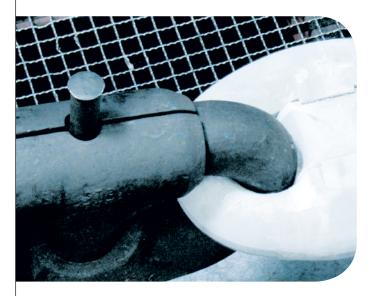
CROSBY FEUBO Testing Equipment









feubo.com thecrosbygroup.com



Testing Equipment Static tension machine (2007)

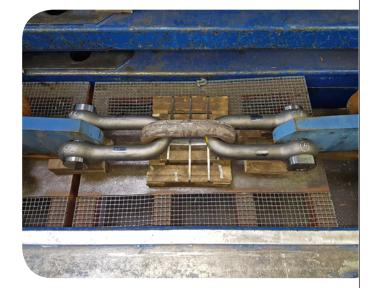


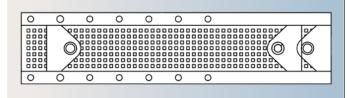
- Loading capacity 2,000 to (20,000 kN)
 - Annual calibration by MPA NRW
- Certification by LR

Testing at low temperatures down to -60°

FEUBO Static (PL/MBL) Testing

Max. length of the test assembly pin-to-pin	7 m
Min. length of the test assembly pin-to-pin	2 m
Test space dimensions	width 1550 mm
Rig arrangement	Horizontal/Tension
Test stroke	Up to 1000 mm
Load Cell capacity	2000 to (20000 kN)
Calibration	Annual MPA
Classification	DIN EN ISO 7500-1, Class 1
Load Range	300 – 1800 kN
Safety	PC-Controlled load and position limits, safety guards
Crane capacity	3,2 to, 12 to forklift





Testing Equipment Static tension machine (2017)

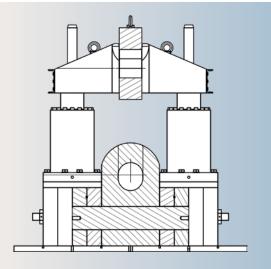


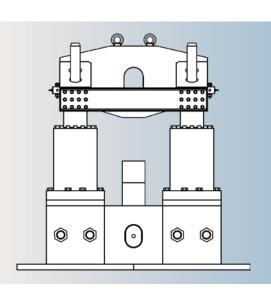
FEUBO Static (PL/MBL) Testing

Location	FEUBO, Hattingen, Hall 5
Max. length of the test assembly pin-to-pin	1800 mm
Test space dimensions	width 1200 mm, extensions possible
Rig arrangement	Vertical/Tension
Test stroke	Up to 750 mm
Load Cell capacity	6000 to (60000 kN)
Calibration	Annual MPA
Classification	DIN EN ISO 7500-1, Class 1
Load Range	Up to 60000 kN
Safety	PC-Controlled load and position limits, safety guards
Crane capacity	16 to

• loading capacity 6,000 to (60,000 kN)

- Annual calibration by MPA NRW
- Certification by LR
- Testing at low temperatures down to -60°





Testing Equipment Dynamic testing machine (2015)



Max. lengthof the test assembly5 mTest space dimensionswidth 1200 mm/

Rig arrangement Test stroke

Testing frequency Load Cell capacity Calibration Classification 5 m width 1200 mm/ height 1200 mm Horizontal/Tension Up to 100 mm dynamic, Up to 1000 mm static Up to 3 Hz 700 to (7000 kN) Annual MPA DIN EN ISO 7500-1, Class 1

Since 2015 we have been able to perform fatigue testing of mooring chain and components

- Loading capacity 700 to (7000 kN)
- Test frequencies 0.3 3 Hz
- Annual calibration by MPA NRW
- Testing in air at ambient temperature
- Testing in sea water (ASTM D1141-98)
- Testing at low temperatures down to -60 °

Load Range	200 – 7000 kN
Load resolution	0,3 kN
Data sampling/logging	1 0
	load + position peak
	values for every cycle;
	full data set every
	100th cycle
Crane Capacity	16 to
Safety	PC-Controlled and position limits, safely guards

Fatigue testing



Example in air

Specimens	Kenter-type shackle 76mm, RAS 76 mm
Testing conditions	HCF, air, ambient temperature
Test frequency	1 Hz
Load range	1049 – 1754 kN

Contact

Crosby Feubo Beuler Höhe 16 – 20 | D 45525 Hattingen | Germany Phone +49 (0)2324 950750 feubo.com thecrosbygroup.com



Example in sea water

5 links, stud chain R4S 76 mm

HCF, controlled environment, sea water acc.to ASTM D1141-98, ambient temperature

0,5 – 0,7 Hz 745 – 1918 kN

Mike.duncan@thecrosbygroup.com Phone +34 685 639 969 Stuart.glennie@thecrosbygroup.com Phone +65 915 99 520