

Safety Aspects by using Crane Scales in Industrial Loading and Transportation Processes

Crane scales are mainly used in combination with loading equipment. So they must be checked in regular time sequences or after a certain number of usage in the same way as all loading and transportation equipment is checked and tested.

Depending on the operating and surrounding conditions the crane scales require maintenance and checks in short time intervals. For example in industrial three- or four-shift operation, the maintenance interval is three to four weeks maximum. Mainly the slings and hooks should be tested.

There are technical associations (depending on specific laws in different countries) or Technical Committees which publicate rules or guidelines for the dealing with ropes, chains and slings, also in combination with crane scales.

The scales are one additional part of the loading and transportation chain, as an accident in a steel mill showed. A coil with a weight of 20 to crashed as a result of a fatigue fracture in the crane scales. In industrial transportation a high grade of mechanization is reached, but in any case the workers have to be very careful in loading and lifting processes and have to doublecheck all components, especially the crane scales.

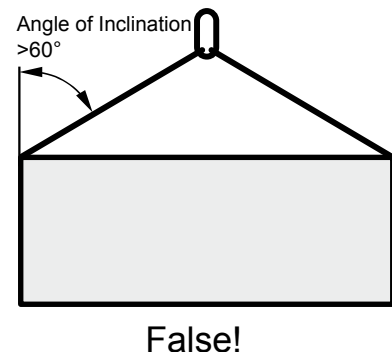
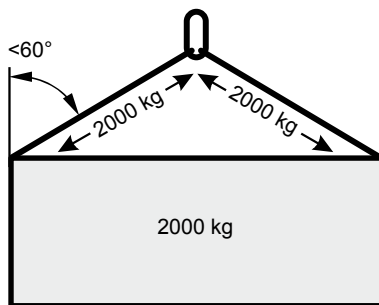
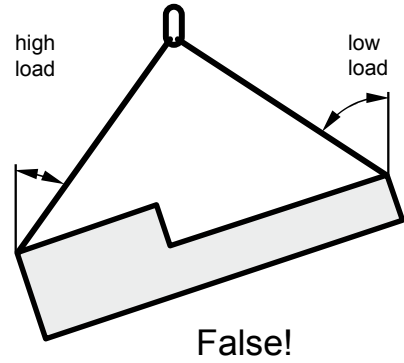
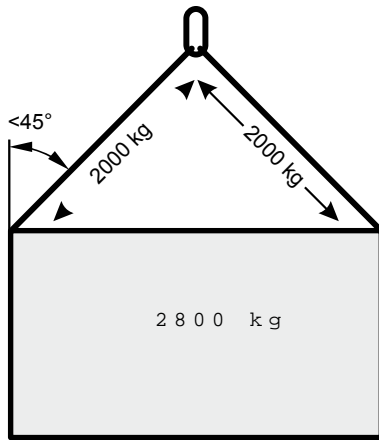
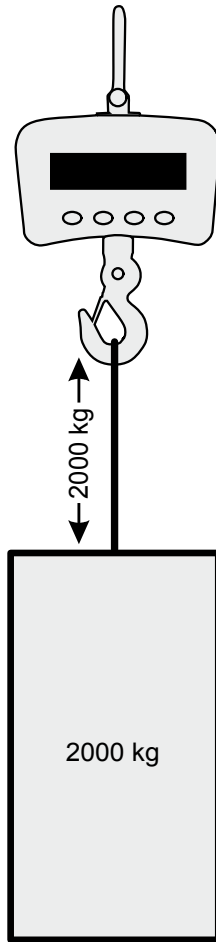
In material handling with cranes the safety aspect is very important to avoid damages of goods and machinery, but mainly to avoid dangerous situations for humans.

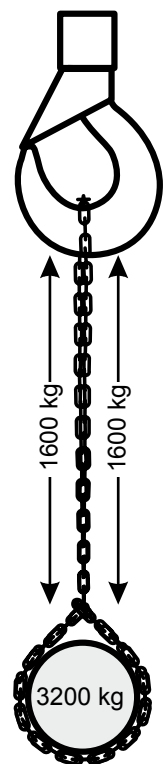
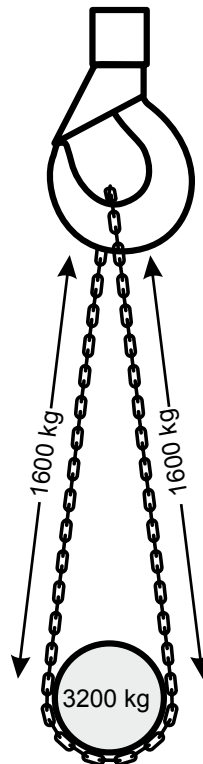
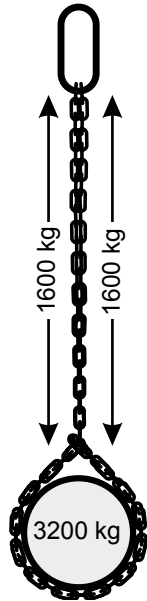
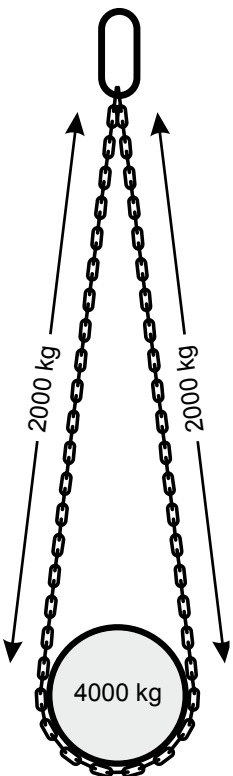
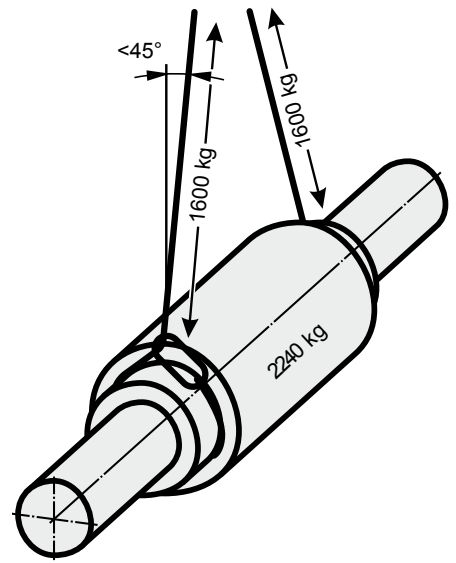
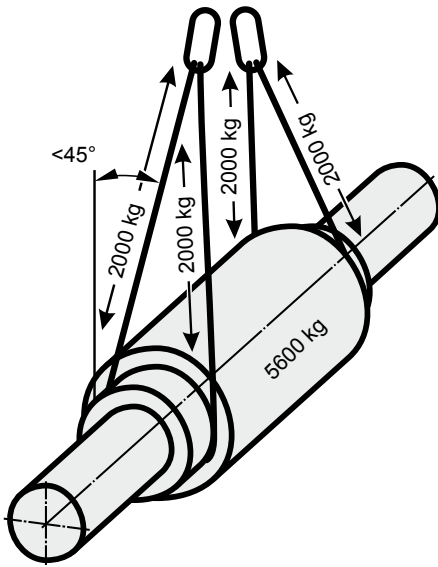
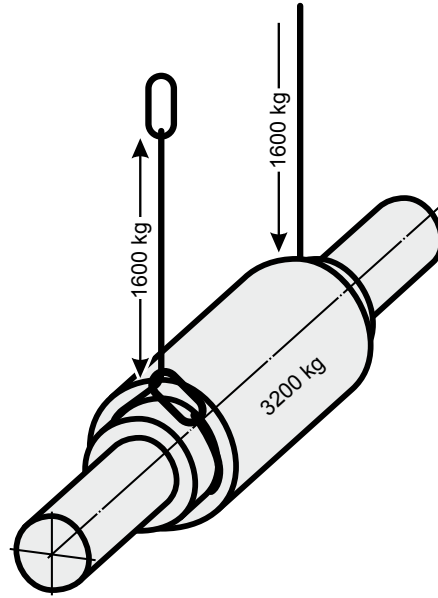
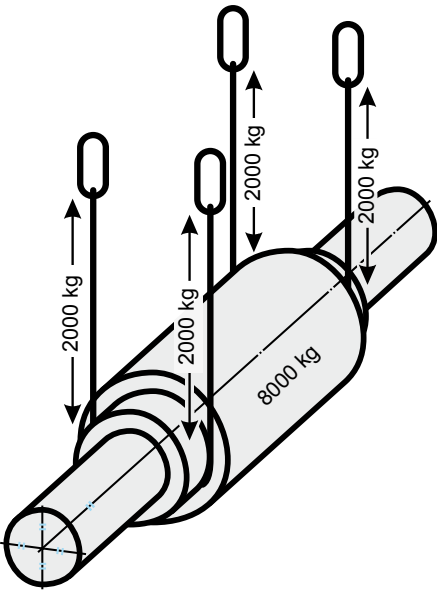


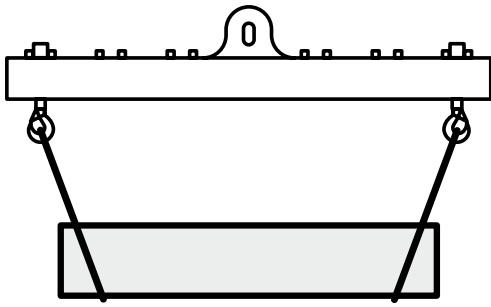
The load transportation workers have to wear protective equipment and the company or the contractor should provide tested slings, hooks and in case of using additional weighing equipment during the transportation process, also tested and certified crane scales. It is important to avoid accidents and health hazards.

In Germany various trainings and expert literature concerning material handling with cranes and also in combination with crane scales are provided by the „BG“ (Berufsgenossenschaft). High precision weighing and industrial load transportation by cranes can be combined to have both: process control and safety.

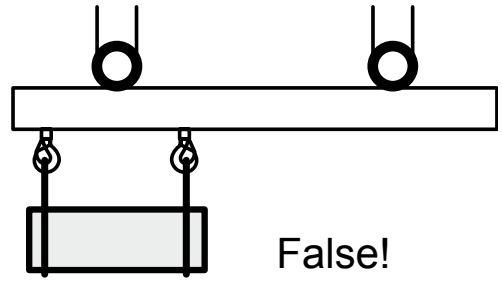
Some examples of correct and incorrect transportation of heavy loads with crane scales can be seen on the following sites:



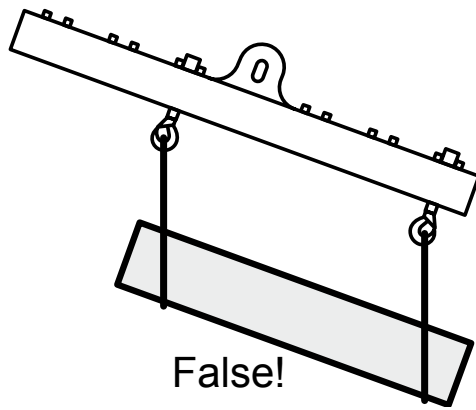




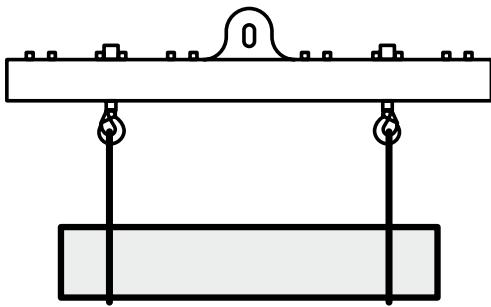
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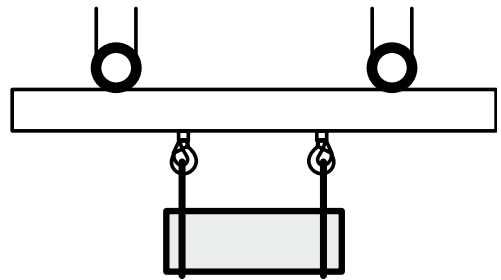
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False!



Right!



Right!