

## Maintenance and repair

- To ensure safe operation, all hoisting equipment must be subjected to regular inspections according to the maintenance instructions given by the manufacturer.
- Hoists which are due for maintenance (normally once per year, unless adverse working conditions dictate shorter periods) or products with obvious defects may be returned to us for inspection and repair.
- Inspections and tests must be performed by competent persons or specialist workshops that use original spare parts.

## Inspections

- According to German laws and standards all hoisting equipment must be subjected to a mandatory inspection at least once a year. The inspection must be performed by a competent person.
  - On building sites hoists have to be inspected every time before operation.
  - Hoist and supporting components have to be cleaned prior to inspection. The cleaning procedure must not cause chemical damages (e.g. no acid-embrittlement). Do not expose the hoist and supporting components to unallowed temperatures by e.g. flame cleaning avoid concealment of cracks and excessive material loss (sand blasting).
- We shall be pleased to consult you in this respect. Please submit your hoists for inspection in clean condition. This will reduce inspection costs considerably.

## Criteria for hoist disposal

### Hoists must no longer be operated if e.g.:

- The identification (identity plate) is missing or illegible.
- Security relevant components like brake, slipping clutch, ratchet pawls etc. do not properly function any longer.
- Housing, control units and suspension of the hoist present obvious deficiencies, i.e.
  - cuts, grooves, cracks
  - excessive corrosion
  - staining due to heat
  - signs of subsequent welding resp. spatters which cannot be easily removed and leave stains.
- Ropes show breakage of wires resp. bruises (criteria for disposal of ropes are given in classification DIN 15020), damages to the rope sleeve and similar failures.
- The load chain presents twisted or distorted links or shows an elongation of 5 % of one chain link or a reduction in diameter of more than 10 % (average of two measurings (longitudinal and transverse) compared to the nominal diameter).
- The opening (C) of suspension and/or load hooks is stretched by more than 10 % compared with the nominal dimension, or if the hook mouth shows a wear of more than 5 % of either dimension B or D.
- Detrimental impacts by e.g. overloading, shock loading, chemical influences or heat have occurred, the hoist may only be returned to service after careful inspection and repair.

