



Lifting is used to move a load horizontally and/or vertically, for example with a crane, overhead crane, manual hoist, telehandler, or gantry crane. Often, aids such as chains, lifting straps, stone clamps, eyebolts, or cables are used. The choice of these aids depends on the dimensions, shape, weight, and distance of movement of the load. It is crucial that the moving of loads is done safely because there are great risks associated with unsafe lifting.

## Why inspect?

To ensure safety, lifting equipment and lifting aids must be inspected periodically. Inspection certificates must always be present during work, and the inspection data must be clearly visible on the lifting equipment. The maximum allowable load must be indicated on all lifting aids. A visual inspection of the lifting equipment and lifting aids must always take place before use.

## What are the dangers?

When working with lifting equipment, one must be alert to the following dangers:

- Sinking or tipping of a lifting device
- Being struck by the lifting device (person or material)
- Bad weather such as storms and lightning
- Overloading of the lifting device or lifting aid

The operator of a lifting device must have sufficient knowledge to operate the lifting device. This knowledge can be demonstrated with a lifting certificate or a logbook in which the experience with specific lifting devices is recorded.

## Lifting equipment use

There are various types of lifting aids, each with specific usage and attention points:

- Chains
- Cables
- Composite lifting tools

Lifting aids must be regularly visually inspected for corrosion, damage, and wear. Hooks should not be loaded on the point.

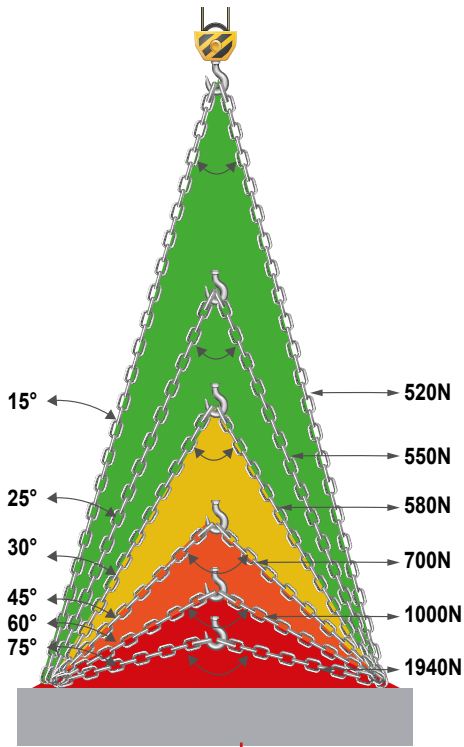
### Maximum and minimum spread angle of the chain

When working with multiple chains or cables to lift a load, for example with a lifting beam, the spread angle must be considered. This should be kept as small as possible, with a maximum spread angle of 60°. The larger the spread angle, the greater the forces on the cable or chain.

In the table next to this, you can see how much force is exerted on the legs at different top angles.

The image shows that the larger the angle between the two legs, the higher the load on the legs. Therefore, we always work with a maximum outside angle of 60°.

Thus, the outside angle should never exceed 60°, and the inside angle should never exceed 120°. It should be clearly indicated which type of chains must be used to ensure lifting safety.



**Always first check the technical data sheet of CBS Beton, where it is clearly stated which type of chains must be used to ensure lifting safety.**

**VOORZIICHT - VUE FRONTALE / VORDERANSICHT - FRONT VIEW**

**BOVENAANZICHT - VUE SUPERIEURE / ERDAUFZICHT - TOP VIEW**

**DOORSNED E - COUPE TRANSVERSALE / QUERSCHNITT - CROSS SECTION**

**HUUVVOORSCHRIFT - INSTRUCTION DE LEVAGE / LIFTING INSTRUCTIONS - HEBEANLEITUNG**

**DETAIL 1, DETAIL 2, DETAIL 3, DETAIL 4, DETAIL 5**

**TECHNISCHE FICHE / FICHE TECHNIQUE / TECHNISCHE DATEN / TECHNICAL DATA**

**CLF10GS 600x200**

**CE, BENOR, ISO 9001**

**cbs**