

MAINTENANCE ALERT

The hoisting reel, or 'winch drum' as more commonly known within the Drilling fraternity and within the British Drilling Association publication The Guidance for the Operation of Cable Percussion Rigs and Equipment has recently been subject to a number of failures.

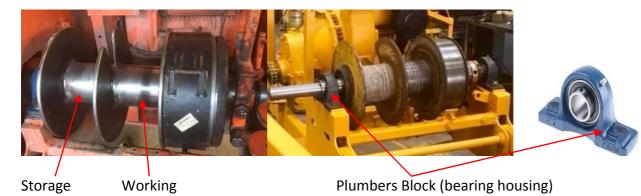
This reel has a long axle through its centre with an exposed drum section separated by a dividing plate into two defined areas. The first area located nearest to the operator/ Driller is referred to as the working section of the drum. The second area, located on the opposite side of the dividing plate, or the furthest from the operator, is the storage section of the drum.

When using the hoisting reels fitted with a dividing plate to provide a storage and working section of the drum, it is important that the correct section of the drum is used for each function.

Using the storage area as the working side will result in the loads being transferred to the winch drum and associated parts to be focused on one end of the winch drum and axle assembly this can cause overloading of the bearing housing or plumber block situated at the storage end of the hoisting reel. This can lead to catastrophic failure of the plumbers block bearing resulting in the winch axle becoming detached from its bearing and potentially mechanical ejection of the entire winch drum and/ or any of its component parts.

The storage section should never be subjected to working loads and when the winch is been subjected to its highest load the wire rope should always be on the working side of the divider. This practice of loading the storage area can result in a catastrophic failure, overloading of the plumbers block which is warned against by the manufacturer. All operators of cable percussion drilling rigs should ensure that the hoisting reels are not subject to excess loads and use the winch rope position as per the manufacturer's instruction.

It is recommended that a thorough inspection of the winch assembly and in particular the plumber blocks are carried out immediately and any items subject to fatigue replaced without delay.





Result of failure of the plumber's block

Requiring inspection











