

High Precision Fastening / Compact

Tabletop NejiRobo® developed for Small Workpieces

Tabletop Screw Fastening Robot

Paired with the NPN/PNP Compatible RC755 Controller

NITOMAN® SR395DT

Features

- High Agility
- Advanced Servo System (Type-2 Z Axis)
- Switch Languages via Touch Panel (JP/EN)
- Advanced Thrust Force Controls (Type-2, Type-3D)
- SD550 Communications Function (Optional)



■ Increase Work Speed (Type-2, Type-3D)

Decrease Cycle Times drastically by increasing Motion Functionality with the help of the Advanced Servo System. Decrease pick up and Fastening time by 1.5 seconds each cycle.

The diagram shows an example configuration of the machine. (SR395DT Type-1)

■ Ease of Use

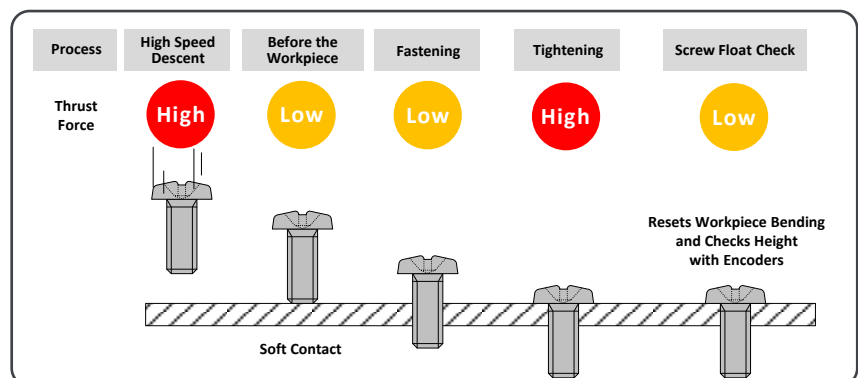
The Teaching Process is now easier with the Direct Teaching Function. Switch between Japanese or English using the Touch Panel.

■ Wide Range of Workpieces, Optimal Fastening

Set Fastening properties such as Torque and RPM individually for optimal fastening of Resin and Thin Metallic Sheet Workpieces. Steady Fastening with no deviation.

■ Thrust Force Control (Type-2, Type-3D)

Achieves the Optimal Fastening Conditions by automatically adjusting the Thrust Force depending on the Screw Type and Workpiece.



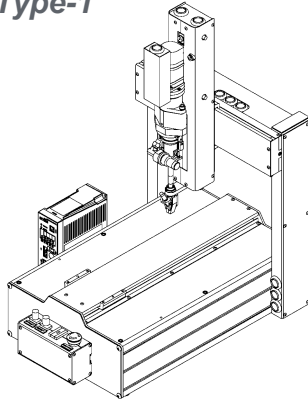
■ Monitoring Fastening Results (Optional) ※8

With the Driver Controller and Robot Controllers' Communication Function (Optional), monitor the Motion, RPM, Output Torque Changes, Fastening Results, Error Details etc. from the Teaching Pendant of the Driver Tool Unit.

Plus
+1

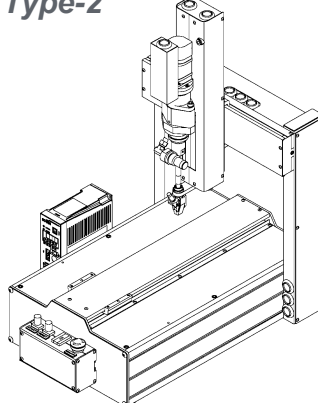
NejiRobo® NITOMAN® SR395DT

Type-1

**Low-Cost Standard Type**

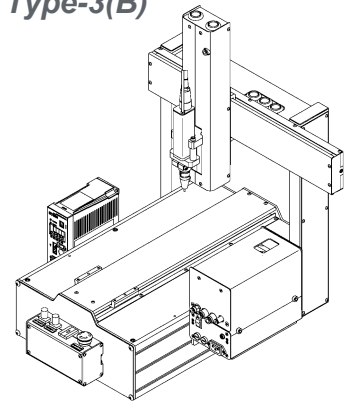
High Speed Fastening for Efficient Production

Type-2

**Variable Thrust Force Type**

Emphasis on High Speed and High Quality Fastening

Type-3(B)

**Screw Pick up Type**

Fasten Short Screws with High Reliability

Robot Specifications

[] Optional Specs.

Robot Controller Specifications

[] Optional Specs.

Type		Type-1	Type-2	Type-3		
				B	D	
Screwdriving Machine	No. of Axis		2	3	3	
	Thrust Control		No	Yes	No	Yes
	Feeding Mechanism		Blow Feed		Pick Up	
	Compatible Screws ※1※2		Machine / Self Tapping Screw			
		Nominal Dia.	2~3mm		[1.2]~2mm	2~3mm
		Length	Max.10mm		Max.5mm	Max.10mm
	Torque Range ※3		[0.2]~1.5N・m		[0.06]~0.4N・m	[0.2]~1.5N・m
	Driver Motor		KX Driver(By NITTOSEIKO)			
	Fastening Stroke		50mm		75mm	
	Screw Holding Mechanism		Vacuum Pipe Suction Type			
NG Detection Function		Torque NG(Screw Strip), Low Screw(At Screw Feeder), Screw Float				
Robot	Maximum Payload(Y Axis)		6kg			
	Motion Range	X Axis	190mm		305mm	
		Y Axis	335mm			
	Standard Base Dimensions		160 × 160mm(X × Y)			
	Maximum Movement Speed	X Axis	600mm/sec			
		Y Axis ※4	600mm/sec			
		Z Axis	—	600mm/sec		
	Coordinate Precision		±0.01mm			
Air Supply		0.4~0.5MPa				
External Dimensions (Robot Only)	Depth xHeight	565 × 485mm				
	Width	385mm		500mm	565mm	
Screw Feeder		FF503H(By NITTOSEIKO)	DF200(By NITTOSEIKO)	FF311DR(By NITTOSEIKO)		

Model	RC755-T□ ※6
Power Supply	Single Phase AC200 – 230V 50/60Hz [Single Phase AC100 – 115V 50/60Hz]
No. of Axis	Maximum 3 Axis
Coordination Method	PTP Control. Open Loop Control(X, Y Axis) PTP Control, Semi Closed Loop Control(Z Axis)
Coordinate Detection Method	Incremental Encoder
Serial Port	RS422(For Teaching Pendant)
Memory	Flash Memory Backup
External Input ※5	16 Standard User Ports [32 Point Option Available]
External Output ※5	16 Standard User Ports [32 Point Option Available]
Field Network	[CC-Link]
Teaching Method	MDI, Remote Teaching, Direct Teaching
Point Management	Total Points : 1,000 Points
External Dimensions(WxHxD)	Built into SR395DT
Teaching Pendant	Handy Type Touch Panel (With Emergency Stop Switch, Deadman Switch) The Pendant can also be used as a Control Panel.
PC Compatible Software	[GX Developer or GX Works2 or newer] ※7

※5 Depending on the Machine Configuration, External I/O may be used as part of the Screwdriving System.

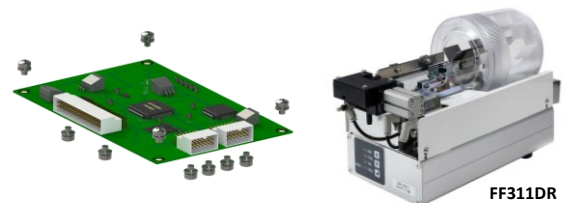
※6 The □ in the model name indicates the Type. T1 : Type-1, Type-3B T2 : Type-2, Type-3D

※7 GX Developer as well as GX Works are Products of MITSUBISHI ELECTRIC Corporation.

※8 Tightening Torque / Angle monitoring【Optional】are subjected to the Machine Specification.

Recommended Uses

By combining the FF311DR (By NITTOSEIKO) with the SR395DT, fastening of “Spring washer + Plane washer Screws” becomes possible.



FF311DR

NITTOSEIKO CO.,LTD.

Assembly Machine Division / Shiroyama Plant
Global Sales Section

2, Shiroyama, Ayabe city, Kyoto 623-0003, Japan

TEL: +81-773-42-1290 FAX: +81-773-45-3680

URL: <https://global.nittoseiko.com/>

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