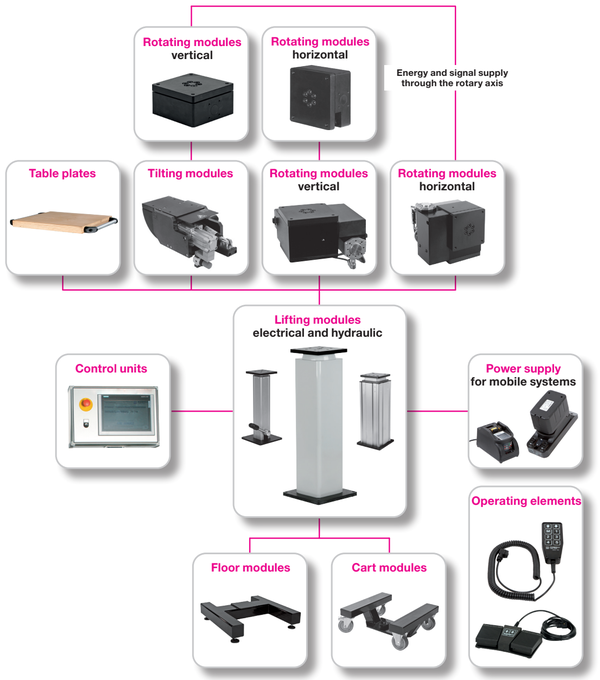
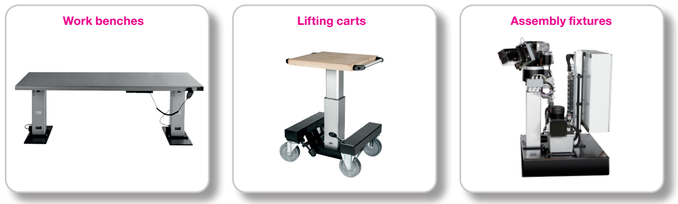
Module combinations

moduhub modules can be easily combined to built multi-functional units. The individual modules are easily assembled and screwed together – either directly on each other or with adaptor plates which are available as accessories.

Variations of module combinations:



Preconfigured systems:



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Ergonomic assembly – good for people and processes

Particularly in the manual assembly of heavy workpieces, ergonomics plays an important role.
With the use of *moduhub* modules, heavy components can be moved without any effort to the desired mounting position and assembled under optimum ergonomic conditions.
This benefits employees and assembly processes:

- ***Higher performance by reducing the physical strain***
- ***Reduction of fatigue***
- ***Conservation of performance in old age***
- ***Reduction of occupational diseases and downtime***
- ***Increased satisfaction and well-being***
- ***Reduction of assembly times***
- ***Increased flexibility and throughput***
- ***Compliance with the regulations: Maximum loads of 15 kg may be moved in recurring activities without support.***

Consultation and know how guarantuee optimum use

Our comprehensive process know how and our long experience are at your disposal to combine a suitable *moduhub* module combination for your individual application.

Our competent consulting supports you to realise considerable time and thereby cost savings.

Use the ROEMHELD know how for your processes!

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Program summary *moduhub* · 05-25 EN · Subject to modification.

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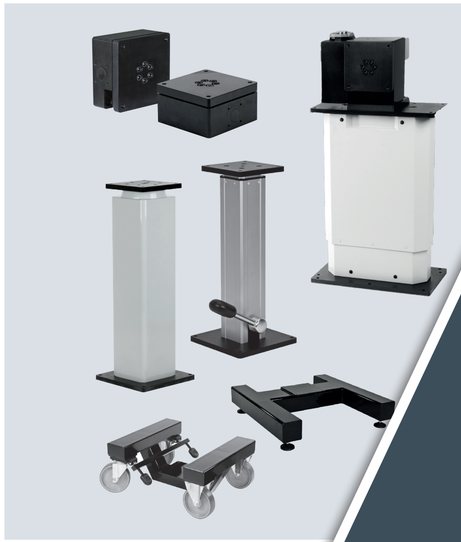
PROGRAM SUMMARY

The *moduhub* module programme for handling technology



Rotating Modules

Tilting Modules

Lifting Modules

Cart Modules

Floor Modules

Accessories

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The *moduhub* module programme for handling technology

Rotating modules	vertical		horizontal			
	600 kg 800 Nm	600 kg 800 Nm	200 kg 800 Nm	200 kg 800 Nm	400 kg 1200 Nm	depeding on the bending moment 4000 Nm
Data sheet	M 1.301	M 1.201	M 1.101	M 1.201	M 1.202	M 1.210
Tilting modules	**KMB 100**		**KME 100**			
	100 kg 500 Nm		100 kg 175 Nm			
Data sheet	M 2.101		M 2.201			
Lifting modules	**Basic**	**Shop-Floor Telescope**	**Range**	**Shop-Floor**	**Strong**	**Solid**	**Twin-Strong**
	100 kg 100 Nm	100–200 kg 500 Nm	100–200 kg 500 Nm	100–600 kg 500 Nm	600 kg 800 Nm	400–600 kg 1000 Nm	400–600 kg 2000 Nm
Data sheet	200 to 600 mm stroke M 4.101	300 to 1.000 mm stroke M 4.202	440 to 940 mm stroke M 4.203	200 to 600 mm stroke M 4.301	200 t 400 mm stroke M 4.401	200 to 400 mm stroke M 4.402	200 to 400 mm stroke M 4.501

Cart modules		Floor modules	
WMS 200	WMS 600	FMS 600	FMD 800
200 kg	600 kg	600 kg	800 kg
Data sheet M 5.101	M 5.101	for one lifting module M 6.101	for two lifting modules M 6.101

Electrical accessories				Plates		
Control modules	Power supply for mobile systems with battery	Energy supply for rotating and lifting modules	Electrical operating elements	Base plates	Adaptor plates	Table plates
M 8.200	M 8.201	M 8.202	M 8.203	M 8.100	M 8.110 M 8.120	M 8.130 M 8.131

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The *moduhub* module principle

All *moduhub* modules in the program summary can be used individually, since they are independent functional units.
In addition, all modules can be easily combined to built multi-functional units.

Modules

Rotating modules – Rotating modules perform a rotary movement around the horizontal or vertical axis of the workpiece. Rotation of the workpiece is made manually either directly at the workpiece or by means of an operation, for example a hand lever at the rotating module. Indexing of the rotational position is 4 x 90°.

Tilting modules – The tilting module effects a rotatory, reversible swivel movement around a defined axis between the final positions 0° and 90°. Tilting of a workpiece is made manually, the weight of the workpiece will be balanced. Indexing of the final positions is 0° and 90°.
Alternatively, models with electric drive are available.

Lifting modules – Lifting modules effect a guided, translational movement in the vertical axis.
The lifting movement is effected power-supported by a hydraulic or electrical actuator against the weight of the workpiece to be moved.
The lowering movement is a defined lowering by use of the weight.

Cart modules – Cart modules offer the possibility to displace manually individual modules or module combinations with workpieces.
All cart modules are equipped with a parking brake.

Floor modules – Floor modules compensate unevennesses of the floor place and guarantee a high stability.
The offer includes two versions with one or two mounting plates for mounting of other *moduhub* modules.

Accessories – Modules to complete the ergonomic working place. From the elegant, robust table plate made of beech wood up to battery control modules for mobile applications.
Complete PLC controls and special solutions on request.

Operations

manual – Modules marked with this symbol are operated by hand. Operation is effected directly at the workpiece or at the assembly fixture.

Hand lever – Operation of the module is made by means of a hand lever acting directly at the cinematics.

Pedal – Operation of the module is made hydraulically by pumping on a foot pedal.
Defined lowering by lifting the foot pedal.

Hand panel – Operation of the module is made electrically by means of a hand panel touching the buttons "up" and "down". The module is supplied and controlled via a connecting cable by a control module.
Also, the hand panel is connected to the control module.

Foot switch – Operation of the module is made electrically by means of a foot switch touching the buttons "up" or "down". The module is supplied and controlled via a connecting cable by a control module.
Also, the foot switch is connected to the control module.

Maximum load – For each module the maximum load is indicated in kg. This load may also be eccentrically, since the modules are in the position to compensate load moments.

Maximum bending moment – The maximum admissible bending torque in Nm is indicated for each module.
Information on the exact admissible load moments is indicated on the corresponding data sheets.
As a rule, the load limits and the potential combinations of modules are determined by the maximum occurring torques.