

MOCOKIT

Modular Construction Kit

**Universal modular construction kit
for static and dynamic test configurations**



Test-Rig Components

MOCOKIT 25
MOCOKIT 65
MOCOKIT 65 SE
MOCOKIT 250
MOCOKIT 250 SE
MOCOKIT 400

Universal modular construction kit for static and dynamic test setups

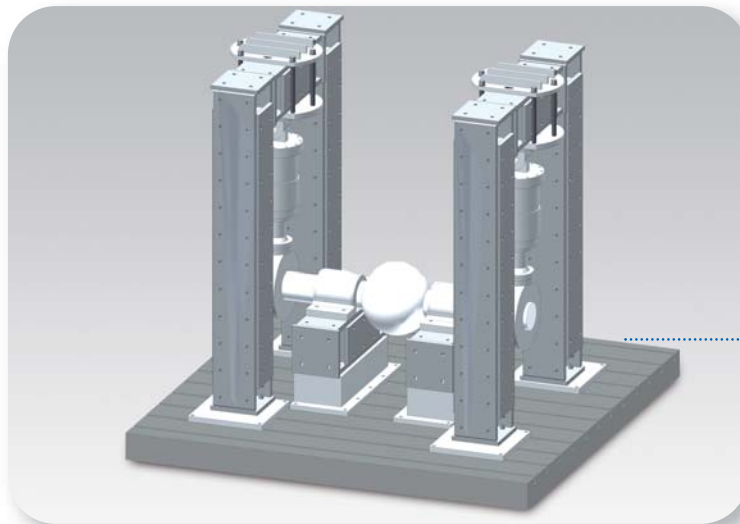
Are you operating your own test lab for component testing or planning a new test lab?



Modular Construction Kit

Test lab with dummy

Apart from servo-hydraulic components like linear actuators and rotary actuators do you also need appropriate devices to mount simply actuators and test-specimens flexible and safely? In order to keep down investment cost, modular solutions are especially useful when test setups are frequently altered.

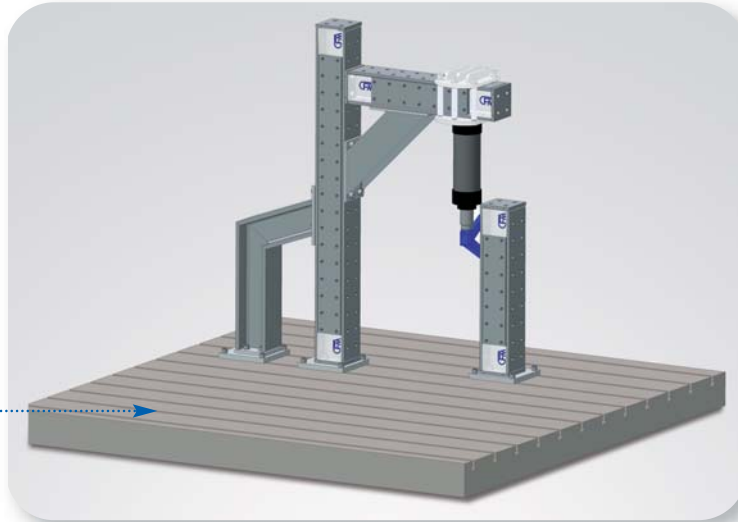


Modular Construction Kit

Truck axle testing, bending test with **MOCOKIT 400**

With our universal modular construction kit **MOCOKIT** we provide you with the flexibility you need in your daily business – high quality at affordable prices. **MOCOKIT** is specially customized to suit the demands of component tests and fulfils the demands of an up-to-date test lab in terms of rigidity, mounting and versatility.

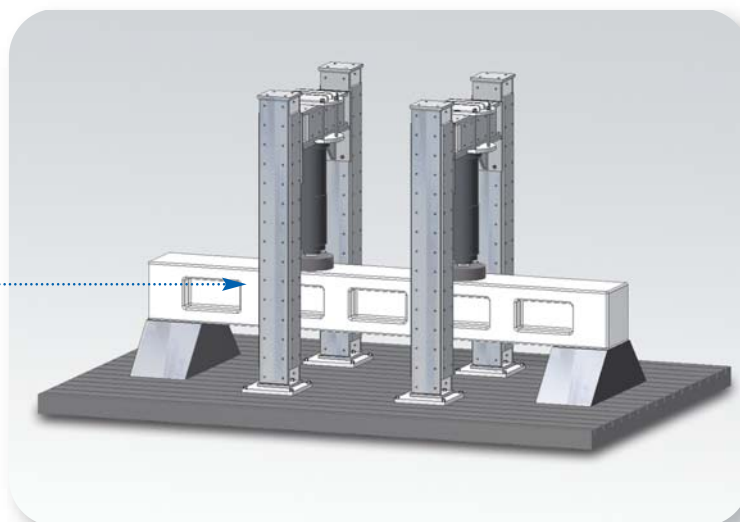
Linear actuators and rotary actuators as well as test specimens can easily be mounted by means of specific adaptor plates, which you can either manufacture yourself or which can be supplied by us.



Implementation **MOCOKIT 250**

Various sizes, graded by their maximum permissive static load, allow you to construct test frames for static forces up to 400kN. We supply dynamic load values on request.

Only by a few tools you can modify the configuration according to a new test arrangement.

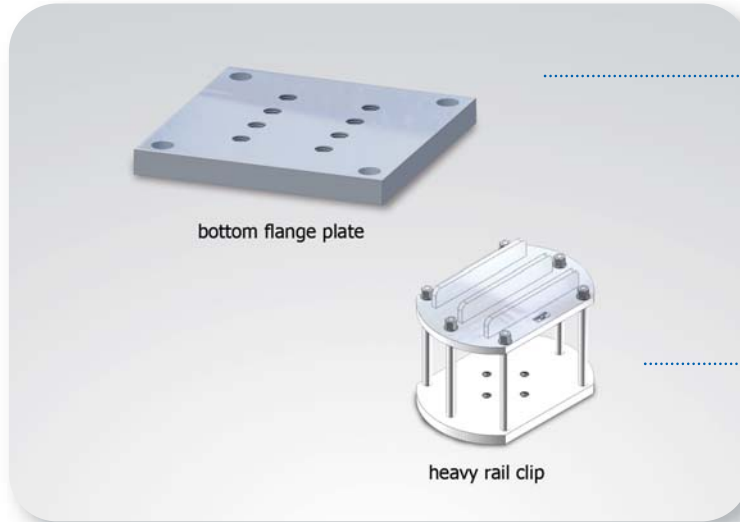


Structural check ferro-concrete bearer, **MOCOKIT 400**

We also look forward to assisting you in the selection of the required components for your particular test configuration.

On request, we offer an FE-analysis of your specific test configuration.

As mentioned before, we can provide you with customized flange and adaptor plates for all servo-hydraulic actuators available on the market.



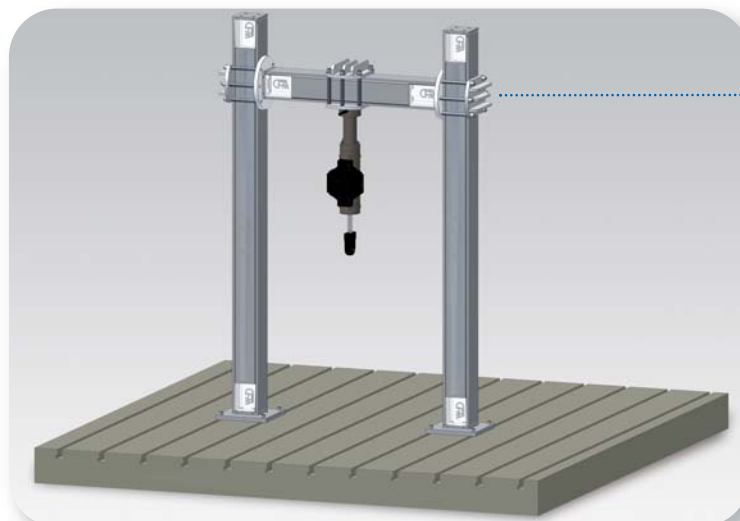
Modular Construction Kit

Modular Construction Kit

MOCOKIT components

Available standard sizes:

	Max. Load	Adjustability
MOCOKIT 25	actuators up to approx. 5,5 kip (25 kN) (static) approx. 4 kip (18 kN) (dynamic)	stepless
MOCOKIT 65	actuators up to approx. 14 kip (65 kN) (static) approx. 10,5 kip (46,8 kN) (dynamic)	3 " pattern / stepless
MOCOKIT 65 SE		stepless
MOCOKIT 250	actuators up to approx. 55 kip (250 kN) (static) approx. 40 kip (180 kN) (dynamic)	4 " pattern / stepless
MOCOKIT 250 SE		stepless
MOCOKIT 400	actuators up to approx. 88 kip (400 kN) (static) approx. 64,5 (288 kN) (dynamic)	4 " pattern



Modular Construction Kit

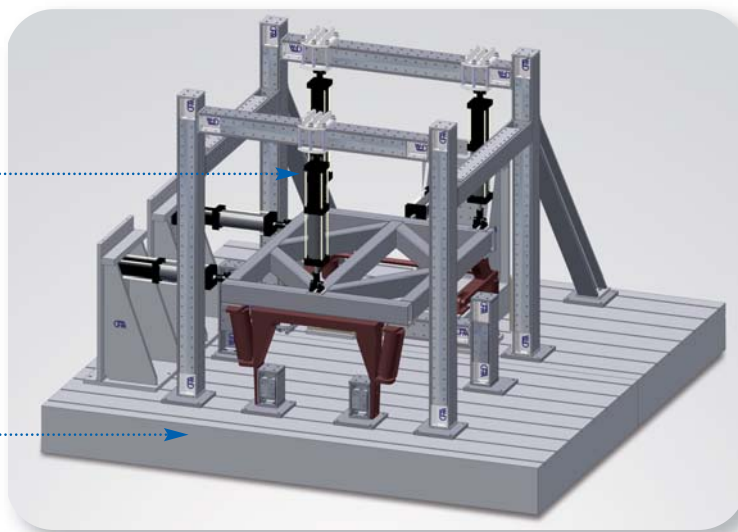
Construction of a portal MOCOKIT 65 SE

General description

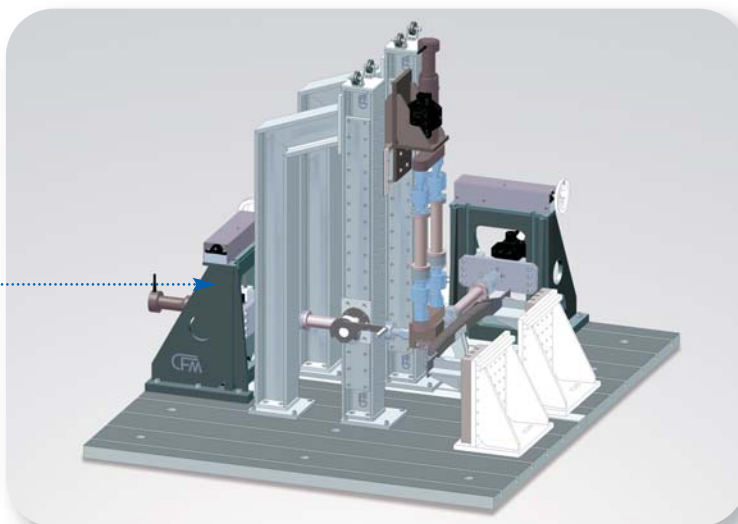
The universal modular construction kit **MOCOKIT** is an erectorset consisting of beams, supports, brackets, adjustable units and other components.

The system allows nearly flexible and easy mounting of test-rig components in unlimited configurations.

Application examples



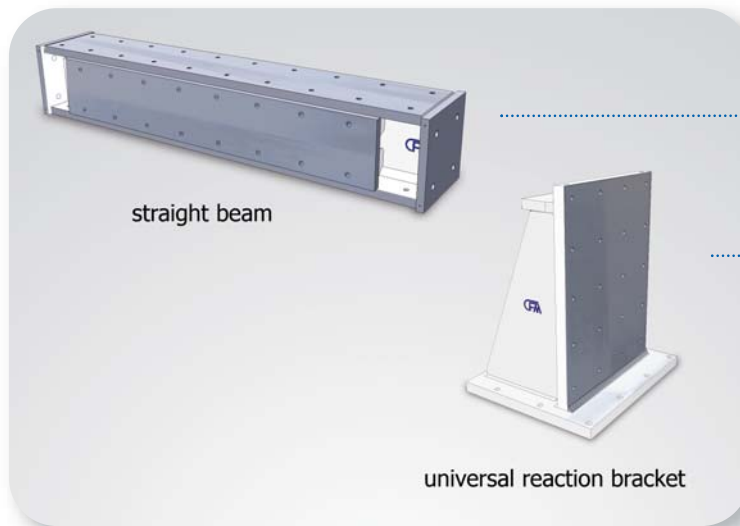
Application with **MOCOKIT 65**, for 6 degrees of freedom, truck cabin support



Application with **MOCOKIT 250**, Carlos TC for passenger car

The complete **MOCOKIT** system is manufactured inhouse of CFM Schiller GmbH.

We manufacture the universal modular construction kit series **MOCOKIT 65, 65 SE, 250, 250 SE** and **400** as a welded steel structure. All surfaces are rectangular and parallel to each other. They are equipped with bores on the top and bottom and tapped holes on the sides. All not machined surfaces are painted light grey.



Modular Construction Kit

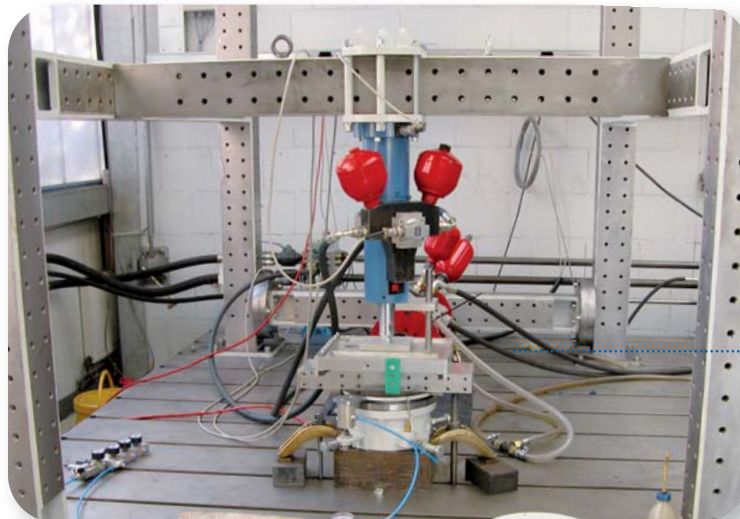
Modular Construction Kit

MOCOKIT components

The **MOCOKIT 25** is made of structural square tubing without threaded holes and is galvanized.

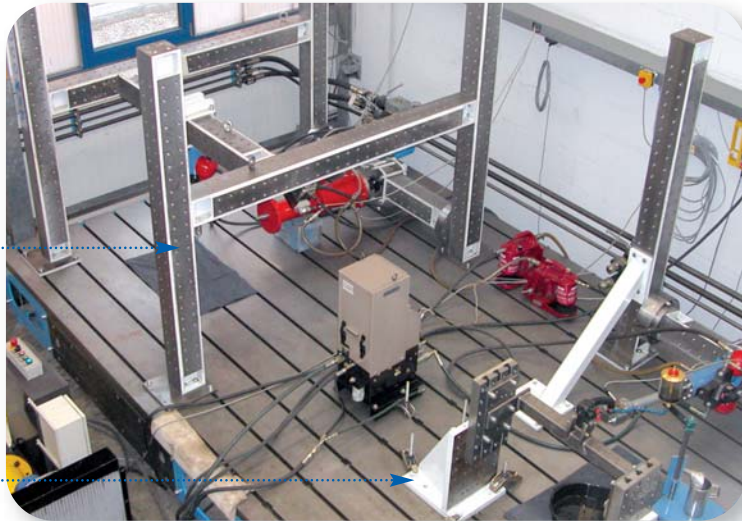
The **MOCOKIT 65 SE** and **MOCOKIT 250 SE** (**S**imple **E**dition) are made similar to **MOCOKIT 65** and **MOCOKIT 250** but without threaded holes. Fixation through clamping only.

Furthermore **MOCOKIT** is designed for a first resonance frequency of 8 - 10 Hz. Please note that significantly higher resonance frequencies can be achieved using specific configurations.



Modular Construction Kit

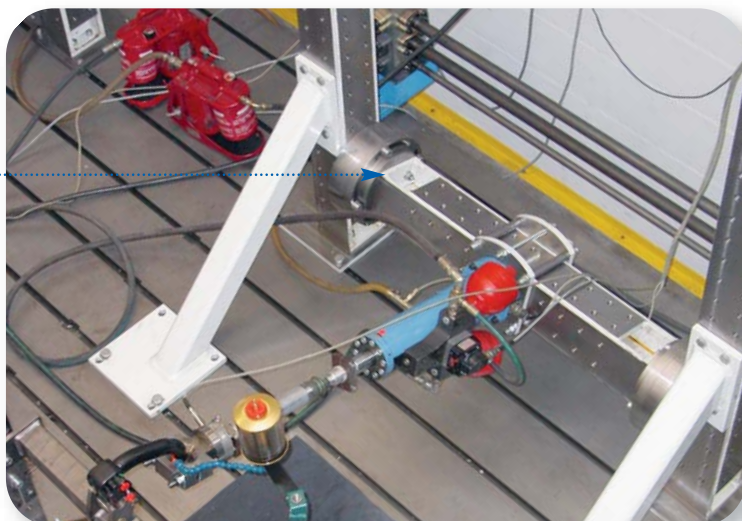
A multi axial test setup with **MOCOKIT**



A multi axial test setup with **MOCOKIT**







The **MOCOKIT has the following advantages:**

- ...▶ Unlimited number of test configurations possible
- ...▶ Short re-built times for different test configurations
- ...▶ Test configurations vary from single axis test up to multi axis tests
- ...▶ All **MOCOKIT** parts are interchangeable
- ...▶ Additional **MOCOKIT** parts can be purchased due to accomodate growing testing needs
- ...▶ Choose the **MOCOKIT** specification suited for your specific range of test load



MOCOKIT swinging test of a durability low bar fixture

MOCOKIT 25
for actuator forces
up to 5.5 kip (25kN) (static)

	Description	Sizes LxWxH (inch) Application	Weight approx. (lbs)	Order-No. SPK ...
	Straight beam with double end flange	L = 40" 40 x 4 x 4" as a crossbeam	71	00137
	Straight beam with single end flange	L = 60" 60 x 4 x 4" as a pillar	100	00036
	Straight beam with single end flange	L = 80" 80 x 4 x 4" as a pillar	128	00138
	Stiffener support 20"	20 ^{-1/2} x 6 ^{-1/4} x 23 ^{-1/2} "	40	00139
	Stiffener support 40"	24 ^{-3/4} x 6 ^{-1/4} x 37 ^{-1/2} "	55	00140
	Reaction bracket 20"	15 ^{-3/4} x 21 ^{-3/4} x 21 ^{-3/4} "	260	00040
	Reaction bracket with vertical adjustment and additional rotational axis	31 ^{-1/2} x 25 x 53"	1367	

MOCOKIT 25
for actuator forces
up to 5.5 kip (25kN) (static)

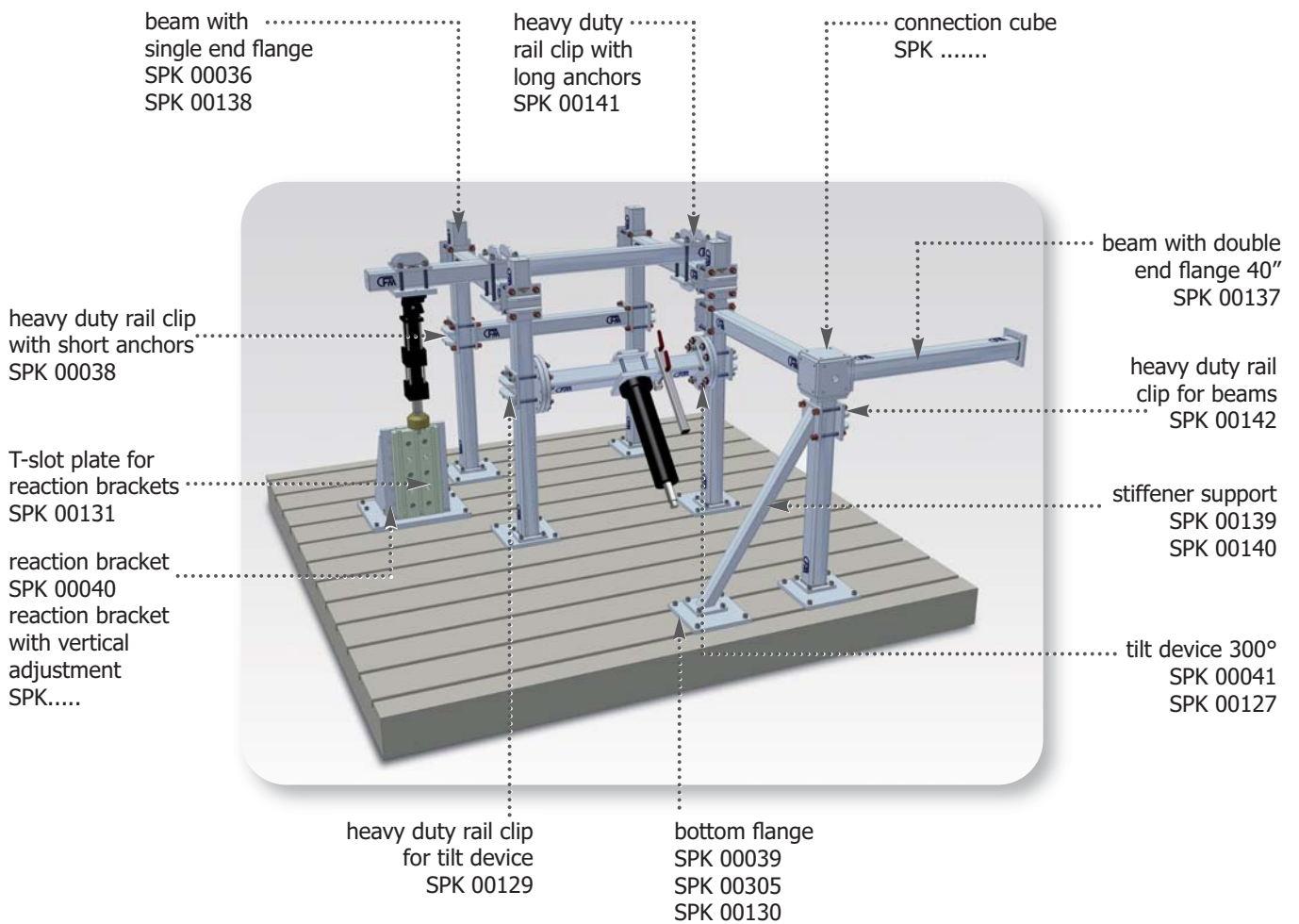
	Description	Sizes LxWxH (inch) Application	Weight approx. (lbs)	Order-No. SPK ...
	Tilt device 300° with angle scale incl. crossbeam L = 30"	30 x 12 x 12" angular adjustment for actuator	177	00041
	Tilt device 300° with angle scale incl. crossbeam L = 40"	40 x 12 x 12" angular adjustment for actuator	192	00127
	Tilt device 300° only	angular adjustment for actuator	128	
	Heavy duty rail clip with long anchor bolts	7 x 7 x 13" anchor bolt $\frac{5}{8}$ - 11 UNC clamping for 2 beams	33	00141
	Heavy duty rail clip with short anchor bolts	8- $\frac{1}{4}$ x 8- $\frac{1}{4}$ x 7- $\frac{1}{2}$ " anchor bolt $\frac{5}{8}$ - 11 UNC for an actuator with an actuator base max. \varnothing 8"	40	00038
	Heavy duty rail clip for beam	7 x 7 x 8- $\frac{1}{4}$ " anchor bolt $\frac{5}{8}$ - 11 UNC	20	00142
	Heavy duty rail clip for tilt device	7 x 7 x 7- $\frac{1}{2}$ " anchor bolt $\frac{5}{8}$ - 11 UNC	20	00129

MOCOKIT 25
for actuator forces
up to 5.5 kip (25kN) (static)

	Description	Sizes LxWxH (inch) Application	Weight approx. (lbs)	Order-No. SPK ...
	Bottom flange plate for center distances 6"	14 x 14 x 3/4" mounting of upright pillars on clamping plates	31	00039
	Bottom flange plate for center distances 12"			00305
	Bottom flange plate for customized design			00130
	T-slot plate	20 x 10 x 2-1/4" 3 T-slots 5/8" center distance 3-1/2"	104	00131
	T - slot nut	T-slot 5/8", 5/8- 11 UNC	-	00134
		T-slot 3/4", 5/8- 11 UNC		00135
	Connection cube	7-1/2 x 7-1/2 x 7-1/2" to connect several beams	44	
	Socket head cap screw	5/8- 11 UNC, ...	-	see page 28
	Collar nut	5/8- 11 UNC	-	00133

MOCOKIT 25
for actuator forces
up to 5.5 kip (25kN) (static)

Component Layout



MOCOKIT 65

for actuator forces
up to 14 kip (65kN) (static)

Description	Sizes LxWxH (inch) Application	Weight approx. (lbs)	Order-No. SPK ...
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	Straight beam 30"	vertikal + horizontal	SE without threaded holes	30 x 6 x 6"	166	00307
			3 x 3", 5/8-11 UNC			00143
	Straight beam 41-1/4"		SE without threaded holes	41-1/4 x 6 x 6"	221	00308
			3 x 3", 5/8-11 UNC			00144
	Straight beam 60"		SE without threaded holes	60 x 6 x 6"	336	00309
			3 x 3", 5/8-11 UNC			00145
	Straight beam 90"		SE without threaded holes	90 x 6 x 6"	512	00310
			3 x 3", 5/8-11 UNC			00146
Straight beam 120"	SE without threaded holes	120 x 6 x 6"	668			
	3 x 3", 5/8-11 UNC					
Straight beam 150"	SE without threaded holes	150 x 6 x 6"	783			
	3 x 3", 5/8-11 UNC					
Straight beam 180"	SE without threaded holes	180 x 6 x 6"	895			
	3 x 3", 5/8-11 UNC					
	Crossbeam 80"	horizontal	SE without threaded holes	80 x 12 x 6"	662	
			3 x 3", 5/8-11 UNC			
	Adapter pieces MOCOKIT 65 / 250		7-1/2 x 6-3/4 x 5" for connection to MOCOKIT 250 pillars		2 x 33	
	Angle pieces 45°		6 x 6-3/4 x 8-1/2" allows diagonal structure		2 x 33	
	Angle pieces 22,5°		6 x 6-3/4 x 16-3/4" / 6 x 6-1/2 x 6" to take straight beams as stiffener support		55 + 27	

MOCOKIT 65

for actuator forces
up to 14 kip (65kN) (static)

		Description	Sizes LxWxH (inch) Application	Weight approx. (lbs)	Order-No. SPK ...	
		Stiffener support 45°	22-1/2 x 6-1/4 x 22-1/2" 3 x 3", 5/8- 11 UNC	110	00147	
		Stiffener support 90°	6 x 6-1/4 x 6-3/4" 3 x 3 x 75", 5/8- 11 UNC	16	00111	
	vertical strengthening for pillar	Stiffener support 30-1/4"	22-3/4 x 7 x 30-1/4" SE without threaded holes 22-3/4 x 7 x 30-1/4" 3 x 3 x 75", 5/8- 11 UNC	181	00149	
		Stiffener support 42"	22-3/4 x 7 x 42" SE without threaded holes 22-3/4 x 7 x 42" 3 x 3 x 75", 5/8- 11 UNC	221	00150	
		Stiffener support 57"	22-3/4 x 7 x 57" SE without threaded holes 22-3/4 x 7 x 57" 3 x 3 x 75", 5/8- 11 UNC	273	00311	
		Tilt device 300° with angle scale incl. crossbeam 33-1/2"	33-1/2 x 12 x 12" without threaded holes MOCOKIT 65 SE	320	00313	
			33-1/2 x 12 x 12" 3 x 3", 5/8- 11 UNC MOCOKIT 65		00151	
		Tilt device 300° with angle scale incl. crossbeam 45-1/4"	45-1/4 x 12 x 12" without threaded holes MOCOKIT 65 SE	375	00314	
			45-1/4 x 12 x 12" 3 x 3", 5/8- 11 UNC MOCOKIT 65		00152	
		Tilt device 300° with angle scale incl. crossbeam 63"	63 x 12 x 12" without threaded holes MOCOKIT 65 SE	490	00315	
			63 x 12 x 12" 3 x 3", 5/8- 11 UNC MOCOKIT 65		00153	
		Tilt device 300° with angle scale only, without crossbeam	for crossbeam	165		
		Tilt device 300° with angle scale only, without crossbeam	for double height	265		

MOCOKIT 65

for actuator forces
up to 14 kip (65kN) (static)

	Description	Sizes LxWxH (inch) Application	Weight approx. (lbs)	Order-No. SPK ...
	Vertical adjustment unit stepless adjustable for tilt device	-	110	00154
	Clamping flange (pair)	2 x 12 x 12 x 10"	135 (pair)	00312
	Clamping flange double height (pair)	2 x 12-1/2 x 10 x 10-1/2"	167 (pair)	
	Heavy duty rail clip	10 x 11 x 8-1/4" anchor bolt 5/8 - 11 UNC stepless adjustment of tilt device or beam	38	00155
	Heavy duty rail clip with turnable actuator support	23-1/4 x 12 x 12" anchor bolt 5/8 - 11 UNC stepless adjustment of the actuator	137	00156
	Heavy duty rail clip with short anchor bolts	11 x 8-1/4 x 9-3/4" anchor bolt 5/8 - 11 UNC for an actuator with an actuator base max. ø 8"	55	00110
	Heavy duty rail clip with long anchor bolts	17-3/4 x 8-1/4 x 11" anchor bolt 5/8 - 11 UNC adjustment of two beams	66	00157






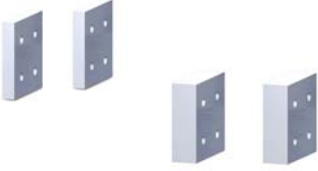

MOCOKIT 65

for actuator forces
up to 14 kip (65kN) (static)

	Description	Sizes LxWxH (inch) Application	Weight approx. (lbs)	Order-No. SPK ...
	Vertical step-by-step lifting device for straight beam	-	33	00160
	Cable winch	23-1/2 x 11-3/4 x 40" for crossbeam with clamping flange	102	
	Universal reaction bracket 21-1/2"	15-3/4 x 23-1/2 x 21-1/2" 3 x 3", 5/8- 11 UNC	429	00043
	Universal reaction bracket 21-1/2"	15-3/4 x 23-1/2 x 21-1/2" with T-slots 5/8"	474	00348
	Universal reaction bracket 41-1/2"	21-1/2 x 30 x 41-1/2" 3 x 3", 5/8- 11 UNC	926	00114
	Universal reaction bracket 41-1/2"	21-1/2 x 30 x 41-1/2" with T-slots 5/8"	1146	00350
	T-slot plate small	20 x 12 x 2-1/4" 3 T-slots, 5/8" center distance 3"	128	00042
	T-slot plate large	40 x 30 x 2-1/4" 9 T-slots, 5/8" center distance 3"	655	00109

MOCOKIT 65

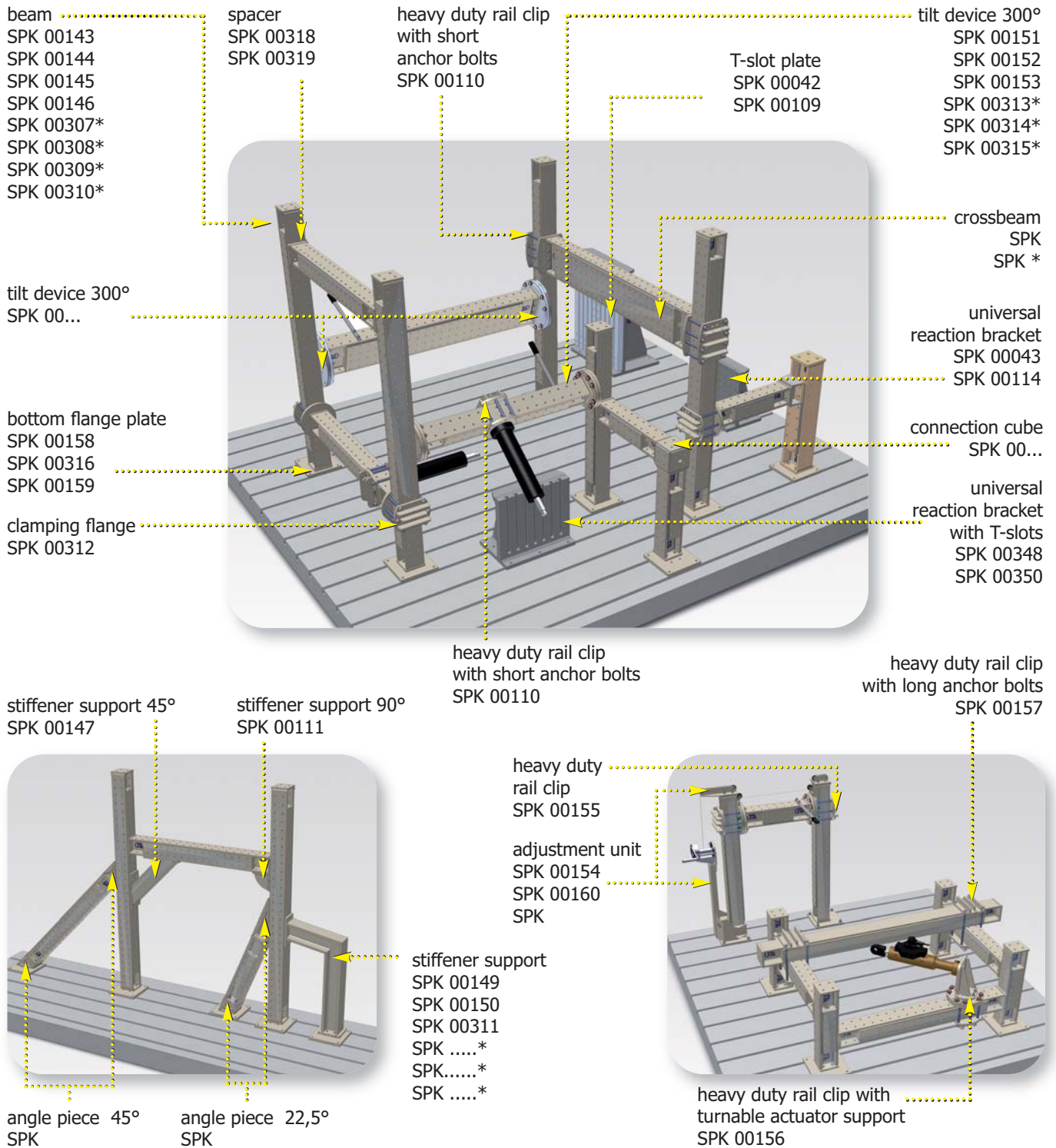
for actuator forces
up to 14 kip (65kN) (static)

	Description	Sizes LxWxH (inch) Application	Weight approx. (lbs)	Order-No. SPK ...
	Bottom flange plate for center distances 6"	14 x 14 x 1" mounting of upright pillars on clamping plates	40	00158
	Bottom flange plate for center distances 12"			00316
	Bottom flange plate for customized design			00159
	Connection cube	185 x 185 x 185 connection of several beams	45	
	Collar nut	5/8 - 11 UNC	-	00161
	Socket head cap screw	5/8 - 11 UNC, ...	-	see page 28
	Transport bracket with eyebolt	6 x 2 x 7"	7	00165
	Spacer (2 pieces)	6 x 6 x 1" adjustment of distance between pillars	11 each	00318
		6 x 6 x 2" adjustment of distance between pillars	20 each	00319
	T-slot nut	T-slot 5/8", 5/8" - 11 UNC	-	00112
		T-slot 3/4", 5/8" - 11 UNC		00163
		T-slot 1", 5/8" - 11 UNC		00164

MOCOKIT 65

for actuator forces
up to 14 kip (65kN) (static)

Component Layout



* for **MOCOKIT 65 SE**

MOCOKIT 250

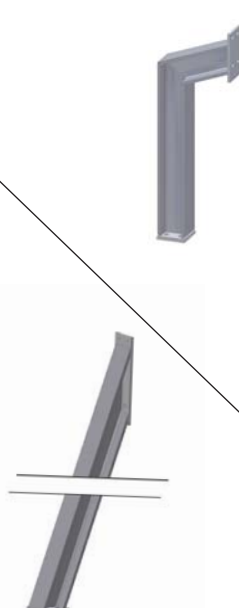
for actuator forces
up to 55 kip (250kN) (static)

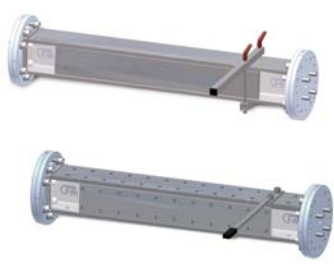
Description	Sizes LxWxH (inch) Raster of threaded hole	Weight approx. (lbs)	Order-No. SPK ...
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	Straight beam 20"	vertical + horizontal	SE without threaded holes	20 x 7-1/2 x 7-1/2"	143	00320
			4 x 4", 1 - 8 UNC			00166
	Straight beam 40"		SE without threaded holes	40 x 7-1/2 x 7-1/2"	280	00321
			4 x 4", 1 - 8 UNC			00167
Straight beam 60"		SE without threaded holes	60 x 7-1/2 x 7-1/2"	430	00322	
		4 x 4", 1 - 8 UNC			00086	
Straight beam 70"		SE without threaded holes	70 x 7-1/2 x 7-1/2"	540		
	Straight beam 80"	vertical	SE without threaded holes	80 x 7-1/2 x 7-1/2"	573	00323
			4 x 4", 1 - 8 UNC			00087
	Straight beam 90"		SE without threaded holes	90 x 7-1/2 x 7-1/2"	646	
			4 x 4", 1 - 8 UNC			
	Straight beam 100"		SE without threaded holes	100 x 7-1/2 x 7-1/2"	723	00324
			4 x 4", 1 - 8 UNC			00168
	Straight beam 120"		SE without threaded holes	120 x 7-1/2 x 7-1/2"	904	00335
			4 x 4", 1 - 8 UNC			00334
Straight beam 124"		SE without threaded holes	124 x 7-1/2 x 7-1/2"	926		
Straight beam 140"		SE without threaded holes	140 x 7-1/2 x 7-1/2"	1058	00337	
		4 x 4", 1 - 8 UNC			00336	
Straight beam 177"		SE without threaded holes	177 x 7-1/2 x 7-1/2"	1367	00339	
		4 x 4", 1 - 8 UNC			00338	
Straight beam 220"		SE without threaded holes	220 x 7-1/2 x 7-1/2"	1676		
		4 x 4", 1 - 8 UNC				
	Crossbeam 80"	horizontal	SE without threaded holes	80 x 15-1/2 x 7-1/2"	1102	00343
			4 x 4", 1 - 8 UNC			00342
	Crossbeam 100"		SE without threaded holes	100 x 15-1/2 x 7-1/2"	1378	
			4 x 4", 1 - 8 UNC			
	Crossbeam 120"		SE without threaded holes	120 x 15-1/2 x 7-1/2"	1687	00345
			4 x 4", 1 - 8 UNC			00344

MOCOKIT 250
for actuator forces
up to 55 kip (250kN) (static)

Description	Sizes LxWxH (inch) Application Raster of threaded hole	Weight approx. (lbs)	Order-No. SPK...
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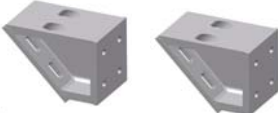








	Stiffener support 29"	SE without threaded holes 4 x 4", 1 - 8 UNC	20 ^{-3/4} x 7 ^{-3/4} x 29"	221	00171
	Stiffener support 41"		SE without threaded holes 4 x 4", 1 - 8 UNC	20 ^{-3/4} x 7 ^{-3/4} x 41"	280
	Stiffener support 60"	SE without threaded holes 4 x 4", 1 - 8 UNC		20 ^{-3/4} x 7 ^{-3/4} x 60 ^{-1/2} "	375
	Stiffener support 80 ^{-1/2} "		SE without threaded holes 4 x 4", 1 - 8 UNC	20 ^{-3/4} x 7 ^{-3/4} x 80 ^{-1/2} "	551
	Stiffener support 100 ^{-1/2} "	SE without threaded holes 4 x 4", 1 - 8 UNC		29 ^{-1/2} x 7 ^{-3/4} x 100 ^{-1/2} "	602
	Stiffener support 159"		SE without threaded holes 4 x 4", 1 - 8 UNC	58 x 7 ^{-3/4} x 159"	864

	Tilt device 300° with angle scale incl. straight beam L = 43 ^{-1/4} "	SE without threaded holes 4 x 4", 1 - 8 UNC	43 ^{-1/4} x 14 ^{-1/2} x 14 ^{-1/2} "	430	00326
	Tilt device 300° with angle scale incl. straight beam L = 63"		SE without threaded holes 4 x 4", 1 - 8 UNC	63 x 14 ^{-1/2} x 14 ^{-1/2} "	585
	Tilt device 300° with angle scale incl. straight beam L = 82 ^{-1/2} "	SE without threaded holes 4 x 4", 1 - 8 UNC		82 ^{-1/2} x 14 ^{-1/2} x 14 ^{-1/2} "	834
	Tilt device 300° with angle scale incl. straight beam L = 102 ^{-1/4} "		SE without threaded holes 4 x 4", 1 - 8 UNC	102 ^{-1/4} x 14 ^{-1/2} x 14 ^{-1/2} "	935


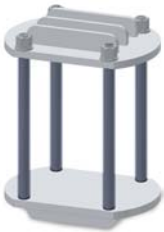





	Tilt device 300° with angle scale without crossbeam		-	166	
	Tilt device 300° with angle scale without crossbeam		-	265	

MOCOKIT 250

for actuator forces
up to 55 kip (250kN) (static)

	Description / Application	Sizes LxWxH (inch)	Weight approx. (lbs)	Order-No. SPK ...
	Angle pieces 45° allows diagonal structure with standard media	6 x 6 ^{-3/4} x 8 ^{-1/4} "	115 (pair)	
	Angle pieces 22,5° to take straight beams as stiffener support	6 x 6 ^{-3/4} x 16 ^{-3/4} " / 6 x 6 ^{-1/2} x 6"	84 (pair)	
	Lifting device cable winch for straight beams with clamping flange	25 x 15 ^{-3/4} x 41 ^{-1/4} "	139	
	Vertical step-by-step lifting device for crossbeam	-	49	00185
	Vertical adjustment unit stepless adjustable for tilt device	-	165	00176
	Clamping flange for straight beams (pair)	2 x 14 ^{-1/2} x 14 ^{-1/2} x 11 ^{-1/2} "	214 (pair)	00325
	Clamping flange for crossbeams (pair)	2 x 15 ^{-3/4} x 13 ^{-3/4} x 11 ^{-1/2} "	274 (pair)	
	Heavy duty rail clip for straight beams	15 ^{-3/4} x 10 ^{-3/4} x 11 ^{-1/2} " anchor bolt 1 - 8 UNC	62	00177
	Heavy duty rail clip for crossbeams	15 ^{-3/4} x 10 ^{-3/4} x 19" anchor bolt 1 - 8 UNC	66	
	Heavy duty rail clip with turnable actuator support stepless adjustment of the actuator	27 x 15 x 15 ^{-3/4} " anchor bolt 1 - 8 UNC	243	00178

MOCOKIT 250
for actuator forces
up to 55 kip (250kN) (static)

	Description	Sizes LxWxH (inch) Application	Weight approx. (lbs)	Order-No. SPK ...
	Heavy duty rail clip with short anchor bolts for an actuator fixation face of $\varnothing 8''$	$15^{-3/4} \times 10^{-3/4} \times 11^{-1/2}''$ anchor bolt 1 - 8 UNC	106	00088
	Heavy duty rail clip with long anchor bolts straight beam/ straight beam	$20^{-3/4} \times 10^{-3/4} \times 15^{-3/4}''$ anchor bolt 1 - 8 UNC	110	00330
	Heavy duty rail clip with long anchor bolts straight beam/ crossbeam	$20^{-3/4} \times 10^{-3/4} \times \dots''$ anchor bolt 1 - 8 UNC	110	
	Heavy duty rail clip with long anchor bolts crossbeam/ crossbeam	$20^{-3/4} \times 10^{-3/4} \times \dots''$ anchor bolt 1 - 8 UNC	110	
	Universal reaction bracket $21^{-1/2}''$	$19 \times 23^{-1/2} \times 21^{-1/2}''$ threaded holes $4 \times 4''$, 1 - 8 UNC	540	00183
		$19 \times 23^{-1/2} \times 21^{-1/2}''$ with T-slots 1" center distance 4"	683	00352
	Universal reaction bracket $41^{-1/2}''$	$22^{-3/4} \times 29^{-1/2} \times 41^{-1/2}''$ threaded holes $4 \times 4''$, 1 - 8 UNC	1069	00184
		$22^{-3/4} \times 29^{-1/2} \times 41^{-1/2}''$ with T-slots 1" center distance 4"	1488	00354
	Reaction bracket with vertical adjustment and additional rotational axis	$33^{-1/2} \times 33^{-1/2} \times 59^{-1/4}''$	1985	
	T-slot plate for reaction brackets small size	$20 \times 12 \times 3^{-1/4}''$ 3 T-slots 1" center distance 4"	152	00181
	T-slot plate for reaction brackets large size	$40 \times 30 \times 3^{-1/4}''$ 7 T-slots 1" center distance 4"	794	00182

MOCOKIT 250

for actuator forces
up to 55 kip (250kN) (static)

	Description	Sizes LxWxH (inch) Application	Weight approx. (lbs)	Order-No. SPK ...	
	Adapter pieces MOCOKIT 250 / 400	each 11-1/2 x 10-3/4 x 5" for connection of MOCOKIT 400 pillars	2 x 51		
	Stiffener support 45°	23 x 8 x 22" 4 x 4", 1 - 8 UNC	150	00169	
	Stiffener support 90°	9-1/2 x 7-1/2 x 8" 4 x 4", 1 - 8 UNC	33	00170	
	Bottom flange plate for center distance ... mounting of upright pillars on ground plates	6"	14 x 14 x 1-1/4"	44	00179
		12"		00328	
		individual		00180	
	Bottom flange plate for stiffener support	41-1/4 x 21-1/4 x 1-1/2"	401		
	Connection cube to connect several beams	9-1/4 x 9-1/4 x 9-1/4"	84		
	Collar nut	1 - 8 UNC	-	00186	
	Socket head cap screw DIN EN ISO 4762	1 - 8 UNC, ...	-	see page 28	
	Transport bracket with eye bolt	7 x 2 x 8-1/2"	7	00189	
	Spacer (2 pieces) adjustment of distance between pillars	7-3/4 x 7-3/4 x 1"	31(pair)	00331	
		7-3/4 x 7-3/4 x 2"	62 (pair)	00332	
	T-slot nut	T-slot 1-1/4", 1 - 8 UNC	-	00188	

MOCOKIT 250

for actuator forces
up to 250kN (static)

Component Layout

straight beam 20"-220"
SPK 0000320* - 00324*
SPK 00335*
SPK 00337*
SPK 00339*
SPK 00...*
SPK 00...*
SPK 00...*
SPK 00...*
SPK 00166, SPK 00167,
SPK 00086, SPK 00087,
SPK 00168, SPK 00334,
SPK 00336, SPK 00338,
SPK 00..., SPK 00...,
SPK 00..., SPK 00...,

tilt device 300°
for crossbeam
SPK 00.....

tilt device 300°
incl. straight beam
SPK 00173
SPK 00174
SPK 00...
SPK 00...
SPK 00326*
SPK 00327*
SPK 00...*
SPK 00...*

tilt device 300°
incl. straight beam
SPK 00....

stiffener support
159"
SPK 00341
SPK 00...*

reaction bracket
with T-slots
SPK 00352
SPK 00354

stiffener support 90°
SPK 00170

bottom flange plate
SPK 00179
SPK 00328
SPK 00180
SPK 00....

clamping flange for straight beams
SPK 00325

clamping flange
SPK 00177
SPK 00....

adjustment unit
SPK 00....
SPK 00176

adjustment unit
for straight beam
SPK 00185

connection cube
SPK 00...

clamping flange
for crossbeam
SPK 00....

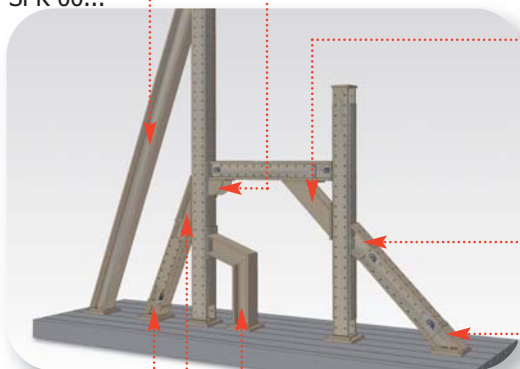
crossbeam
SPK 00343*
SPK 00...*
SPK 00345*
SPK 00342
SPK 00...
SPK 00344

T-slot plate
large size
SPK 00182

universal reaction
bracket
SPK 00183
SPK 00352

T-slot plate
small size
SPK 00181

heavy rail clip with
short anchor bolts
SPK 00088



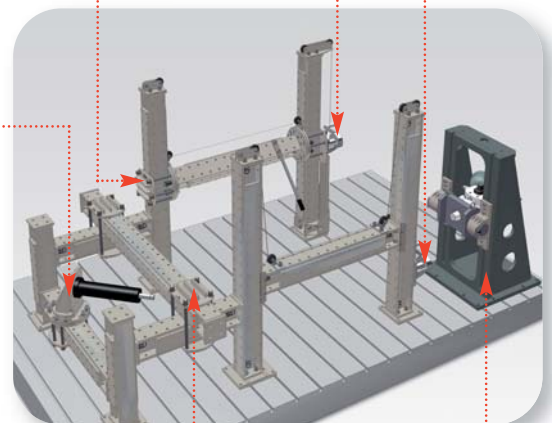
angle pieces 22,5°
SPK 00.....

stiffener support
SPK 00171, SPK 00...*,
SPK 00091, SPK 00...*,
SPK 00..., SPK 00...*,
SPK 00..., SPK 00...*,
SPK 00340, SPK 00...*,

stiffener support 45°
SPK 00169

heavy duty rail clip
with turnable
actuator support
SPK 00178

angle pieces 45°
SPK 00....



heavy duty rail clip
with long anchor bolts
SPK 00330,
SPK 00.....,
SPK 00.....

reaction bracket
SPK 00...

* for MOCOKIT 250 SE

MOCOKIT 400

for actuator forces
up to 88 kip (400kN) (static)


Description	Sizes LxWxH (inch) Application	Weight approx. (lbs)	Order-No. SPK ...
-------------	-----------------------------------	----------------------------	----------------------

	Straight beam 40"	+ vertical horizontal	40 x 13 ^{-3/4} x 13 ^{-3/4} " 8 x 8", 1 - 8 UNC	882	00280
	Straight beam 55"		55 x 13 ^{-3/4} x 13 ^{-3/4} " 8 x 8", 1 - 8 UNC	1235	00281
	Straight beam 80"	vertical	80 x 13 ^{-3/4} x 13 ^{-3/4} " 8 x 8", 1 - 8 UNC	1764	00282
	Straight beam 95"		95 x 13 ^{-3/4} x 13 ^{-3/4} " 8 x 8", 1 - 8 UNC	2117	00283
	Straight beam 120"		120 x 13 ^{-3/4} x 13 ^{-3/4} " 8 x 8", 1 - 8 UNC	2646	00284
	Straight beam 134"		134 x 13 ^{-3/4} x 13 ^{-3/4} " 8 x 8", 1 - 8 UNC	2910	..
	Straight beam 160"		160 x 13 ^{-3/4} x 13 ^{-3/4} " 8 x 8", 1 - 8 UNC	3087	00285
	Straight beam 173"		173 x 13 ^{-3/4} x 13 ^{-3/4} " 8 x 8", 1 - 8 UNC	3418	00346
	Straight beam 200"		200 x 13 ^{-3/4} x 13 ^{-3/4} " 8 x 8", 1 - 8 UNC	3892	00347
	Straight beam 213"		213 x 13 ^{-3/4} x 13 ^{-3/4} " 8 x 8", 1 - 8 UNC	4200	..
	Straight beam 240"		240 x 13 ^{-3/4} x 13 ^{-3/4} " 8 x 8", 1 - 8 UNC	4670	..
			Crossbeam 80"	horizontal	80 x 13 ^{-3/4} x 21 ^{-3/4} " 8 x 8", 1 - 8 UNC
Crossbeam 120"		120 x 13 ^{-3/4} x 21 ^{-3/4} " 8 x 8", 1 - 8 UNC	3505		..
Crossbeam 160"		160 x 13 ^{-3/4} x 21 ^{-3/4} " 8 x 8", 1 - 8 UNC	4674		..
Crossbeam 240"		240 x 13 ^{-3/4} x 21 ^{-3/4} " 8 x 8", 1 - 8 UNC	7011		..
	Angle pieces 45°		2 x 20 ^{-1/2} x 14 ^{-1/4} x 13 ^{-1/2} "	2 x 276	..
	Stiffener support 45°		30 x 12 ^{-1/4} x 30" 8 x 8", 1 - 8 UNC	507	00289
	Stiffener support 90°		13 ^{-3/4} x 13 ^{-3/4} x 14 ^{-1/2} " 8 x 8", 1 - 8 UNC	188	00288
	Stiffener support 45° 45 ^{-1/4} "		45 ^{-1/4} x 12 ^{-1/4} x 45 ^{-1/4} "	816	00286
	Stiffener support 45° 84 ^{-1/2} "		84 ^{-1/2} x 12 ^{-1/4} x 84 ^{-1/2} "	1577	00287

MOCOKIT 400










for actuator forces
up to 88 kip (400kN) (static)

Description	Sizes LxWxH (inch) Application	Weight approx. (lbs)	Order-No. SPK ...
-------------	-----------------------------------	-----------------------------	----------------------

	Stiffener support 45-1/4"	vertical pillar stiffening	23-3/4 x 14 x 45-1/4"	761	00294
	Stiffener support 84-1/2"		23-3/4 x 14 x 84-1/2"	1301	00295
	Heavy duty rail clip with short anchor bolts		25-3/4 x 17-1/4 x 19-1/2" anchor bolts 1 - 8 UNC stepless actuator fixation face of ø max. ø17"	386	00296
	Heavy duty rail clip with long anchor bolts	straight beam to straight beam	25-3/4 x 17-1/4 x 35-3/4" anchor bolts 1 - 8 UNC	430	00297
		straight beam to crossbeam	25-3/4 x 17-1/4 x ... anchor bolts 1 - 8 UNC	435	
		crossbeam to crossbeam	25-3/4 x 17-1/4 x ... anchor bolts 1 - 8 UNC	439	
	Universal bracket 38-3/4		31-3/4 x 27-1/2 x 38-3/4" with threaded holes 8 x 8 ", 1 - 8 UNC	1709	00300
			31-3/4 x 27-1/2 x 38-3/4" with T-slots center distance 8 "	1929	00356
	Universal bracket 54-1/2"		41-3/4 x 31-3/4 x 54-1/2" with threaded holes 8 x 8 ", 1 - 8 UNC	2866	00301
			41-3/4 x 31-3/4 x 54-1/2" with T-slots center distance 8 "	3230	00358
	Universal bracket 60"		41-3/4 x 35-1/2 x 60" with threaded holes 8 x 8 ", 1 - 8 UNC	3252	
			41-3/4 x 35-1/2 x 60" with T-slots center distance 8 "	3748	
	Universal bracket 70"		41-3/4 x 41-3/4 x 70-3/4" with threaded holes 8 x 8 ", 1 - 8 UNC	4189	
			41-3/4 x 41-3/4 x 70-3/4" with T-slots center distance 8 "	4850	

MOCOKIT 400

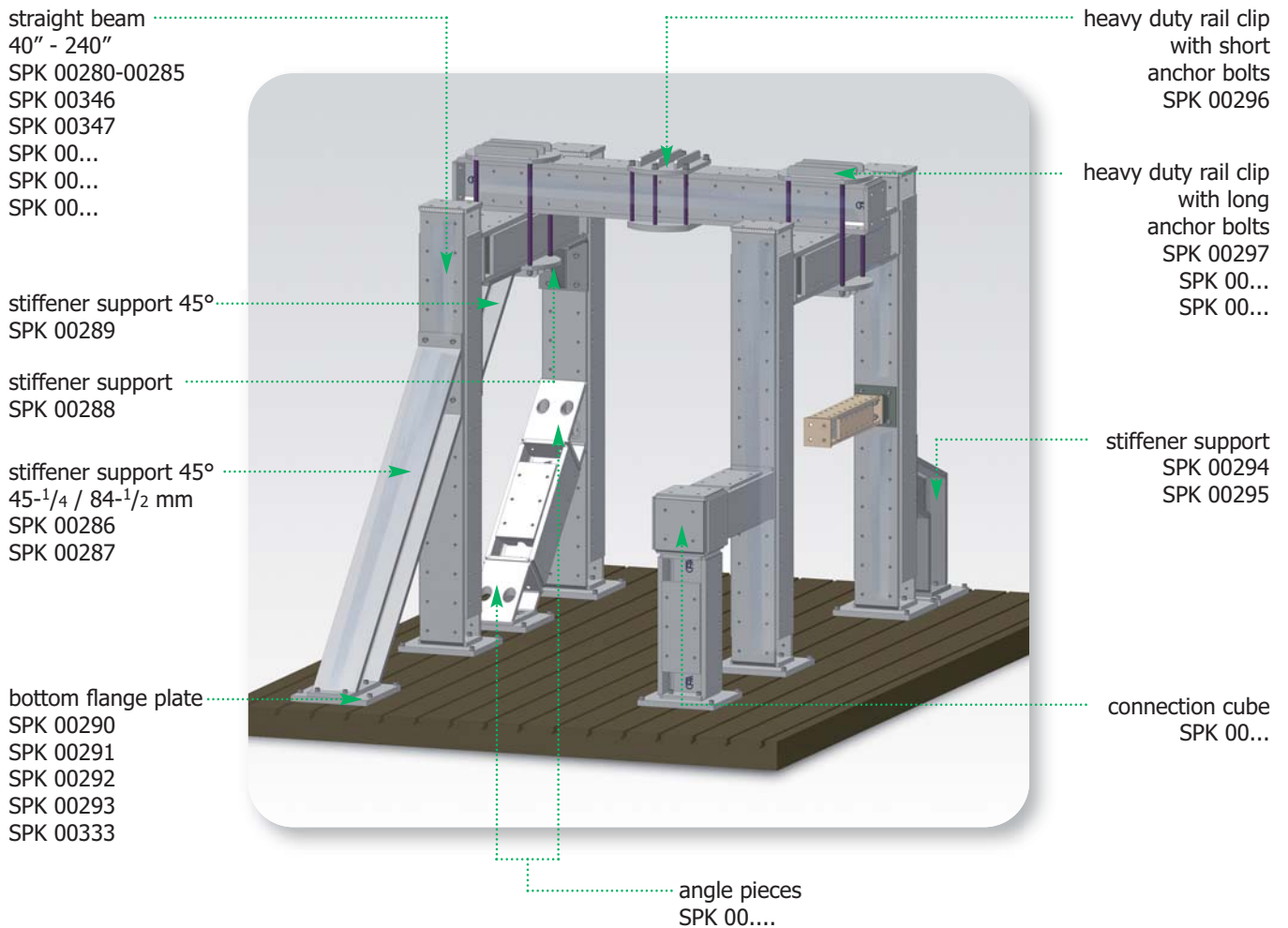
for actuator forces
up to 88 kip (400kN) (static)

	Description	Sizes LxWxH (inch) Application	Weight approx. (lbs)	Order-No. SPK ...
	Bottom flange plate center distance 6"	17- ³ / ₄ x 17- ³ / ₄ x 1- ¹ / ₂ " adjustment of upright pillars on ground plates	141	00290
		23- ¹ / ₂ x 17- ³ / ₄ x 1- ¹ / ₂ " for stiffener support 45°	188	00291
	Bottom flange plate center distance 12"	21- ¹ / ₂ x 21- ¹ / ₂ x 1- ¹ / ₂ " adjustment of upright pillars on ground plates	210	00292
		25- ¹ / ₂ x 21- ¹ / ₂ x 1- ¹ / ₂ " for stiffener support 45°, adjustment of vertical beams 40"/80" on ground plates	250	00293
		25- ¹ / ₂ x 21- ¹ / ₂ x 1- ¹ / ₂ " for stiffener support 45°, adjustment of vertical beams 55"/95" on ground plates	250	00333
	Connection cube to connect several beams	16- ¹ / ₄ x 16- ¹ / ₄ x 16- ¹ / ₄ "	397	
	T-slot plate for reaction bracket small size	35- ¹ / ₂ x 27- ¹ / ₂ x 3- ¹ / ₂ " 3 T-slots 1", center distance 8"	893	00298
	T-slot plate for reaction brackets large size	51- ¹ / ₄ x 35- ¹ / ₂ x 3- ¹ / ₂ " 4 T-slots 1", center distance 8"	1654	00299
	Guiding gib set of 4 pieces horizontal guiding for the beams	17- ³ / ₄ x 1/2 x 3"	18 (Set)	00302
	Flange plate small size for cylinders	20 x 20 x 1- ¹ / ₂ "	178	00303
	Flange plate large size for cylinders	20 x 27- ¹ / ₂ x 1- ¹ / ₂ "	243	00304
	T-slot nut	T-slot 1- ¹ / ₄ ", 1 - 8 UNC	-	00188
	Socket head cap screw DIN EN ISO 4762	1 - 8 UNC, ...	-	see page 33

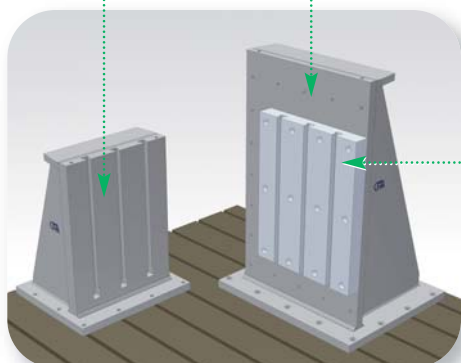
MOCOKIT 400

for actuator forces
up to 88 kip (400kN) (static)

Component Layout



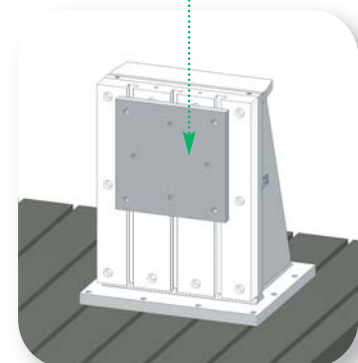
universal reaction
bracket with T-slots
SPK 00356
SPK 00358
SPK 00...
SPK 00...



universal reaction bracket
with threaded holes
SPK 00300
SPK 00301
SPK 00...
SPK 00...

T-slot plate
SPK 00298
SPK 00299

flange plate for
cylinders
SPK 00303
SPK 00304



Socket head cap screw DIN EN ISO 4762
Additional information about their application

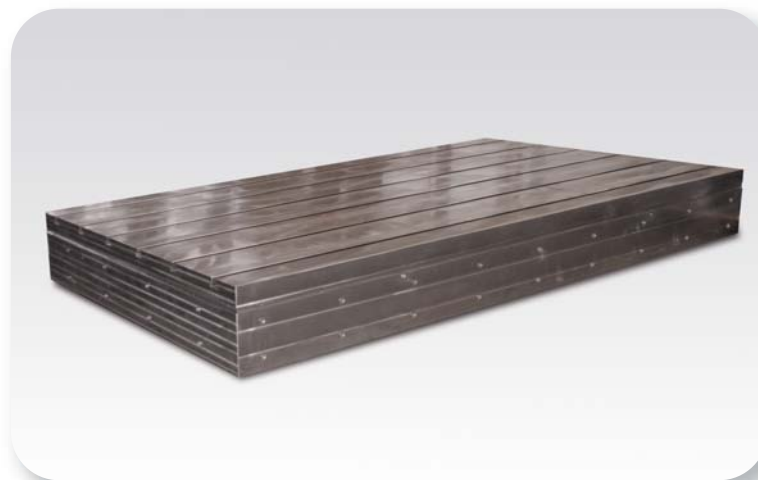
for MOCOKIT 25, MOCOKIT 65 and 65 SE all screws with 145.000 PSI min. tensile strength tightening torque = 190 ft-lbs	SPK 004.xxx							
	.035	.040	.045	.050	.055	.060	.065	.070
	5/8" - 11 UNC, length ... (inch)							
	1-1/4	1-1/2	1-3/4	2	2-1/4	2-1/2	2-1/2	2-3/4
MOCOKIT 25								
Beam on bottom flange plate	x							
Bottom flange plate on T-slot plate with T-slot DIN650 18H12			x					
Bottom flange plate on T-slot plate with T-slot DIN650 22H12					x			
Universal reaction bracket on T-slot plate with T-slot DIN650 18H12					x			
Universal reaction bracket on T-slot plate with T-slot DIN650 22H12							x	
T-slot plate to universal reaction bracket							x	
MOCOKIT 65								
Beam to beam	x							
Beam to bottom flange plate	x							
Stiffener support to beam		x						
Stiffener support 45° to beam		x						
Stiffener support 90° to beam		x						
Stiffener support to bottom flange plate		x						
Bottom flange plate on T-slot plate with T-slot DIN650 18H12				x				
Bottom flange plate on T-slot plate with T-slot DIN650 22H12						x		
Bottom flange plate on T-slot plate with T-slot DIN650 28H12								x
Universal reaction bracket on T-slot plate with T-slot DIN650 18H12						x		
Universal reaction bracket on T-slot plate with T-slot DIN650 22H12							x	
Universal reaction bracket on T-slot plate with T-slot DIN650 28H12								x
T-slot plate to universal reaction bracket							x	

for MOCOKIT 250, 250 SE and 400 all screws with 145.000 PSI min. tensile strength tightening torque = 600 ft-lbs	SPK 005.xxx					
	.040	.045	.055	.070	.080	.090
	1" - 8 UNC, length ... (inch)					
	1-1/2	1-3/4	2-1/4	2-3/4	3	3-1/2
MOCOKIT 250						
Beam to beam		x				
Beam to bottom flange plate		x				
Stiffener support to beam		x				
Stiffener support 45° to beam		x				
Stiffener support 90° to beam			x			
Stiffener support to bottom flange plate			x			
Bottom flange plate on T-slot plate with T-slots DIN650 28H12					x	
Universal reaction bracket on T-slot plate with T-slot DIN650 28H12					x	
T-slot plate on universal reaction bracket						x
MOCOKIT 400						
Beam to beam				x		
Beam on bottom flange plate				x		
Stiffener support to beam				x		
Stiffener support 45° to beam				x		
Stiffener support 90° to beam				x		
Stiffener support 45° on bottom flange plate				x		
Stiffener support on bottom flange plate						x
Bottom flange plate on T-slot plate with T-slot DIN650 28H12						x
Universal reaction bracket on T-slot plate with T-slot DIN650 28H12						x
T-slot plate to universal reaction bracket						x

Ground plate

Any test bench configuration starts on a robust and flexible baseplate. This plate guarantees a very stable and reproducible installation of the **MOCOKIT** single components. Made of special steel casting the plates are available in different dimensions. We can install the plate into the ground floor or in a specified working height.

Furthermore CFM Schiller offers different vibration isolation systems with defined eigenfrequencies to react on the required applications and test conditions. The standard dimensions are listed below, but in case of special requirements concerning baseplate specification, please contact us for immediate support and an individual quote.



Ground plate for **MOCOKIT**

Natural frequency	
Ground plate support	Natural frequency of vibration isolation
Elastomer	8 - 14 Hz
Steel spring	2 - 6 Hz
Air spring (Typ BZ, GRB)	0,8 - 2,5 Hz

Standard sizes [mm]	T-Nut DIN 650	MOCOKIT			Order-No. SPK ...
		25	65	400	
3000 x 2000	18H12	25	65		..
	22H12	25	65		..
	28H12		65	250 400	..
3000 x 3000	18H12	25	65		..
	22H12	25	65		..
	28H12		65	250 400	..
4000 x 3000	18H12	25	65		..
	22H12	25	65		..
	28H12		65	250 400	..
4000 x 4000	18H12	25	65		..
	22H12	25	65		..
	28H12		65	250 400	..
6000 x 5000	18H12	25	65		..
	22H12	25	65		..
	28H12		65	250 400	..

Important note:

At dynamic testing the excitation frequency should be greater than the eigenfrequency of the used vibration isolation.

Universal modular fixture system for actuators

Components of the **MOCOKIT** accessories kit for static and dynamic application

Technical data / Application:

- welded steel construction in various sizes and forces

Forces:

- 5.5 kip / 11 kip / 22 kip / 44 kip / 55 kip / 110 kip
- according to size for test frequency up to 75 hertz



With and without vertical adjustment. The vertical adjustment is retrofittable

Base frame bracket

- actuator flange plate for swiveling support available

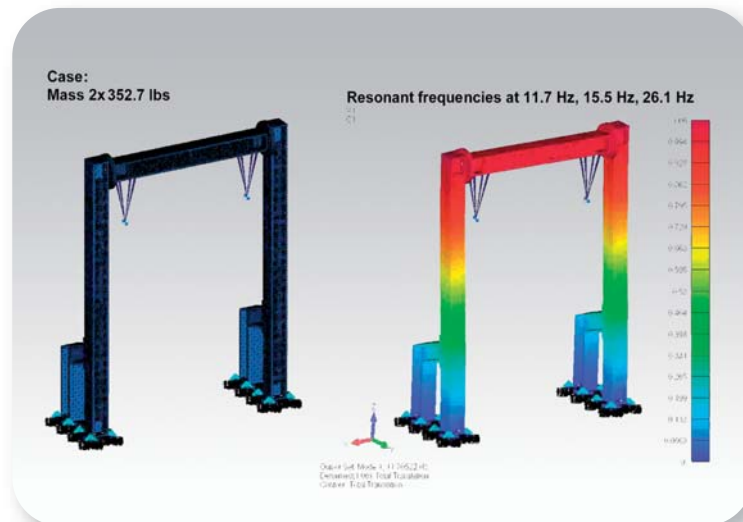
Vertical adjustment:

- 5.5 + 11 kip> +/- 17^{-3/4} "
- 22 + 44 kip> +/- 17^{-3/4} "
- 110 kip> +/- 9^{-3/4} "



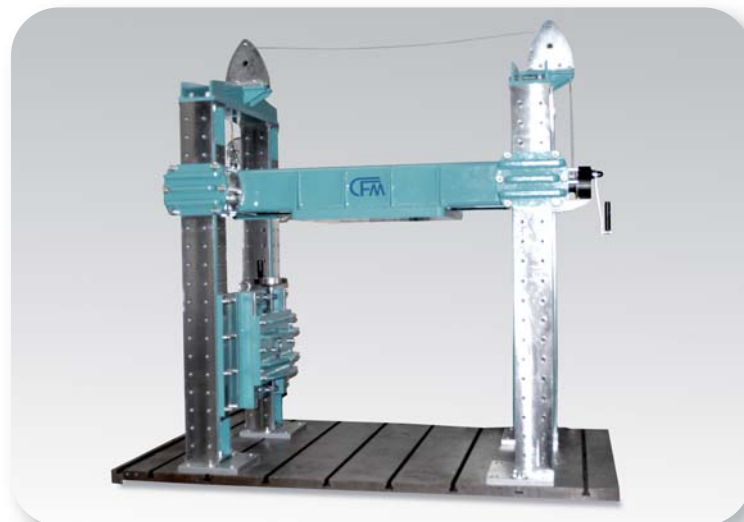
Actuator flange plate for fixed support

Individual solutions based on **MOCOKIT** components



Example for a FEA calculation

If you are uncertain about the proper layout or sizing of a test setup please let us help you. We can analyze your system using modern FEM Analysis methods utilizing your static and dynamic test data. We can then choose from the large range of **MOCOKIT** components to build the proper test setup.



Application of standard and special components

Instead of designing a new fixture system choose from our large range of **MOCOKIT** components. This will save you time and money and lets you focus on your component testing.

We look forward to assisting you in your special requirements. Feel free to contact us!



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