

**ESTIC**

ELECTRIC  
HANDHELD NUTRUNNER



*Handy 2000*



# Advanced Technologies Combined to Fasten Critical Areas throughout Worldwide Production



**QUALITY**  
ISO5393

**ENVIRONMENT**  
RoHS compliance  
Energy saving

**ERGONOMICS**  
Pulse fastening

# ELECTRIC HANDHELD NUTRUNNER



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The next generation handheld nutrunner "Handy 2000" was created based on the concepts of quality, environment, and ergonomics

Estic has supplied the most advanced nutrunner systems to automotive and other industries and received high evaluations. The electric handheld nutrunner "Handy 2000" was produced within Estic using the finest electronic control, machinery and program technology available. The "Handy 2000" nutrunner was created based on the concepts of high-quality, environmental friendliness and ergonomic design. It incorporates pulse technology to reduce the reaction during fastening as well as the working load to the operator. The nutrunner is designed to preserve the environment by RoHS compliance and energy saving through electrical operation. Its stable controlling performance achieves the same high quality and accurate fastening as that of larger fixture type nutrunner systems. The innovative handheld nutrunner available only by Estic continues to support production in the future.

*Handy 2000*



# 【ISO 5393】

The high level fastening quality required for critical areas is achieved with the advanced measuring capability and controlling performance of the Handy 2000 manufactured based on ISO9001 to offer the highest quality

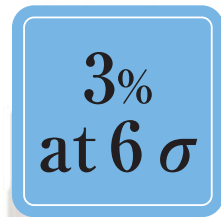


Certificate of indicator

Performance inspection report

## Traceability

The fastening performance of the nutrunner is evaluated with inspection equipment (indicator) that complies with the international standard ISO5393 and the inspection report is issued with each tool.



## Excellent fastening accuracy

The fastening performance of 3% at 6σ (3σ/x = ± 3%) is guaranteed by the inspection equipment according to ISO5393.

## High level quality control

Handy 2000 is manufactured according to ISO9001 and supplied and is serviced with the international standard level.

## High speed sampling and response

The torque and angle readings are monitored every 1/2000 second to control the target values.

# 【Energy saving】 【RoHS compliance】

Toward Earth and environment friendly products ----  
Estic's electric handheld nutrunners support future production with the aim to harmonize with the environment



## Energy saving tool

Improvement in energy efficiency is a must to reduce CO<sub>2</sub> emissions which promote global warming. The electric handheld nutrunner "Handy 2000" consumes about 1/20 the energy in comparison with compressed air powered pneumatic nutrunners. It is an energy saving tool that allows operation while reducing negative impacts to the environment.

## Clean and quiet working environment

Handy 2000 does not generate such oil mist or noise as generated by pneumatic nutrunners, and thus constantly provides clean and quiet working environment.

## RoHS compliance

Handy 2000 conforms to RoHS directive of EU (European Union) stipulating abolition and alternatives of the hazardous materials such as lead with the consideration to environmental friendliness.

### 【What is RoHS Directive?】

RoHS is the acronym for Restriction of the use of certain Hazardous Substances in electrical and electronic equipment, and the restriction is applied by European Union (EU) to 6 substances of lead, mercury, cadmium, hexavalent chrome, PBB (polybrominated biphenyl), and PBDE (Polybrominated diphenyl ether) in electric and electronic equipment marketed in EU.

ELECTRIC HANDHELD NUTRUNNER



# 【Pulse fastening】

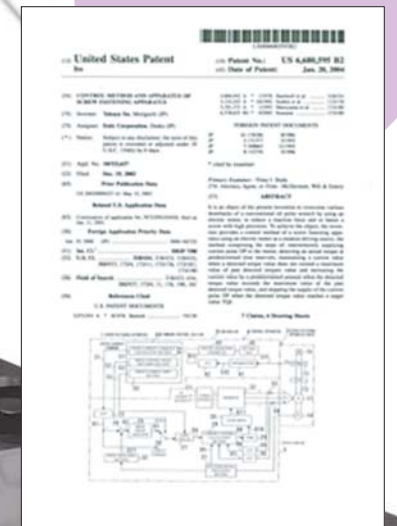
Reaction during fastening has been significantly reduced while maintaining the high torque accuracy available only with electric tool

Estic's patented pulse technology reduces the reaction generated during fastening with an electric handheld tool. The required torque values are read at 1/2000 of a second to control the subsequent fastening force (electric current). The Handy 2000 allows highly accurate and safe fastening without the need of a reaction device.

Letter of patent (Japan)



Letter of patent (U.S.A.)

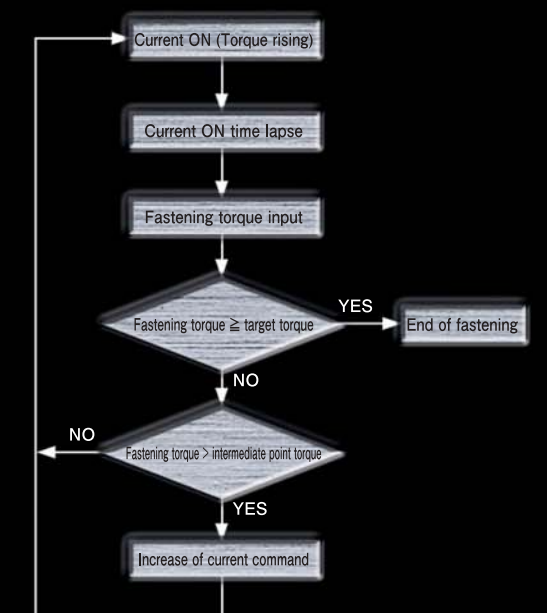
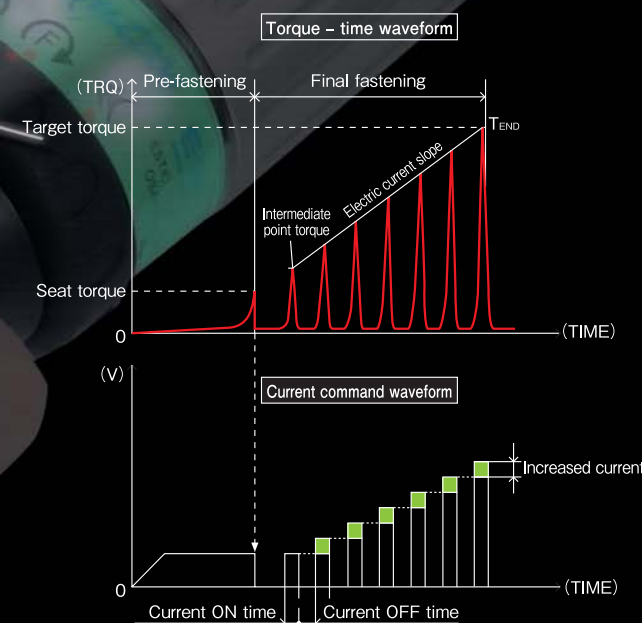


Pulse fastening  
Reaction : small

Conventional electric handheld tool  
Reaction : Big

Torque change according to the current command

Command flow chart



ERGONOMICS  
ELECTRIC HANDHELD NUTRUNNER

ERGONOMICS  
ELECTRIC HANDHELD NUTRUNNER

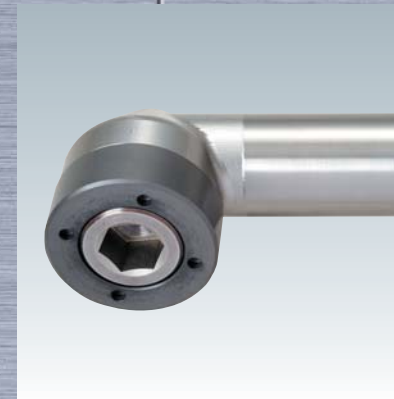


# ANGLE TOOL & STRAIGHT TOOL

## Customization examples



⚙️ Crow foot gear



⚙️ Flush socket



⚙️ Long switch lever



⚙️ Short switch lever

## ANGLE TOOL

### ⚙️ Titanium alloy angle head

The angle head made of titanium featuring light weight and high tensile reduces the operator's load during fastening and provides high durability.



**EH2-R1020-A**  
※Full scale

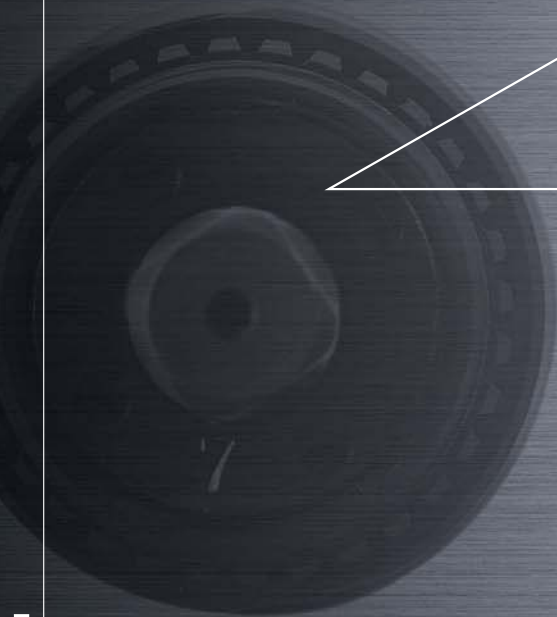
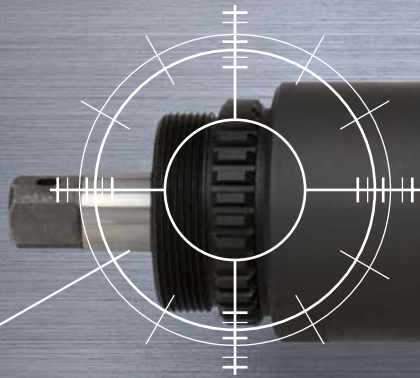
### ⚙️ Lightweight and high speed motor

The lightweight motor is used to reduce the burden to the operator from the tool weight during operation. The high speed motor is used to improve the productivity.

## STRAIGHT TOOL

### ⚙️ Involute spline

Allows various applications including multiple spindle configuration and mounting on an assisting arm. The flanged spindle is provided with the high torque model.



**EH2-R1016-S**  
※Full scale

## Customization examples

⚙️ Multi-spindle



⚙️ Assisting arm



⚙️ Socket changer



⚙️ Ball plunger



Contact us about the details for the customized products.



# PISTOL TOOL

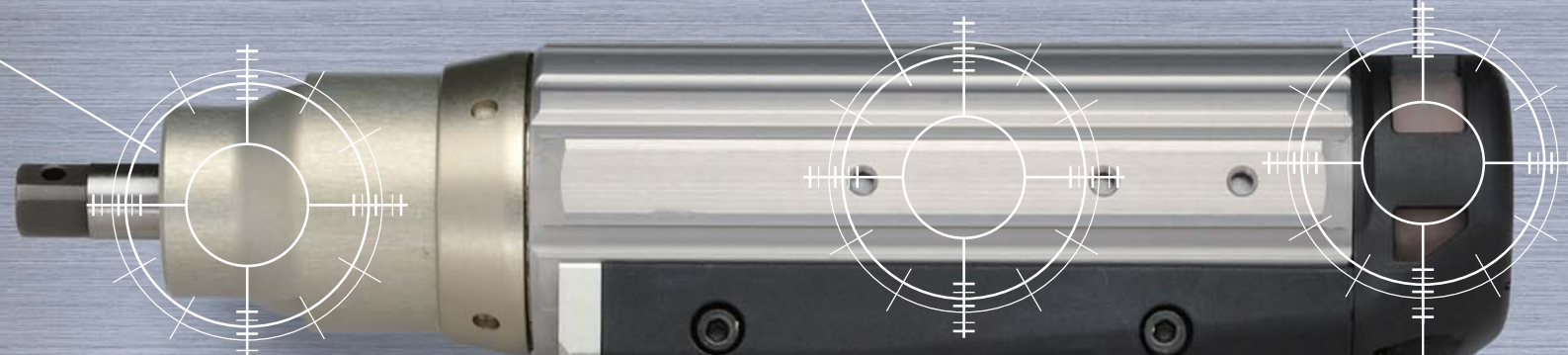
## Optional involute spline

Allows various applications including multiple spindle configuration and mounting on an assisting arm.



## Rail guide

A rail guide is used for various applications such as hanging fixture to mount easily and securely.



## The tool with the hanging fixture (EH2-PH02) mounted



# PISTOL TOOL

## Compact tool with high speed exceeding 1000rpm

Though compact and lightweight, the high maximum speed of 1247 rpm (16N·m model) is achieved for ease of use and high productivity.

## 50N·m pulse special model (EH2-P1050-P)



## Indicator window

An omnidirectional confirmation window with excellent visibility is used to make the operating condition visible at any time.



EH2-R1016-P  
※Full scale

## Ergonomically suited grip

The pistol type grip is used for operators to easily grip and prevent fatigue during long period operation.



# LOW TORQUE ADAPTATION TOOL

## Lever Start Type



Push the lever to activate the tool, and release it to stop.

## Push-to-Start Type

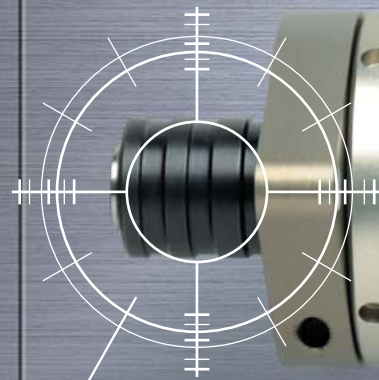


Push the bit onto the screw to activate the tool, and release it to stop.

## Pistol tool (EH2-R0005-P)



Critical security parts require traceability, whether the torque is small or large. This tool helps you achieve better quality with automobile industry products, including sensors, cables, and airbags, as well as products for the aircraft and home electronics industries.



## Bit Holder

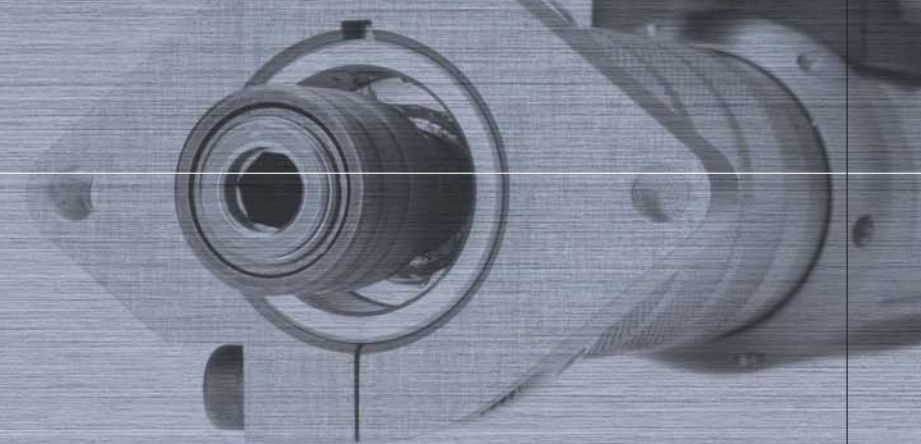
Slide-and-latch – Easily fit and remove the bit holder.  
Two options to activate the tool – Lever start and push-to-start.

## Removable Flange

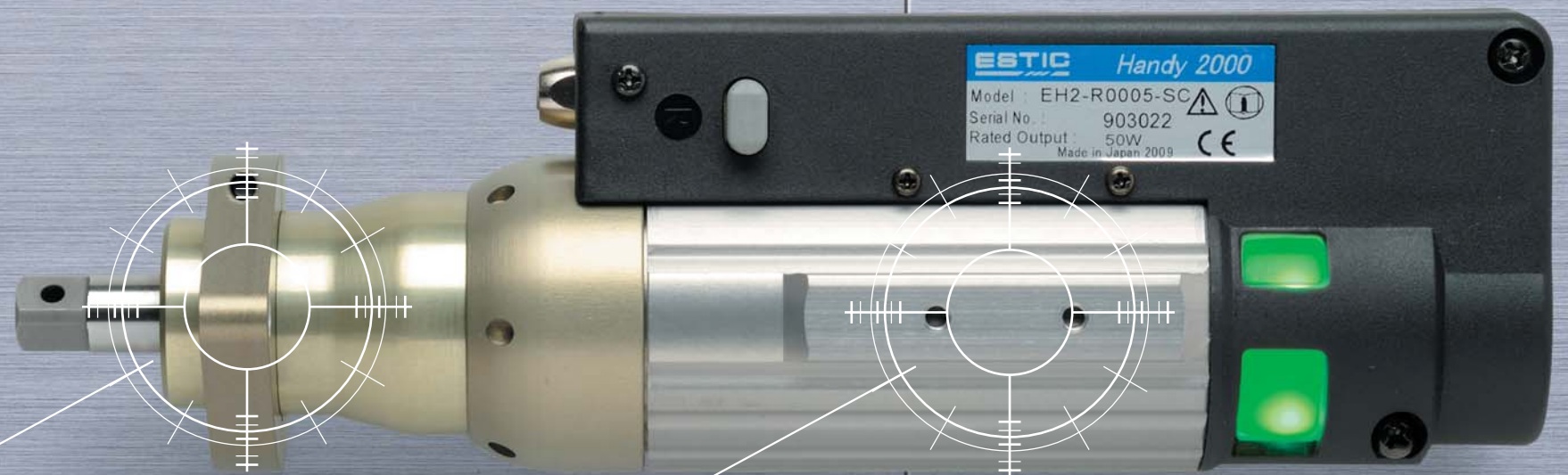
Remove the flange when using a single spindle. Utilize this feature together with the rail guide for use in various applications.

## Rail Guide

Rail guide employed for a multiple-spindle unit configuration and assist arms. Same horizontal type hanging hook can be used as pistol models.



EH2-R0005-SP (Push-to-start type)  
※Full scale



EH2-R0005-SC (Connector start type)  
※Full scale

ESTIC Handy 2000  
Model : EH2-R0005-SP  
Serial No. : 903016  
Rated Output : 50W  
Made in Japan 2009

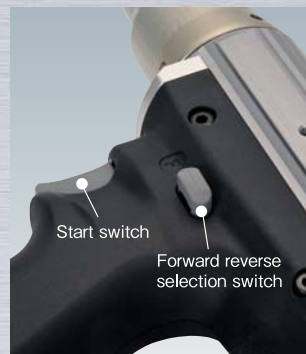
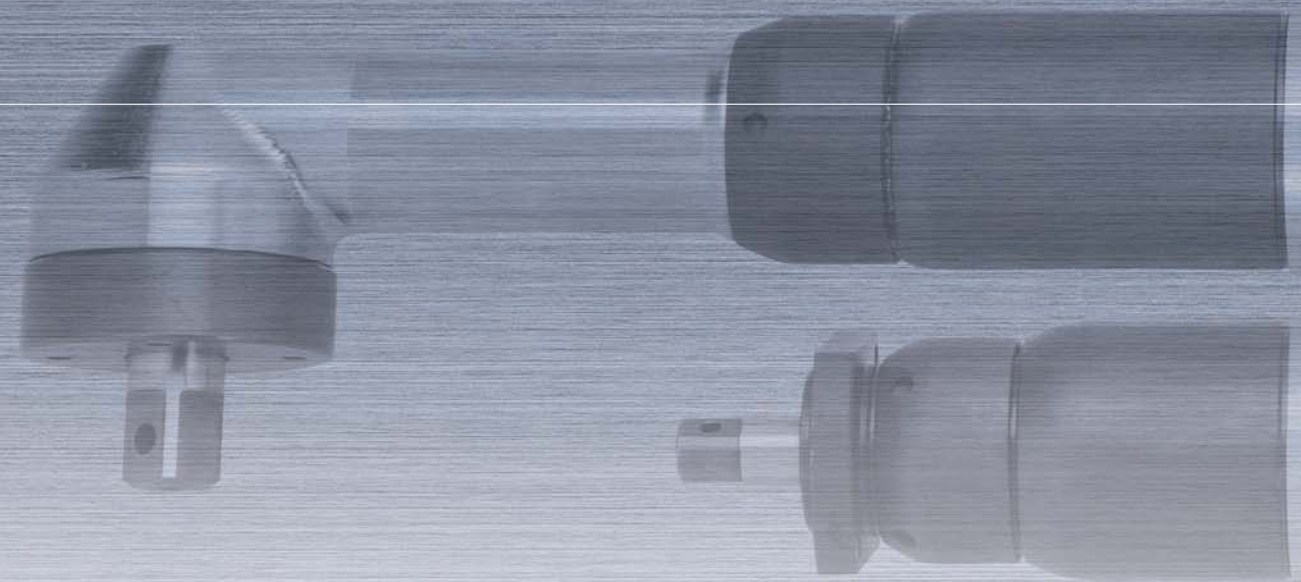
ESTIC Handy 2000  
Model : EH2-R0005-SC  
Serial No. : 903022  
Rated Output : 50W  
Made in Japan 2009



# Tool (functions)

ANGLE TOOL, STRAIGHT TOOL & PISTOL TOOL

Advanced functions support usability, accuracy and durability during fastening



## High-intensity LED lamps

To inform the operator of the operating condition in 7 colors with the LED lamps such as for OK/NG of the fastened results (OK: green & NG: red or yellow) and fastening direction (forward rotation: blue & reverse rotation: purple), etc. The lamps are visible at any angle regardless of the posture of the operator.

## Start and forward reverse selection switch

The start trigger utilizes an IC contactless switch to offer high operability and reliability. The forward reverse selection switch provides reset function in addition to change the rotating direction. The push turn system that can be operated by a single hand is incorporated for the pistol tool.



## Protection handle

The shock resistant handle is mounted to the aluminum alloy frame to minimize the impact if accidentally dropped. The ergonomically designed grip allows easy operation and reduces operator burden during extended use.

## Inner shell connector

The connector to connect the tool and the cable is installed in the frame of inside handle. It provides excellent durability against drop or impact.



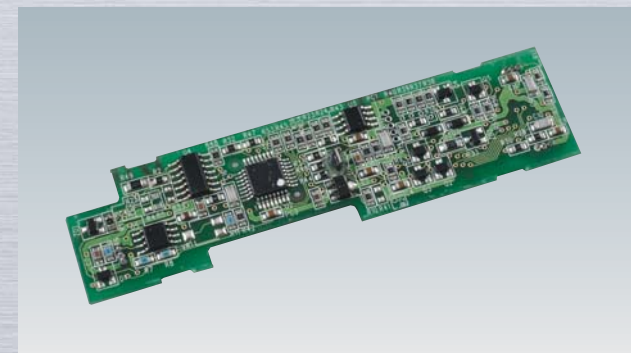
## Angle/rotation speed sensor

The environmentally friendly high resolution resolver detects the angle used to control the servo-motor feed-back process. The resolution of 2048 or greater per rotation assures highly accurate speed control and fastening rotational angle.



## Torque sensor

The strain gage type torque transducer is built in to detect the torque. Gages at 8 points and external disturbance self-cancellation function make the high accuracy torque detection possible.



## Intelligent ID

The controller can be quickly setup when a tool is connected. An ID memory chip storing torque calibration value, gear ratio, and tool model is embedded into the tool. The records for frequency of repair and fastening counts are helpful for maintenance control.



## Reduction gear

The compact design of the high power planetary gear assures excellent durability.



# Controller (specifications)

Various field needs including visibility, operability, expandability, and space saving are provided



## Interactive liquid crystal display

You can set the display by simply inputting numbers according to the instructions displayed on the screen. You can set various programs for the display through the controller.



## Large LED featuring high visibility

Large size 7 segmented LEDs are used for the display panel. OK and NG are indicated in an understandable way with green and red respectively.



OK indication



NG indication

## Centralized wiring on the bottom face

I/O terminals are concentrated on the bottom face to help package the wiring and save the space.

### Connector for the tool cable

The system is automatically recognized when the tool is connected.

### Control I/O signal connector

Digital I/O compatible with both PNP and NPN modes capable of free allocation (IN: 16 points OUT: 16 points)

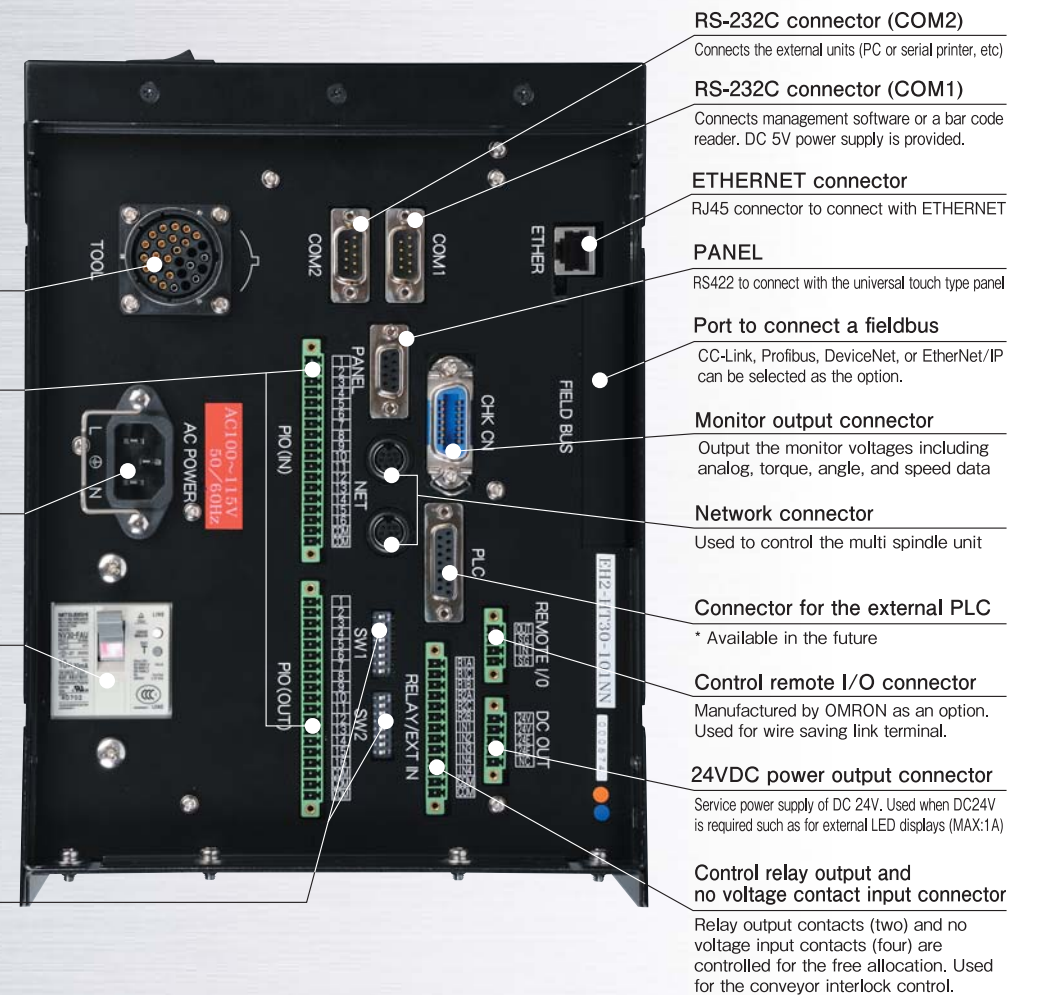
### Connector for the AC power supply

Connector for AC100V and AC200V power supply cables

### Earth leakage breaker for the main power supply

The earth leakage breaker conforming to various international standards

### DIP switch for setting the system



### RS-232C connector (COM2)

Connects the external units (PC or serial printer, etc)

### RS-232C connector (COM1)

Connects management software or a bar code reader. DC 5V power supply is provided.

### ETHERNET connector

RJ45 connector to connect with ETHERNET

### PANEL

RS422 to connect with the universal touch type panel

### Port to connect a fieldbus

CC-Link, Profibus, DeviceNet, or EtherNet/IP can be selected as the option.

### Monitor output connector

Output the monitor voltages including analog, torque, angle, and speed data

### Network connector

Used to control the multi spindle unit

### Connector for the external PLC

\* Available in the future

### Control remote I/O connector

Manufactured by OMRON as an option. Used for wire saving link terminal.

### 24VDC power output connector

Service power supply of DC 24V. Used when DC24V is required such as for external LED displays (MAX:1A)

### Control relay output and no voltage contact input connector

Relay output contacts (two) and no voltage input contacts (four) are controlled for the free allocation. Used for the conveyor interlock control.

## Basic specifications for the controller

- Fastening methods : Torque method, torque with angle monitoring method, angle method, torque or angle method, torque and angle method and reverse motion angle control method
- Fastening mode : Selection (Pulse mode only for EH2-P1050-P) between the direct mode (direct force fastening) and pulse mode (reaction reduction fastening)
- No. of the fastening channel setting : Max. 99 channels
- Fastening result record : Max. 33,000 records (free allocation default data)
- Torque curve history : Max. 30 records (Fastening OK: 20 records & fastening NG: 10 records)
- Ethernet : Connection with ETHERNET to connect management software in high speed at a remote location. With the use of special protocol it is possible to monitor, control, and collect the resultant data of fastening.
- FieldBus : Compatible with the general Filedbus of Profibus, DeviceNet, CC-Link, and EtherNet/IP with the optional interface cards mounted. Fastening is controlled and the results are output by I/O. The word format data such as torque can be sent by allocating it to I/O.
- Remote I/O : Mounting the optional remote I/O interface function permits the connection with OMRON B7A model link terminal (16 points type with 1 terminal each for the I/O). The terminal can be used for the addition of I/Os and wire saving at the location remote from the controller. The free allocation is possible in the same way as with PIO.
- Statistical function : Compatible with QS-9000 statistical process control
- Batch counter function : nx OK and nx NG output
- External touch panel : The torque values and number of fastening operations can be displayed on the touch type panel and also jobs and the channels can be changed on the touch type panel. As the display screen can be designed by users, necessary and appropriate human-machine interfaces can be constructed.

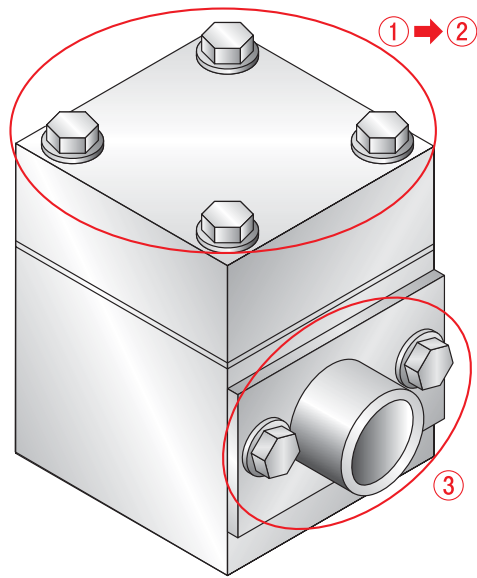


# Controller (functions)

## Versatile functions are included to further enhance efficiency in fastening

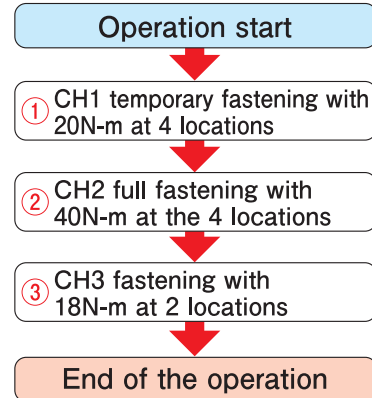
### Job control function

A convenient function to permit the integrated control in the various torque fastening operation. The max. 99 jobs can be controlled with the function. All of the channels and fastening operations can be programmed with a maximum of 30 steps per job.



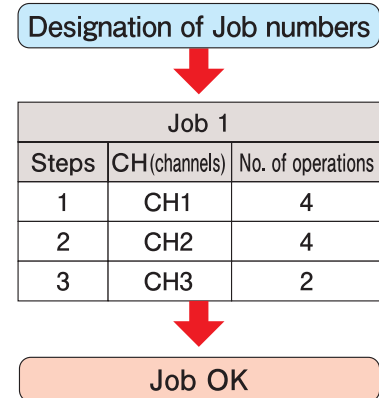
For instance, when 4 locations must be temporarily and then fully fastened with gaskets installed at the 4 locations, and then parts to be installed at two locations

#### Operation flow



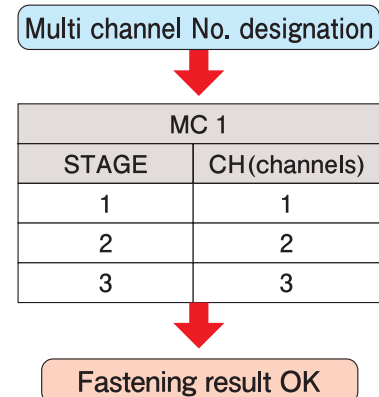
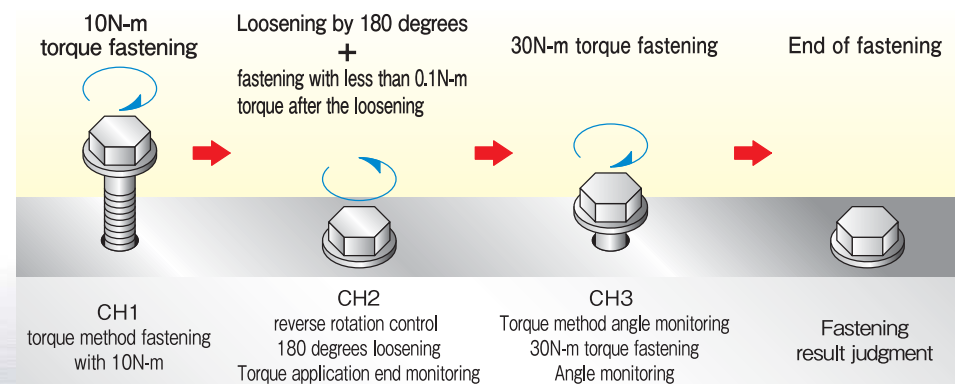
A series of steps is programmed as a JOB parameter in the job control function so that you may execute a job by designating the job number and the job end may be informed with the JOB OK output message.

#### Job control function



### Multi channels

Tightening, loosening, and retightening are necessary to detect the fitting or cross-thread condition in the bolt fastening operation. You can avoid the troublesome channel change operation and simply carry out the fastening in continuity by continuously defining the necessary fastening channels as one multi channel system.



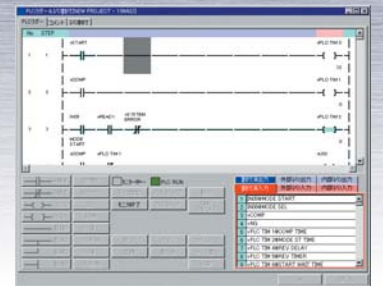
The maximum 99 channels including the multi channels and normal channels can be set. The set multi channels can perform as one CH in the job control function.

### High speed seating function

When fastening a screw at high rotation speed with a low target torque, the servo motor cannot stop promptly. This creates excess torque (overshoot), causing the fastening torque to be uneven and the workpiece to be damaged. As a solution to this, Handy2000 employs overshoot reduction software to make your fastening faster and more secure.

### Simplified PLC functions

A simplified sequence control function with AND, OR, and timer control is equipped. Logic programs can be set to select the ON lamps or set off a buzzer for a certain length of time depending on the fastening result of OK or NG.



Screen showing the management program

### Free allocation function

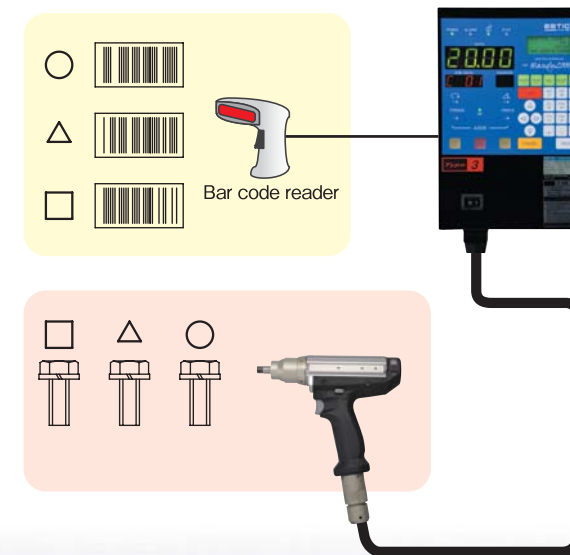
The fastening result data stored in the controller and outputted on the external unit after every fastening can be freely selected. The function to select only necessary items can make the data size smaller. The control signals for the system control connectors (PIO), remote I/O, relay output, and no voltage contact input can also be freely allocated.

### Multi-spindle function

A maximum of 10 spindles can be operated for synchronous fastening without the help of external controls. The synchronous fastening allows for shorter operating times.

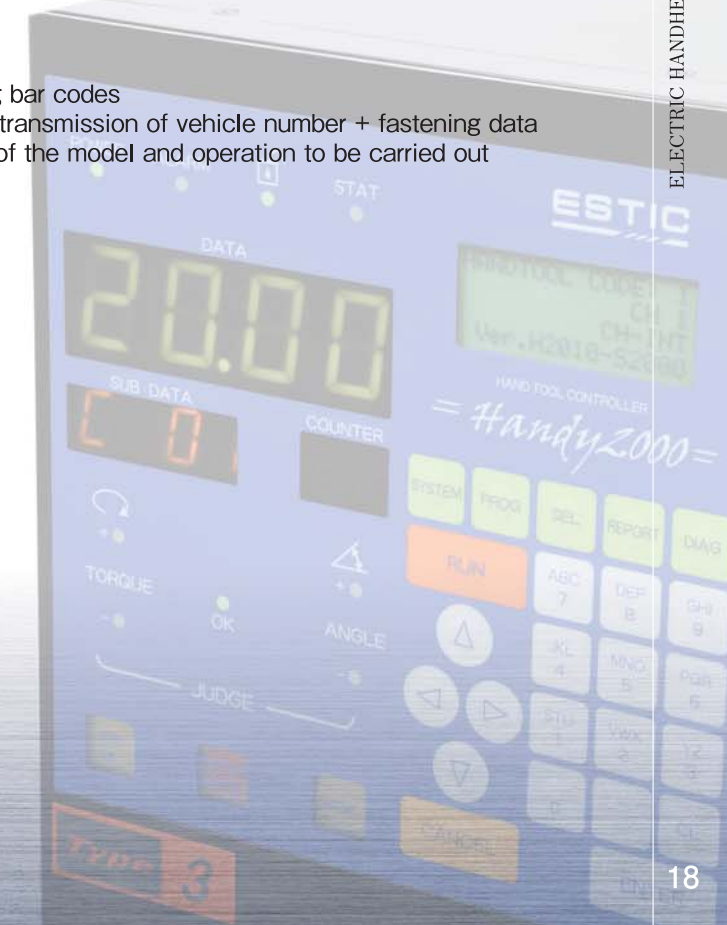
### Compatible with bar code readers

A bar code reader can be directly connected with the controller. The loaded data can be reflected in the fastening result. The fastening channel and job can be changed based on the loaded data when the identifier function is in use.



By reading bar codes

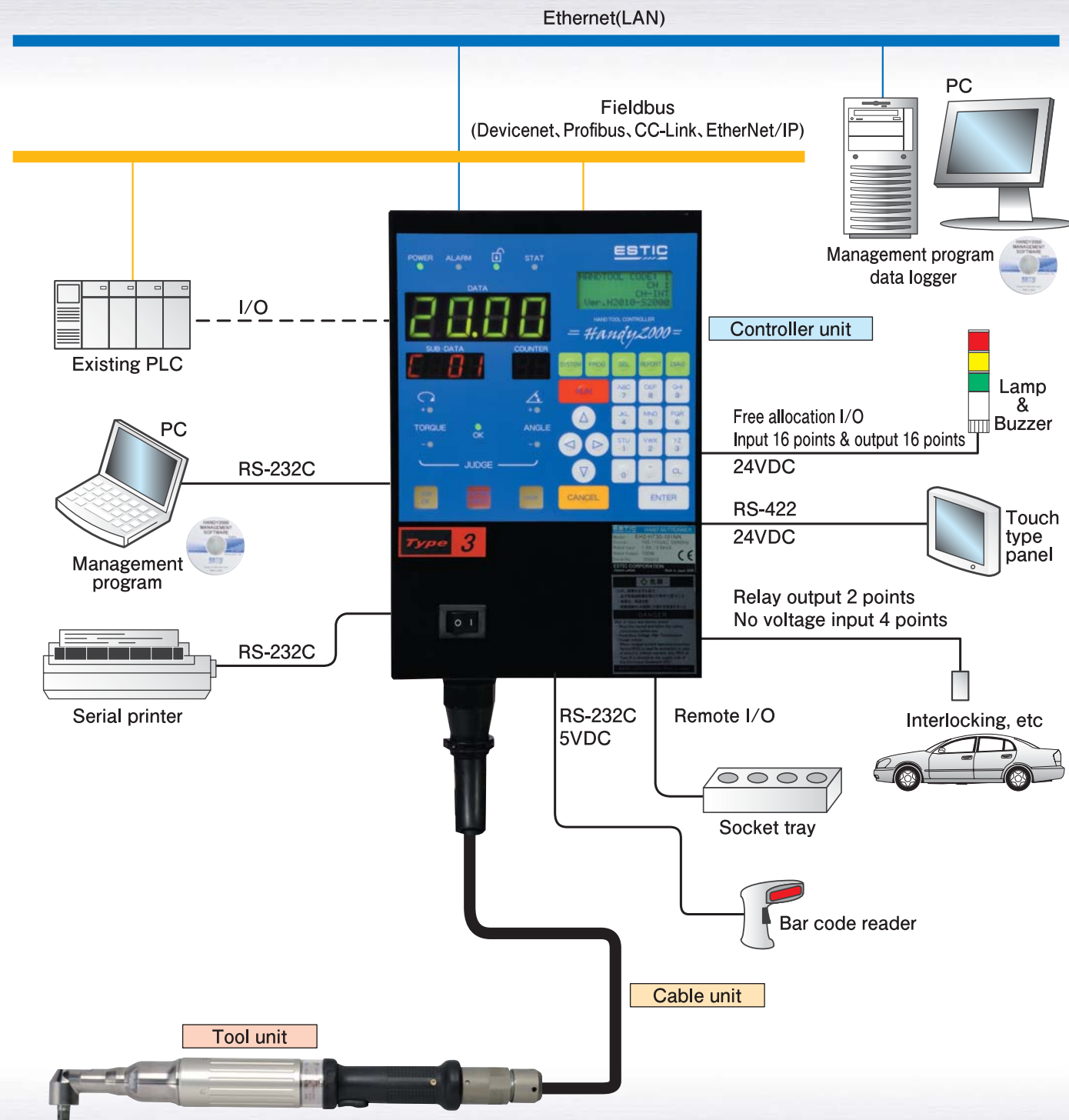
- Storage/transmission of vehicle number + fastening data
- Change of the model and operation to be carried out





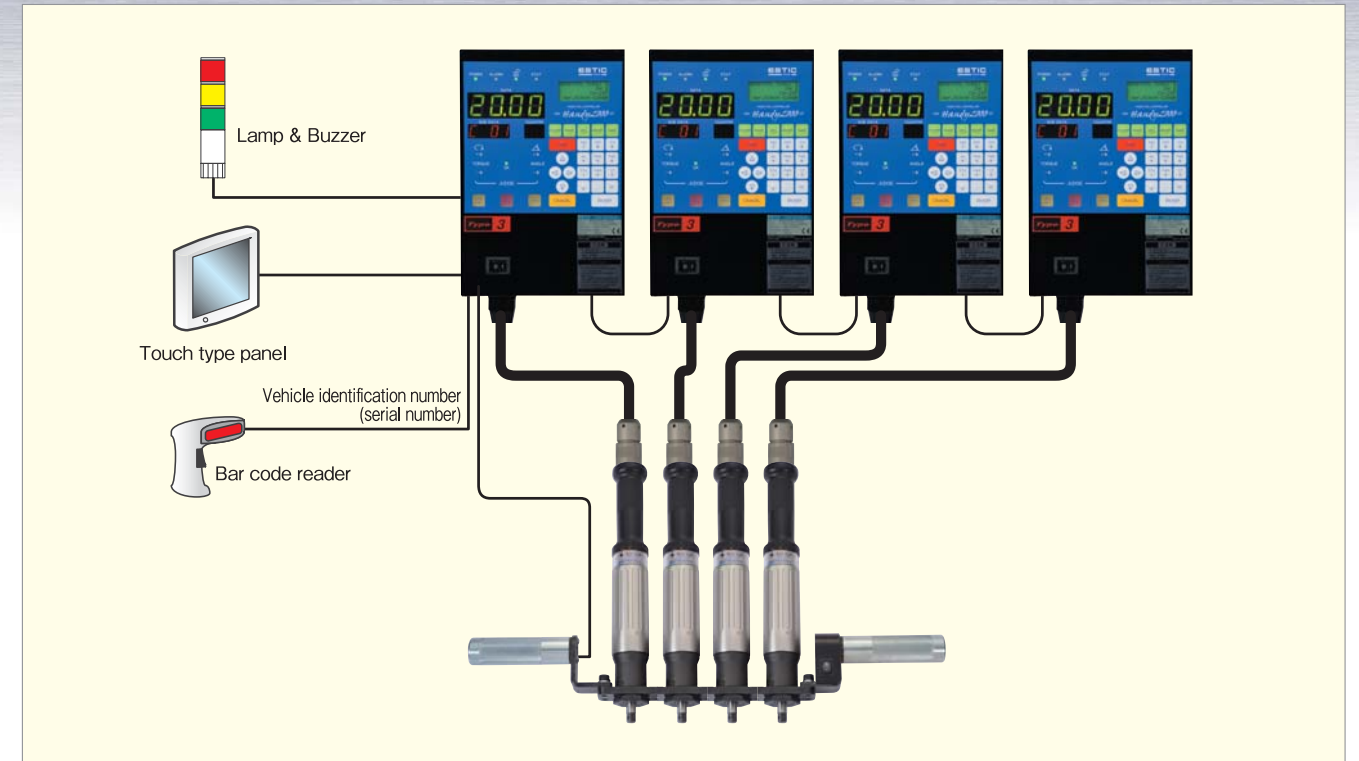
# Controller (system configuration)

## Controller (system block diagram)



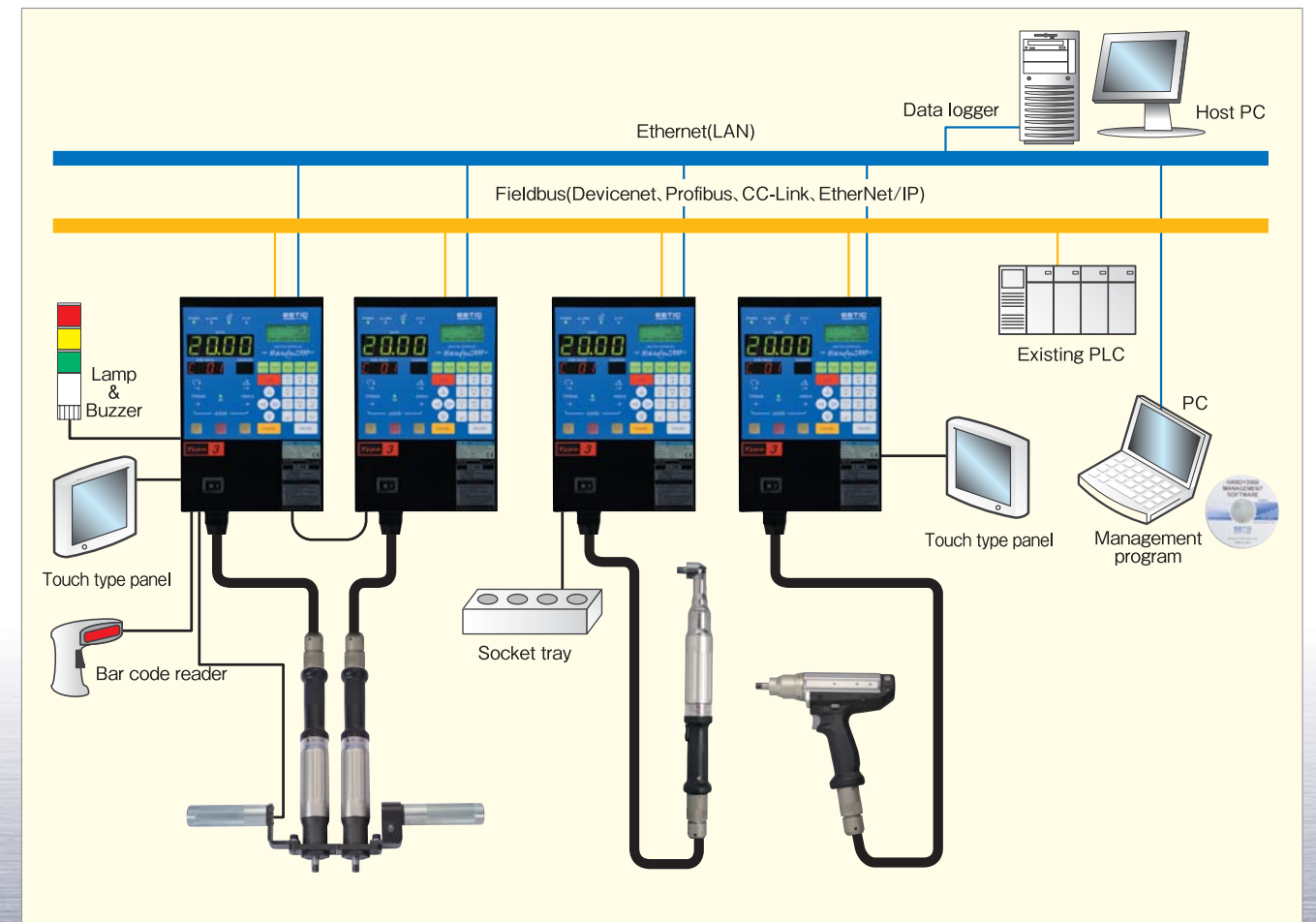
## Multi spindle connection

Channels can be freely selected depending on the vehicle identification number. The fastening condition is set on the master controller and sent to the local controllers via NET cables for each fastening.



## Expanding network connection

The fastening results for up to 50 units\* can be compiled via the hub unit on ETHERNET. This wire saving connection can be used for the channel setting and interlocking from the outside with the use of FieldBus. \* Variable depending on the network structure.





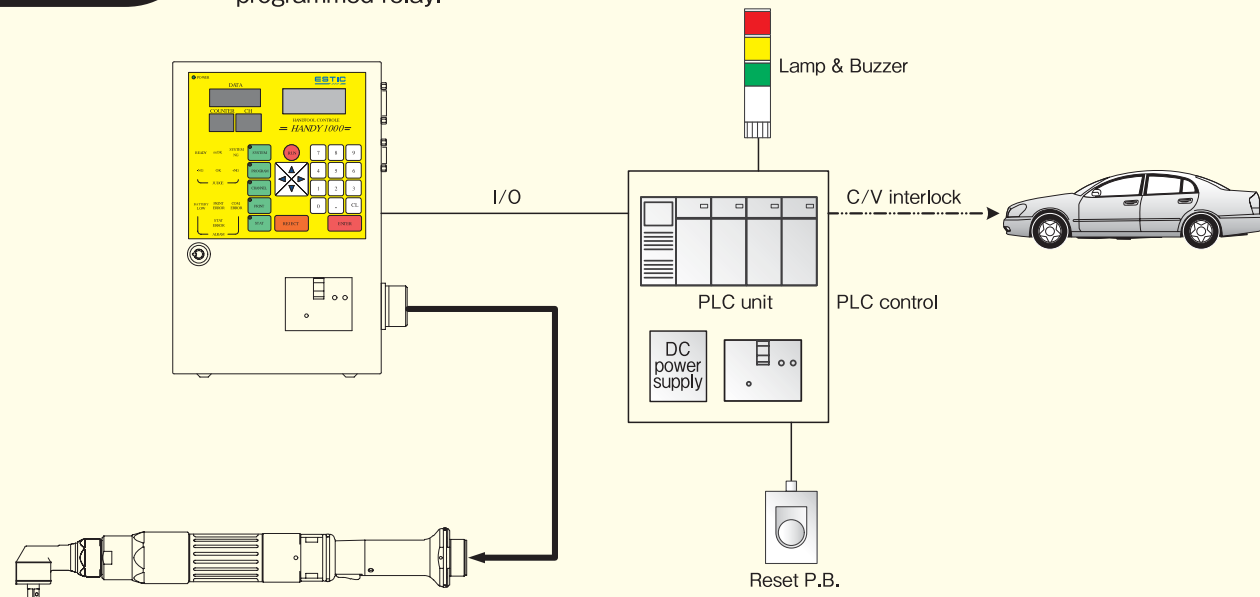
# A cost reduction example with the new functions

Peripheral units required in the past are not necessary  
Low cost and space saving system can be configured

## Lamp & Buzzer control

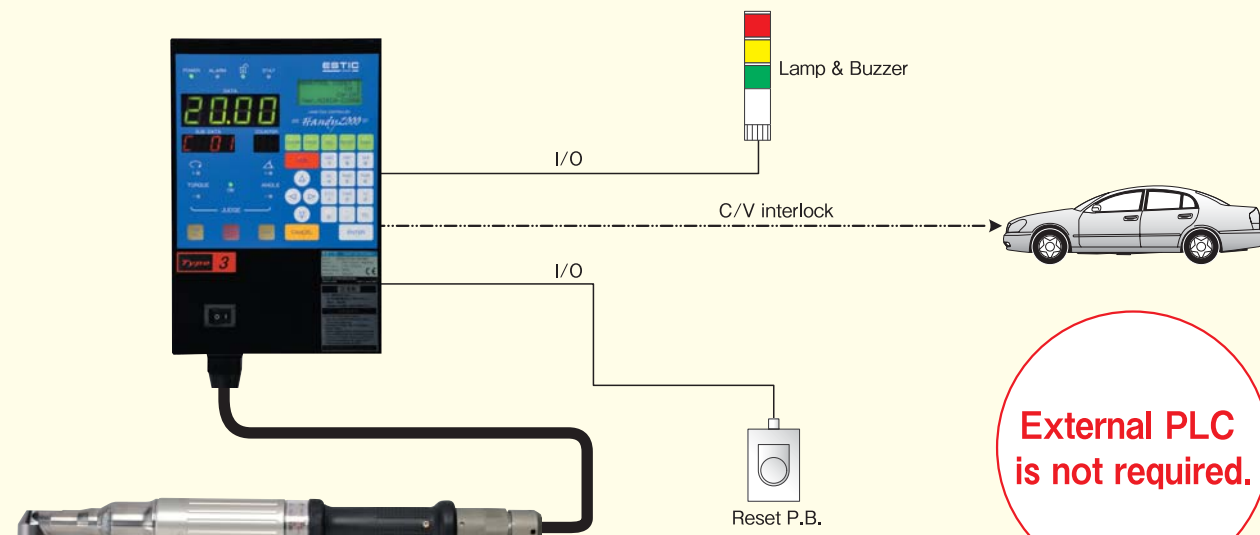
### Conventional model

The lamp and buzzer are controlled with OK and NG signals sent from the controller via programmed relay.



### Handy 2000

The lamp and buzzer can be directly controlled with the simplified PLC and I/O free allocation functions. Additional power supply for the peripheral units is not required as 24VDC power supply is provided.

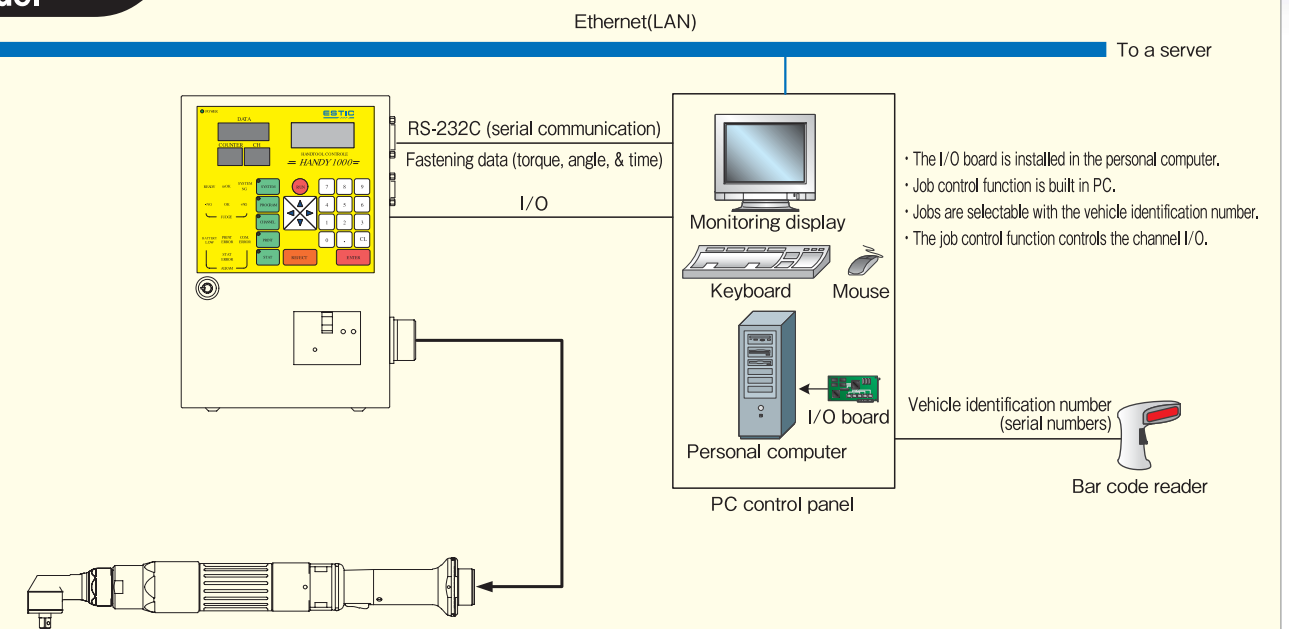


**External PLC is not required.**

## Data control + Interlock control

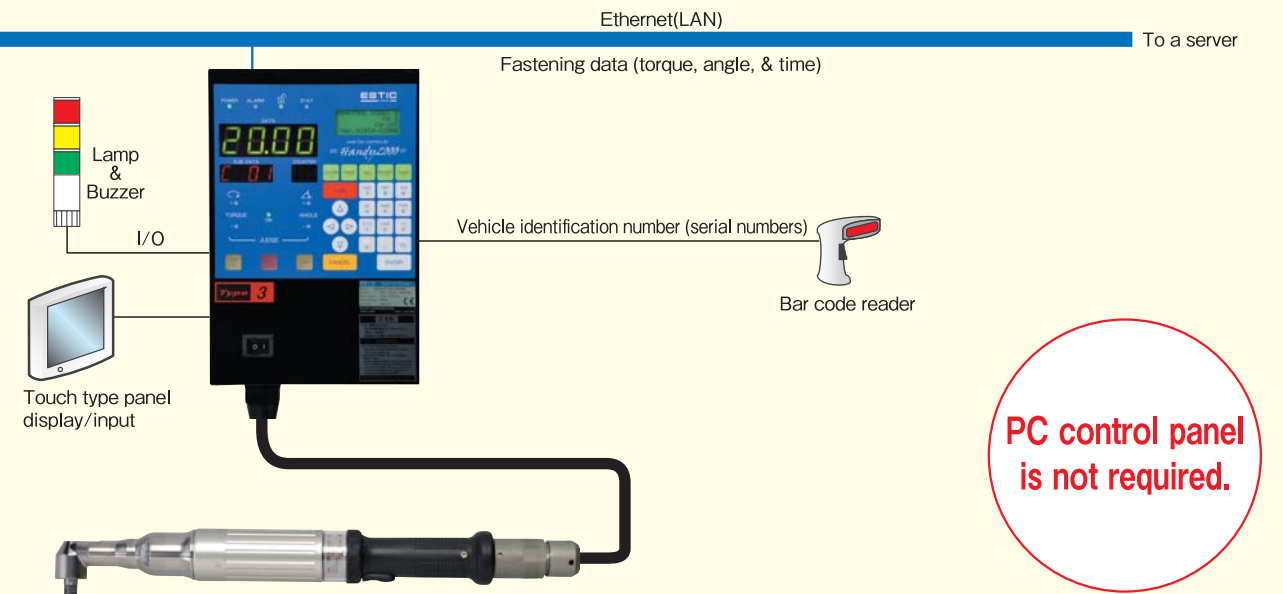
### Conventional model

The channels are controlled with the external PC.



### Handy 2000

The fastening is controlled in the channels appropriate for the car model and parts with the job control function and job selecting function based on the vehicle identification number. 5VDC power supply for bar code readers is built in.



**PC control panel is not required.**



# Handy 2000 Management Software

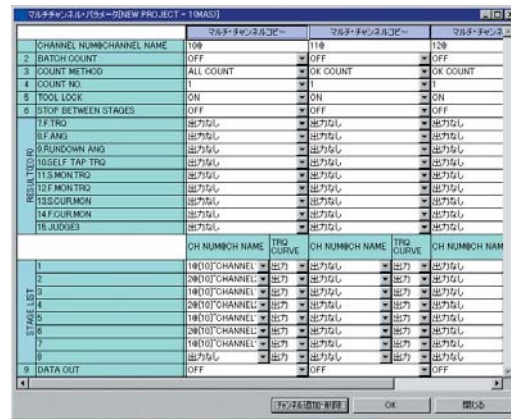
## Handy 2000 Management Software is a dedicated program used to take full advantage of all the Handy 2000 functions

### Functions to be set

Parameters can be loaded from the controller, written into the controller, stored and printed. The copy function is provided to help with quick start-ups.



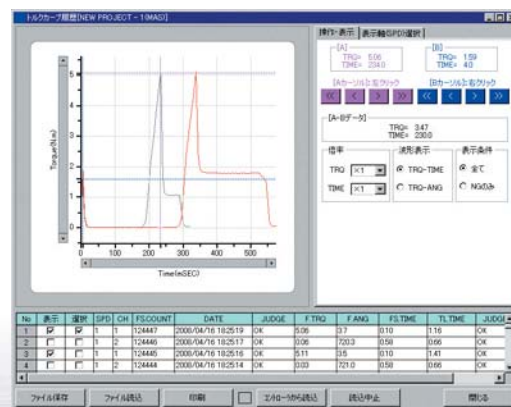
Program parameters



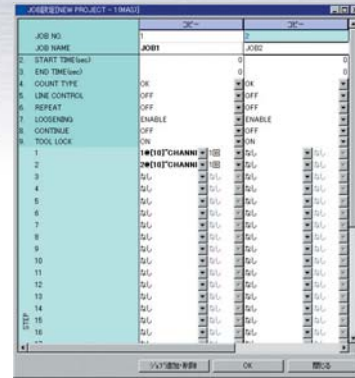
Multi channel parameter

### History function

Fastening results, torque curves, system error data recorded in the controller can be loaded, displayed, and printed with the function. Data is stored in CSV file format and can easily be imported into spreadsheets.

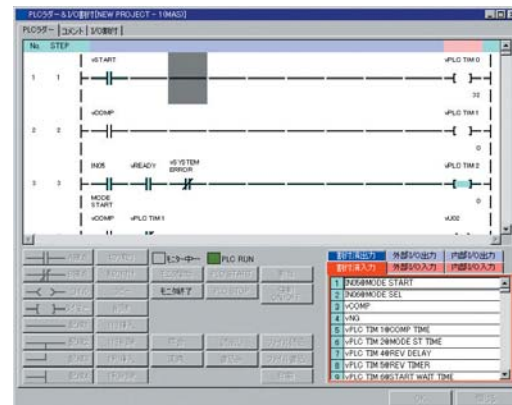


Torque curve data

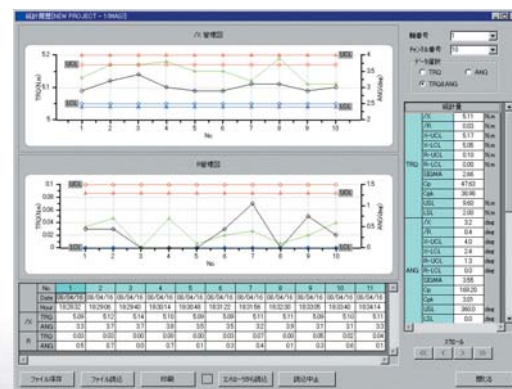


Fastening job setting

The simplified PLC functions allow ladder logic creation, monitoring, and storage.



PLC ladder & I/O allocation



Statistical records

### Monitoring function

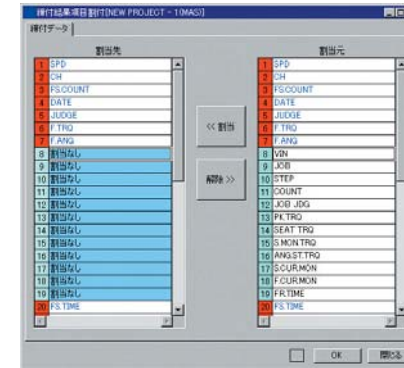
The latest fastening results and torque curve data stored in the controller can be displayed and printed. The data can be automatically or manually stored in CSV file format.

No	SPD	CH	FSCOUNT	DATE	JUDGE	F.TRG	F.ANG	JOB	STEP	COUNT	JOB JOG	PR.TRG
1	10	124419	2008/04/19	182410	OK	910	3.9	0	0	0	A	91.0
2	10	124419	2008/04/19	182410	OK	910	10.4	2	1	0	A	91.0
3	10	124419	2008/04/19	182410	OK	910	24.7	0	1	0	A	91.0
4	10	124419	2008/04/19	182410	OK	910	38	0	0	0	A	91.0
5	10	124419	2008/04/19	182410	OK	910	14.8	0	1	0	A	91.0
6	10	124419	2008/04/19	182410	OK	910	16.5	0	1	0	A	91.0
7	10	124419	2008/04/19	182410	OK	910	14.4	0	1	0	A	91.0
8	10	124419	2008/04/19	182410	OK	910	3.6	0	0	0	A	91.0
9	10	124419	2008/04/19	182410	OK	910	11.4	0	1	0	A	91.0
10	10	124419	2008/04/19	182410	OK	910	32	0	0	0	A	91.0
11	10	124419	2008/04/19	182410	OK	910	15.4	0	1	0	A	91.0
12	10	124419	2008/04/19	182410	OK	910	9.9	0	1	0	A	91.0
13	10	124419	2008/04/19	182410	OK	910	3.4	0	0	0	A	91.0
14	10	124419	2008/04/19	182410	OK	910	10.9	0	1	0	A	91.0
15	10	124419	2008/04/19	182410	OK	910	27.1	0	1	0	A	91.0
16	10	124419	2008/04/19	182410	OK	910	25.7	0	1	0	A	91.0
17	10	124419	2008/04/19	182410	OK	910	2.7	0	0	0	A	91.0
18	10	124419	2008/04/19	182410	OK	910	13.9	0	1	0	A	91.0
19	10	124419	2008/04/19	182410	OK	910	3.9	0	0	0	A	91.0
20	10	124419	2008/04/19	182410	OK	910	14.1	0	1	0	A	91.0
21	10	124419	2008/04/19	182410	OK	910	21.3	0	1	0	A	91.0

Fastening results displayed on the monitor screen.

### Allocation function

Allocation of virtual I/O items in PIO (IN), PIO (OUT), RELAY/EXTIN, remote I/O units, allocation of items added to the fastening result, and allocation of data including the related data in Fieldbus I/O unit are possible.



Allocation of fastening result items



Fieldbus I/O allocation

### Two types of interface connections are available. (RS-232C and ETHERNET)

Two RS-232C ports are available for quick and easy connection with a single system. The ETHERNET is available to connect to multiple systems locally or through a network.

### Verifying function

The verify function is available to compare a saved program file with the program file currently running in the system. This allows for added file control and change tracking.

### Maintenance functions

The maintenance function allows I/O monitoring, output signal forcing, torque and angle monitoring as well as displaying various tool data.

### Access limitation function

To prevent the unauthorized use with the access control using passwords

(Compatible OS) Windows 2000, SP4/XP, SP2/Vista, and later models





## ANGLE TOOL

Model	Motor power (W)	Applicable torque (N·m)	Max. speed (rpm)	Dimensions of output spindle (mm)	Weight (kg)	Total length (mm)	Distance from the center (Min. pitch: mm)
EH2-R1020-A	100	4~20	1027	9.5 sq	1.4	386	R13.5
EH2-R1030-A		6~30	702	9.5 sq	1.5	393	R17.2
EH2-R2050-A	200	10~50	779	9.5 sq	2.1	434	R17.5
EH2-R2080-A		16~80	480	12.7 sq	2.5	466	R21
EH2-R2120-A		24~120	269	12.7 sq	3.0	514	R25.5
EH2-R2180-A		36~180	184	19.0 sq	3.2	538	R27.5



## PISTOL TOOL

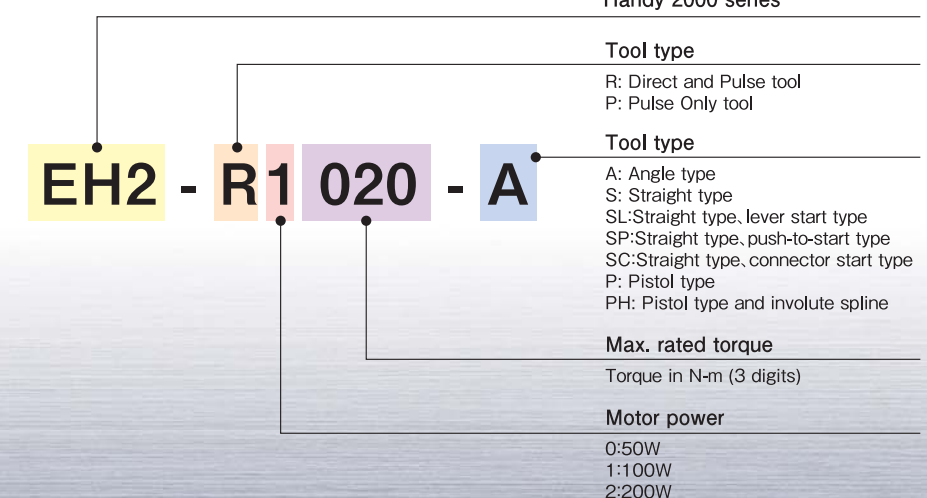
Model	Motor power (W)	Applicable torque (N·m)	Max. speed (rpm)	Dimensions of output spindle (mm)	Weight (kg)	Total length (mm)	Distance from the center (Min. pitch: mm)
EH2-R0005-P	50	1~5	1694	9.5 sq	1.1	202	R26
EH2-R0010-P		2~10	942	9.5 sq	1.1	202	R26
EH2-R1016-P	100	3.2~16	1247	9.5 sq	1.4	220	R26
EH2-R1016-PH		3.2~16	1247	9.5 sq	1.4	220	R26
EH2-R1020-P		4~20	1053	9.5 sq	1.4	220	R26
EH2-R1020-PH		4~20	1053	9.5 sq	1.4	220	R26
EH2-P1050-P		10~50	1052	1052	12.7 sq	1.7	248



## STRAIGHT TOOL

Model	Motor power (W)	Applicable torque (N·m)	Max. speed (rpm)	Dimensions of output spindle (mm)	Weight (kg)	Total length (mm)	Distance from the center (Min. pitch: mm)
EH2-R0005-SL	50	1~5	1694	6.35 Hex	1.2	296	R26
EH2-R0005-SP		1~5	1694	6.35 Hex	1.2	296	R26
EH2-R0005-SC		1~5	1694	6.35 Hex	1.1	228	R26
EH2-R0010-SL		2~10	942	6.35 Hex	1.2	296	R26
EH2-R0010-SP		2~10	942	6.35 Hex	1.2	296	R26
EH2-R0010-SC		2~10	942	6.35 Hex	1.1	228	R26
EH2-R1016-S	100	3.2~16	1247	9.5 sq	1.3	344	R23.5
EH2-R1020-S		4~20	1053	9.5 sq	1.3	344	R23.5
EH2-R2035-S	200	7~35	1169	9.5 sq	2.0	406	R24
EH2-R2055-S		11~55	720	12.7 sq	2.2	431	R24
EH2-R2085-S		17~85	403	12.7 sq	2.4	448	R24
EH2-R2120-S		24~120	292	12.7 sq	2.5	448	R24

### How to read the model numbers





# CONTROLLERS

## List of available models

Models	Options					Power supply voltage (V)	Screwdriver power (W)
	Remote I/O	DeviceNet	Profibus	CC-Link	EtherNet/IP		
EH2-HT30-101NN						100	50/100
EH2-HT30-101ND		●					
EH2-HT30-101NP			●				
EH2-HT30-101NC				●			
EH2-HT30-101NE					●		
EH2-HT30-101RN	●						
EH2-HT30-101RD	●	●					
EH2-HT30-101RP	●		●				
EH2-HT30-101RC	●			●			
EH2-HT30-101RE	●				●		
EH2-HT30-102NN						200	50/100
EH2-HT30-102ND		●					
EH2-HT30-102NP			●				
EH2-HT30-102NC				●			
EH2-HT30-102NE					●		
EH2-HT30-102RN	●						
EH2-HT30-102RD	●	●					
EH2-HT30-102RP	●		●				
EH2-HT30-102RC	●			●			
EH2-HT30-102RE	●				●		
EH2-HT30-201NN						100	200
EH2-HT30-201ND		●					
EH2-HT30-201NP			●				
EH2-HT30-201NC				●			
EH2-HT30-201NE					●		
EH2-HT30-201RN	●						
EH2-HT30-201RD	●	●					
EH2-HT30-201RP	●		●				
EH2-HT30-201RC	●			●			
EH2-HT30-201RE	●				●		
EH2-HT30-202NN						200	200
EH2-HT30-202ND		●					
EH2-HT30-202NP			●				
EH2-HT30-202NC				●			
EH2-HT30-202NE					●		
EH2-HT30-202RN	●						
EH2-HT30-202RD	●	●					
EH2-HT30-202RP	●		●				
EH2-HT30-202RC	●			●			
EH2-HT30-202RE	●				●		

## Tool and Controller combinations

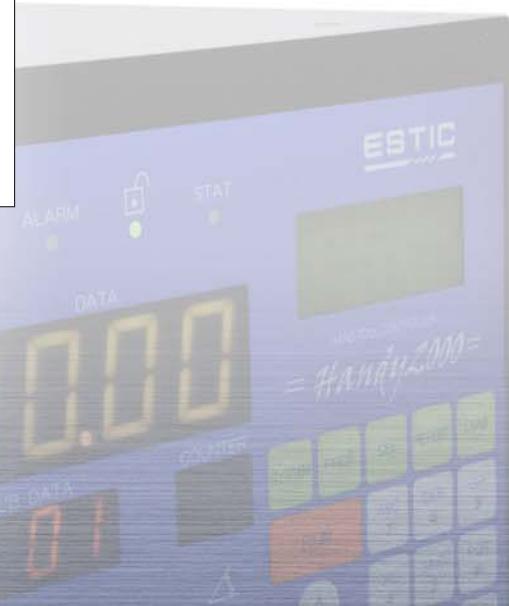
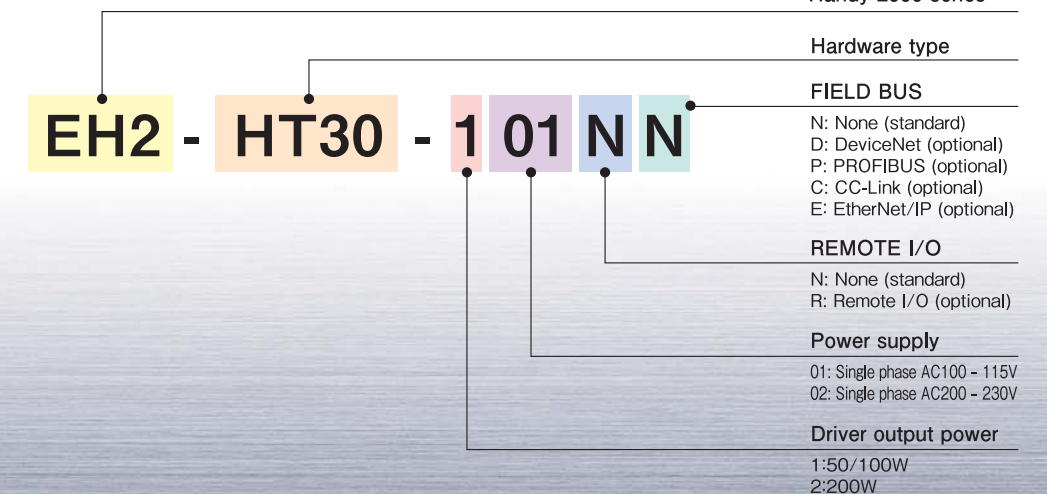
Tool type	Models	Controllers		Power supply voltages	Motor power (W)
		For 50/100W power	For 200W power		
		EH2-HT30-101**	EH2-HT30-201**	Single phase AC 100 - 115V ±10%	
Straight	EH2-R0005-SL	●		Lever start	50
	EH2-R0005-SP	●		Push-to-start	
	EH2-R0005-SC	●		Connector start	
	EH2-R0010-SL	●		Lever start	
	EH2-R0010-SP	●		Push-to-start	
	EH2-R0010-SC	●		Connector start	
Pistol type	EH2-R0005-P	●			100
	EH2-R0010-P	●			
Angle	EH2-R1020-A	●			200
	EH2-R1030-A	●			
Straight	EH2-R1016-S	●		Involute spilne	100
	EH2-R1020-S	●		Involute spilne	
Pistol type	EH2-R1016-P	●			200
	EH2-R1016-PH	●		Involute spilne	
	EH2-R1020-P	●			
	EH2-R1020-PH	●		Involute spilne	
	EH2-P1050-P	●		Pulsing model only	
Angle	EH2-R2050-A		●		200
	EH2-R2080-A		●		
	EH2-R2120-A		●		
	EH2-R2180-A		●		
Straight	EH2-R2035-S		●	Flange	200
	EH2-R2055-S		●	Flange	
	EH2-R2085-S		●	Flange	
	EH2-R2120-S		●	Flange	

## Specifications

Models	External dimensions (mm)	Weight (kg)
EH2-HT30-10***	200 wide x 270 deep x 300 high	Approx. 9.8
EH2-HT30-20***		Approx. 10.6

\* Varies depending on the options selected

## How to read the model numbers





# Highly durable molded connector with unique double shell construction

The cable is extremely durable and easy to handle with a high strength elastic aramid fiber core covered by a molded resin. The connector has a dual shell constructed from machined duralumin to assure a secure cable connection while maintaining flexibility.



Double shell construction

Molded connector

## List of the models

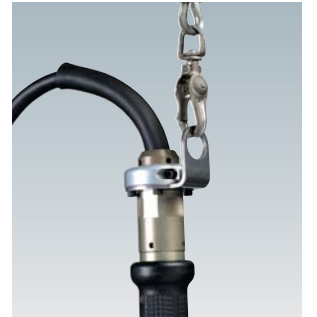
Models	Total length (m)	Outside diameter (mm)	Remarks
EH2-CVS05-SS	5	13.5	* Made to order
EH2-CVS10-SS	10		
EH2-CVS15-SS	15		
EH2-CVS20-SS	20		
EH2-CVS25-SS	25		
EH2-CVS30-SS	30		

## Tool Accessories

Hanging fixture for the straight and angle type models



EH2-SB01



EH2-SH01

Hanging fixture for the pistol type models



EH2-PH01

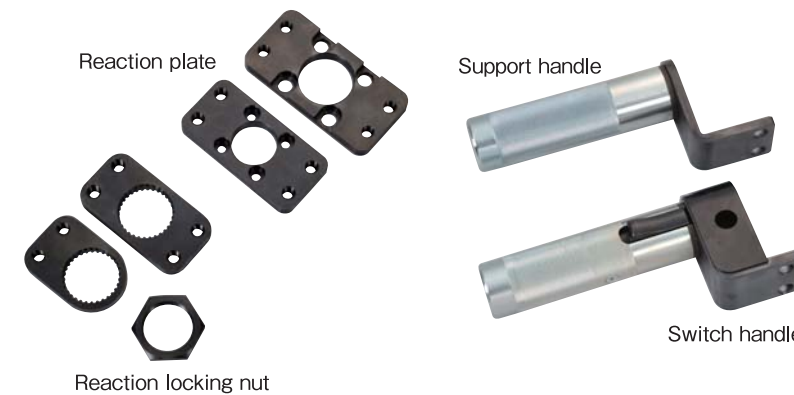


EH2-PH02



EH2-PH03

Model	Product name	Remarks
EH2-SB01	Hanging fixture	For straight and angle tools (100 W type): Horizontal
ENRH-SB02		For straight and angle tools (200 W type): Horizontal
EH2-SH01		For straight and angle tools: Vertical
EH2-PH01		For pistol tool: Horizontal/upside down
EH2-PH02		For pistol tool: Horizontal, For straight tool (50 W type) : Horizontal
EH2-PH03		For pistol tool: Vertical



Model	Product name	Remarks
ENRH-RP20S	Reaction plate	For 16/20 N·m straight and pistol tools (single)
ENRH-RP20W		For 16/20 N·m straight and pistol tools
ENRH-RP35W		For 35N·m straight tool
ENRH-RP90W		For 55/85/120N·m straight tools
ENRH-LNM30	Reaction locking nut	For 16/20 N·m straight and pistol tools

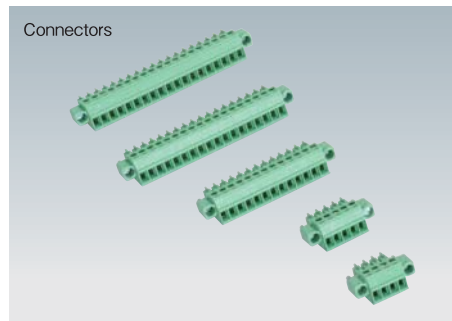
Model	Product name	Remarks
ENRH-SH01	Support handle	
ENRH-SH02	Switch handle	With direction selector switch
EH2-LS01	Short switching lever	For straight and angle tools (100/200W type)
EH2-LS02	Long switching lever	For straight and angle tools (100/200W type)





Models	Product name	Remarks
EH2-PP01	Protection cover	For 50 N·m pistol tools
EH2-PP02		For 16/20 N·m pistol tools
EH2-PP03		For 5/10 N·m pistol tools
* Made to order		For 20 N·m angle tools
		30/50 N·m angle tools
		80 N·m angle tools
	120 N·m angle tools	
	180 N·m angle tools	

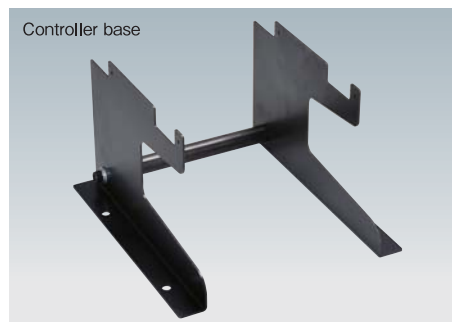
Controller Accessories



Models	Product name	Remarks
EH2-FCN18-PI	Connectors	For PIO (IN) connection
EH2-FCN19-PO		For PIO (OUT) connection
EH2-FCN13-RL		For relay/exit-in connection
EH2-FCN4-RM		For the remote I/O connection
EH2-FCN5-DC		For DC OUT connection



Models	Product name	Remarks
EH2-CVNK-005	NET cable	For the multi spindle connection :0.5m
EH2-CVNK-010		For the multi spindle connection :1m
EH2-CVNK-030		For the multi spindle connection :3m
EH2-CNST	Terminator	



Models	Product name	Remarks
EH2-CF01	Controller base	For vertically setting the controller



For PCs



Models	Product name	Remarks
EH2-PC-J	Handy2000 Management software	Japanese version
EH2-PC-E		English version
ENRZ-CVSR-015	Serial communication cable	1.5m
ENRZ-CVSR-050		5m
ENRZ-CVSR-100		10m

【Servo Nutrunner Series】

High speed, compact, and lightweight servo nutrunner for fixtured mounting  
Well suited for use with robots

【Features】

- The highest accuracy and durability among the Estic fastening tools
- All manners of fastening can be carried out.
- High speed fastening for shorter cycle time
- Offers a wide variety from the compact and light weight type for use with robots to the heavy duty type with a torque capacity reaching 1300 N·m
- A full line of user interfaces for flexible system structures

\* See the special catalogue for further details.



【Servo type Press Series】

The high speed, precision accuracy, and durable press unit with an environmentally clean system

【Applications】

- Pressing (load control/increment control/load and positioning control)
- Lamination, punching, swaging, strain relieving, and positioning

【Features】

- Equipped with a clean system using no air nor oil
- Easy installation with a simple system composed of the controller and tool body
- Integration with advanced servo system offers high speed, accuracy and quality
- High standard load data control and analysis to improve pressing performance
- The risk of damaging works is virtually eliminated with the instant stop reaction of the press to any problems detected.

\* See the special catalogue for further details.





MEMO

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JQA-2805



- The colors of the products may slightly differ from those of the actual products, which is inevitable in printing.
- The specifications and designs of the products may be changed without previous notice.

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- Recycle paper is used for the catalog for environmental conservation.

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