



*... Handling for Profit*



# Multi Talent

Handling Systems  
Type RC

# ...REMAK know-how = your profit

## REMAK – your innovation team...

- standard systems and special designs (5-axis servo) for machines up to 4.400 tons clamping force
- Removing – inserting
- thousands have proven excellence and reliability in every-day production / easy to maintain
- single machines – complete production cells
- one control basis for all REMAK robot systems, CAN-Bus technology with Ethernet interface (remote diagnosis)
- REMAK operating surface: „easy - brilliant“
- very firm framework construction – optimized via FMEA
- consistent servo technique, digital with electronic type identification plate
- high acceleration = shortest part removal time and thus low piece part prices
- EOATs and peripheral solutions according to customers' specification

## Multi Talent



RC 60 as center of a working cell



pneumatic driven handaxes B - C - S



# ...REMAK-robot-systems

## – our design – your advantage!



RC 60T, special version along centerline, 2 robot-heads



hand held programming unit PHG16



Pallet-conveyor with steel inserts, positioned

All machines of the RC line are of modular design. The very firm steel framework construction, low-play gearings, quality gear racks and highly precise linear guides guarantee highest stability and quietness of operation as it is required for precise inserting and demolding jobs. The main axes are driven

by high-dynamic, maintenance-free servo motors. High accelerations and velocities allow very short take-out times. The pneumatic components – arranged in 'islands' – feature easy access and maintenance. All energy carriers (electric, pneumatic, vacuum) are connected by plug-in type couplings. Spacious cable drag chains and a cabling with highly flexible material guarantee long-term production without parting of a cable. The flexible design permits an operation to the operator's side, to the non-operator side or to both sides (T-style arrangement). Thus, very different processes with peripheral equipment can be realized. Alternatively, an arrangement inline to the machine center is possible (part release at the end of the machine). Secondary axes, such as stacking or rotational axes, are developed as pneumatic linear drives or rotatory pneumatic drives with well-dimensioned limit stops

with hydraulic absorbers. As an option, the rotatory axes can be driven by three-phase AC servo motors.

As a standard, REMAK offers a 32 bit multi-tasking control – an industry-tested control system – which permits a simultaneous run of several axes. The operating and programming is done in plain text via the hand-held programming unit PHG 16 with a very simple operator guidance. Alternatively, the control system may be programmed "off-line" (extra charge for software ROPS 16) via personal computer in plain text. Advantage: Eminent reduction of the tool setting times, program files. All programs can be optimized during the run in fully automatic operation via the PHG 16. Programming aids = soft tools as well as an extensive additional equipment – such as the patented mold chasing system (MCS) – complete our product range.



servo driven handaxes

# ROBOT-SYSTEMS Series RC MULTI TALENT

## for the automation of injection molding machine production

Modular system to be used on/at injection molding machines with clamping forces from 660 up to 4.400 tons. The standard modules can be combined to suit the particular application. Modifications / special designs are possible. Available are linear axes with different stroke lengths (servo motor), rotary axes with different drives (pneumatic – servo motor) as well as further secondary axes.

Furthermore, REMAK supplies EOATs and peripheral solutions according to the customers' specifications for the different applications and processes – also special processes such as multi-component injection, rotary and turnover tool techniques, multi-platen technology, insertion of foils, fabric molding, laser beam cutting, lost core technology etc. The corresponding interfaces to the involved machines have been developed and optimized.

### Technical Data

REMAK-ROBOT-SYSTEM RC						
Combination of axes as required for the particular application		length of stroke/ angle of rotation		drive mode	maximum speed inch(mm)/sec. degr./sec (at 6 bar)	
		RC 30	RC 60		RC 30	RC 60
X-axis = removing stroke	inch mm	59/78.7 1.500/2.000	78.7 2.000	AC servomotor	51.2 1.300	74.8 1.900
Y-axis = lifting stroke	inch mm	- 78.7 - 2.000	78.7 2.000	AC servomotor	130 3.300	118 3.000
Y-axis = telescoping	inch mm	- 98.4 - 2.500	- 118 - 3.000	AC servomotor	130 3.300	118 3.000
Z-axis = traversing stroke	inch mm	- 393.4 - 10.000	- 393.4 - 10.000	AC servomotor	130 3.300	63 1.600
A-axis = swivelling axis	degree	0 – 90 – 180		pneumatic/ servomotor	100	
B-axis = rotation axis	degree	0 – 90 / 180 – 270		pneumatic/ servomotor	100	
C-axis = tilting axis	degree	0 – 90 – 180		pneumatic/ servomotor	100	
CNC-A / D control programming axes movement drive	alternative / standard with hand-held programming unit (PHG 16), CAN-Bus system, Ethernet interface via PHG/Teach-in / Off-line on personal computer (ROPS program) position-controlled AC servo motors, absolute / incremental encoders mold chasing systems (MCS) synchronized run of several axes					
maximum lifting capacity	in kgs in lbs	- 50 - 110	- 80 - 176	dependent on the max. axes dimensions		

Subject to technical changes

### REMAK MASCHINENBAU GMBH

Darmstädter Strasse 72  
D-64354 Reinheim

Telefon: + 49 61 62 - 8 04 11  
Telefax: + 49 61 62 - 8 04 59



eMail: info@remak-online.de  
www.remak-online.de