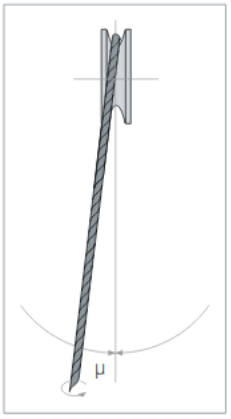
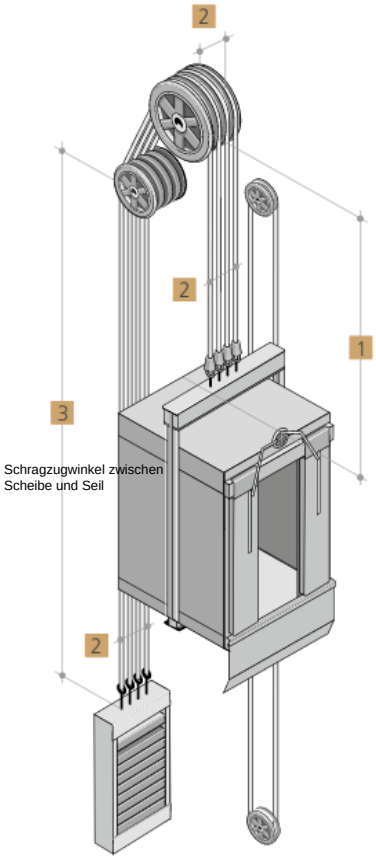
4.nspection of fleet angle

The allowable fleet angle is 0.5. For the CTP 8.1 this angle can be increased up to a maximum of 1.0 as long as the number of trips is reduced limited to 2400000 and divided by the number of pulleys passing the most bended part of the rope (this does NOT apply for the CTP 6.5). Fleet angle allowed (in accordance with our certificate) is 0.5. If the fleet angle is too big it will induce torsion into the rope. This effect also applies to conventional ropes but is even more pronounced in the CTP rope.



The most critical positions are when the cabin is at the top floor (maximum fleet angle between cabin and tractions sheave/deflecting pulley) and when the cabin is at the lowest floor (maximum fleet angle between counter weight and traction sheave/deflecting pulley). It is fairly difficult to directly measure the fleet angle between rope and sheave. For this reason we recommend an indirect more practical way of measuring the fleet angle (please see below).



Schragzugwinkel zwischen Scheibe und Seil

To get a rough estimate on the fleet angle measure following points (illustrated on an elevator with 1:1 suspension):

1 Distance from traction sheave to end termination on lift car (when cabin is at the very top)

2 Distance from rope to rope at rope termination on elevator cabin and on traction sheave. Distance from rope to rope on traction sheave (groove to-groove distance) and on rope termination on counter weight

3 Distance from traction sheave to end termination on counter weight (when cabin is at the very bottom)

Brugg Rillenlehre

5.Prufung der Rillenform (Treibscheiben und Umlenkrolle)

Even if traction sheave and diverting pulley grooves are manufactured according to drawing (radius for CTP 6.5 : 3.4 3.65 mm, radius for CTP 8.1 4.3mm), we strongly recommend to check the shape with the specially designed Brugg groove gauge. Brugg Lifting provides a custom made gauge which includes the 45 (30 45 for CTP 6.5) opening angle as specified in our CTP certificate.

Furthermore check the groove surface for following defects:

Selbst wenn die Rillen der Treibscheibe und der Umlenk-
Selbst wenn die Rillen

Selbst wenn die Rillen der Treibscheibe und der Umlenk-
Selbst wenn die Rillen der Treibscheibe und

Brugg groove gauge.

5.Seilspannung

Even though rope tension is often measured by hand (by plucking the rope and judging by feeling) this method is far from accurate. Comparing spring buffers with each other is more precise to a certain extent but not all elevators are equipped with such springs. The most reliable way of measuring rope tension is by measuring the tension on the rope itself. There are various tools for measuring tension commercially available. Brugg Lifting recommend our own specialist tool the Brugg RPM

Rope tension device Brugg RPM

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