# Care & Use

# **GUIDELINES FOR GENERAL USE**

## STUD MATERIAL

Material shall be minimum Class 4.6 with a tensile strength of 400 MPa minimum.

## IS THE EYENUT TIGHT?

Do not excessively tighten, but have less than 0.04mm gap between the collar and the face of the load.

### HAS THE WORKING LOAD LIMIT BEEN CHECKED?

Make sure the WLL for the evenut is checked against the load being lifted.

## DO THE THREADS MATCH?

The threads of the eyebolt and stud or bolt must match in both size and thread type

## HAS THE EYENUT BEEN INSPECTED PRIOR TO USE?

Check the eyenut and discard if there are any signs of the following

- Deformation or distortion
- Bent shank
- · nicks, cracks and gouges
- Corrosion
- Reduction in thread length or size
- Poor thread condition (e.g. crossthreading, wear etc)
- Excessive wear, including:
  - 1. Reduction in diameter at the undercut 2. Reduction in cross section
- Illegible markings
- · Evidence of excessive heat exposure

#### **TEMPERATURE EFFECTS?**

The eyebolt shall only be used in the range of 0°C to 200°C Please refer to the manufacturer for operation outside of this range.

#### **TAPPED HOLES**

Where using the eyebolt with a tapped hole, the length of thread engagement shall be at least the nominal diameter of the thread.

The payload substrate shall be of adequate strength to withstand the applied forces.

The following recommendations should be observed for minimum thread engagement of a tapped hole.

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- 1.50 D in Steel (minimum AS3678 G250)
- 1.75 D in Cast Iron (minimum T250)
- 3.00 D in Aluminum alloys (only available in longer shank versions)
- (D = Eyebolt thread diameter, eg. M20)

Information that needs to be supplied with enquiries and orders

- a) Nominal Thread Size
- b) Thread Type
- c) Thread Length, if not standard
- d) Surface Finish, unless self-coloured
- e) Lifting Capacity as:
  - (i) Axial WLL; or
  - (ii) Transverse WLL; or
  - (iii) WLL for particular conditions of use.
  - f) Whether proof testing is required
- g) Whether a NATA test certificate is to be supplied
- h) Whether additional testing is required i.e. material

analysis, ultrasonic, magnetic particle, Brinell Hardness etc.

## Inspection Before Use

- 1. Ensure the WLL is clearly legible.
- 2. Clean the Eyenut and attaching threaded stud. Check for any signs of deformation, cracking, nicks, gouges and excessive bruising, wear or corrosion.
- 3. Threads should be concentric and fit neatly into a standard nut.
- 4. Check that the centre line of the eye is aligned with the centre line of the thread.
- 5. The threaded hole in which the evebolt is to be fitted should also be carefully checked to ensure the hole is free from dirt, grease and other contaminants that could restrict the eyebolts from seating correctly in the hole. Particular attention should be paid to the hole thread to ensure it is in good condition.
- 6. Check that the hole thread and the eyebolt thread are compatible.
- 7. It is important to also carefully check the surface area around the threaded hole (which the eyebolt collar will sit on) to ensure it is clean, free from deformation, cracking or any other problem that may restrict the eyebolt seating correctly.

