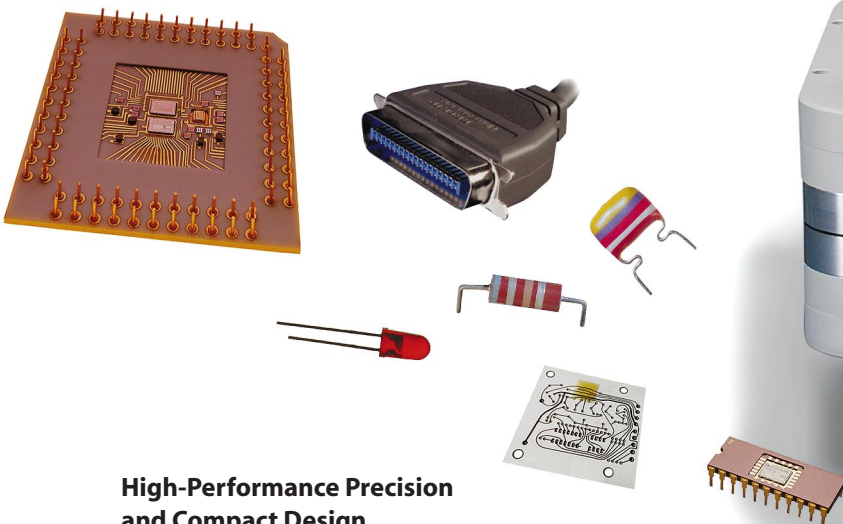


MOVEMASTER RP-1AH - Our Idea of Micro Handling:

Small - quick - precise!

- Required footprint 200 x 160 mm only
- Pick and place in <0.5 s
- Repeatability $\pm 5 \mu\text{m}$



High-Performance Precision and Compact Design

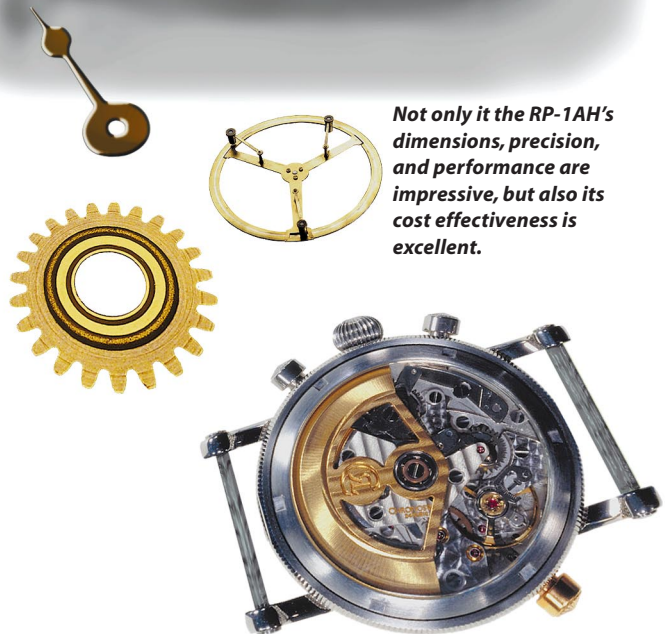
The RP-1AH is designed specifically for space limited work areas where components have to be placed precisely and quickly. Despite the RP-1AH's footprint of only 200 x 160 mm it features a reachable range of 230 mm and a handling payload of up to 1 kg.

Its Qualities Speak for Themselves

The RP-1AH provides a unique mechanical system. It places components on a rectangular work envelope of 150 x 105 mm providing a repeatability of $\pm 0.005 \text{ mm}$ and a cycle period of <0.5 s per pick and place. Simultaneously the Z-axis rotates at a max. speed of 3.000 °/s. These performance values allow a considerable increase in micro handling productivity and quality.

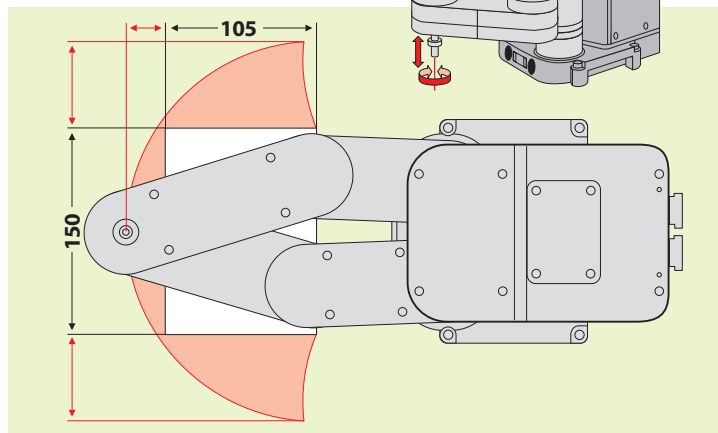
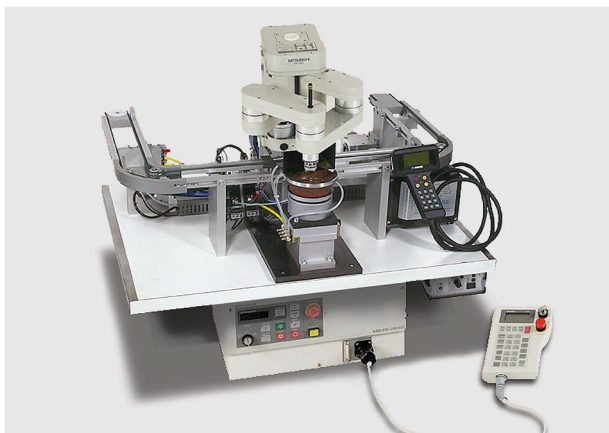
Flexibility and Multitasking Operating System

Due to its compact design, the RP-1AH can often be integrated directly into an existing manufacturing location. Additionally, the RP-1AH's multitasking operating system supports parallel processing. Thus it can perform further functions besides movement and communication with peripheral devices, e.g. transferring signals. The heart of the RP-1AH is the new CR2-532 controller including a 64-bit RISC processor. In case of production changes this new controller, which can be programmed easily by means of the standard software MELFA BASIC IV, perfectly meets the industrial requirements



Not only it the RP-1AH's dimensions, precision, and performance are impressive, but also its cost effectiveness is excellent.

concerning flexibility. The RP-1AH can store several programs which can be changed by an easy program switch.



These are the outstanding advantages of the new RP-1AH robot:

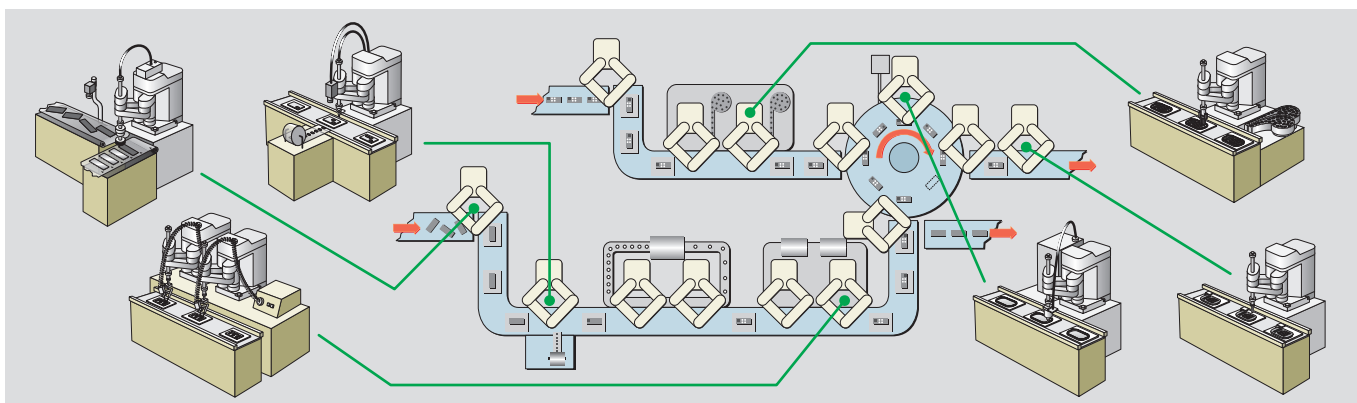
- **Repeatability**
 ± 0.005 mm
- **Cycle period per pick and place** < 0.5 s
- **Required footprint**
approx. 200 x 160 mm
- **Work envelope**
approx. 150 x 105 mm
- **Extended pick up zones for material feeding**
- **Multitasking operating system**
supports parallel processing

The Ideal Micro Handling System

Due to its small dimensions and high precision, the strength of the RP1-AH is in the area of micro handling. For example, the RP1-AH is a popular choice for installing minuscule components in the clock industry or placing and soldering components on circuit boards (SMD technology). The RP1-AH with its multitasking operating system can replace old production lines consisting of inflexible machines and thereby increase production efficiency.

MOVEMASTER RP-1AH

Robot type	Double-arm SCARA
Number of axes	4
Repeatability	± 0.005 mm
Hard rotation speed J4	3000 °/s
Drives	AC servo motors incl. brakes
Cycle period	< 0.5 s (25 mm/100 mm/25 mm)
Handling payload	0.5 kg/max. 1 kg
Digital I/Os	32/32 (max. 256/256)
Control modes	Axial, linear, or circular interpolation, multitasking (32 tasks max.), compliance control, palletting functions, interrupt and subroutine control
Programming language	MELFA BASIC IV
Number of positioning points	2500 (expandable)
Number of program lines	5000 (expandable)
Number of programs	88
Controller dimensions (W x H x D)	420 mm x 200 mm x 510 mm
Power consumption	0.8 kVA



EUROPEAN HEADQUARTERS

**MITSUBISHI ELECTRIC
EUROPE B.V.**
German Branch
Gothaer Straße 8
D-40880 Ratingen
Phone (0 21 02) 4 86-0
Fax (0 21 02) 4 86-112

EUROPEAN REPRESENTATIVES

GEVA AUSTRIA
Wiener Straße 89
A-2500 Baden
Phone +43 (0) 2252 / 85 55 20

GETRONICS NV/SA BELGIUM
Pontbeeklaan 43
B-1731 Zellik
Phone +32 (0) 2 / 467 17 51

AutoCont Control Syst.s.r.o. CZECHIA
Nemocnicni 12
CZ-70100 Ostrava 1
Phone +420 (0) 69 / 615 21 11

louis poulson DENMARK
Geminvej 32
DK-2670 Greve
Phone +45 (0) 43 / 95 95 95

Beijer Electronics OY FINLAND
Eläntontie 5
FIN-01510 Vantaa
Phone +358 (0) 9 / 615 20 11

IP Systèmes FRANCE
8, Rue Colonel Chambronet
F-69672 Lyon Bron
Phone +33 (0) 4 / 72 14 18 00

SANDSOFT HUNGARY
5 Róppenttyű Köz
H-1139 Budapest
Phone +36 (0) 1 / 375 38 98

MITSUBISHI ELECTRIC IRELAND
Westgate Business Park, Ballymount
IRL - Dublin 22
Phone +353 (0) 1 / 450 50 07

ILAN & DAVISH Automation ISRAEL
Qiryat-Arie 49513
IL-Petach Tikva 49001
Phone +972 (0) 3 / 922 18 24

CARPANETO & C.S.p.A. ITALY
Via Ferrero 10
I-10090 Cascine Vica-Rivoli (TO)
Phone +39 011 / 959 01 11

Getronics bv NETHERLANDS
Donauweg 10
NL-1043 AJ-Amsterdam
Phone +31 (0) 20 / 586 15 92

Beijer Electronics AS NORWAY
Teglverksveien 1
N-3002 Drammen
Phone +47 (0) 32 / 24 30 00

MPL Technology Sp. z o.o. POLAND
ul. Wrocławska 53
PL-30011 Kraków
Phone +48 (0) 12 / 632 28 85

F. Fonseca Lda. PORTUGAL
Estrada de Taboiera 87/89, Esqueira
P-3800 Aveiro
Phone +351 (0) 34 / 31 58 00

INEA d.o.o. SLOVENIA
Ljubljanska 80
SI-1230 Domžale
Phone +386 (0) 61 / 71 80 00

Medición y Control, S.A. SPAIN
Gran Via de les Corts Catalanes 133, 4
E-08014 Barcelona
Phone +34 (9) 3 / 422 77 00

Beijer Electronics AB SWEDEN
Box 325
S-20123 Malmö
Phone +46 (0) 40 / 35 86 00

ECONOTEC AG SWITZERLAND
Postfach 282
CH-8309 Nürensdorf
Phone +41 (0) 1 / 838 48 11

MITSUBISHI ELECTRIC UK
Travellers Lane
GB-Hatfield Herts. AL10 8XB
Phone +44 (0) 1707 / 27 61 00