



USER MANUAL

# Solid Hanging Truss Adaptors



Original Instructions

Part No's:

T55720 - T55785

<b>Introduction</b>	<b>2</b>
<b>Safety Information</b>	<b>3</b>
<b>Limitations of Use</b>	<b>5</b>
<b>Operation</b>	<b>6</b>
<b>Inspection, Discard and Rejection Criteria</b>	<b>7</b>
<b>Maintenance</b>	<b>8</b>
<b>Faults, Repair and Replacement</b>	<b>10</b>
<b>Disposal and Warranty</b>	<b>11</b>
<b>Data Sheets</b>	<b>12</b>
<b>Inspection List</b>	<b>15</b>
<b>EC Declaration</b>	<b>16</b>
<b>Contact Details</b>	<b>17</b>

Doughty Solid Truss Adaptors are a range of devices designed specifically for lifting and suspending truss sections with a tube diameter of 48 - 51mm. Solid Truss Adaptors are supplied with a fitted Bow Nut enabling a hook from a chain hoist or similar to be attached.

Each Solid Truss Adaptor can be adjusted to fit trusses with 207 to 339mm chord centres.

Doughty Solid Truss Adaptors are available in the following sizes:

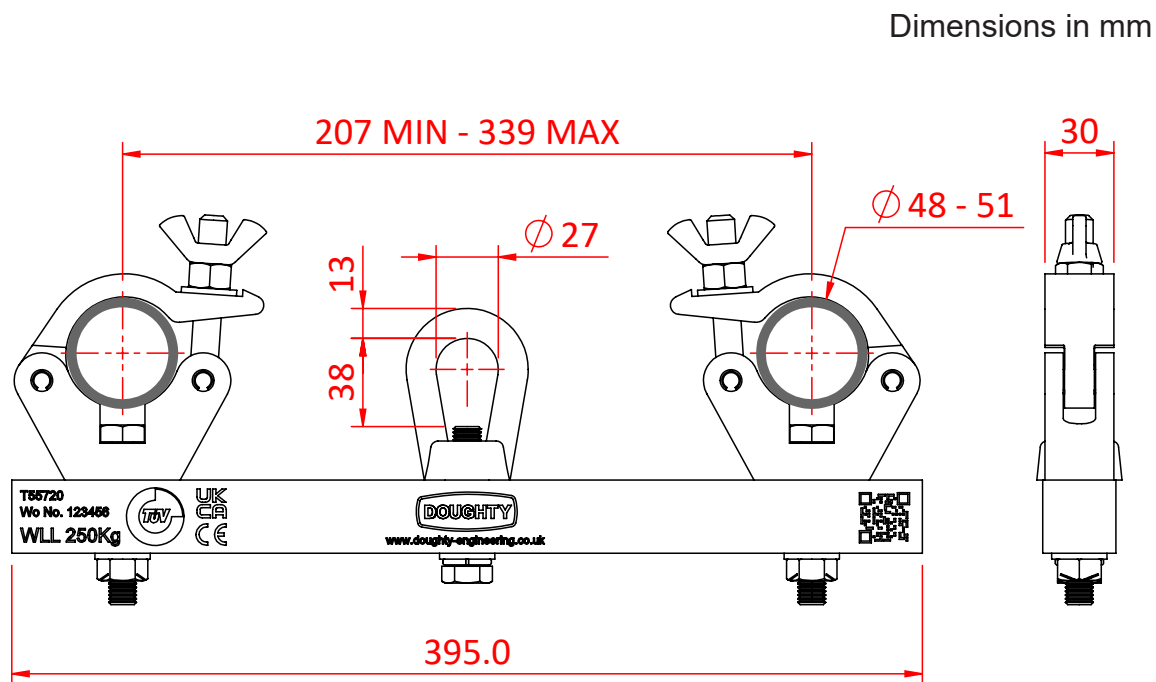
## Solid Hanging Truss Adaptors

T55720 - WLL 250Kg - Polished Aluminium Finish  
T55725 - WLL 250Kg - Satin Black Powder Painted Finish

T55750 - WLL 500Kg - Polished Aluminium Finish  
T55755 - WLL 500Kg - Satin Black Powder Painted Finish

T55780 - WLL 1000Kg - Polished Aluminium Finish  
T55785 - WLL 1000Kg - Satin Black Powder Painted Finish

**Safety Factor 5:1**



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



### Warning

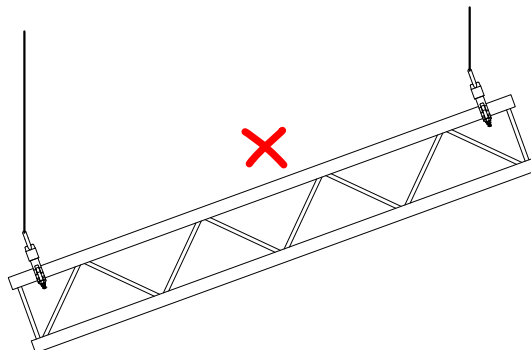
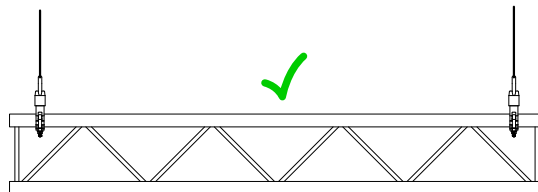
- Solid Hanging Truss Adaptors must only be installed and used by qualified/competent persons. Salt water environments require cleaning with fresh water at least once per week.
- DO NOT exceed the working load limit indicated for the Solid Hanging Truss Adaptors
- Resulting forces on the supporting structure are approved by a competent person.
- All loads imposed shall be considered, e.g. dynamic forces caused by lifting machinery.
- Nuts and bolts shall be tightened by means of a tool 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 Hanging Truss Adaptors 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.
- DO NOT throw Solid Hanging Truss Adaptors

## Safety Information

- Organisational measures should be implemented to keep the area beneath work operations clear of people during installation.
- Solid Hanging Truss Adaptors can be operated in  $-20^{\circ}$  Celsius and up to  $+60^{\circ}$  Celsius.
- Solid Hanging Truss Adaptors are not to be used for construction purposes unless approved by a chartered engineer.
- Solid Hanging Truss Adaptors should only be used on steel and aluminium truss.
- The User Manual informs to ensure that couplers are seated correctly on a truss i.e. not seated on a weld, as this may cause the bar to become loose during lifting/suspension operations.
- Where Solid Hanging Truss Adaptors are used in an outdoor environment the support structure must be fitted with earth protection against lightening.



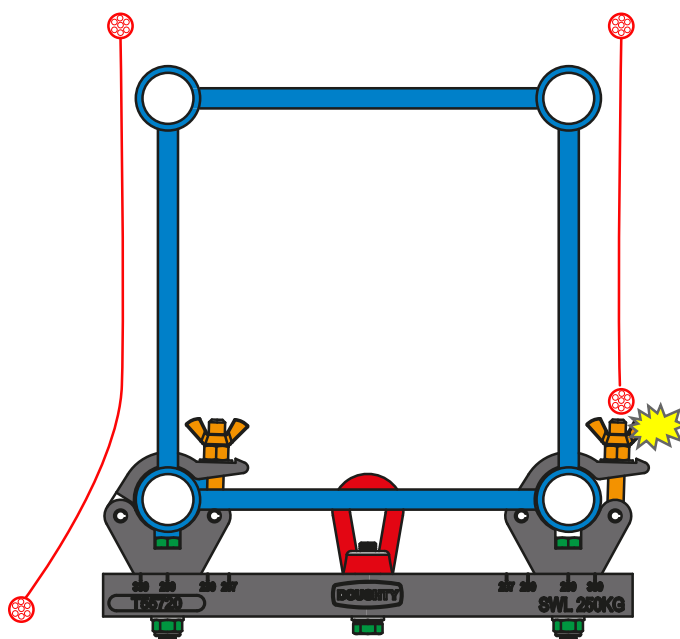
**Warning** - Only lift trusses horizontally.





## 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.



Should the Truss Adaptors require reconfiguring as shown below in Fig 1, 2 & 3 only move the couplers. **DO NOT MOVE THE BOW NUT.**

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

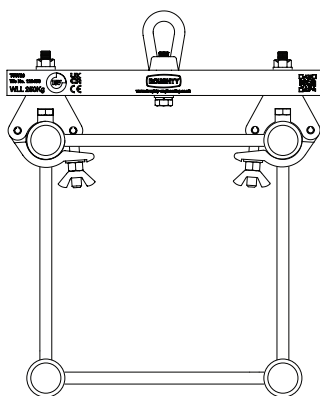


Fig 1.

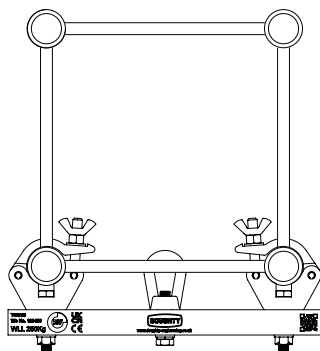


Fig 2.

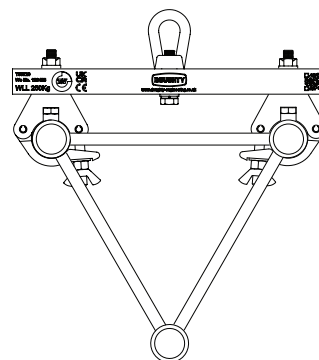
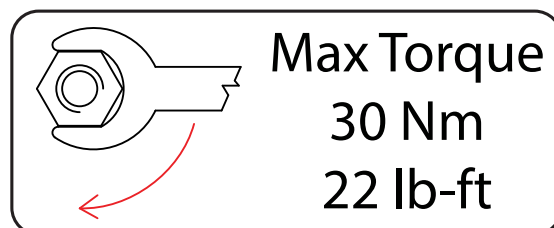


Fig 3.



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

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



## COMMISSIONING

### Warning

**Before applying a load, check that all connections are properly made and check if all parts are in good order. If any fault is found, mark the product clearly and remove from service.**

## INITIAL INSPECTIONS

When first acquired, whether they are new or used, Solid Hanging 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.

If you see any damage including cracks, deformation or missing parts, the product must be removed from service and returned to an Approved Service Agent for evaluation/repair.

## INSPECTION FREQUENCY

### SOLID HANGING TRUSS ADAPTORS IN REGULAR SERVICE

Solid Hanging 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 frequency and intensity of use.

### PERMANENT INSTALLATIONS

Periodic inspections should be carried out in accordance with an inspection routine established by a qualified person, on all Solid Hanging 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 Hanging Truss Adaptors and should be signed and dated by the person carrying out the inspections.





## Safety Instructions

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

## NOTICE

The Solid Hanging Truss Adaptors 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.

- 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 exchanged with like for like approved replacement parts.
- 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 Hanging Truss Adaptors
- Only use hot water and soap to remove dirt from Solid Hanging Truss Adaptors - DO NOT use abrasive fluids.

- Approved personnel must carry out a visual and a function test before every usage.
- Approved personnel must carry out more detailed inspection and testing of the product on a regular basis depending on the usage of the product.
- Written records should be kept from the date the product was put into operation.



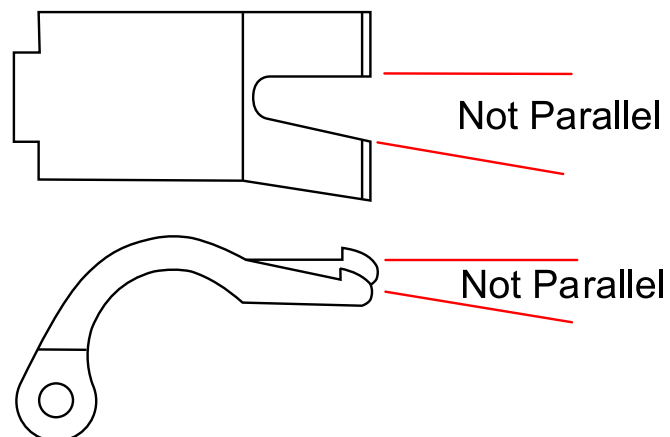
### **Warning**

- The installer/operator must read and understand the User Manual before using the equipment.
- Operators shall be adequately instructed and fully understand the safe use of the equipment before use.
- Failure to carry out maintenance as necessary, including the replacement of parts to the correct standard could render this equipment unsafe and the manufacturer cannot accept any responsibility in this respect.
- Only use approved spare parts.
- DO NOT modify the equipment as this could lead to a critical failure.
- DO NOT use this equipment for a purpose that it is not intended. This could lead to a failure of the equipment and a risk of falling objects.

The following faults could be an indication of overload or misuse. Remove those clamps from service.

- Deformation of the lid (see diagram).
- Nuts which cannot be turned by hand.
- Eyebolts which do not swivel properly.
- Lids which do not swivel properly.
- Clamp does not fit around the pipe.

### Typical Deformation Examples



### REPAIRS AND REPLACEMENT OF PARTS

If the Solid Hanging Truss Adaptors is damaged, contact the manufacturer.

### DISPOSAL

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

- Aluminium 6082 T6
- Mild Steel S275
- Steel 8.8

### 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 Hanging Truss Adaptors or for any damage resulting from such changes.



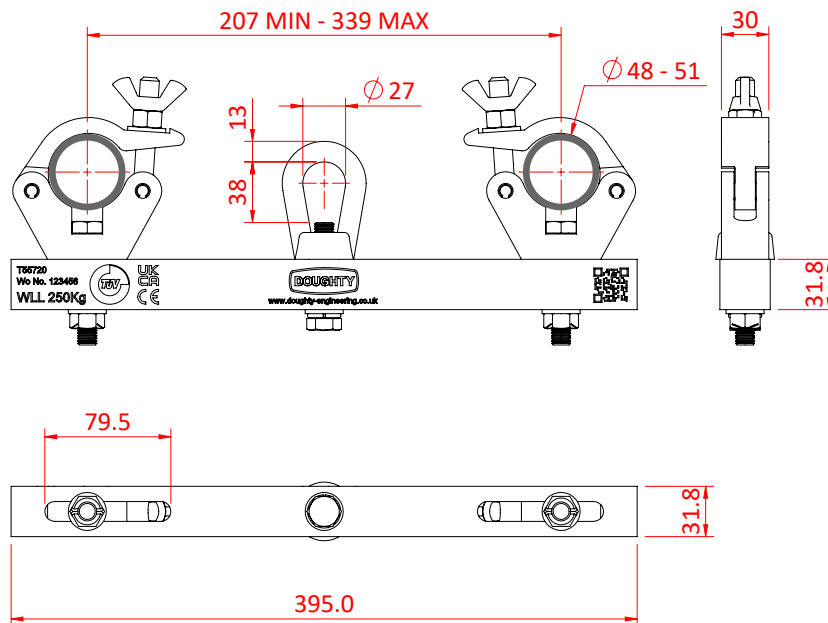
Product Data Sheet

# 250Kg Solid Hanging Truss Adaptors



A Solid Hanging Truss Adaptor	
<b>Part Nos</b>	T55720 - Silver T55725 - Black
<b>Tube Diameter</b>	Ø48-51mm
<b>Tube Centres</b>	207 to 339mm
<b>Material</b>	AW6082 T6 Aluminium
<b>Finish</b>	Powder Painted / Polished
<b>Max Torque</b>	30Nm
<b>WLL</b>	250Kg
<b>Safety Factor</b>	5:1
<b>Weight</b>	2.30Kg
<b>Approval</b>	TÜV approved

Dimensions in mm



Doughty Engineering Ltd - Crow Arch Lane, Ringwood, Hampshire, BH24 1NZ, UK  
 +44 (0) 1425 478961, sales@doughty-engineering.co.uk - www.doughty-engineering.co.uk



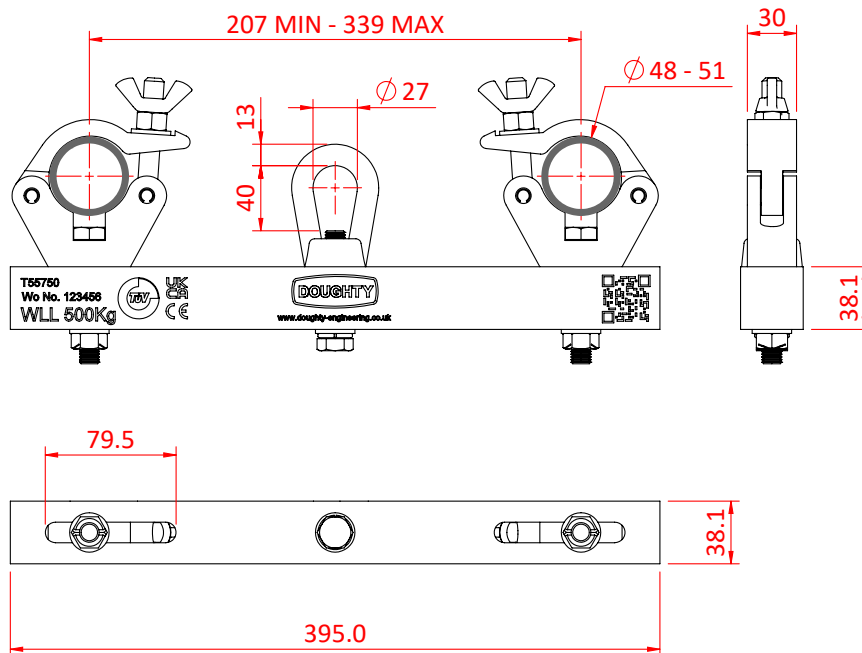
Product Data Sheet

# 500Kg Solid Hanging Truss Adaptors



A Solid Hanging Truss Adaptor	
<b>Part Nos</b>	T55750 - Silver T55755 - Black
<b>Tube Diameter</b>	Ø48-51mm
<b>Tube Centres</b>	207 to 339mm
<b>Material</b>	AW6082 T6 Aluminium
<b>Finish</b>	Powder Painted / Polished
<b>Max Torque</b>	30Nm
<b>WLL</b>	500Kg
<b>Safety Factor</b>	5:1
<b>Weight</b>	2.80Kg
<b>Approval</b>	TÜV approved

Dimensions in mm



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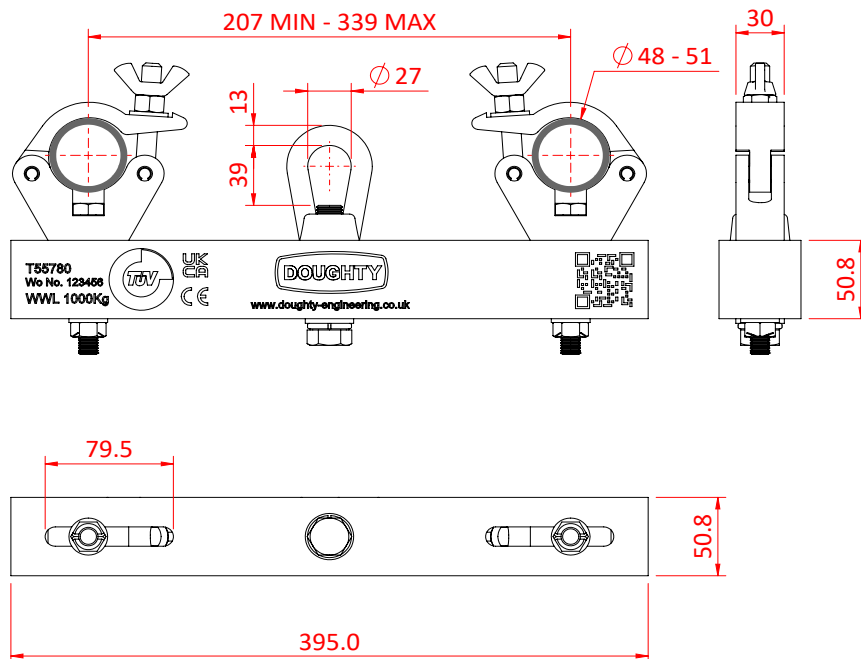
Product Data Sheet

# 1000Kg Solid Hanging Truss Adaptors



A Solid Hanging Truss Adaptor	
<b>Part Nos</b>	T55780 - Silver T55785 - Black
<b>Tube Diameter</b>	Ø48-51mm
<b>Tube Centres</b>	207 to 339mm
<b>Material</b>	AW6082 T6 Aluminium
<b>Finish</b>	Powder Painted / Polished
<b>Max Torque</b>	30Nm
<b>WLL</b>	1000Kg
<b>Safety Factor</b>	5:1
<b>Weight</b>	4.0Kg
<b>Approval</b>	TÜV approved

Dimensions in mm



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Engineering Ltd

## EC-DECLARATION OF CONFORMITY

According to the Machinery Directive 2006/42/EEC Annex II

**Doughty Engineering Ltd**  
Crow Arch Lane  
Ringwood  
Hampshire  
BH24 1NZ

Herewith declares that:

**T55720, T55725, T55750, T55755, T55780 & T55785**

**Solid Hanging Truss Adaptors**

Are in compliance with the following harmonized standards/standards/regulations:

### **Machinery Directive 2006/42/EEC annex II**

- Machinery Directive 2006/42/EC;
- BS EN 12100:2010 – Safety of Machinery – General Principles of Design – Risk Assessment and Risk Reduction.
- BS 7906-1:2005 - Lifting Equipment for Performance, Broadcast and Similar Applications;
- DGUV 17 – Regulations for Stages and Studios
- DGUV Information 215-313

Signed for and behalf of **Doughty Engineering Ltd**

Name **Dan Phillips**

A handwritten signature in black ink, appearing to be "DP", written over the printed name "Dan Phillips".

Position **Company Director** being the person responsible appointed by the manufacturer.

Company Registration No. London 972614  
Registered Office: Crow Arch Lane, Ringwood, Hants, BH24 1NZ  
Directors: J.C.G. Chiverton. S.C. Wright. D. Phillips. D.M. Chorley



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