

# Instructions for the safe use of Flints Toggles for Hanging Clamps

# The information in this leaflet should be passed to the user of the equipment

This document is issued in accordance with the requirements of Section 6 of the Health and Safety at Work Act 1974, amended March 1988.

These instructions apply to Flints Toggles for Hanging Clamps with Codes FHS002T and FHS002TF

# Working Load Limit 550kg

## Use for which the article is designed

Flints Toggles for Hanging Clamps have been designed to allow Wedge Sockets to DIN15315 to fit directly to Flints Hanging Clamps types FHSOO2HC and FHSOO2LHC. It is assumed the flying bars are flown using standard indoor theatre counterweight or hemp systems or power flying systems fitted with soft starts. The use of the fittings for any other purpose would be inappropriate. The fittings should be fitted to the tube by a competent person familiar with the theatre environment.

### Always

- ✓ Store the fittings in a area which is dry, clean and protected from corrosion.
- ✓ Inspect the fittings before putting into use or before being placed into storage. Any fittings found to be faulty should be marked as such and taken out of service and destroyed.
- ✓ Ensure fittings are selected and fitted by a competent person.
- ✓ Ensure the fittings are used in such a way that the failure of any one fitting would not lead to a dangerous situation.
- ✓ Ensure any fitting subjected to excessive load by way of shock loading or any other means is immediately removed from service and marked for destruction.
- ✓ Follow the fitting instructions.
- ✓ Ensure the load is applied in the direction as stated in the instruc-
- ✓ Ensure the fittings are thoroughly inspected by a competent person at six monthly intervals or after any exceptional circumstance or according to an examination scheme.
- ✓ Individually mark the fittings and record their details together with the EC Declaration of Incorporation.

### Never

- X Exceed the working load limit.
- X Subject fittings to shock loads.
- X Never use a fitting which is bent, modified in an unapproved manner, stretched, has nicks, gouges or cracks, has signs of heat or burning, or signs of corrosion.
- X Apply a load without ensuring any wedge sockets, shackles or rigging screws are correctly aligned.







### **Selection of Correct Fitting**

Choose the twisted type (FHSO02T) for flying bars used for raising Frenchmen or built scenic units from laving horizontally on stage to the vertical position. This will allow the wedge socket to articulate in the direction of the load during the initial hauling period. Only use the Flat Toggle (FHS002TF) if you are sure that the wedge socket will never receive a load other than in the axis of the flying bar. The Flat

> Toggle may be used as an anchor for a wedge socket when diverting wires along the flying bar to utilise full flying height.



Both types of toggles should be attached to the top 13mm diameter hole provided in Flints Hanging Clamps using the Grade 8.8 hexagonal M12 bolt, washers and Nylon insert nut provided. Tighten the Nylon insert nut until some thread from the bolt protrudes from end of the nut but DO NOT TIGHTEN hard down. The toggles should be free to move in the axis of the bar. Before flying out carefully inspect that the Hanging Clamp is fitted correctly and the Toggle is able to articulate. Finally check the Wedge Socket is correctly fitted with one cable grip with the saddle on the loaded wire. The top of the wedge should be secured

with the split pin provided with the socket and the clevis pin should be secured with the special clip.

Safe Use The load should be applied so that the wedge socket is able to articulate in the direction of the wire. Bridles may be employed but the angle subtended between the wire and the vertical should not exceed 45° and the bridle must be along the axis of the flying bar. Before applying a load ensure the wedge sockets are correctly aligned. Care should be taken during flying to avoid shock loads which may arise due to wires becoming slack if a piece of scenery becomes caught on a fixed object while flying in.

In Service Inspection and Maintenance The fittings should be kept clean and free of corrosion. They must be inspected every six months or after any exceptional circumstance or according to an examination scheme drawn up by a competent person. Check the Nylon insert nut is secure and the toggle can swivel. Inspect for illegible markings, distortion, wear, stretched or bent toggles, nicks, gouges, cracks, corrosion, heat marks or any other defect. If in doubt replace the fitting or seek further advice.

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