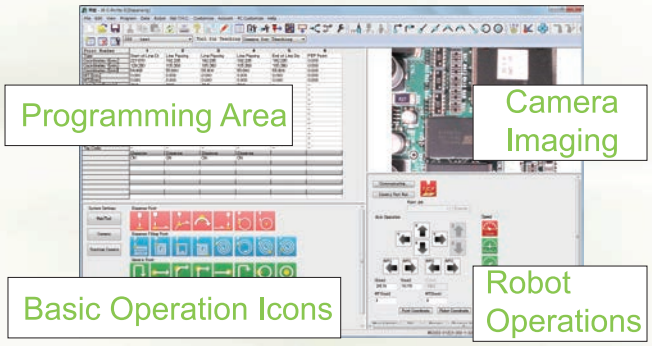
Comprehensive Interfacing

An Ethernet port (LAN) and 3 COM ports (RS232C) are standard equipment. Install an optional Fieldbus port. Not only can you specify a program and run it from the PLC, you can also specify position coordinates and move the robot axes, as well as rewrite the position coordinates in existing programs.

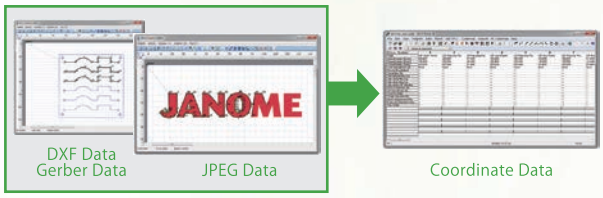
Time-Saving PC Software

USB Camera Teaching
Connect a USB camera* and set points using enlarged images on your PC screen, click the icons for the movements you want.

*For details about compatible USB cameras, please contact us.



Point Graphic Editing Function
Import CAD data using our PC software and automatically generate point data for fast and convenient program teaching.



Control up to 2 External Motors (optional)

Control up to 2 external motors to function as auxiliary axes. For example, add a motor to angle the tool, or use a conveyor to transport the work.

Model Name

JC-3 D12-4 W 3

JC-3 Series	Model	Support Configuration	No. of Control Axes Directions
	D12-4: SMC Double X-Axis (4 Axes: X1, X2, Y, Z)	W: Double-sided (Double X-Axis)	3

Compatible Applications

Standard

Dispensing

Specifications

Item	Model	Double X-Axis Model
		JC-3D12-4W3
Control Axes Directions		3 (X, Y, Z)
Operating Range	X-1, X-2 Axes (mm)	600 / 800 / 1000 / 1200
	Y Axis (mm)	600 / 800 / 1000 / 1200
	Z Axis (mm)	100 / 200 / 300
Maximum Portable Load (kg)		8
Maximum Speed (PTP Drive)*1	X-1, X-2 Axes (mm/s)	220
	Y Axis (mm/s)	220
	Z Axis (mm/s)	400
Repeatability*2	X-1, X-2 Axes (mm)	±0.01
	Y Axis (mm)	±0.01
	Z Axis (mm)	±0.01
External Dimensions (mm) (excluding cables and protrusions)	Robot Unit	W: Y-Axis Stroke + 594
		D: X-Axis Stroke + 378
		H: Z-Axis Stroke (100) + 397 / Z-Axis Stroke(200/300) + 367
	Controller	W 250 x D 310 x H 345
Program Capacity		999 Programs
Database Capacity*3		Up to 32,000 points
External Input/Output	I/O-SYS*4	16 Inputs/ 16 Outputs
	I/O-1*4	8 Inputs/ 8 Outputs
	I/O-MT*4	Controls up to 2 external motors (optional)
	Fieldbus	EtherNet/IP / PROFINET / CC-Link / DeviceNet / PROFIBUS / CANopen (optional)
	COM1·COM2·COM3	RS 232C (for external devices)
	EMG OUT	Emergency stop signal input for external safety circuit connection (set up by end user)
	MEMORY	USB memory connector (for saving/reading out teaching & customizing data, system software upgrades)
	LAN	Ethernet connector for PC (for operating the robot using control commands and connecting to "JR C-Points II" PC software)
Power Source*5(V)		AC100~240 (single phase) + external DC48 (depending upon facility power supply)
Power Consumption (W)		150 (AC power supply), 480 (DC48V, motor drive power supply)

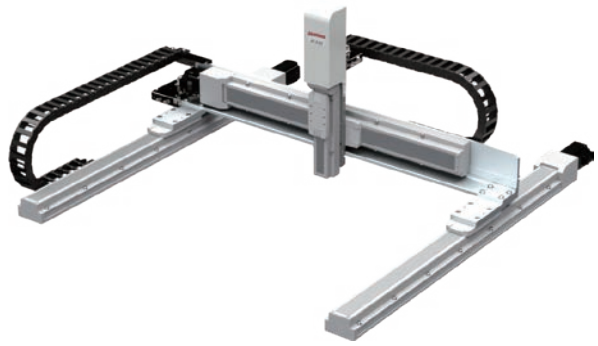
<Notes>
*1 There are limitations depending upon driving conditions and stroke lengths.
*2 Repeatability was measured at a constant temperature and does not represent a guarantee of absolute precision.
*3 Point data memory capacity reduces as additional function data settings/point job data/PLC program data are added, due to the shared data storage area.
*4 Please choose the I/O polarity: NPN or PNP.
*5 Please contact us regarding the DC48V power supply.

Fieldbus LAN USB I/O-MT PLC CE

<Standard Accessories>
·Power Cable ·Teaching Pendant Short Connector ·EMG-OUT Connector ·Operation Manual (CD-ROM) ·Controller Wall Mounting Plate
<Option>
·Switchbox Short Connector

JC-3D12-4W3

Double X-Axis Model



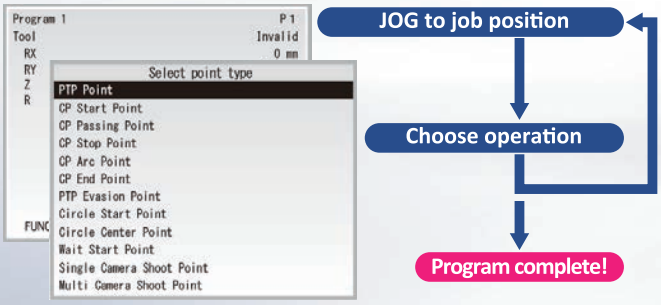
Controller

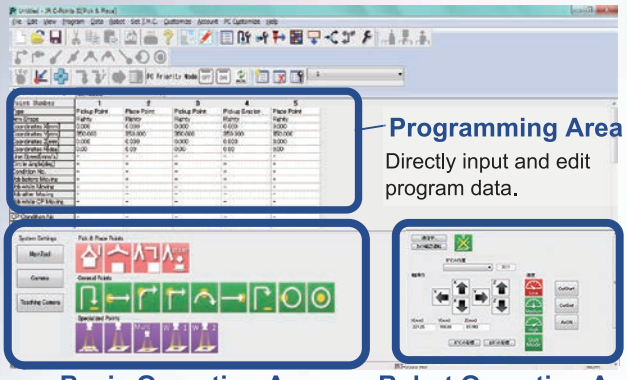
JS3 Series

Cut costs with our easy-to-teach,
fast and highly functional SCARA Robot!

User-Friendly All-in-One System

Teach using our interactive teaching pendant or get a hands-on feel for the robot's operation using our PC software. The JS3 has a short setup time, and making fine adjustments to programs while you run the robot is easy!





Programming Area
Directly input and edit program data.

Basic Operation Area
Program just by choosing the icons you want.

Robot Operation Area
Use the operation icons to make JOG movements.

Pick and Place Model

Specialized software features icons for teaching Pick and Place operations.

Pickup Point　Place Point　Pickup Evasion Point

Cable Interference Prevention

The J3-J4 Axes (vertical and rotary axes on the end of the robot arm) mechanism features internal wiring and piping for streamlined hand installation.

Works Fast!

Our standard cycle time is top class: 0.29sec, with a maximum speed of 8,300mm/sec, helpful for shorter tact times and greater efficiency.

Comprehensive Interfacing

Dedicated controller features an Ethernet port as standard equipment and offers 6 Fieldbus options.

EtherNet/IP　DeviceNet
PROFINET　PROFIBUS
CC-Link　CANopen

Model Name

JS3 - 35 20

JS3 Series	Maximum Arm Length	J3 Axis Operating Range
	35: 350mm 45: 450mm 55: 550mm	20: 200mm

Compatible Applications

- Standard
- Dispensing
- Pick & Place

Specifications

Item		JS3-3520	JS3-4520	JS3-5520
Number of Axes			4	
Arm Length (mm)	Maximum Arm Length (J1+J2)	350	450	550
	J1 Arm	125	225	325
	J2 Arm		225	
Operating Range	J1 Axis (°)		340(±170)	
	J2 Axis (°)		290(±145)	
	J3 Axis (mm)		200	
	J4 Axis (°)		720(±360)	
Portable Mass (kg)			Maximum 6 (Rating 3)	
Acceptable Moment of Inertia (kgm^2)			Maximum 0.12 (Rating 0.01)	
Maximum Speed	J1+J2+J4 Axes Combined(mm/sec)*1	6900	7600	8300
	J3 Axis (mm/sec)		2080	
	J4 Axis (°/sec)		2500	
Standard Cycle Time (sec)*2			0.29	
Repeatability*3	J1+J2 Axes Combined (mm)	±0.010	±0.010	±0.012
	Axis (mm/sec)		±0.010	
	J4 Axis(°)		±0.004	
J3 Axis Resistance*4			165N	
External Dimensions*5 W×D×H (Excluding Protrusions) (mm)	Robot	174×572×798	174×672×798	174×772×798
	Controller		400×350×288	
Weight (kg)	Robot	36	36	37
	Controller		16	
Tool Wiring			•I/O-H 8 Hand Inputs/ 8 Hand Outputs •LAN Cable <100BASE-TX>	
Air Piping			Primary: φ6×2 Secondary: φ4×8*6	
Program Capacity			999 Programs	
Database Capacity*7			Up to 32,000 points	
External Input/Output	I/O-SYS*8		15 Inputs/ 14 Outputs	
	I/O-1*8		18 Inputs/ 22 Outputs (including 4 relay outputs)	
	I/O-MT*8		Controls up to 2 external motors (optional)	
	I/O-S		Safety device connector (optional)	
	I/O-H*8		8 Hand Inputs/ 8 Hand Outputs	
	Fieldbus		EtherNet/IP / PROFINET / CC-Link / DeviceNet / PROFIBUS / CANopen (optional)	
	COM1, COM2		RS232C (for external devices, COM commands)	
	MEMORY		USB memory connector (for saving/reading out teaching & customizing data, system software upgrades)	
	LAN		Ethernet connector for PC (for operating the robot using control commands and connecting to "JR C-Points II" PC software)	
Power Source (V)			AC200~240(single phase)	
Power Consumption (W)			1600	

<Notes>
*1 This is the J1, J2 and J4 axes' maximum speed with a control point on a flat X-Y surface.
(The control point is a position 30mm from the center of the J4 axis' rotation.)
*2 Value when bearing a 2kg load. Cycle time may increase when precision workpiece positioning is necessary or due to the robot's operating position(s).
*3 Repeatability is not a guarantee of absolute precision.
*4 The downwards pressing force at the tip of the load when the robot is bearing its maximum load and the J1, J2 and J4 axes are at rest.
An excess load error may occur if a pressing force is applied for an extended period of time.
*5 These are the dimensions when the J1 and J2 Axes' position is 0°.
*6 The ϕ4 secondary piping is used when the optional solenoid valve is added.
*7 Point data memory capacity reduces as additional function data settings/point job data/PLC program data are added, due to the shared data storage area.
*8 Please choose the I/O polarity: NPN or PNP.

<Standard Accessories>
•Operation Manual (CD-ROM) •Short Connectors (for Teaching Pendant, I/O-S and I/O-SYS) •Robot-Controller Connector Cable

Fieldbus LAN USB I/O-MT PLC CE

JS3-3520

JS3-4520

JS3-5520

Controller

Automatic Screw Presenter

Convenient automatic screw presenter handles a wide range of screw types and sizes;
both robot-mounted and handheld screwdriver compatible models available.

Broad Compatibility

Usable with a wide range of ferrous, non-ferrous and other screw types.

Manual and Robot Types Available

We offer different models for handheld screwdrivers and robot-mounted screwdrivers; screw sizes M1.0~M5.0.

Easy Changeover for Greater Versatility

Just replace the rail to change to a different screw size.

- **JSP-RSD/JSP-MS Series: compatible with 8 different sizes.**
- **JSP-R/JSP-M Series: compatible with 3~4 different sizes.**

Dependable Delivery

Horizontal outflow method for smooth and steady screw presentation.

Overload Protection Function

If there are too many screws in the scooping chamber and the screws stop coming, the motor runs in reverse for a short time to let the presenter correct itself.
If the presenter does not return to normal, the safety function cuts off the motor power.

External Output Signal

All models come with an external output signal line as a standard accessory, useful for connecting with a robot or with a common counting device.

Manual	**Outputs a signal when a screw is picked up**
Robot	**Outputs a signal for screw presence/absence**

Model Code

JSP - R45 35

JSP Series	Type	Screw Size

Manual

MS: Manual type / Small size
M 23: Manual type (rail size 23)
M 45: Manual type (rail size 45)

Robot

RSD: Robot type / Small size / Disc type
R 23: Robot type (rail size 23)
R 45: Robot type (rail size 45)

10: M1.0
12: M1.2
14: M1.4
17: M1.7
20: M2.0
23: M2.3
26: M2.6
30: M3.0
35: M3.5
40: M4.0
50: M5.0

Specifications

Item	Model	Manual		Robot	
		JSP-MS	JSP-M	JSP-RSD	JSP-R
Compatible Screw Sizes	M1.0	JSP-MS10	-	JSP-RSD10	-
	M1.2	JSP-MS12	-	JSP-RSD12	-
	M1.4	JSP-MS14	-	JSP-RSD14	-
	M1.7	JSP-MS17	-	JSP-RSD17	-
	M2.0	JSP-MS20	JSP-M2320	JSP-RSD20	JSP-R2320
	M2.3	JSP-MS23	JSP-M2323	JSP-RSD23	JSP-R2323
	M2.6	JSP-MS26	JSP-M2326	JSP-RSD26	JSP-R2326
	M3.0	JSP-MS30	JSP-M2330	JSP-RSD30	JSP-R2330
	M3.5	-	JSP-M4535	-	JSP-R4535
	M4.0	-	JSP-M4540	-	JSP-R4540
	M5.0	-	JSP-M4550	-	JSP-R4550
Maximum Screw Shaft Length (mm)		20	18	20	18
Screw Supply Volume (cc)		80	150	80	150
Cycle Time (sec)		-	-	0.9	1.5
External Dimensions W×D×H (mm)		123×181×145.9	129.4×215×138.5	123×181×145.9	133.4×274×138.5
Weight (kg) (with rail)		2.9	3.7	3.0	4.4
Power Supply (V)	Input	AC100~240V (single phase) 50/60Hz			
	Output	DC15V 2.4A AC adapter			

<Standard Accessories>

・AC Adapter (100V~240V) ・Power Cord ・Operation Manual ・Hex Wrench ・Adjustment Screwdriver ・Grounding Wire ・0.35mm Gauge Plate (JSP-MS Series only)

CE

JSP-MS

JSP-M

JSP-RSD

JSP-R

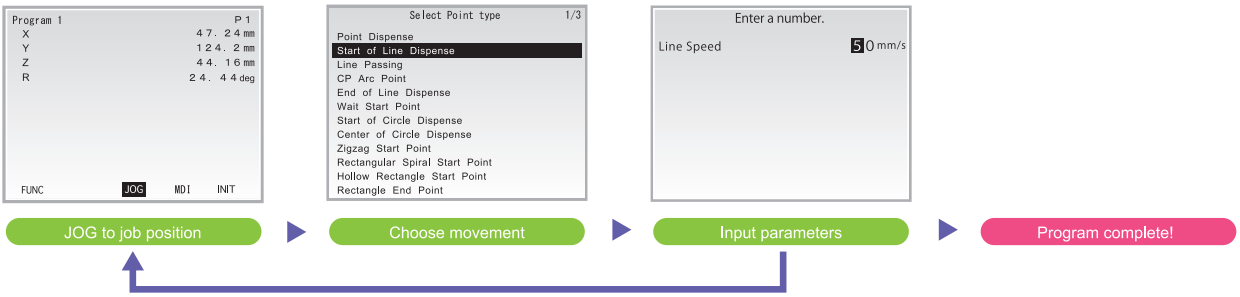
Software

From first-time users to seasoned professionals, a system software for everyone!

We offer dedicated software designed for individual applications, each with a comprehensive set of operation commands new users can use easily for program teaching.

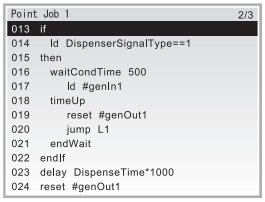
▶ Please refer to pp. 9 and 10 for details about compatible applications for each robot

User-Friendly Teaching

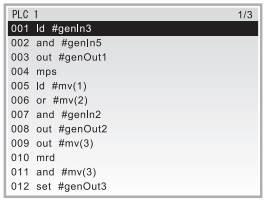


Standard Application

With our original application-based robot language, users can freely create programs with the operations they want using easy-to-understand "Point Commands".
Our software is designed with helpful functions: with our "Customizing Function" users can create their own program applications and our "Simple PLC Function" lets the robot communicate with peripheral devices without using an external PLC.



Point Job Command Setting Screen

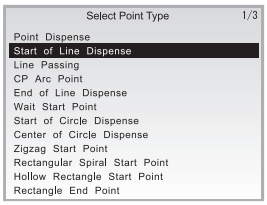


Simple PLC Setting Screen

Dispensing Application

With our dedicated dispensing software, teach by pointing the dispenser needle tip to the position you want and select the type of dispensing movement (point dispense, line dispense, fill-in dispense, etc.)

Fill-in Dispensing Function



Point Type Selection Screen

Screw Tightening Application

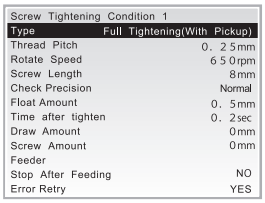
With our dedicated screw tightening software, teach a program just by setting screw tightening conditions such as screw length, pitch, driver rpm, etc., and specifying the tightening positions.

Screw Tightening Operation Types

- Full Tightening
- Tighten with Float Amount
- Partial Tightening
- Unscrew

Error Detection Functions

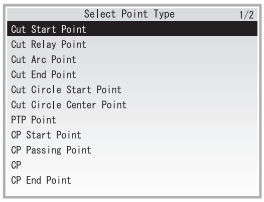
- Spinning Screws
- Floating Screws



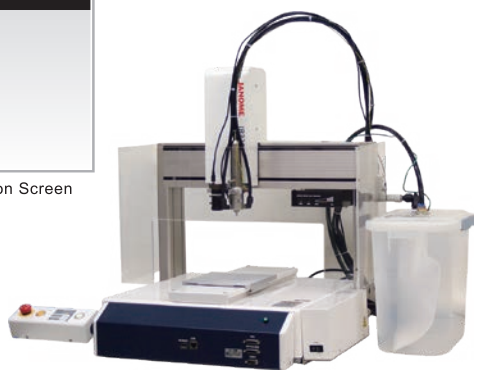
Screw Tightening Condition Setting Screen

Depaneling Application

This dedicated depaneling software for the JR3000ERT/EBV includes a function for notifying when it is time to change the spindle motor router bit.



Point Type Selection Screen



"JR C-Points II" PC software (optional)

JR C-Points II is our original application software for creating, editing and saving program teaching and customizing data.

USB Camera Teaching

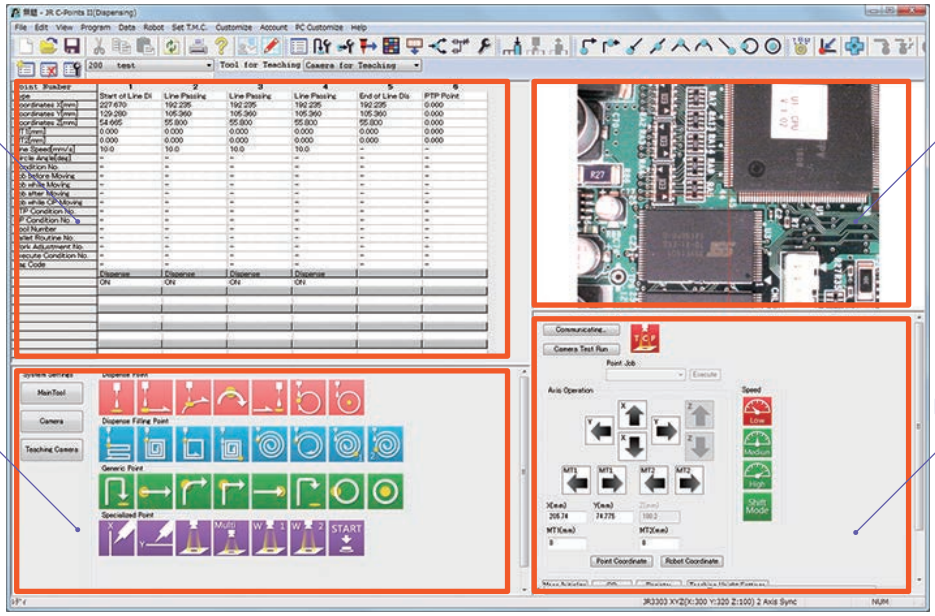
Connect a store-bought USB camera*1 and teach while referring to enlarged images of your workpiece.

Programming Area

Displays programming data point by point; edit values by selecting them directly.

Basic Operation Area

Programming is easy for everyone. Just select the icons for the operations you want.



Camera Imaging Area

Use the enlarged image to designate precise positions.
Click on a position on the camera image and the robot moves to center itself over that position.

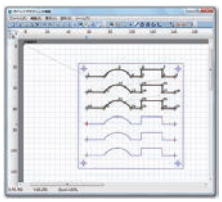
Robot Operations Area

Make JOG movements while viewing the camera screen.

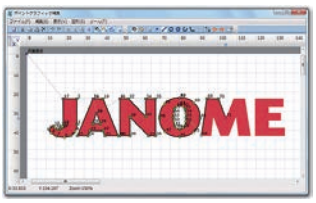
*1 Please contact us for details about compatible USB cameras.

Point Graphic Editing Function

Import DXF or Gerber data and automatically generate point data. Refer to background image data (.jpeg format) when creating movement paths. Track and edit the robot's path in the teaching data; create programs while viewing an image of the entire workpiece, etc.

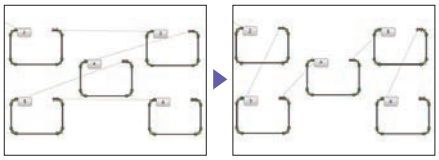


Set points based on DXF data for precise positioning.



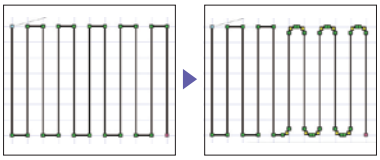
Teach while referring to a .jpeg image.

Point Order Sorting Function (for shorter cycle times)



Sorting from left to right to shorten the moving distance.

Corner Angle Rounding Function



Designate a radius by clicking on a connecting point.

Software Specifications

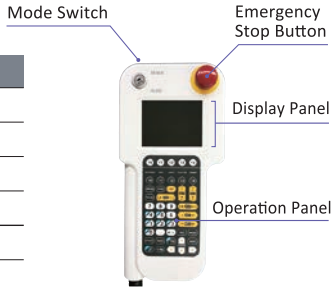
	JR3000	JR3000AP-D	JR3000ERT(EBV)	JR3000F	JC-3	JC-3-X2	JS3
PC Software Name	JR C-Points II						
Display Languages	English, German, Japanese, Chinese (Simplified & Traditional)						
Compatible OS	Windows®10, Windows®11						

Options

Teaching Pendant

・Each axis has independent JOG keys for a hands-on feel when moving from point to point
・Switch freely among multiple screen display languages
・Useful for programming and running diagnostics in locations where you cannot bring a PC

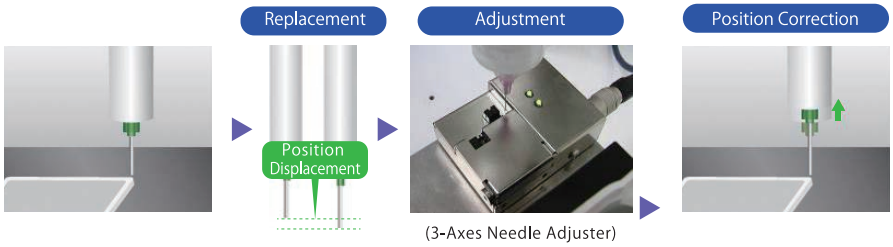
	JR3000	JR3000 AP-D	JR3000 ERT/EBV	JC-3	JC-3-X2	JS3	Notes
Standard Type (No Emergency Stop Switch)	●	●	●				Cable Lengths: 2m/3m/5m
With Emergency Stop Switch	●	●	●	●	●		Cable Lengths: 2m/3m/5m
With Emergency Stop & Enable Switches	●	●	●	●	●		Cable Lengths: 2m/3m/5m
With Emergency Stop, Enable & Mode Switches						●	Cable Lengths: 2m/3m/5m
Interchangeable Display Units	mm, inch						
Interchangeable Display Languages	English, Spanish, German, French, Italian, Japanese, Korean, Chinese (Simplified & Traditional), Czech, Vietnamese						JR3000AP-D is mainly PC software operated.



JS3 Teaching Pendant

Needle Adjuster (Dispensing Models only)

Detects and corrects any needle tip position displacement occurring after needle replacement.
Just set the standard position and run the adjustment program after changing needles. The robot adjusts automatically.



(3-Axes Needle Adjuster)

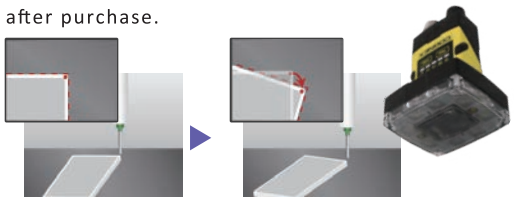

3-Axes Needle Adjuster
PR1・PR2


4-Axes Needle Adjuster
CAPTRON

Model	Needle Gauge	Compatible Robots	Variation
PR1	φ0.35~2.50mm	3-Axes	Cable Lengths: 1m/5m *Choose NPN or PNP
PR2	φ0.20~1.00mm	3-Axes	Cable Lengths: 1m/5m *Choose NPN or PNP
CAPTRON	φ0.20~2.50mm	4-Axes	Cable Lengths: 2 m/5m *Choose NPN or PNP

Easy Add-on Camera Set

User-friendly camera for camera-based teaching and work adjustment. Dedicated COGNEX camera is the ideal robot vision system for dispensing, screw-tightening, depaneling and more. Available for order with the robot or as an add-on after purchase.


Correct work displacement mid-operation.
No need to stop and mechanincally reset each work position.

I/O-MT

Add up to 2 pulse string input type motors (stepping, servo, etc.) and control them from the robot.

Example:
2 Motors added to a 4-Axis Robot

2 motors are added to modify the syringe angle and workpiece angle. The robot dispenses along the edge of a hole cut through a tube-shaped piece.

Example:
Dispensing on a Turntable

A 4-Axes robot dispenses on multiple workpieces set on a rotating worktable.

Switchbox・Operation Box*

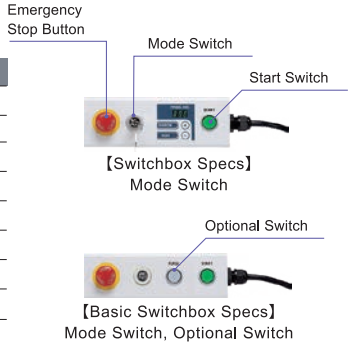
*Not applicable for Built-in Switch Type robots used outside of the EEA

Select and start programs, change modes and more.

○:Included on Box
●:Optional Add-on

		JR3000	JR3000 AP-D	JR3000 ERT/EBV	JR3000F	JC-3	JC-3-X2	JS3	Notes
Switchbox	Standard	○*1	○		○*1				Cable Lengths: 1.5m (Standard)/1m
	Mode Switch	●*1	●		●*1				Cable Lengths: 1.5m (Standard)/1m
	Optional Switch	●	●	○	●				Cable Lengths: 1.5m (Standard)/1m
	Mode Switch, Optional Switch	●*2			●*2				Cable Lengths: 1.5m (Standard)/1m
	Initialization Switch					●	●		Cable Lengths: 2m/5m
	Initialization Switch, Mode Switch					●	●		Cable Lengths: 2m/5m
	Initialization Switch, Purge Switch					●	●		Cable Lengths: 2m/5m
	Initialization Switch, Mode Switch, Purge Switch					●	●		Cable Lengths: 2m/5m
	Operation Box							○	Vertical/Horizontal Placement

*1 Switchbox or Basic Switchbox is available according to robot operation panel specs. *2 Basic Switchbox only



【Switchbox Specs】
Mode Switch

【Basic Switchbox Specs】
Mode Switch, Optional Switch

Field Network Compatibility*

*Not available with the JR3000F

Acquire and set point and position data information from an external PLC, etc. Choose from among these 6 types.

EtherNet/IP | PROFINET | CC-Link | DeviceNet | PROFIBUS | CANopen

Attachments

○:Included with Robot
●:Optional Add-on

Category	Product	Variation	JR3000	JR3000 AP-D	JR3000 ERT/EBV	JR3000F	JC-3	JC-3-X2	JS3	Notes
Robot Unit Options	Field Network*1	EtherNet/IP	●	●	●	—	●	●	●	
		PROFINET	●	●	●	—	●	●	●	
		CC-Link	●	●	●	—	●	●	●	
		DeviceNet	●	●	●	—	●	●	●	
		PROFIBUS	●	●	●	—	●	●	●	
		CANopen	●	●	●	—	●	●	●	
	Additional Interfaces*1	I/O-SYS	○	○	○	○	○	○	○	JR3000 Series: 17 Inputs/16 Outputs JC-3: 16 Inputs/16 Outputs JS3:15 Inputs/14 Outputs
		I/O-1	●	●	●	●	○	○	○	JR3000 Series: 8 Inputs/ 8 Outputs (including 4 relay outputs) JC-3: 8 Inputs/8 Outputs JS3: 18 Inputs/22 Outputs(including 4 relay outputs)
		I/O-MT	●	●	●	●	●	●	●	Control up to 2 External Motors
		I/O-S	●	●	○	●	○	○	○	Marked as EMG-OUT on the JC3.
		COM1	○	○	○	○	○	○	○	
		COM2・COM3	●	○	●	●	○	○	○	JS3 has only COM2.
	Internal I/O Power Supply*1		●	○	—	●	●	●	○	
	Cableveyor Set (JC-3)*2		—	—	—	—	●	●	—	For X Axis/for Y Axis
	Optional Cover for 3 Axes Type (JC-3)		—	—	—	—	●	●	—	Motor Assembly Panel Z Axis: 50-100mm/150-200mm
	Solenoid Valve (JS3)		—	—	—	—	—	—	●	For Air Piping (Please choose NPN/PNP when ordering)
	Hand Cable Curled Tube (JS3)		—	—	—	—	—	—	●	
	Hand Wiring and Tubing (JS3)		—	—	—	—	—	—	●	
	External Wiring and Tubing Box (JS3)		—	—	—	—	—	—	●	
Cables	I/O-SYS Cable		●	—	—	●	●	●	—	Cable Lengths: Connector only/2m/3m/5m
	I/O-1 Cable		●	●	●	●	●	●	●	Cable Lengths: Connector only/2m/3m/5m
	I/O-MT Cable		●	●	●	●	●	●	●	Cable Lengths: Connector only/0.5m/1m/3m/5m
	Robot Unit~Controller Cable		—	—	—	—	●	●	○	JC-3: 2/3/4 Axes Types (Cable Lengths:3/5/10/20m) JS3: Cable Lengths: 5m (Standard) 10m/15m/20m(optional)
	Hand Output Cable (JS3)		—	—	—	—	—	—	●	
	Hand Input Cable (JS3)		—	—	—	—	—	—	●	
	Switchbox Short Connector		●	●	●	●	●	●	●	For use outside the EEA. All CE models include a Switchbox (JR3000/JC-3) or Operation Box (JS3).
	Teaching Pendant Short Connector		●	●	●	●	○	○	○	
Other	PC Software		●	○	●	●	●	●	●	
	USB Camera		●	—	●	●	●	●	●	USB Camera Teaching
	Positioning Pin Set (JC-3)		—	—	—	—	●	●	—	Used for positioning during setup
	Mechanical Stopper (JS3)		—	—	—	—	—	—	●	Used for J1 range modification
	J1/J2 Adjustment Tool (JS3)		—	—	—	—	—	—	●	
Model Options	Screw Tightening	Screwdriver Unit	●	—	—	—	—	—	—	Screwdriver mounting fixture Please ask about compatible screwdrivers.
		Screw Feeder Attachment Plate	●	—	—	—	—	—	—	Screw feeder mounting fixture Please ask about compatible screw presenters.
		Ejector Unit*1	●	—	—	—	●	—	—	Screw Vacuum Microejector Unit
	Dispensing	Needle Adjuster	●	○	—	●	●	●	—	For 3 Axes Type (4 Axis type included for JR3000AP-D 4 Axes Robot)

*Unit optional at time of order

Servo Press Lineup

High-precision servo presses provide exact control over speed, position and pressing force.
We offer a wide range of models, from inline types for assembly lines to stand alone
C-frame models to clean room compatible types for a variety of applications.

		Electro Press			
		JP Series 5 Unit Type	JP Series 5 Stand Alone Type	JP Series 5 Clean Room Type	JP-S2 Series
Product Image					
Pages		pp.35-36	pp.37-38	pp.39-40	pp.41-42
Features		Dependable "visualized" new generation servo press increases productivity.	Ready to Run C-Frame Servo Press requires no area sensor.	ISO4 Clean Class compatible all-in-one servo press	Slim and compact servo press ideal for inline installation.
Pressing Capacity	0.5kN	●	●	● (Unit Type Only)	
	1kN	●	●	● (Unit Type Only)	
	2kN	●	●	● (Unit Type Only)	
	5kN	●	●	●	●
	10kN	●	●	●	●
	15kN	●	●	● (Unit Type Only)	●
	20kN	●	●	● (Unit Type Only)	●
	30kN	●	●	●	●
	50kN	●	●	● (Unit Type Only)	●
	80kN	●			●
	100kN				●
	120kN	●			
	200kN				●
Clean Room				●(ISO4*1)	

*1 Comparable with US Federal Standard 209D (FED-STD-209D) Class 10.

Icon Key

Fieldbus — Fieldbus Compatible (Optional)

LAN — LAN port included as standard equipment

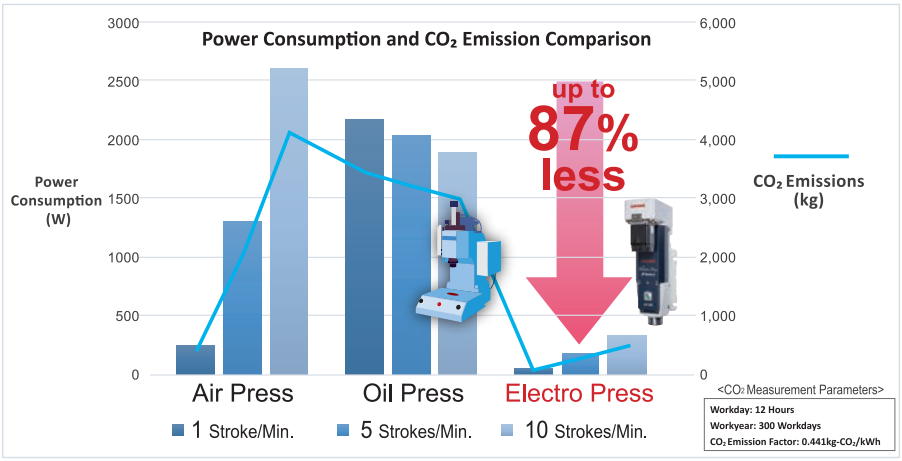
USB — USB memory port included as standard equipment

CE — CE Declared Model

Clean Room — Clean Room Compatible Models Available

Energy consumption and CO_2 emissions lower than pneumatic and hydraulic Presses

Low noise Electro Press is easier on the environment uses less power with lower CO_2 emissions.



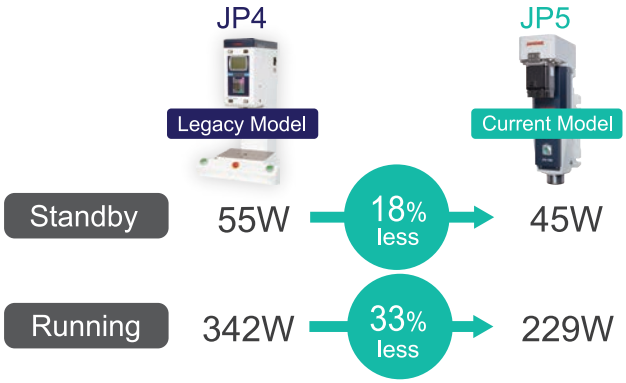
Based on our simulations.

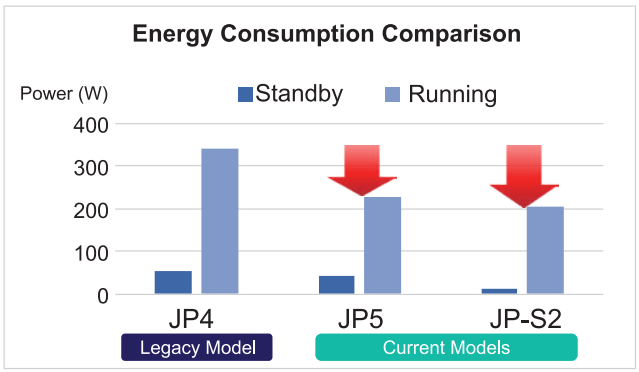
Environmentally Friendly Electro Press

- Cleaner Operation
- Minimal Carbon Emissions
- Low Noise・Low Vibration
- No Waste Oil Disposal

Energy Saving Advancements

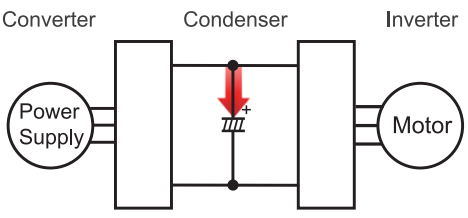
When developing our current models, we made a comparative analysis against our legacy model to further lower energy usage.





Uses Regenerated Energy

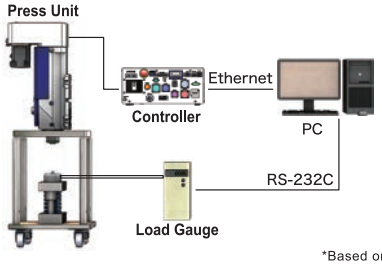
Energy-saving design stores up regenerative current in the condenser for lower power loss.



Shorter Maintenance Time

We automated labor intensive load amp adjustment and load cell calibration, reducing maintenance time by 60%*.

Example



*Based on our calculations.

JP Series 5

New Model Servo Press:

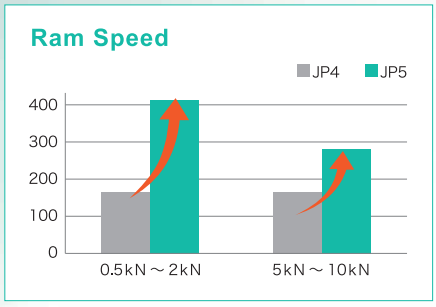
Excellent Speed, High Precision and Ready for IoT Era Facilities

Easy Facility Installation

- **Ethernet port included as standard equipment**
- **Choose from 7 different Fieldbus types**
- **Low noise and clean work environment**
- **Much lower running cost than oil or air presses**
- **User-friendly program teaching**

Higher speed for greater productivity

Maximum ram speed 414mm/sec
The highest speed in the lightweight servo press industry greatly shortens cycle times.



Improved Production Quality

- Load Display Precision **±0.8% FS***
  *When pressing at or more than 5% of the maximum load
- Position Repeatability **±0.005mm***
  *With the press unit at a constant temperature
- Internal Processing Speed **4×***
  (sampling interval: 0.25msec)
  *Compared with our previous model

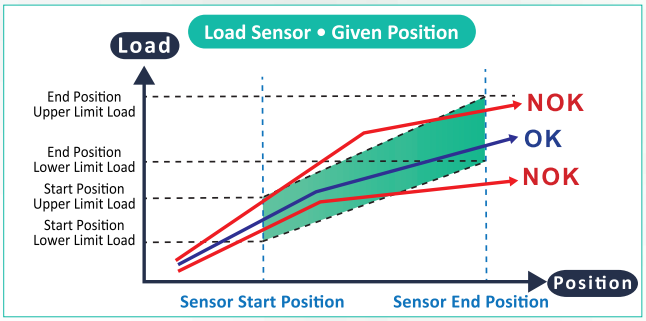
Driven by Energy Saving Servomotor

The low noise JP Series 5 is gentler on the work enviroment, consuming only 1/4~1/5* of the energy used by hydraulic and pneumatic presses and keeping CO^2 emissions low.

*Based upon our calculations

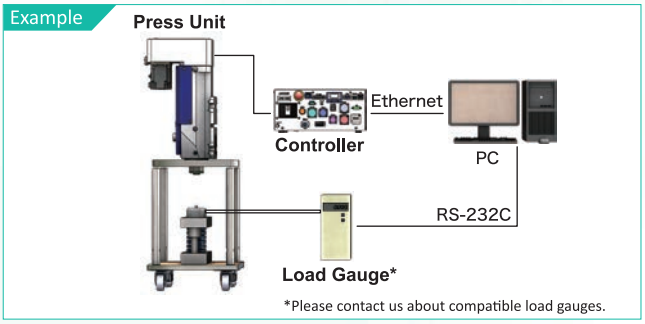
Various Pressing Modes and Sensor Functions

The JP Series 5 combines pressing (speed•load) and stopping conditions (position•load, etc.) to create multiple pressing modes. A broad range of sensor functions prevents the flow of faulty work to the next process station.



Auto Amp Adjustment•Auto Load Calibration

Make complicated load calibrations automatically.



Model Name

JPU - 1005 L - B C N I 150

Type	Pressing Capacity	Specs	Controller	Rating	Pulley Box Direction	Model Type	Stroke
JPU: Unit Type	0055: 0.5kN 0105: 1kN 0205: 2kN 0505: 5kN 1005: 10kN 15R5: 15kN 2005: 20kN 3005: 30kN 5005: 50kN 8005: 80kN 12T5: 120kN	N: Standard L*: Long C*: Clean	B: Standard C: Compact	C: CE	N: Standard R: Facing Right L: Facing Left B: Facing the Rear	I: Incremental A*: Absolute F*: Fully Closed	0.5~2kN 080: 80mm 5~15kN 100: 100mm 150: 150mm 20~80kN 200: 200mm 400: 400mm 120kN 200: 200mm

*Please contact us about compatible models.

Specifications

Item \ Model	JPU-0055	JPU-0105	JPU-0205	JPU-0505	JPU-1005	JPU-15R5
Pressing Capacity (kN)	0.5	1	2	5	10	15
Ram Stroke (mm)	80	80	80	100 (L:150)	100 (L:150)	100 (L:150)
Ram Speed — Pressing (mm/sec)	0.01~35	0.01~35	0.01~35	0.01~35	0.01~35	0.01~35
Ram Speed — Approach-Return (mm/sec)	0.01~414	0.01~414	0.01~414	0.01~280	0.01~280	0.01~120
Maximum Holding Time at Max. Load (sec)*1	999.9	360	20	999.9	25	100
Load Display Precision*2	25N or more ±4N	50N or more ±8N	100N or more ±16N	250N or more ±40N	500N or more ±80N	750N or more ±120N
Position Repeatability(mm)*3	±0.005	±0.005	±0.005	±0.005	±0.005	±0.005
Tool Weight Hanging from Ram Tip (kg)	1 or less	2 or less	4 or less	10 or less	20 or less	30 or less
Power Consumption (W) — Standard Controller	400	400	400	950	950	950
Power Consumption (W) — Compact Controller	200	200	200	750	750	750
Power Source (V)	Single Phase/3 Phase 200~240 ±10%(50/60Hz)	Single Phase/3 Phase 200~240 ±10%(50/60Hz)	Single Phase/3 Phase 200~240 ±10%(50/60Hz)	Single Phase/3 Phase 200~240 ±10%(50/60Hz)	Single Phase/3 Phase 200~240 ±10%(50/60Hz)	Single Phase/3 Phase 200~240 ±10%(50/60Hz)
External Dimensions W×D×H (mm)*4	116×218×425	116×218×425	116×218×425	146×258×502	146×258×502	175×270×502
Weight (kg)*4	17	17	17	34	34	41

Item \ Model	JPU-2005	JPU-3005	JPU-5005	JPU-8005	JPU-12T5
Pressing Capacity (kN)	20	30	50	80	120
Ram Stroke (mm)	200 (L:400)	200 (L:400)	200 (L:400)	200 (L:400)	200
Ram Speed — Pressing (mm/sec)	0.01~35	0.01~35	0.01~35	0.01~35	0.01~35
Ram Speed — Approach-Return (mm/sec)	0.01~320	0.01~320	0.01~320	0.01~250	0.01~200
Maximum Holding Time at Max. Load (sec)*1	80	30	20	8	25
Load Display Precision*2	1kN or more ±160N	1.5kN or more ±240N	2.5kN or more ±400N	4kN or more ±640N	6kN or more ±960N
Position Repeatability (mm)*3	±0.005	±0.005	±0.005	±0.005	±0.005
Tool Weight Hanging from Ram Tip (kg)	40 or less	90 or less	100 or less	150 or less	150 or less
Power Consumption (W) — Standard Controller	3.7	3.7	5.2	5.2	11.2
Power Consumption (W) — Compact Controller	3.5	3.5	5.0	5.0	11
Power Source (V)	3 Phase 200~240 ±10%(50/60Hz)	3 Phase 200~240 ±10%(50/60Hz)	3 Phase 200~240 ±10%(50/60Hz)	3 Phase 200~240 ±10%(50/60Hz)	3 Phase 200~240 ±10%(50/60Hz)
External Dimensions W×D×H (mm)*4	171×384×706	230×474×775	230×474×775	260×477×797	290×580×934
Weight (kg)*4	80	161	167	170	296

JP Series 5 Common Specifications

Item		Content
Program Capacity*5		512
External Input/Output	COM	RS-232C 1ch
	I/O-SYS*6	17 Inputs/ 16 Outputs *Choose NPN or PNP
	LAN	10BASE–T/100BASE–TX
	MEMORY	USB memory connector (Save results data, backup and restore data, update system software)(32GB or less)
	Fieldbus	EtherNet/IP / PROFINET / EtherCAT / CC-Link / DeviceNet / PROFIBUS / CANopen (optional)
	I/O-S	Safety device connector
	Other	Load cell output, encoder output, analog monitor output (optional)
Encoder		Incremental (standard) or absolute types*7 (optional)

<Notes>
*1 Value when making a cold start. Can vary according to setting conditions.
*2 Load display precision is ±0.8% (FS) of the maximum load when pressing in the range of 5% or more of the maximum load.
This is an indicator of sensor measuring unit and accuracy and is not an indicator of load tolerance after pressing or margin of error.
*3 Position repeatability is dependent upon the press bearing a constant load at a constant press unit and surrounding temperature.
Repeatability is not a guarantee of absolute position precision.
*4 Values are for standard specification models. For Long and Clean specifications, please contact us about compatible models, external dimensions and other details.
*5 The number of programs, pressing steps and step judgments is limited in relation to the total memory size.
When multiple steps are included in one program, this in turn limits the number of new programs which can be added to the memory.
*6 An internal I/O power supply is available as an option for the standard controller.
*7 Please contact us about compatible models.

Fieldbus LAN USB CE Clean Room

<Standard Accessories>
•PC Software "JP5 Designer" •Operation Manual (CD-ROM) •Press Unit Connector Cable (3m) •SWBOX Short Connector •TPU Short Connector •I/O-S Short Connector •I/O-SYS Connector

JPU-0055~ JPU-0205 | JPU-0505• JPU-1005 | JPU-15R5 | JPU-2005 | JPU-3005• JPU-5005 | JPU-8005 | JPU-12T5

Standard Controller

Compact Controller

JP Series 5 Stand Alone Type

Two Hand Switch Model

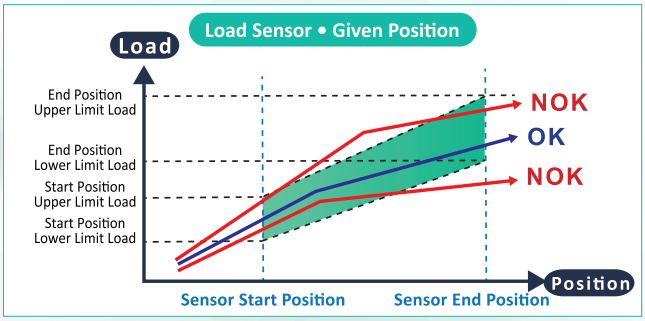
Ready to Run C-Frame Servo Press

Built-in Safety Features & CE Declared

With no need for a light curtain or area sensor, additional costs are avoided, while achieving both operator safety and a broad work area.

Various Pressing Modes and Sensor Functions

The JP Series 5 combines pressing (speed•load) and stopping conditions (position•load, etc.) to create multiple pressing modes. A broad range of sensor functions prevents the flow of faulty work to the next process station.



All-in-One System Ideal for Cell Production

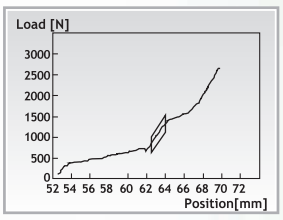
C-Frame configuration unifies the controller and drive mechanism. Just turn ON the power and the press is ready to work; ideal as an independent machine tool used in cell production, or for R & D work.

Improved Production Quality

- Load Display Precision **±0.8% FS***
  *When pressing at or more than 5% of the maximum load
- Position Repeatability **±0.005mm***
  *With the press unit at a constant temperature
- Internal Processing Speed **4×***
  (sampling interval: 0.25msec)
  *Compared with our previous model

Traceability (IoT･Industrie 4.0)

Data acquired by high-speed sampling is displayable on the front panel LCD and transferable to your PC via an Ethernet connection or in CSV format to a USB drive for effective quality control.



Front Panel LCD Display

PC Software Screen

Driven by Energy Saving Servomotor

The low noise JP Series 5 is gentler on the work enviroment, consuming only 1/4~1/5* of the energy used by hydraulic and pneumatic presses and keeping CO^2 emissions low.

*Based upon our calculations

Model Name

JPT - 1005 L - 0 C N I 150

Type	Pressing Capacity	Specs	Rating	Model Type	Stroke
JPT: Two Hand Switch	0055: 0.5kN 0105: 1kN 0205: 2kN 0505: 5kN 1005: 10kN 15R5: 15kN 2005: 20kN 3005: 30kN 5005: 50kN	N: Standard L*: Long C*: Clean *The long stroke is not available for clean room models.	C: CE	I: Incremental	0.5~2kN 080: 80mm 5~15kN 100: 100mm 150: 150mm 20~50kN 200: 200mm

Specifications

Item	Model	JPT-0055	JPT-0105	JPT-0205	JPT-0505	JPT-1005
Pressing Capacity	Maximum(kN)	0.5	1	2	5	10
Ram Stroke (mm)		80	80	80	100 (L:150)	100 (L:150)
Ram Speed	Pressing (mm/sec)	0.01~25	0.01~25	0.01~25	0.01~25	0.01~25
	Approach-Return (mm/sec)	0.01~414	0.01~414	0.01~414	0.01~280	0.01~280
Maximum Holding Time at Max. Load (sec)*1		999.9	360	20	999.9	25
Load Display Precision*2		25N or more ±4N	50N or more ±8N	100N or more ±16N	250N or more ±40N	500N or more ±80N
Position Repeatability(mm)*3		±0.005	±0.005	±0.005	±0.005	±0.005
Tool Weight Hanging from Ram Tip(kg)		1 or less	2 or less	4 or less	10 or less	20 or less
Power Consumption (W)		400	400	400	950	950
Power Source(V)		Single Phase/3 Phase 200~240±10%				
External Dimensions W×D×H (mm)*4		520×659×816	520×659×816	520×659×816	520×675×947(L:1022)	520×675×947(L:1022)
Weight(kg)*4		109	109	109	193 (L: 201)	193 (L: 201)

Item	Model	JPT-15R5	JPT-2005	JPT-3005	JPT-5005
Pressing Capacity	Maximum(kN)	15	20	30	50
Ram Stroke (mm)		100 (L:150)	200	200	200
Ram Speed	Pressing (mm/sec)	0.01~25	0.01~25	0.01~25	0.01~25
	Approach-Return (mm/sec)	0.01~120	0.01~100	0.01~100	0.01~100
Maximum Holding Time at Max. Load (sec)*1		100	80	30	20
Load Display Precision*2		750N or more ±120N	1kN or more ±160N	1.5kN or more ±240N	2.5kN or more ±400N
Position Repeatability(mm)*3		±0.005	±0.005	±0.005	±0.005
Tool Weight Hanging from Ram Tip(kg)		30 or less	40 or less	90 or less	100 or less
Power Consumption (W)		950	3,700	3,700	5,200
Power Source(V)		Single Phase/3 Phase 200~240 ±10%	3 Phase 200~240 ±10%		
External Dimensions W×D×H (mm)*4		520×725×947(L:1022)	520×952×1230	560×1125×1326	560×1125×1326
Weight(kg)*4		197(L:205)	527	975	982

JP Series 5 Common Specifications

Item		Content
Program Capacity*5		512
External Input/Output	COM	RS-232C 1ch
	I/O–SYS	17 Inputs/ 16 Outputs *Choose NPN or PNP
	LAN	10BASE–T/100BASE–TX
	MEMORY	USB memory connector (Save results data, backup and restore data, update system software)(32GB or less)
	Fieldbus	EtherNet/IP / PROFINET / EtherCAT / CC-Link / DeviceNet / PROFIBUS / CANopen (optional)
	I/O–S	Safety device connector
	Other	Load cell output, encoder output, analog monitor output (optional)
Encoder		Incremental

<Notes>
*1 Value when making a cold start. Can vary according to setting conditions.
*2 Load display precision is ±0.8% (FS) of the maximum load when pressing in the range of 5% or more of the maximum load.
This is an indicator of sensor measuring unit and accuracy and is not an indicator of load tolerance after pressing or margin of error.
*3 Position repeatability is dependent upon the press bearing a constant load at a constant press unit and surrounding temperature.
Repeatability is not a guarantee of absolute position precision.
*4 Values are for standard specification models. For Long and Clean specifications, please contact us about compatible models, external dimensions and other details.
*5 The number of programs, pressing steps and step judgments is limited in relation to the total memory size.
When multiple steps are included in one program, this in turn limits the number of new programs storable in the memory.

Fieldbus LAN USB CE Clean Room

<Standard Accessories>
•PC Software JP5 Designer •Operation Manual (CD-ROM) •Fieldbus Cover (for presses without an optional Fieldbus) •I/O-S Short Connector

JPT-0055/0105/0205

JPT-0505/1005/15R5*

*The depth of the JPT-15R5 is greater.

JPT-2005

JPT-3005/5005

JP Series 5 Clean Room Type

Clean Class ISO4 (Class 10) Compatible Model

Clean Class ISO4 (Class 10)...

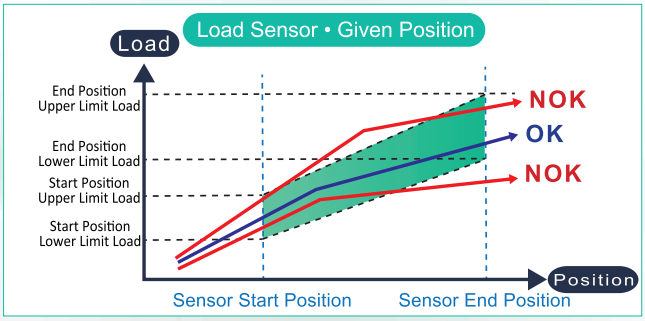
...is defined by US Federal Standard 209D (FED-STD209D) as a particulate count that does not exceed a total of 10 particles 0.5μm or larger in size per cubic foot of air.

Special Airtight Construction

- Airtight construction prevents dust.
- Specialized anti-static bellows moves with the ram to keep dust from the ram off the work.

Various Pressing Modes and Sensor Functions

The JP Series 5 combines pressing (speed•load) and stopping conditions (position•load, etc.) to create multiple pressing modes. A broad range of sensor functions prevents the flow of faulty work to the next process station.

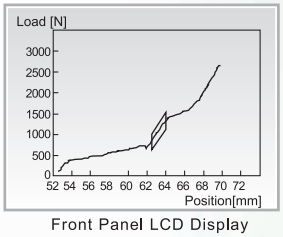


Specialized Finishing, Screws and Grease

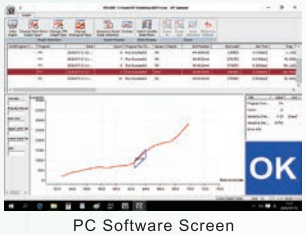
- Special conductive finish prevents static electricity buildup.
- Internal moving parts lubricated with low dust grease.
- All stainless steel external plates and screws.
- Usable both in clean room and regular environments.

Traceability (IoT)

Data acquired by high-speed sampling is displayable on the front panel LCD and transferable to your PC via an Ethernet connection or in CSV format to a USB for effective quality control.



Front Panel LCD Display



PC Software Screen

Built-in Safety Features

With no need for a light curtain or area sensor, additional costs avoided. Both operator safety and a broad work area are achieved.

All-in-One System Ideal for Cell Production

C-frame configuration unifies the controller and drive mechanism. Just turn ON the power and the press is ready to work; ideal as an independent machine tool used in cell production, or for R & D work.

Driven by Energy Saving Servomotor

The low noise JP Series 5 is gentler on the work enviroment, consuming only 1/4~1/5* of the energy used by hydraulic and pneumatic presses and keeping CO^2 emissions low.

*Based upon our calculations

Model Name

JPU -1005 C - 0 C N I 100

Type	Pressing Capacity	Specs	Rating	Model Type	Stroke
JPU: Unit JPT: Two Hand Switch	0055: 0.5kN 0105: 1kN 0205: 2kN 0505: 5kN 1005: 10kN 3005: 30kN 5005: 50kN	C: Clean	C: CE	I: Incremental* *The encoder for all clean room models is incremental type only.	0.5~2kN 080: 80mm 5~10kN 100: 100mm 20~50kN 200: 200mm

Specifications

Item \ Model	Unit Type JPU-0055C	JPU-0105C	JPU-0205C	JPU-0505C	JPU-1005C	JPU-2005C
Pressing Capacity (kN)	0.5	1	2	5	10	20
Ram Stroke (mm)	80	80	80	100	100	200
Maximum Ram Speed – Pressing (mm/sec)	0.01~35	0.01~35	0.01~35	0.01~35	0.01~35	0.01~35
Maximum Ram Speed – Approach-Return (mm/sec)	0.01~414	0.01~414	0.01~414	0.01~280	0.01~280	0.01~320
Maximum Holding Time at Max. Load (sec)*1	999.9	360	20	999.9	25	80
Load Display Precision*2	25N or more ±4N	50N or more ±8N	100N or more ±16N	250N or more ±40N	500N or more ±80N	1kN or more ±160N
Position Repeatability(mm)*3	±0.005	±0.005	±0.005	±0.005	±0.005	±0.005
Tool Weight Hanging from Ram Tip (kg)	1 or less	2 or less	4 or less	10 or less	20 or less	40 or less
Power Consumption (W) – Standard Controller	400	400	400	950	950	3,700
Power Consumption (W) – Compact Controller	200	200	200	750	750	3,500
Power Source (V)	Single Phase/3 Phase 200~240 ±10% (50/60Hz)	Single Phase/3 Phase 200~240 ±10% (50/60Hz)	Single Phase/3 Phase 200~240 ±10% (50/60Hz)	Single Phase/3 Phase 200~240 ±10% (50/60Hz)	Single Phase/3 Phase 200~240 ±10% (50/60Hz)	Single Phase/3 Phase 200~240 ±10% (50/60Hz)
External Dimensions W×D×H (mm)	116×218×425	116×218×425	116×218×425	146×258×503	146×258×503	171×384×706
Weight (kg)	17	17	17	34	34	80

Item \ Model	Unit Type JPU-3005C	JPU-5005C	Stand Alone Type JPT-0505C	JPT-1005C	JPT-3005C
Pressing Capacity (kN)	30	50	5	10	30
Ram Stroke (mm)	200	200	100	100	200
Maximum Ram Speed – Pressing (mm/sec)	0.01~35	0.01~35	0.01~25	0.01~25	0.01~25
Maximum Ram Speed – Approach-Return (mm/sec)	0.01~320	0.01~320	0.01~280	0.01~280	0.01~100
Maximum Holding Time at Max. Load (sec)*1	30	20	999.9	25	30
Load Display Precision*2	1.5kN or more ±240N	2.5kN or more ±400N	250N or more ±40N	500N or more ±80N	1.5kN or more ±240N
Position Repeatability(mm)*3	±0.005	±0.005	±0.005	±0.005	±0.005
Tool Weight Hanging from Ram Tip (kg)	90 or less	100 or less	10 or less	20 or less	90 or less
Power Consumption (W) – Standard Controller	3,700	-	950	950	3,700
Power Consumption (W) – Compact Controller	3,500	5,000			
Power Source (V)	Single Phase/3 Phase 200~240 ±10% (50/60Hz)	Single Phase/3 Phase 200~240 ±10% (50/60Hz)	Single Phase/3 Phase 200~240 ±10% (50/60Hz)	Single Phase/3 Phase 200~240 ±10% (50/60Hz)	Single Phase/3 Phase 200~240 ±10% (50/60Hz)
External Dimensions W×D×H (mm)	230×474×775	230×474×775	520×675×947	520×675×947	560×1125×1326
Weight (kg)	161	161	193	193	975

JP Series 5 Clean Room Type Common Specifications

Item		Content
Program Capacity*4		512
External Input/Output	COM	RS-232C 1ch
	I/O-SYS	17 Inputs/ 16 Outputs *Choose NPN or PNP
	LAN	10BASE–T/100BASE–TX
	MEMORY	USB memory connector (Save results data, backup and restore data, update system software)(32GB or less)
	Fieldbus	EtherNet/IP / PROFINET / EtherCAT / CC-Link / DeviceNet / PROFIBUS / CANopen (optional)
	I/O-S	Safety device connector
	Other	Load cell output, encoder output, analog monitor output (optional)
Encoder		Incremental

<Notes>
*1 Value when making a cold start. Can vary according to setting conditions.
*2 Load display precision is ±0.8% (FS) of the maximum load when pressing in the range of 5% or more of the maximum load.
This is an indicator of sensor measuring unit and accuracy and is not an indicator of load tolerance after pressing or margin of error.
*3 Position repeatability is dependent upon the press bearing a constant load at a constant press unit and surrounding temperature.
Repeatability is not a guarantee of absolute position precision.
*4 The number of programs, pressing steps and step judgments is limited in relation to the total memory size.
When multiple steps are included in one program, this in turn limits the number of new programs which can be added to the memory.

Fieldbus LAN USB CE Clean Room

<Standard Accessories>
•PC Software JP5 Designer •Operation Manual (CD-ROM) •Fieldbus Cover (for presses without an optional Fieldbus) •I/O-S Short Connector

Clean Type Exhaust Outlet & Air Flow

Model / Item	Unit Type Press JPU-0055C~ JPU-1005C	JPU-2005C	JPU-3005C, JPU-5005C	Unit Type Standard Controller JPB-0055C~ JPB-1005C	JPB-2005C, JPB-3005C	Stand Alone Type JPT-0505C	JPT-1005C	JPT-3005C
Exhaust Outlet Diameter	External φ10 and External φ16*5	Internal φ19	Internal φ19	External φ10 and External φ16*5	Internal φ19×2*6	External φ12 Internal φ19	External φ12 Internal φ19	Internal φ25
Outlet Air Flow	15Nm³/h (250NL/min) or more	15Nm³/h (250NL/min) or more	24Nm³/h (400NL/min) or more	12Nm³/h (200NL/min) or more	27Nm³/h (450NL/min) or more	18Nm³/h (300NL/min) or more	18Nm³/h (300NL/min) or more	30Nm³/h (500NL/min) or more

<Notes>
*5 Equipped with 2 outlets of different diameters. Customer connects their exhaust system to either outlet, according to the configuration of their facility.
*6 Equipped with 2 outlets of identical diameters. Customer connects their exhaust system to both outlets.

JPU-0055C~ JPU-0205C

JPU-0505C• JPU-1005C

JPU-2005C

JPU-3005C• JPU-5005C

JPT-0505C• JPT-1005C

JPT-3005C

JP-S2 Series

Slim and Compact “Inline Specialist” Servo Press
Designed for Factory Installation

Slim and Compact

Easy to install slim press unit and compact controller are ideal for factory incorporation. Even multiple press units installed together save space; helpful for effective assembly line layout.

JP-S1002 (10kN)　　JPU-1005 (10kN)

Easy Facility Installation

- **Ethernet port included as standard equipment**
- **Choose from 7 different Fieldbus types**
- **Low noise and clean work environment**
- **Much lower running cost than oil or air presses**
- **User-friendly program teaching**

Driven by Energy Saving Servomotor

The low noise JP-S2 is gentler on the work enviroment, consuming only 1/4~1/5* of the energy used by hydraulic and pneumatic presses and keeping CO^2 emissions low.

*Based upon our calculations

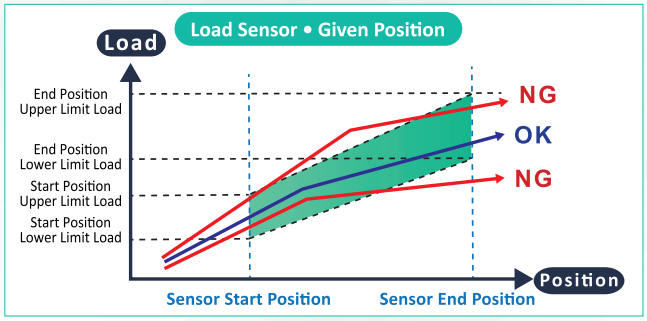
Full Lineup

- Pressing Capacity: **5kN~200kN**
- Stroke: **100mm~450mm**

Long holding types also available.

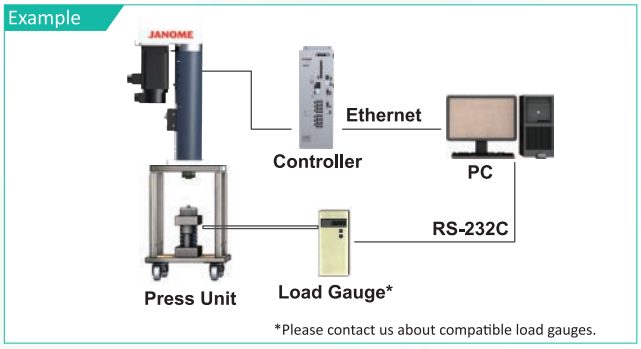
Various Pressing Modes and Sensor Functions

The JP-S2 combines pressing (speed•load) and stopping conditions (position•load, etc.) to create multiple pressing modes. A broad range of sensor functions prevents the flow of faulty work to the next process station.



Auto Amp Adjustment•Auto Load Calibration

Make complicated load calibrations automatically.



Model Name

JP-S 1002 - 1 0 100 B S - N 0 CC B - 5 5 1

JP-S2 Series	Pressing Capacity	Specs	Variations	Stroke*2	Brake	Load Cell	DIO	Fieldbus	Regenerative Resistance	Press Unit Cable*3	Power Cable	Power Source Specs
	0502: 5kN 1002: 10kN 1502: 15kN 2002: 20kN 3002: 30kN 5002: 50kN 8002: 80kN 10T2: 100kN 20T2: 200kN	1: CE	0: Standard 1: Long Holding*1	100: 100mm 150: 150mm 200: 200mm 250: 250mm 300: 300mm 350: 350mm 400: 400mm 450: 450mm	B: Yes 0: No	S: Pressing 0: None	N: NPN P: PNP 0: None	EP: EtherNet/IP PN: PROFINET EC: EtherCAT CC: CC-Link DE: DeviceNet PR: PROFIBUS CO: CANopen 00: None	B: Built-in A: External Add-on	3: 3m 5: 5m A: 10m B: 15m C: 20m D: 5mR E: 10mR F: 15mR 0: None	3 : 3m 5 : 5m A : 10m 0 : None	1: Single Phase*4 3: Three Phase

*1 Equipped with a motor one size larger. Please contact us about compatible models.
*2 Compatible strokes vary by model. Please refer to the specifications.
*3 ○mR are flexible cables. Flexible cables and cables 10m and longer are not CE compatible.
*4 JP-S2002 and smaller models only.

Specifications

Item \ Model		JP-S0502	JP-S1002	JP-S1502	JP-S2002	JP-S3002
Pressing Capacity (kN)		5	10	15	20	30
Ram Stroke (mm)		100/150/250/350	100/150/250	100/200/300/350/400/450	100/150/200/300/350/400	100/200/300/350/400
Ram Speed	Pressing (mm/sec)	0.01~35	0.01~35	0.01~35	0.01~35	0.01~35
	Approach-Return (mm/sec)	0.01~216	0.01~216	0.01~200	0.01~200	0.01~210
Maximum Holding Time (sec)*1		999.9	999.9	999.9	999.9	999.9
Load Display Precision*2		±50N at 0.5kN or more	±100N at 1kN or more	±200N at 2kN or more	±200N at 2kN or more	±300N at 3kN or more
Position Repeatability (mm)*3		±0.01	±0.01	±0.01	±0.01	±0.01
Maximum Ram Tip Fixture Hanging Weight (kg)		5 or less	10 or less	15 or less	20 or less	30 or less
Power Consumption (W)		200	400	750	750	2,000
Power Source(V)		Single Phase / 3 Phase 180~250(50/60Hz)	Single Phase / 3 Phase 180~250(50/60Hz)	Single Phase / 3 Phase 180~250(50/60Hz)	Single Phase / 3 Phase 180~250(50/60Hz)	3 Phase 180~250(50/60Hz)
External Dimensions W×D×H (mm) Value in parentheses ( ) is the press unit weight (kg)		st100: 65×155×455(12) st150: 65×155×505(13) st250: 65×155×655(16) st350: 65×155×805(18)	st100: 65×155×455(12) st150: 65×155×505(13) st250: 65×155×655(16)	st100: 80×196×505(20) st200: 80×196×645(25) st300: 80×196×775(28) st350: 80×196×845(30) st400: 80×196×925(33) st450: 80×196×995(36)	st100: 80×196×505(20) st150: 80×196×575(23) st200: 80×196×645(25) st300: 80×196×775(28) st350: 80×196×845(30) st400: 80×196×925(33)	st100: 100×259×570(35) st200: 100×259×690(42) st300: 100×259×810(48) st350: 100×259×870(52) st400: 100×259×930(56)

Item \ Model		JP-S5002	JP-S8002	JP-S10T2	JP-S20T2
Pressing Capacity (kN)		50	80	100	200
Ram Stroke (mm)		100/200/300/350/400	200	200/400	200/400
Ram Speed	Pressing (mm/sec)	0.01~35	0.01~22	0.01~16	0.01~8
	Approach-Return (mm/sec)	0.01~200	0.01~135	0.01~100	0.01~50
Maximum Holding Time (sec)*1		999.9	999.9	999.9	999.9
Load Display Precision*2		±500N at 5kN or more	±800N at 8kN or more	±1000N at 10kN or more	±2000N at 20kN or more
Position Repeatability (mm)*3		±0.01	±0.01	±0.01	±0.01
Maximum Ram Tip Fixture Hanging Weight (kg)		50 or less	80 or less	100 or less	200 or less
Power Consumption (W)		5,000	5,000	5,000	5,000
Power Source(V)		Three Phase 180~250 (50/60Hz)	Three Phase 180~250 (50/60Hz)	Three Phase 180~250 (50/60Hz)	Three Phase 180~250 (50/60Hz)
External Dimensions W×D×H (mm) Value in parentheses ( ) is the press unit weight (kg)		st100: 148×365×643(98) st200: 148×365×743(110) st300: 148×365×843(123) st350: 148×365×893(129) st400: 148×365×943(135)	st200: 135×380×820(99)	st200: 200×465×889(198) st400: 200×465×1089(235)	st200: 292×442×1499(392) st400: 292×442×1699(442)

JP-S2 Series Common Specifications

Item		Content
Progam Capacity*4		512
External Input/Output	COM	RS–232C 1ch
	Digital Input/Output (DIO)	17 Inputs / 16 Outputs *Choose NPN or PNP at time of order (optional)
	LAN	10BASE–T/100BASE–TX
	Fieldbus	EtherNet/IP / PROFINET / EtherCAT / CC-Link / DeviceNet / PROFIBUS / CANopen (optional)
	Other	Load Cell Output, Encoder Output, Analog Monitor Output
Encoder		Incremental

<Notes>
*1 Hold times decrease as loads increase. (In some situations, hold times cannot be attained.) Increases in motor temperatures can also shorten hold times.
*2 Load display precision is ±1% (FS) of the maximum load when pressing in the range of 10% of more of the maximum load, except for the JP-S1502.
Load display precision for the JP-S1502 is approximately ±1.3% (FS) of the maximum load when pressing in the approximate range of 13% or more of the maximum load.
This is an indicator of sensor measuring unit and accuracy and is not an indicator of load tolerance after pressing or margin of error.
*3 Position repeatability is dependent upon the press bearing a constant load at a constant press unit and surrounding temperature.
Repeatability is not a guarantee of absolute position precision.
*4 The number of programs, pressing steps and step judgments is limited in relation to the total memory size. When multiple steps are included in one program, this in turn limits the number of new programs which can be added to the memory.

<Standard Accessories>
•Main Unit Cables •Power Cable •Switchbox(standard for CE models) •Operation Manual(CD-ROM) •PC Software "JP-S2 Designer"

Fieldbus LAN CE

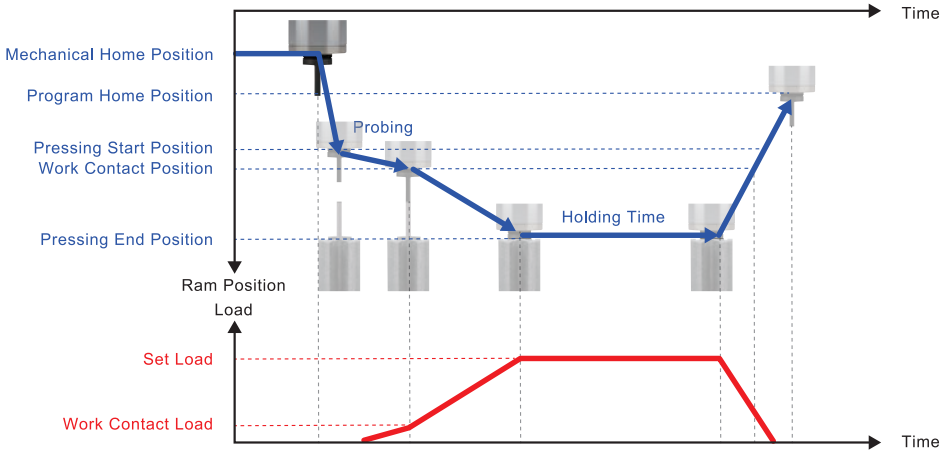
JP-S0502• JP-S1002 | JP-S1502• JP-S2002 | JP-S3002 | JP-S5002 | JP-S8002 | JP-S10T2 | JP-S20T2 | Controller

Modes / Functions

Pressing Modes・Sensor Functions

With a variety of pressing modes and sensor functions, Janome Electro Presses are well equipped to handle complicated pressing methods, including those which require multiple sensor functions.
Our quality control capabilities prevent faulty workpieces from moving through your assembly process.

Basic Servo Press Operation



Pressing Mode

Pressing Conditions	Stopping Conditions	Content
Constant Speed Pressing	Position	Stops when a set position is reached
	Distance	Stops when a set distance from a given position is reached
	Load	Stops when a set load is reached
	⋮	Also set stopping conditions based upon incremental load increases or load differentials. Please contact us for details.
Constant Load Pressing	Time	Stops when a set time is reached
	Position	Stops when a set position is reached
	⋮	Also set stopping conditions based upon distance or in response to external signals. Please contact us for details.

Max 512 Programs

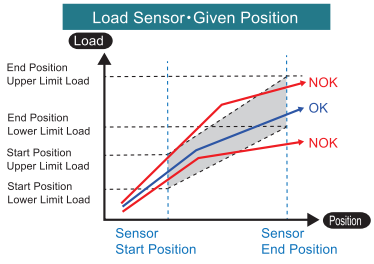
Max 512 Steps

*The number of programs, pressing steps and step judgments is limited in relation to the total memory size.
When multiple steps are included in one program, this in turn limits the number of new programs which can be added to the memory.

Sensor Functions

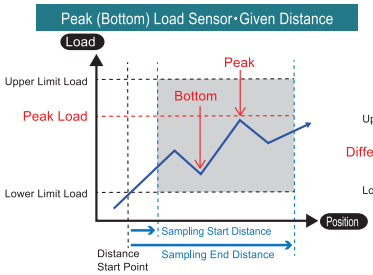
We offer a wide variety of step sensors, load path sensors and load zone sensors.

Load Sensors



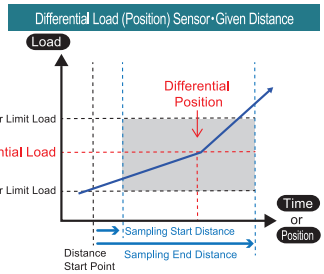
- Load Sensor・Given Position
- Load Sensor・Given Distance (Step Start)
- Load Sensor・Given Position (Step End)
- Load Sensor (Step End)

Peak Load・Bottom Load Sensor



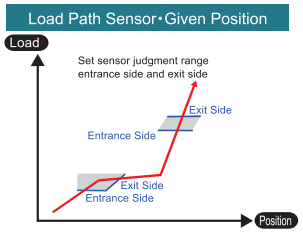
- Peak Load Sensor・Given Position
- Peak Load Sensor・Given Distance
- Bottom Load Sensor・Given Distance
- Bottom Load Sensor・Given Distance

Inflection Point Load・Position Sensors



- Differential Load Sensor・Given Position
- Differential Load Sensor・Given Distance
- Differential Position Sensor・Given Position
- Differential Distance Sensor・Given Distance

Load Curve Thru Path Sensor



- Load Path Sensor・Given Position
- Load Path Sensor・Given Distance

You can set the sensor range freely thereby to create a variety of different sensors.

Please contact us for details about other sensor functions which are not described here.

PC Software

We offer dedicated servp press application software you can run on your PC to edit setting data and display and analyze result data.

Touch Panel Interface
(Optional for all servo press models)

* The PC software screen shown below is of the "JP TaS II System", used with the JP Series 5. There are some differences in appearance and function with the software for the JP-S2 Series.

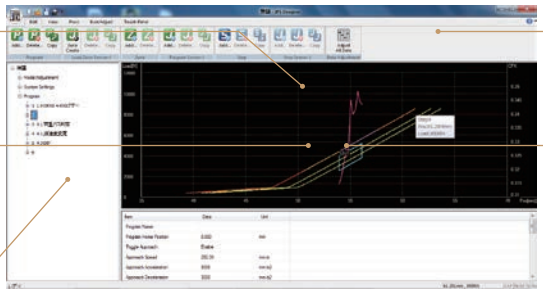
Designer

Create teaching data, sensor conditions, etc., upload all of your setting data to your PC, modify the settings, save a backup copy of your data, as well as print it out.

Display a graph of time series data acquired by Sampler

Sensor Window Display (Blue)
CPK Value Display (Pink)

Use icons to choose sensors and create programs easily



Touch Panel PC Compatible* Icon

Operate the sensor window with your mouse and modify sensor conditions

Comprehensive Auto Load Calibration and Diagnostic menus

Sampler

Display single shot quality control & time series data and save it as a sampling file. Display the data for multiple presses at the same time.

Latest Result Data

Quality Control Data Screen
Result Data History from Startup

Display the Waveform Data for the Latest Result

* Data for 4 presses are displayed here.

Know your press productivity status both on the control side and on site

Know the sensor result with just one look! OK NOK

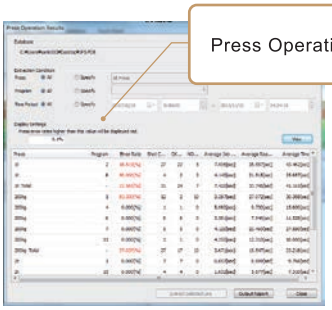
Uses a database format to save a large quantity of result data

Reporter

Display data acquired by Sampler, create CPK breakdown analysis and result analysis reports.

Comprehensive Sorting Function
- NOK Result List Extraction
- Check for workpiece variance using end position・end load sorting

Analyze workpiece characteristics
(Compare multiple presses doing the same process)



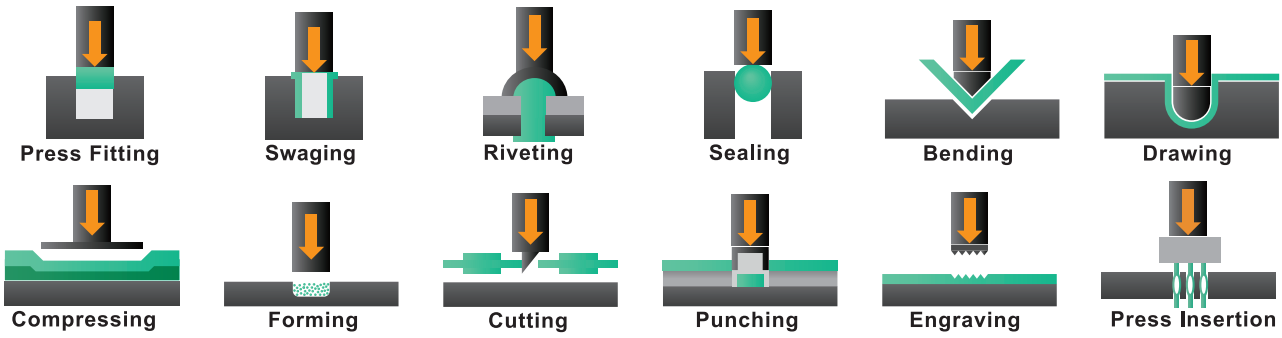
Press Operation Status

	JP5 Unit	JP5 Stand Alone	JP-S2
PC Software Name	JP TaS II System		JP-S2 SaS System
Usable Display Languages	English, German, Japanese, Korean, Chinese (Simplified & Traditional)		English, Japanese, Korean, Simplified Chinese
Compatible PC Operating Systems	Windows®10, Windows®11		

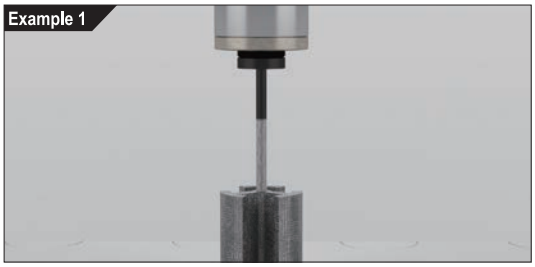
Application Examples

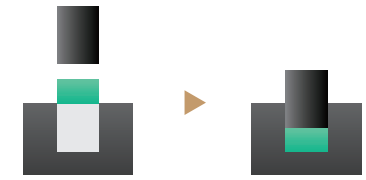
From press fitting to testing, Janome servo presses fulfill an important role in many different processes.

Pressing Application Types

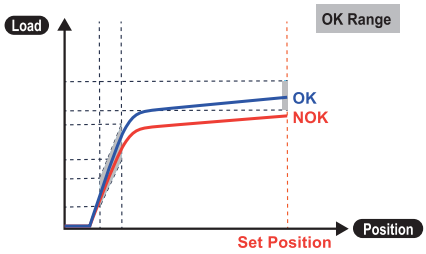


Press Fitting

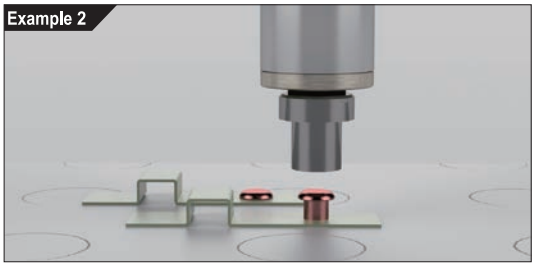


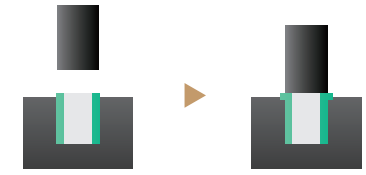


Pressing Condition: Constant Speed･Position Stop
Sensor Condition 1: Load Sensor･Given Position
Sensor Condition 2: Load Sensor･Given Distance(Step End)

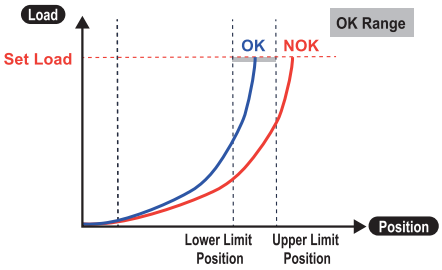


Swaging

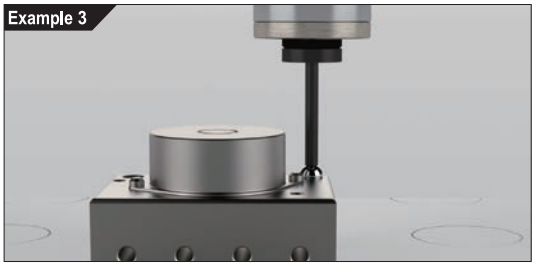




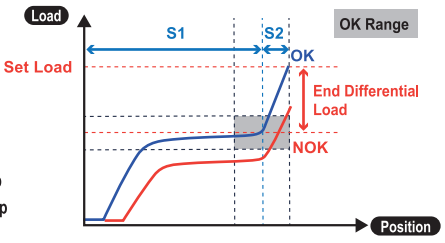
Pressing Condition: Constant Speed･Load Stop
Sensor Condition: Position Sensor (Step End)



Sealing

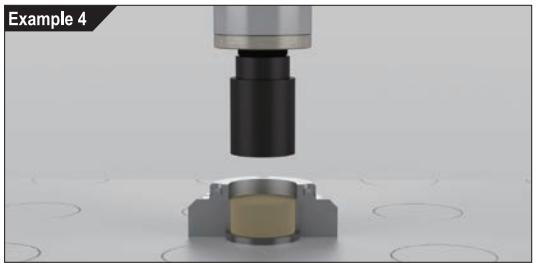


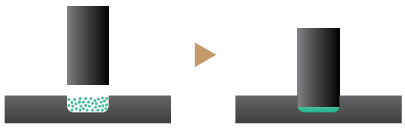
Pressing Condition S1: Constant Speed･Differential Load Stop
Pressing Condition S2: Constant Speed･Incremental Load Stop
Sensor Condition: Differential Load Sensor･Given Position



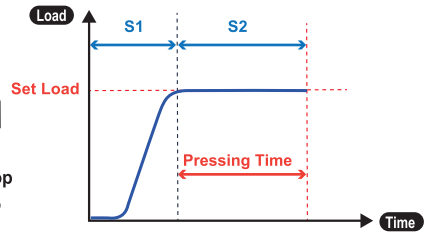
Powder Forming

Example 4



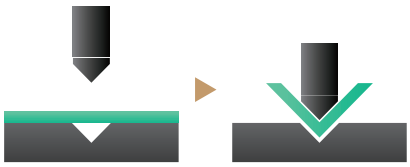


Pressing Condition S1: Constant Speed･Load Stop
Pressing Condition S2: Constant Load･Time Stop

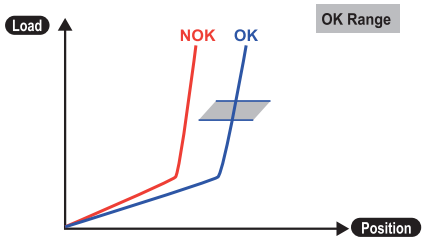


Bending

Example 5

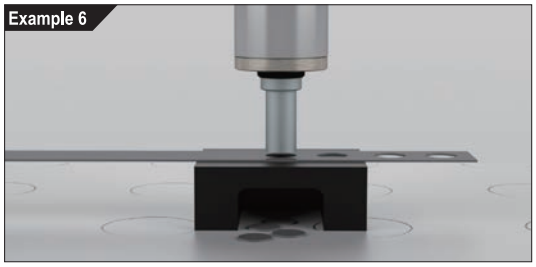


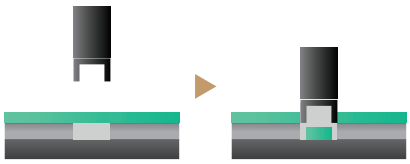
Pressing Condition: Constant Speed･Position Stop
Sensor Condition: Load Path Sensor･Given Position



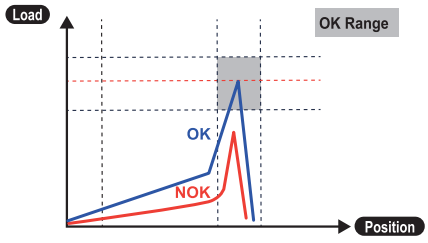
Punching

Example 6



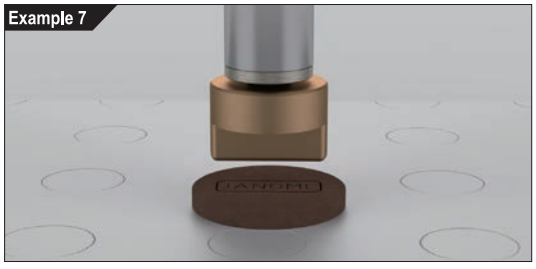


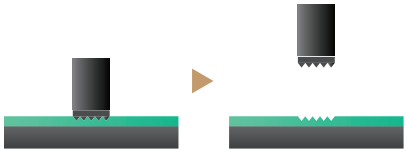
Pressing Condition: Constant Speed･Position Stop
Sensor Condition: Peak Load Path･Given Position



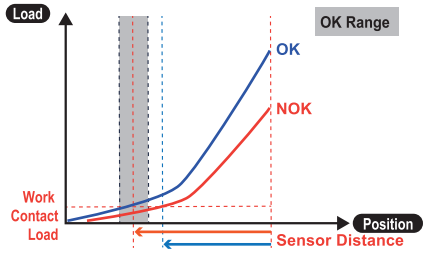
Engraving

Example 7





Pressing Condition: Constant Speed･Position Stop
Sensor Condition: Distance Sensor (Step End)

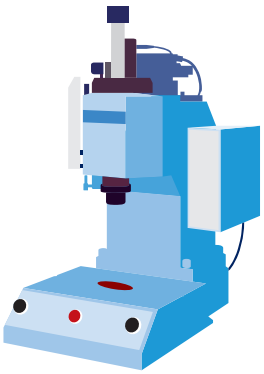


Maintenance

Maintenance･Repairs

A Janome servo press needs a lot less maintenance compared to a hydraulic press.

Hydraulic Press



- Oil Leak Repair
- Packing Replacement
- Cylinder Overhaul
- Oil Replacement
- Tubing Maintenance
- Pump Overhaul
- ⋮

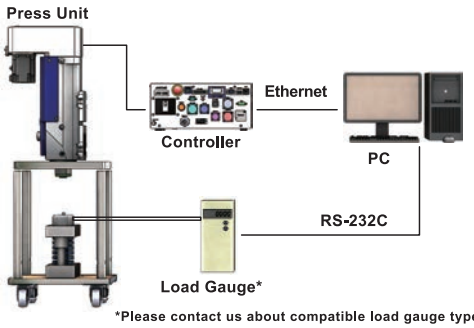
Servo Press

- Lubrication
- Load Calibration

Auto Amp Adjustment･Auto Load Calibration

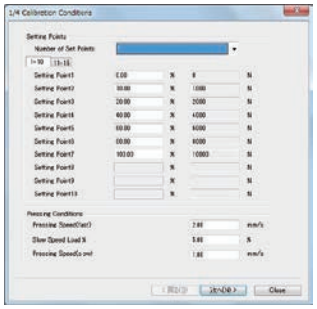
The tough job of load calibration is now much easier (but manual calibration is also available if needed).

Setup Example

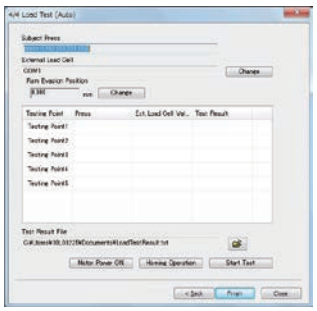


*Please contact us about compatible load gauge types.

Auto Load Calibration Using "JP 5 Designer" Software



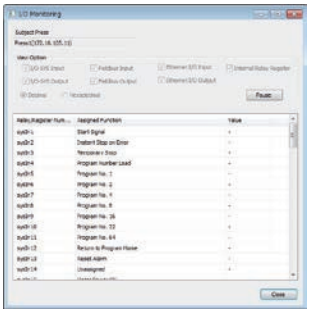
Calibration Conditions Setting Screen



Load Check Screen

I/O Monitoring Function

Make real-time I/O status checks while the press is running.

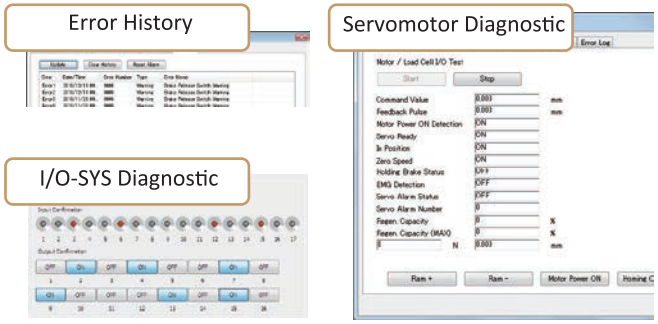


JP5 Designer

Diagnostic Functions* *Functions differ for the JP-S2.

Helpful "Diagnostic Mode" improves servo press maintainability.

- Error History
- I/O-SYS Diagnostic
- Servomotor Diagnostic



JP5 Designer

Options

○: Included with the press
●: Optional add-on

Category	Product	Variation	JP5	JP5 Stand Alone	JP-S2	Notes
Press	Fieldbus*1	EtherNet/IP	●	●	●	
		PROFINET	●	●	●	
		EtherCAT	●	●	●	
		CC-Link	●	●	●	
		DeviceNet	●	●	●	
		PROFIBUS	●	●	●	
		CANopen	●	●	●	
	Additional Interfaces*1	I/O-SYS	○	○	—	17 Inputs / 16 Outputs *Please choose NPN/PNP when ordering.
		Digital Input/Output (DIO)	—	—	●	17 Inputs / 16 Outputs *Please choose NPN/PNP when ordering.
		COM	○	○	○	
		MEMORY	○	○	—	
		I/O-S	○	○	—	
		Load Cell Output	●	●	○	
		Encoder Output	●	●	○	
		LAN	○	○	○	
		Analog Monitor Output	●	●	○	
Cables	Emergency Stop Connector Output Cable		—	—	●	Cable Lengths: 3m/5m
	I/O-SYS Cable		●	●	—	Cable Lengths: 2m/3m/5m
	DIO Cable		—	—	●	Cable Lengths: Connector only/2m/3m/5m
	Encoder Output Cable		—	—	●	Cable Lengths: 3m/5m
	Load Cell Output Cable		—	—	●	Cable Lengths: 3m/5m
	Analog Monitor Output Cable		—	—	●	Cable Length: 2m
	DC Power Input Cable (for compact controller)		●	—	—	Cable Lengths: 3m/5m
	Controller Power Cable, Press Motor Power Cable		—	—	○	Cable Lengths: 3m/5m/10m
	Press Unit to Controller Connector Cable		●	—	●	Cable Lengths: 3m/5m/10m/15m/20m
Other	Teaching Pendant*2	No Emergency Stop Switch	—	—	●	Teaching Pendant (JP5) Cable Lengths: 3m/5m Display Languages: en, ja, it, es, fr, de, ko, zh (simplifed and traditional), ro, cs, vi, hu Pendant Unit (JP-S2) Cable Lengths: 2m/3m/5m/10m Display Languages: en, ja, zh (simplified), ko
		With Emergency Stop Switch	—	—	●	
		With Emergency Stop Switch & Sub Switch	●	—	—	
	Teaching Pendant Short Connector		○	—	●	
	Maintenance Box		●	—	—	Cable Lengths: 3m/5m
	SWBOX Connector		○	—	—	
	DIN Rail Attachment Board		—	—	●	
	Touch Panel Interface		●	●	●	Windows®10 IoT Enterprise compatible
	PC Software (Designer, Sampler, Reporter)		●	●	●	Designer is included as a standard accessory for JP5 & JP–S2.

*1 Optional at time of order.
*2 This referrred to as a Pendant Unit for the JP-S2 Series.

Fieldbus

Using a fieldbus, each parameter (such as end load・position and sensor load・position) is read out from a PLC to the register and acquired. Choose from up to 7 different compatible fieldbuses.

EtherNet/IP　PROFINET　EtherCAT　CC-Link　DeviceNet　PROFIBUS　CANopen

Support

Support Centers

Japan Sales Offices

Tokyo Head Office	1463 Hazama-machi, Hachioji-shi, Tokyo 193-0941 Japan	Domestic Sales	TEL:042-661-2123 FAX:042-665-3354
		International Sales	TEL:042-661-6301 FAX:042-661-6302
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Nagoya Sales Office	J's Bldg. Nagoya 2F, 6-42 Maehama, Minami-ku, Nagoya-shi, Aichi 457-0058 Japan		TEL:052-819-5501 FAX:052-819-5503
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*Telephone calls answered by ARTTEC CO., LTD.

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Please check our website for product information, application examples, maintenance information and to request materials.

www.janomeie.com (English)
www.janomeie-europe.de (Deutsch)
www.janomeie.com/mx (español)

- Actual products may differ in color from their depictions in this catalog due to differences in the printing process.
- Before using our products, please be sure to check their respective operation manuals so that you can use them safely and correctly.
- Specifications may be modified without prior notice to improve product quality.
- For inquiries, please contact us at the telephone number above or through our website.

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