



# Sheave Block Use & Maintenance information

## **SAFETY OF PERSONNEL**

The regulatory authority may require that it be notified where a sheave block is to be used for personnel lifting.

## **STORAGE**

Sheave blocks and ropes should be periodically overhauled and, when not in use, carefully stored in a satisfactory environment.

## **USE**

Prior to use, sheave blocks should be thoroughly examined to determine whether they are safe to use, for their intended application, they should only be used in a manner in which they are designed for.

Sheave blocks must be regularly inspected, lubricated and maintained for peak efficiency and extended usefulness. The frequency of inspection depends upon frequency and period of product use as well as environmental conditions, which are contingent upon the users good judgement.

*Special attention should be given to following precautions prior to use.*

- ◆ **Rope Groove**, Examine the fit of the rope in the grooves of the sheaves to ensure that the grooves are correct for the rope size. A worn sheave groove will result in a high rate of rope wear, particularly when a new rope is first reeved.
- ◆ **Safety Latch**, Examine the safety latch for correct operation, deformation, broken springs etc
- ◆ **Swivel Head Fittings**, Examine the nut or collar of the shank to ensure that it is securely fastened and free from visible defects, check that the shank is not distorted and turns freely by hand, and that the clearance is not excessive. Grease or oil the shank and the bearing surface of the nut or collar, if thrust bearings are fitted these must also be greased or oiled periodically depending on the severity of use.
- ◆ **Side Straps and Side Plates**, Examine for fractures, stretching, buckling, distortion and wastage due to corrosion. Buckled or distorted side plates may allow the rope to jam between the sheave and the side or partition plate.
- ◆ **Sheaves**, Examine the rope grooves for excessive wear and surface defects (e.g. bruising, chipping cracking etc) that may damage the rope during use. The sheave should be checked to see that it turns freely on the axle and that the bush or bearing is not excessively worn.
- ◆ **Axles**, Examine axles for wear, and check that they are retained as intended.
- ◆ **Fasteners**, Examine the security of nut's bolts and other locking methods, especially after reassembly following a tear down inspection.
- ◆ **Lubrication**, Where provision is made for lubrication, ensure that the sheave block is adequately lubricated. If the block is not lubricated regularly, its life is greatly reduced, and the efficiency of the tackle is impaired.
- ◆ **Painting**, Do not paint the block in such a manner that free movement is impaired or lubrication points or grease nipples become clogged. It is specially important that load or reference markings are not obliterated.
- ◆ **Heating**, After any exposure of a block to temperatures exceeding 400 degrees Celsius (such as from a furnace, welding etc) that may affect its serviceability, the block should be returned to SuperLift for evaluation.