

# Technical bulletin rigging

In addition to the technical guidelines of Hamburg Messe und Congress, Section 5.7.5 "Suspensions from the hall ceiling", this information bulletin regulates the technical specifications and requirements for ceiling suspensions from the roof structure of the Hamburg exhibition halls that are subject to notification and approval. Suspensions are largely possible on the technical equipment provided for this purpose, but require authorisation from Hamburg Messe und Congress GmbH (HMC). Ceiling suspensions are carried out exclusively by Hamburg Messe's contractual partner. To clarify the feasibility and commission the required suspension points, please submit your planning documents with the relevant mandatory information (point loads, location, aids, etc.) by the deadline, i.e. no later than 4 weeks before the official start of the trade fair. Please note that an express surcharge of 20% will be charged after the deadline. The suspension points provided may not be modified or converted by the exhibitor or the authorised company and may only be loaded with the weights registered and approved in advance with HMC's service partner. Any deviations must be communicated in writing and may only be carried out with the approval of the service partner. To ensure the construction quality and to check the previously communicated load details, HMC retains the right to check the provided loads with suitable load measurement systems. In case of questions contact the service partner.

Neumann&Müller GmbH & Co. KG

mail | [messe.hamburg@neumannmueller.com](mailto:messe.hamburg@neumannmueller.com)  
phone | +49 40 254049 400  
fax | +49 40 254049 409  
web | [www.neumannmueller.com](http://www.neumannmueller.com)

With regard to the application of crossbeams, mobile event technology, working, carrying and connecting equipment, lifting/hoisting equipment, rope end connections and the protective-equipotential bonding for the structure parts to be suspended, the pertinent safety regulations and accepted rules of technology - the following must be observed in particular:

- DGUV regulation 1,
- DGUV regulation 3,
- DGUV regulation 17,
- DGUV regulation 54,
- DGUV information 215-313,
- DGUV information 215-314,
- IGWV SQ P1 (crossbeams) and
- IGWV SQ P2 (electric chain hoists)

Please also note the following additional information.

## Ceiling suspensions

- In halls A1 – A4 as well as B1 – B7, any provided suspension on the roof supporting structure can be loaded with a maximum of 50 kg (rated load).
- The use of manual and electric chain hoists is not permitted in Halls B1 – B4.
- Higher loads must be requested and coordinated with the contracting partner. Any costs for necessary static tests will be charged to the client.
- The provided steel ropes must only be strained vertically.
- Structures to be suspended may only be located within the boundaries of the booth.

## Construction notes

- Suspensions that are used to secure erected structures (rigid and/or force-locked connections to hall floor) are generally not permitted.
- Crossbeams and wooden structures must always be used in accordance with the specific type static (manufacturer's instructions) and the static stress analysis. Static analyses are required for structures and loads/strains that are not defined in the manufacturer's instructions.
- Crossbeam components may only be installed expertly and not in worn state.  
The following information must be permanently attached:
  - Manufacturer
  - Year and month of construction
  - ID no.
  - Inherent weight in kg
- Floodlights, loudspeakers, monitors, etc. must be additionally fitted with a second, independent safety rope (secondary safeguard).
- Suspended objects are exclusively supplied with power from the booth connection. A separate power supply from the hall ceiling is not possible.
- Crossbeams with lighting installations must be fitted with an additional protective-equipotential bonding.

### Working materials

The manufacturers of working materials used as securing elements or rigging/load lifting equipment state their load-bearing capacity or minimum breaking force.

The following applies for suspending loads above persons:

- If the load-bearing capacity (WLL) is stated, this working material may only be stressed with at most half of this value.
- If the minimum breaking force is stated, this value must be divided by the required operational coefficient to obtain the maximum permissible load-bearing capacity.

Working materials for which the load-bearing capacity values for suspending loads above persons have been verified may be used in accordance with the manufacturer's instructions.

### Allowed

- Wire ropes consisting of round strand rope in accordance with DIN EN 12385-4
- Short-link round steel chains with approved accessories of Grade 8 in accordance with DIN 685 and DIN EN 818-4
- Rigging chain, single-strand, shortenable with multi-shortening claw in accordance with DIN EN 818-1
- Quick link in accordance with DIN 56927
- Shackle in accordance with DIN EN 13889
- Rope locks in accordance with DIN 15315 and DIN 4314
- Suspension links (O-ring) in accordance with DIN 5688-3
- Wire rope gliders (black) with BGV C1 certificate, six balls, steel metal parts and ring nut bonded with housing
- Textile round sling in accordance with DIN EN 1492-2 and using a sufficiently dimensioned metal safeguard
- Wire rope round sling with statement of load-bearing capacity, hose sleeve made of chemical fibres ("Steelflex")
- Aluminium or steel clamps approved for use on crossbeam systems

### Lifting equipment

The use of lifting equipment must be stated in the order process and coordinated with the responsible contracting company of HMC.

### Manual chain hoists


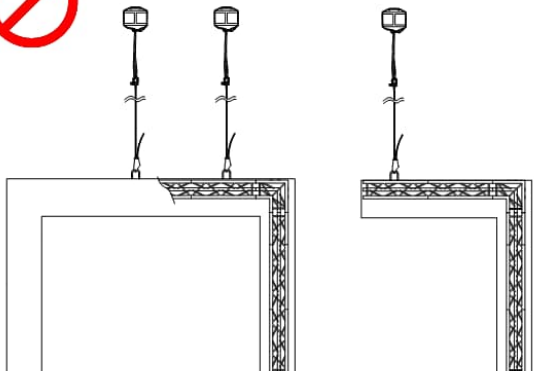

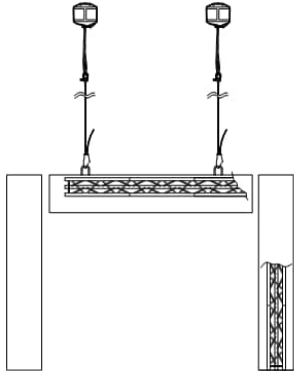

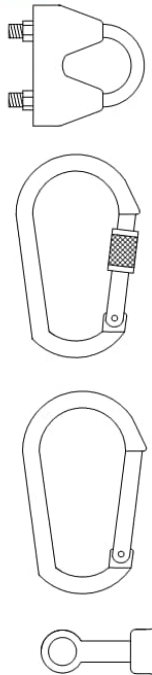
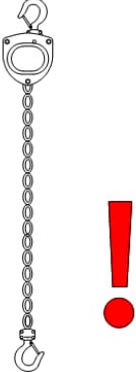

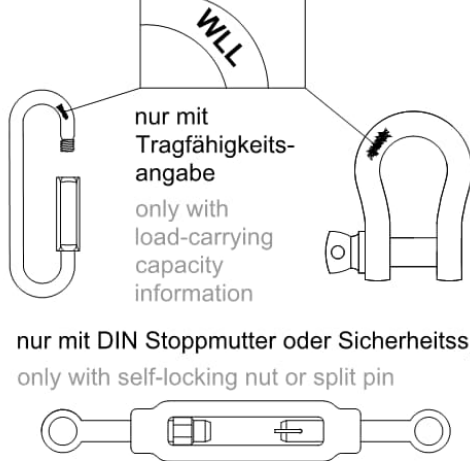

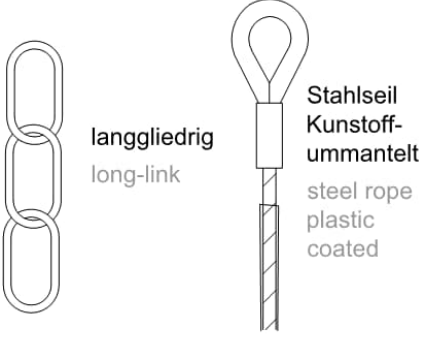

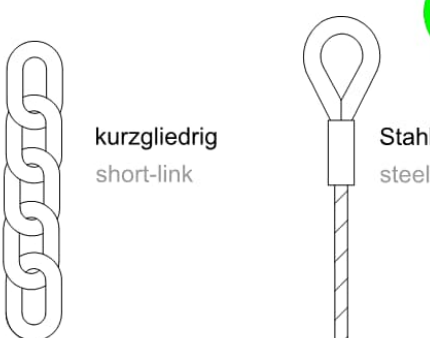
- Load movements with manual chain hoists above persons are strictly prohibited.
- Due to the high asynchronism only point loads with a maximum weight of 50 kg may be moved manually.
- Manual chain hoists must be moved out of the load after installation and set-up work.
- At most four manual chain hoists may be used simultaneously with distributed loads and surface loads. The use of four manual chain hoists is only permitted if the strain on the system between two manual chain hoists amounts to at most half of the permitted maximum strain specified by the manufacturer or a

static analysis.

- The nominal load-bearing capacity stated by the manufacturer must not be exceeded at any time during application.
- The maximum permitted load for the applied span must be calculated and verified on request.
- All manual chain hoists must be staffed simultaneously when lifting loads; the load must be moved as synchronously as possible.
- A chain box that is approved for the chain hoist must be available.
- The load chain may not be used for rigging loads.

### Electric chain hoists

- The nominal load-bearing capacity stated by the manufacturer must not be exceeded at any time during application.
- Electric chain hoists may only be used in tested state and marked with a corresponding test label.
- Electric chain hoists must be suspended so that the chain does not come into contact with anything and cannot retract diagonally.
- With climbing hoists, the chain must be able to safely retract into the chain box. Make sure that the chain can also safely extend and retract without attached load. Only qualified persons may operate electric chain hoists. The operator has to monitor the movement procedure of the electric chain hoists and the load.
- The electric chain hoist D8 is not approved for suspending and moving loads above persons in accordance with DGUV regulation 54. A D8 chain hoist may only be used in event and production technology for assembly and disassembly and for lifting loads. After terminating the load movement, a secondary safeguard must be installed and the power supply to the chain hoist must be cut off. The applied secondary safeguards may not allow any drop.
- The electric chain hoist D8 Plus is not approved for moving loads above persons. Stationary loads may be suspended above persons without secondary safeguard. The power supply to the electric chain hoist must be cut off. The chain hoist D8 Plus must be visibly labelled as such.

<p><b>NICHT ERLAUBT</b> <b>NOT ALLOWED</b></p>	<p><b>ZULÄSSIG</b> <b>ALLOWED</b></p>
<p> <b>Decken- Boden Verbindung</b> connection between floor and roof</p> 	<p></p> 
<p></p>  <div style="border: 1px solid red; padding: 10px; text-align: center;">  <p><b>mehr als 4 Handkettenzüge gleichzeitig</b> more than 4 manual chainhoists simultaneous</p> </div>	<p></p> <p><b>DGUV 17</b> Anschlagmittel nach DGUV Information 215-313 slings by DGUV Information 215-313</p> <p><b>nur nach DGUV Vorschrift 17 mit DGUV Test Prüfbescheinigung</b> only by DGUV regulation 17 with DGUV test - certificate</p> <p><b>nur mit Tragfähigkeitsangabe</b> only with load-carrying capacity information</p> <p><b>nur mit DIN Stopmutter oder Sicherheitsplint</b> only with self-locking nut or split pin</p> 
<p></p>  <p><b>langgliedrig</b> long-link</p> <p><b>Stahlseil Kunststoffummantelt</b> steel rope plastic coated</p>	<p></p>  <p><b>kurzgliedrig</b> short-link</p> <p><b>Stahl</b> steel</p>