

Helicopter Cargo Net Inspection Guidelines

Introduction

Aeromotion Australia has developed helicopter lifting equipment over an extensive period of time producing a high-performance product. With best use and care practices applied our cargo nets will provide operational life of 10 years from introduction to service.

There are periodic inspection requirements during the service life and this document assists with understanding your obligations in regards to the inspection and reporting process.

It is recommended by the British Standard BS 6756:1986 Fibre Rope Cargo Nets that the whole net is examined at as close intervals as practicable, preferably at intervals of not less than 1 to 3 months. Aeromotion Australia agrees with this period although exceptions are made based on the frequency of use and level of duty experienced.

Aeromotion Australia recommends daily preflight inspections prior to use are mandatory and must involve a thorough visual inspection of the cargo net in its entirety. Where areas of damage are identified, a photo record of the area is to be captured and the manufacturer must be made aware of this for assessment.

Furthermore, an annual inspection is recommended by a competent person and where damage or areas of concern exist the manufacturer must be made aware of this for assessment.

At five (5) years of service life, contact the manufacturer providing details of the service log sheet, serial number, current inspection checklist report and photo records which are to be assessed for recertification and extension of service life as based on condition or the decision is to be made to remove from service. Depending on the condition an estimate will be provided before any works are carried out to overhaul the cargo net.

All inspection events for our cargo nets are to be entered into the service log sheet with a current inspection checklist report and any relevant photos to be made available upon request.

Daily Preflight Inspection Process

Prior to use the cargo net must be removed from the bag or container and laid out in a large open clean area where possible. Particular attention must be paid when visually inspecting the entire net mesh material. Pay close attention to all terminations (sewn or spliced). Where any cuts, loose threads or excessive rope ends exist, record these with photos and monitor until such time as the next periodic inspection event. Where these areas have degraded while monitoring or if significant areas of damage have occurred contact the manufacturer for assessment. Inspect each corner of the cargo net paying close attention to the terminations, hardware fittings if used and data plate/ ID tags are clear and visible.

Annual Inspection Process

The annual (12 months) inspection is to be performed by a competent person who assesses the condition of the cargo net and can determine the suitability of continued use or the decision is made to remove it from service for maintenance. As for the daily pre-flight inspection the same points are to be observed for the annual inspection with particular attention to be paid when visually inspecting the entire net mesh material. Turn all rope and webbing to reveal the entire external surfaces. By untwisting the strands to allow for examination between the strands will identify any ingress of dirt or foreign object causing mechanical damage. Particular attention should be directed to intersections, knots and splices, where a fine powder or embrittlement exists this may indicate UV damage or chemical and or abrasion issues are occurring. Pay close attention to all terminations (sewn or spliced) as cuts are difficult to detect when first inflicted and may have a serious effect on the strength of the rope or webbing. They may be indicated by the local fraying of the yarns or strands. Where any loose threads or excessive rope ends exist, record these in the service log sheet and current inspection checklist and include photos. Where significant areas of damage have occurred contact the manufacturer for assessment. Inspect each corner of the cargo net paying close attention to the terminations, hardware fittings if used and data plate/ ID tags are clear and visible. Observe any mould or mildew that may present during the inspection as this may relate to the cargo nets being stored in damp conditions.

Five (5) Year Inspection Process

Upon the period of five (5) years service life contact the manufacturer providing details of the service log sheet, current inspection checklist report, serial number, photo records and any other details relevant which will be used to assess the suitability for recertification and extension of service life based on the condition. If the cargo net is assessed as suitable to extend service life an estimate will be provided before any works are carried out.

Glossary

Terminations - each corner and edge will have spliced or sewn terminations.

Hardware - Heavy-duty 316 stainless steel gusseted end fittings that may be fitted to the rope at the load-bearing point of the terminations.

Assembly - refers to the whole system of a cargo net

Data Label - Identification of the product with details of serial numbers, date of manufacture, Workload Limits etc, must be clear and visible to be compliant.

Inspection - To assess the product's condition and suitability for use.

Proof Load Test - a calibrated force is placed upon the long line to determine the adequacy of the design for achieving the required performance.

Competent Person - is someone who has practical and theoretical knowledge and relevant experience, sufficient to enable that person to detect and evaluate any defects and any weakness that may affect the performance of equipment