

# MM-3000 Mechatronic Module V Series



## Accessories and Text books

MM-VB410 Magnetic Clamp Unit



MM-VU310 Wires with connection pins



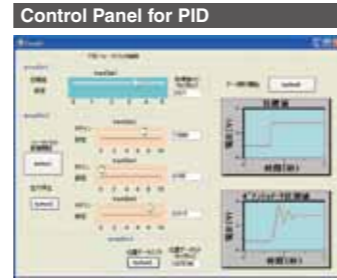
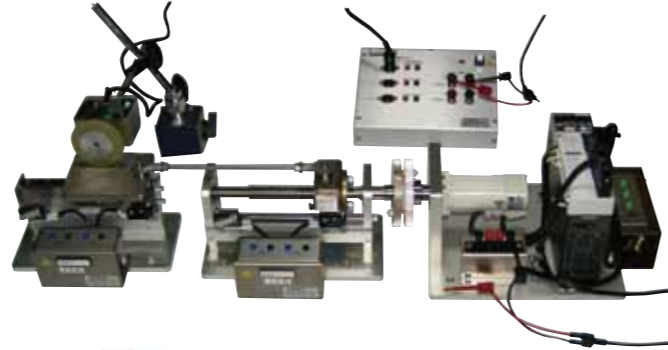
MM-VC190 Connecting Rods



Text Books



## PID feedback control training units



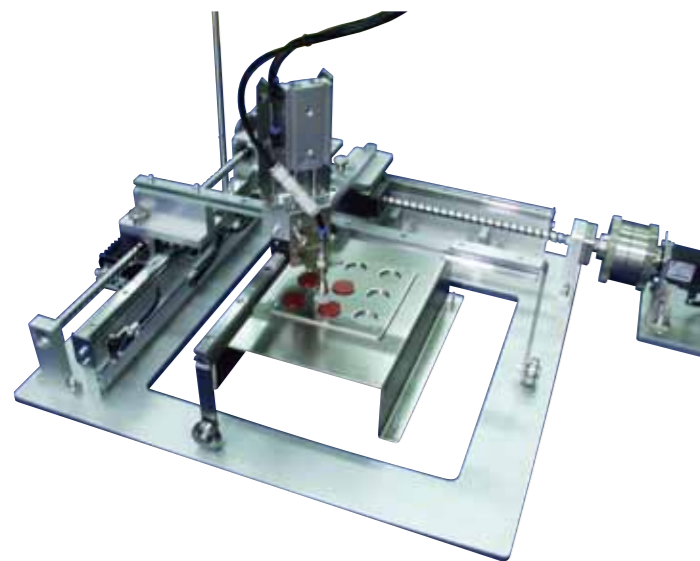
## X-Y ROBOT TRAINING MACHINE

In many cases, X-Y robot is more useful than Arm-type robots because easy-to control, Heavier load, lower cost and higher speed.

This X-Y robot training machine has a pneumatic driven Z axis with X-Y axis which would be driven by any kinds of motors, as an induction motor, servo motor, stepping motor

Training items:

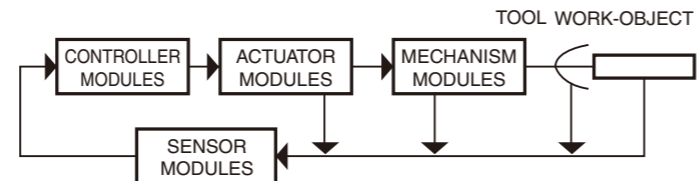
How to using of X-Y robot, Control, Positioning, Drawing pictures by X-Y robot etc. (Attachable motors: VA310, VA320, VA335, VA345 est.)



## [FUNCTIONS AND FEATURES]

### FLEXIBLE COMBINATION OF AUTOMATION ELEMENTS

The automation elements are classified into the following four groups.



The Automation System Composer, MM3000 series is designed to allow selection and combination of wide variety of elements belonging to the abovementioned four groups.

### FROM "MEANS-ORIENTED TRAINING" TO "PURPOSE-ORIENTED TRAINING"

Currently "means-oriented training" is commonly adopted, but a change to "purpose-oriented training" is essential for effective education in mechatronics. MM3000 training system is the ideal experimental system for "purpose-oriented training" in order to study the construction of a correct automation system, which is based on the optimum selection of elemental devices in each group deduced from the desired operating characteristics.

### FROM BASIC TRAINING TO ADVANCED RESEARCH:

This system is applicable to every educational level of training ranging from basic training on automation mechanism and control up to research in highly advanced technologies for FA lines.

You may want to change specifications and design without notice.

## MECHATRONICS TRAINING SYSTEM

# MM3000V SERIES

## AUTOMATION SYSTEM COMPOSER

### <Special features>

#### Modules type training system

More than 100 kinds of mechanical components and control devices are modularized.

#### Small and light, and safety type

You can carry these modules by single hand.

#### Free combination type

You can combine these modules freely to configure any mechatronics systems.

**SERC** SHINKO ENGINEERING RESEARCH CORP.

〒157-0073 KINUTA 6-6-18 SETAGAYA-KU TOKYO, JAPAN

PHONE: +81-3-3417-1801 FACSIMILE: +81-3-3417-1828

URL: <http://www.sa.il24.net/~serc/>

Email: [serc-ch@interlink.or.jp](mailto:serc-ch@interlink.or.jp)

Agency

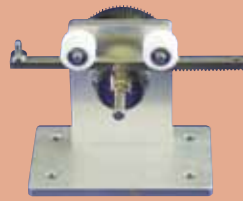
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## Mechanism and Output units

MM-VM110 Rack & Pinion



MM-VM150 Spur Gear



MM-VM230 Crank



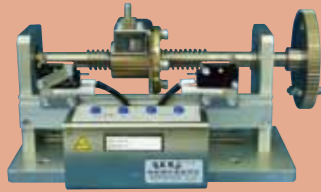
MM-VM310 Slide Table



MM-VM330 Rotary Table



MM-VM140 Feed Screw



MM-VM220 Geneva Gear (Double pin type)



MM-VM240 Lever Slider

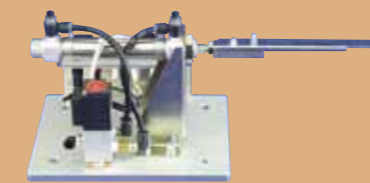


MM-VM320 Belt Conveyor



## Actuator

MM-VA210 Pneumatic (Air) Cylinder



MM-VA320 Reversible Motor



MM-VA345 AC Servo Motor



MM-VA310 Speed Control Induction Motor



MM-VA335 Stepping Motor



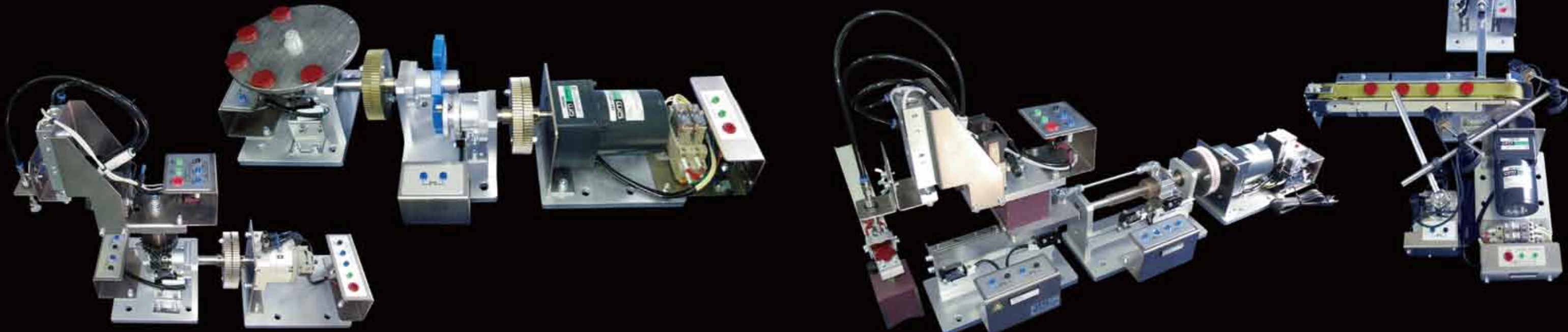
MM-VA410 Rotary Pneumatic (Air) Actuator



## Transportation and handling practice case index

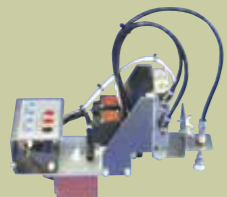
# Mechatronics Training System MM3000V SERIES

## Practice cases free-flow production system



## Robot unit, others

MM-VR110 Pneumatic (Air) driven Robot Arm



MM-VJ130 Drill unit

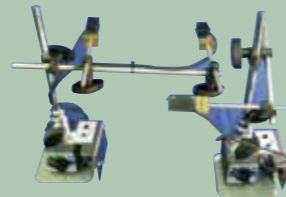


MM-VR180 Rotary Motion Robot Arm (with Xaxis)



## Sensor unit

MM-VS310 2-Way Photo Electric Sensor



MM-VS330 Ultra sonic sensor



MM-VC500 Analog I/O box



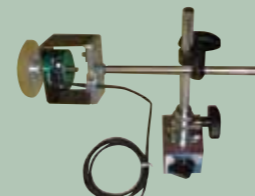
MM-VS320 Magnetic Sensor



MM-VS340 Thermo sensor

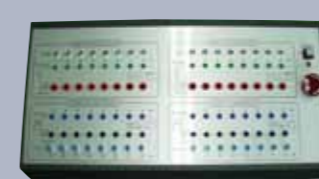


MM-VC510 Rotary potentiometer



## Controller

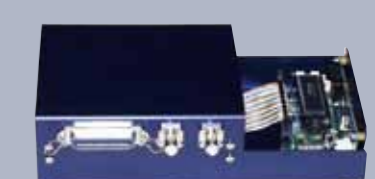
MM-VC220 Terminal I/O Box (with 32points)



MM-VC310 Digital I/O board



MM-VC1010PIC-A PIC Controller unit



MM-VC300 Terminal I/O Box (with 16points)



MM-VC3048H8 H8 Micro Computer Controller



MM-VC590 Analog I/O board

