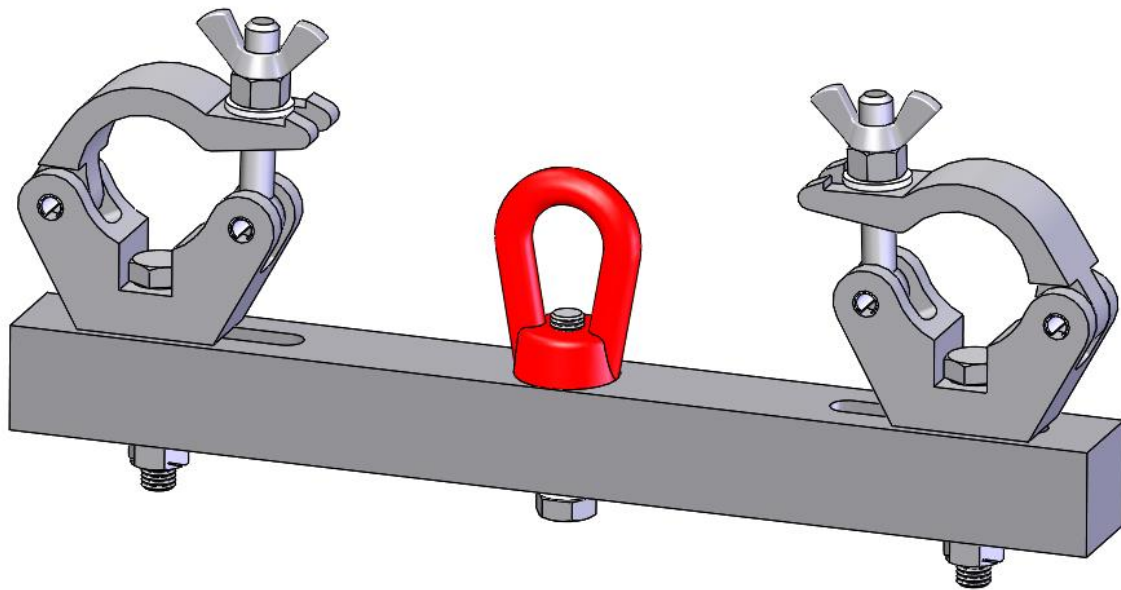




Engineering Ltd

Solid Truss Adaptors



User Manual

IMPORTANT – READ CAREFULLY BEFORE USE – KEEP FOR FUTURE REFERENCE

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1. SAFETY NOTES

Before installing and using Solid Truss Adaptors, please read this manual carefully and pay attention to the information provided. Use this manual to familiarise yourself with Solid Truss Adaptors, their proper use and safety regulations.

DANGER

DANGER: Indicates a hazardous situation which, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations.

WARNING

WARNING: Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION: Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE: address practices not related to personal injury.

SAFETY INSTRUCTIONS

SAFETY INSTRUCTIONS: is used for lists of steps, procedures or instructions that might otherwise substitute a DANGER, WARNING or CAUTION notification.

2. GENERAL

The Solid Truss Adaptor collection is a range of Solid Truss Adaptors designed specifically for lifting and suspending truss sections with a tube diameter of 48 to 51mm.

Only competent persons are permitted to install and use Solid Truss Adaptors. A competent person in this respect is an individual with relevant technical education, training and/or experience enabling him or her to perceive risks and to avoid hazards occurring during use of the product.

Solid Truss Adaptors are finished in silver or black powder coating.

Doughty has endeavoured to deliver the highest degree of accuracy possible. However, continuous improvement of our products is a Doughty Policy. Therefore, product specifications are subject to change without notice.

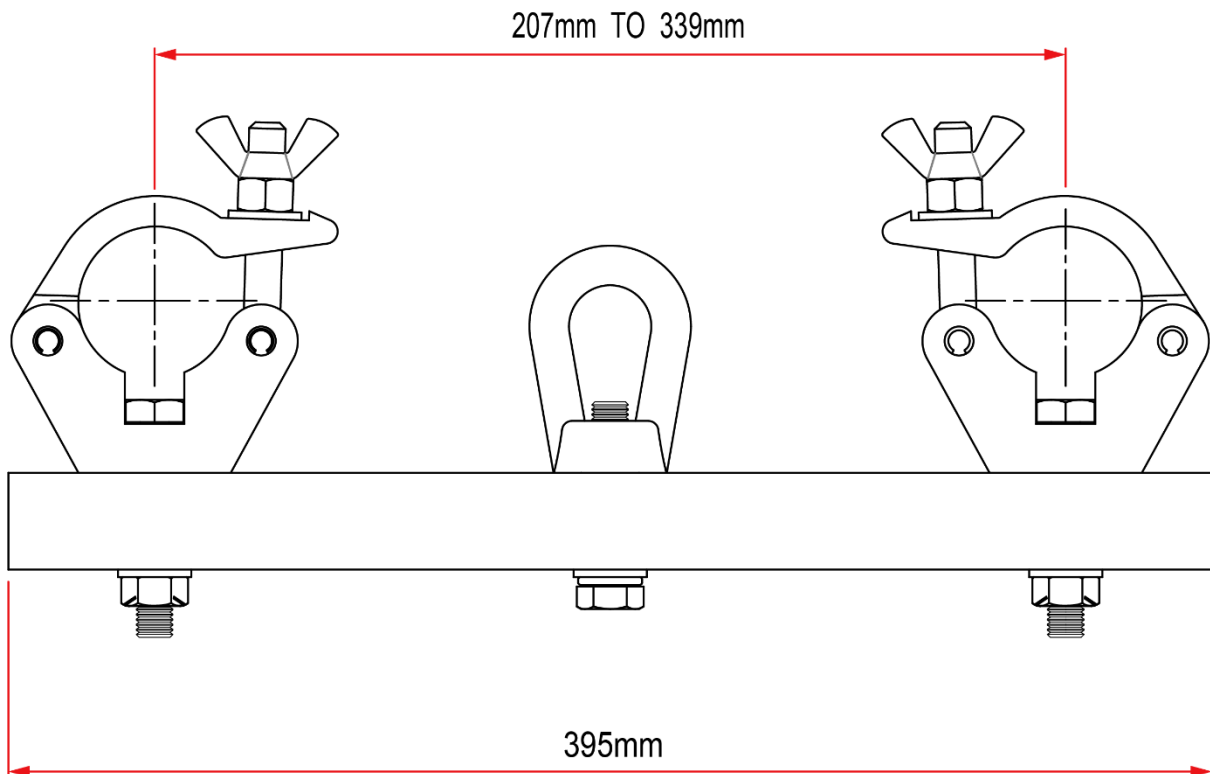
Readers and users are encouraged to notify Doughty of errors and send in suggestions for improvement. All communications will be carefully considered for future printings of this manual and changes to our products.

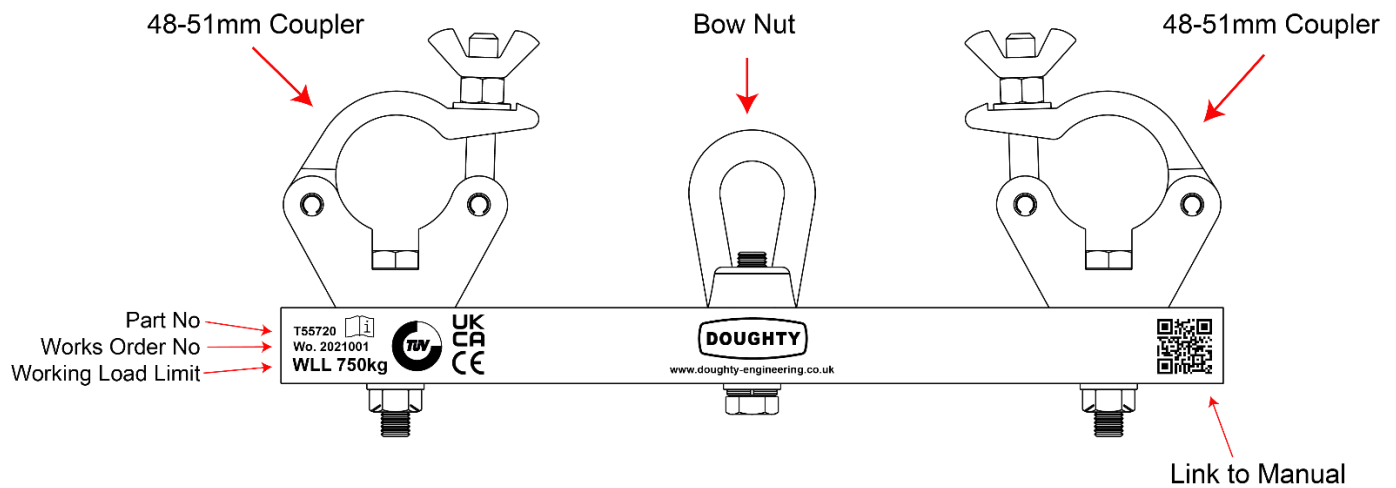
3. SOLID TRUSS ADAPTOR RANGE.

Solid Truss Adaptors can be adjusted to fit trusses with 207mm through to 339mm chord centres. Solid Truss Adaptors are supplied with a bow nut enabling a hook from a chain hoist or similar to be attached.

Solid Truss Adaptors are available for the following three load capacities:

Part No	WLL (Kg)	FINISH	WEIGHT (Kg)
T55720	250	Satin Silver Paint	2.50
T55725	250	Satin Black Paint	2.50
T55750	500	Satin Silver Paint	2.90
T55755	500	Satin Black Paint	2.90
T55780	1000	Satin Silver Paint	4.00
T55785	1000	Satin Black Paint	4.00





4. LIMITATIONS OF USE










- The Solid Truss Adaptors can be operated in -20° Celsius up to +60° Celsius.
- Salt-water environments require cleaning with fresh water at least once per week.
- Solid Truss Adaptors shall only be used on steel or aluminium truss.
- Where Solid Truss Adaptors are used in an outdoor environment, the support structure must be fitted with earth protection against lightning.
- The use of Solid Truss Adaptors is the sole responsibility of the user.
- All persons who use these devices must be acquainted with this manual and must be informed about its potential hazards.
- It is imperative to observe the local accident prevention regulations and/or occupational health and safety regulations.
- The manufacturer is not liable for indirect consequential damage and financial loss. The manufacturer shall not be liable for any changes made to the device nor for any damage resulting from such changes.
- No modifications are allowed to be carried out by third parties.

5. SAFETY INFORMATION

SAFETY INSTRUCTIONS

For health and safety reasons people assembling, disassembling, transporting, maintaining and cleaning Solid Truss Adaptors should wear adequate Personal Protection Equipment such as, but not limited to; gloves, hard hats and safety shoes.

WARNING

-  Solid Truss Adaptors must only be installed and used qualified/competent persons.
-  Do not exceed the working load limit indicated on the Solid Truss Adaptor.
-  Make sure the resulting forces on the supporting structure are approved by a competent person.
-  All loads imposed shall be considered. E.g. dynamic forces caused by lifting machinery.
-  Bolts and nuts shall be tightened by means of a spanner in such a manner they cannot be released by manpower.
-  When loads are using electrical power, equip-potential bonding shall be put in place.
-  Solid Truss Adaptors shall be inspected by a competent person as often as required but with a minimum of once a year.
-  A Solid Truss Adaptor must be taken out of service immediately if, during use, repair or maintenance any serious damage is discovered.
-  Maintenance and repairs can be undertaken only by authorised personnel. If in any doubt contact the manufacturer.

6. COMPLIANCE

TRUSS ADAPTORS USED AS A LIFTING ASSESSORY:

2006/42/EC	Machinery directive
DGUV Rules 115-002	Regulations for stages and studios (Formerly known as BGVc1)
DGUV Information 215-313	Safety at productions and events for television, radio, film, theatre, exhibitions: Loads above persons (Formerly known as BGI 810-3)
BS EN 17206:2020	Entertainment technology. Machinery for stages and other production areas. Safety requirements and inspections

7. TRANSPORT AND STORAGE

- Due to the relatively high self-weight it is advised to keep storage bins as small as possible in such a manner they can be lifted by one person. Local legislation for maximum load to be lifted by persons shall be adhered to.
- Before Solid Truss Adaptors are put into storage they shall be checked for defects. Defective Solid Truss Adaptors shall be clearly marked and put aside in such a way they cannot be re-used.
- Ensure the product is stored and kept in a dry, ventilated environment to avoid corrosion.
- Appropriate packaging or protective measures are to be provided to prevent damage to Solid Truss Adaptors during transportation.

8. INSTALLATION

WARNING

Inspect the Solid Truss Adaptor before every use. Do not use if damaged.

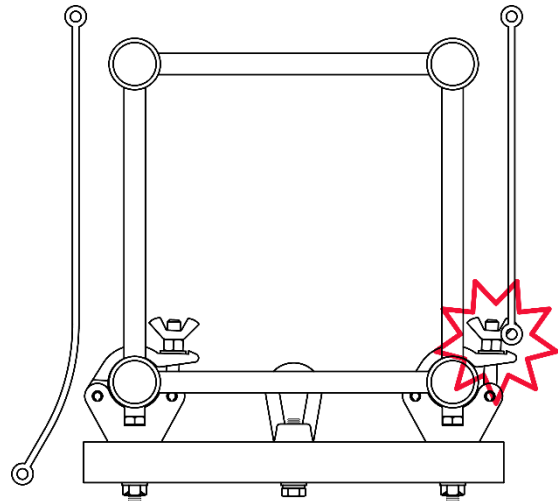
The Solid Truss Adaptor are used for lifting and suspending truss sections.

- a. Organisational measures should be implemented to keep the area beneath work operations clear of people during installation.
- b. Ensure that the installation is suitable for the application.
- c. Never exceed the working load limit (WLL) as indicated on the Truss Adaptor and in this manual or as instructed by your installer, as installation conditions may alter the working load limit.
- d. When used in conjunction with any other accessories, care must be taken to ensure the WLL of any component is not exceeded.

WARNING

Doughty Engineering recommend using the couplers with the eyebolts facing inwards

When lifting trusses with the eyebolts facing outwards there is a chance of any trailing cables becoming snagged on the eyebolts



Solid Truss Adaptors have been designed specifically to suspend square and triangular trusses from the Bow nut.

Should the truss adaptor require reconfiguring as shown in Figs 2 & 3 only move the couplers. **DO NOT MOVE THE BOW NUT.**

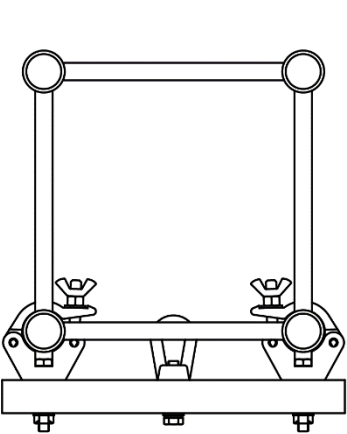


Fig 1.

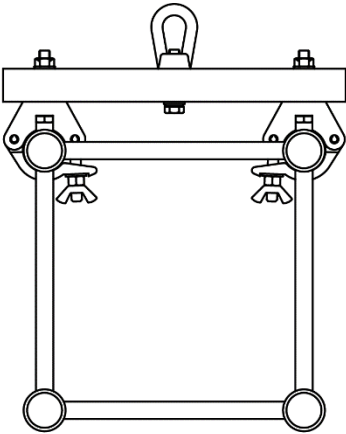


Fig 2.

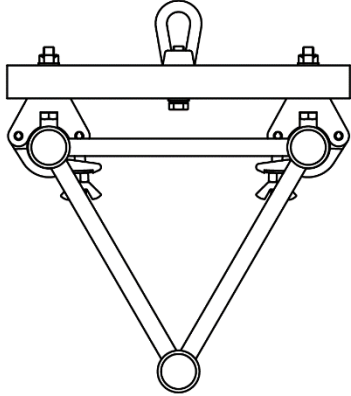


Fig 3.

When moving or checking the couplers, make sure that the eyebolt and fixing bolts are properly secured.

The couplers are secured with a washer and 'Binx' nut. The 'Binx' nut is a locking nut and is designed to be reused. Care must be taken to ensure that the nut is not damaged and its locking properties are functional. Doughty Engineering recommends these nuts are replaced on a regular basis.

When securing the coupler to the truss, ensure the couplers are seated on the tube correctly and not seated in the weld, as this may cause the coupler to become loose during the lifting/suspension operation.

The recommended torque for securing the couplers and clamping the truss is 30Nm.

Overtightening the couplers will reduce their lifespan and can damage the truss.



A callout box with a rounded rectangular border. On the left side, there is a technical drawing of a hexagonal nut with a red curved arrow pointing to it, indicating torque application. To the right of the drawing, the text reads: "Max Torque 30 Nm 22 lb-ft".

Max Torque
30 Nm
22 lb-ft

Important:

Always use a secondary safety device.

9. COMMISSIONING

-  Before applying a load check that all connections are properly made.
-  Check if all parts are in good order.

10. INSPECTION, DISCARD AND REJECTION CRITERIA

WARNING

If any fault is found, mark the product clearly and remove from service.

14.1 INITIAL INSPECTIONS

When first acquired, whether they are new or used, Solid Truss Adaptors should be inspected and a record of the inspection maintained.

REGULAR INSPECTIONS

Regular visual inspections should be carried out. Regular inspections should be performed by a competent person and should be carried out prior to each incident of use.

14.2 INSPECTION FREQUENCY

SOLID TRUSS ADAPTORS IN REGULAR SERVICE

Solid Truss Adaptors in regular service should be subjected to regular and periodic inspections.

The frequency of inspections should be determined on the basis of the prevalent conditions.

PERMANENT INSTALLATIONS

Periodic inspections should be carried out every three months, or in accordance with an inspection routine established by a qualified person, on all Solid Truss Adaptors that are installed in a permanent configuration.

RECORDS

Records of initial inspections and periodic inspections should be kept by the owner for each Solid Truss Adaptor and should be signed and dated by the person carrying out the inspections.

11. MAINTENANCE

SAFETY INSTRUCTIONS

Although under normal use and environmental circumstances, Solid Truss Adaptors need little maintenance, for safety reasons, all parts must be checked regularly for damage, cracks and corrosion.

NOTICE

The Solid Truss Adaptor shall be checked in compliance with the local law by a competent person. Checking shall take place as often as required but at a minimum of once a year. If in doubt contact the manufacturer.

- ⚠ Maintenance must only be carried out by approved personnel.
- ⚠ Approved personnel must carry out a visual and functional test before every usage.
- ⚠ Check all components for damage and corrosion. Damaged and corroded parts shall be removed and disposed of.
- ⚠ Burrs and sharp edges shall be removed using fine sandpaper or a file.
- ⚠ Maintenance and repairs must only be carried out by a competent person. If in doubt, contact the manufacturer.
- ⚠ Do not use any mechanical abrasive machine to remove sharp edges from Solid Truss Adaptors.
- ⚠ Use hot water and soap to remove any dirt from Solid Truss Adaptors.
- ⚠ Do not use abrasive fluids to remove dirt or paint from Solid Truss Adaptors.

12. REPAIRS and REPLACEMENT OF PARTS

- Damaged Solid Truss Adaptors should be returned to an authorised Doughty service agent for repair.

13. IF THE PRODUCT IS NO LONGER NEEDED

Products that are no longer needed can be scrapped. Preferably remove all steel parts, store part separately before offering them to a scrapping company.

The following alloys are used:

- Boron BS3111 TYPE 9/2
- Aluminium 6082 T6
- Mild Steel

14. WARRANTY

- For a period of 12 months we undertake to repair, free of charge any damage attributable to faulty materials or workmanship, provided that the appliance is forwarded, freight paid, to our works or one of the Doughty appointed service agents.
- The guarantee-period begins on the day of the delivery, proven by a purchase receipt like an invoice or delivery note or their copies.
- The guarantee only is applicable for new equipment.
- The guarantee does not cover damage due to transport damage, negligent handling, overload or parts subject to normal wear and tear. Nor damages that originate from a case of misuse because of non-observance the instructions in this manual.
- The fitting of non-original replacement parts or modifications of design by third parties invalidates the guarantee.
- Guarantee repairs do not renew nor extend the guarantee-period.
- In case of a claim under the guarantee or spare part requirements please contact your Doughty service agent.
- The manufacturer is not liable for indirect consequential damage or financial loss.
- The manufacturer is not liable for any changes made to the Solid Truss Adaptor or for any damage resulting from such changes.

15. INSPECTION LIST

ITEM	FAULT	REPAIR	DATE	SIGNATURE