HIGH OUTPUT CABLE HANDLING SYSTEM Description and Specifications



A suite of products for handling, transporting and laying cables on rail infrastructure

Issue I

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Introduction

This short document introduces a suite of products designed to facilitate the rapid loading, transport and laying of cables within the rail infrastructure. The suite of products includes a cable drum transport stillage designed to mount quickly onto standard rail trailers, a telehandler attachment for loading cable drums onto the transport stillage and a cable yoke for use with a road-rail excavator.

Because of the wide variety of excavators, telehandlers and rail trailers in the rail industry, each of the products is manufactured to order to suit each individual user's requirements.

Within this document the key specifications for each of the products is provided and the range of options discussed.

Please contact the factory for a fully detailed specification for each particular application.

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CSI9 Drum Carrying Stillage for Rail Trailers

The simple cable stillage is designed to carry four standard 2m diameter cable drums up to 1.5m wide and each weighing up to 2.5 tonnes.

The stillage is equipped with lifting points and fork lift pockets for placing onto the trailer and is fitted with twist lock blocks for attaching to the trailer. The positions of the twist lock fittings vary between different rail trailers and this must be specified at the time of order. Stillages can be manufactured to suit all trailer types or to fit ISO dimensions.

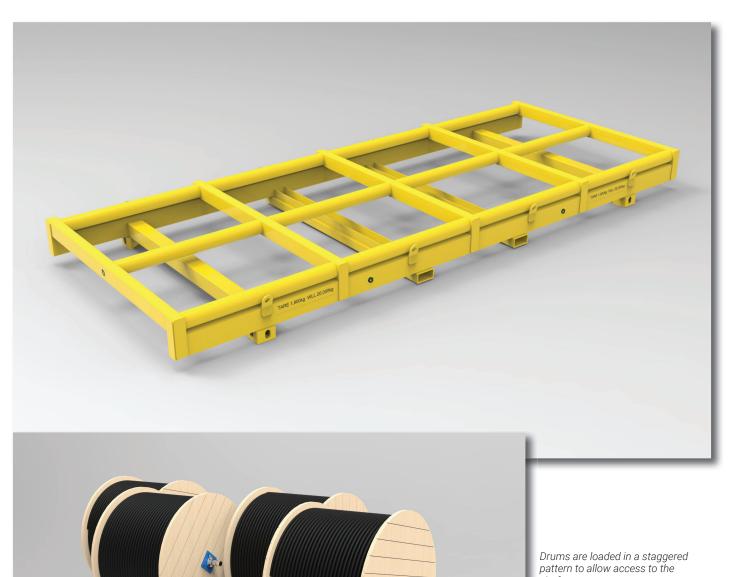
Before loading each cable drum is fitted with a shaft and collars ready for use with the CY18 Cable Yoke. Drums may be loaded onto the stillage either by the RRV using the Cable Yoke or by a telehandler equipped with a THCH19 Cable Drum Handler attachment.

The drums are supported in transit by large diameter steel tubes with a 10mm wall thickness to withstand impact from carelessly handled drums. Lashing points are provided for ratchet straps to secure each drum during transport.

For the shortest work time a heavy duty stillage can be provided with large extra fork pockets for a large machine to load pre-loaded complete stillages onto the trailers.

CSI9-OI Specifications

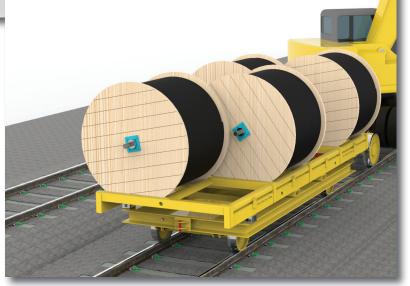
Overall Length	6,320	mm
Overall Width	2,540	mm
Overall Height	470	mm
Tare Weight	1,900	kg
Working Load Limit	20,000	kg
Capacity	4	Drums
Drum Diameter	1.8- 2.5	m
Maximum Drum Width	1.45	m
Standard Equipment	Lifting Points	
	Lashing Points	
	Fork pockets	
Optional Equipment	Strap Storage Locker	
	Heavy Duty Fork Pockets	



shafts

Stillage is secured to the rail trailer with twist locks.

Cable drums may be lashed down if required.



Telehandler Attachment for Loading and Unloading

Where cable drums are stored too far from the running line to be reached by the RRV a telehandler equipped with the THCH19 Cable Drum Handling Attachment may be used to rapidly unload empty drums and replenish the stillages with full drums.

The THCH19 Cable Drum Handler can be configured to suit any type of telehandler and is a robust device designed for many years of use.

The tapered slots at the ends of the arms on the device are designed to carry the ends of the drum shaft. Using this attachment drums can be lifted, carried and placed without the need for a slinger to attach and release chains.

THCHI9-OI Specifications

The following specifications are for the THCH19-01 Cable Drum Handler which is designed to fit JCB telehandlers with Q-Fit hitch systems. Please enquire for details of other configurations.

Tare Weight 475 kg
Working Load Limit 6,000 kg
To Suit Drum Shaft 80mm diameter x 1,850mm long



THCH19 Cable Drum Handlers can be supplied for all makes of telehandler.



CYI8 Cable Yoke

The CY18 Cable Yoke is the fastest way to lay cables direct from the drum to the troughing.

Suspended from the boom of an RRV the CY18 Cable Yoke is used to lift the ends of the pre-fitted drum shafts and thereafter to position the drums ready for de-coiling of the cable directly into place as the RRV moves along the rails.

The drum shaft rests on rollers in the foot of the Cable Yoke. This minimises friction and makes it easy to draw cable from the drum.

Swapping an empty drum for a full drum takes a few seconds ensuring the maximum output with minimum manpower.

The CY18 Cable Yoke can be supplied with any of a wide range of adapter systems for fitting to the RRV including a simple shackle mount for suspending from a hook or a hydraulic rotator with a quick coupler head.

Cable yokes can be supplied to suit any drum size and weight but our most popular model is the CY18-2.5-1.5-5T.

CYI8-2.5-I.5-5T Specifications

Tare Weight (including shaft assembly but without adapter head	275	kg
Working Load Limit	5,000	kg
Maximum Drum Diameter	2,500	mm
Maximum Drum Width	1,500	mm
Shaft Diameter	80	mm
Adapter Options	Shackle	
	Rotator and Adapter Head	
	Atlas Square Drive	





Typical CY18 Cable Yoke with Atlas square drive adapter head



The drum shaft is secured with a simple locking pin and rests on rollers to reduce the force required to pull cable from the drum.



CY18 Cable Drum with hydraulic rotator and two-pin quick coupler adapter head









Approvals and Certification

All products manufactured by Thomson Engineering Design are subjected to rigorous design and safety checks at all stages of the development and production process.

All of our products are CE marked and all lifting equipment is supplied with a LOLER test certificate as standard.

Equipment sold to clients outside the United Kingdom may also be factory certified to our clients' local standards if required.

Thomson Engineering Design maintains a full range of calibrated test and measurement equipment to ensure that we can guarantee the performance of our products.

Use on Controlled Railway Infrastructure

Equipment put to use on railway infrastructure may additionally require approval by the infrastructure control company, for example Network Rail or SNCF.

The process of obtaining such approval can take months or even years to complete and, since both the necessity of approval and the approval itself rests upon the opinion of individual case examiners and since no part of these approvals processes is governed by law, no guarantee can be given that any product will ultimately be approved.

Thomson Engineering Design Ltd has many products approved for use by railway authorities across the world and a great deal of experience of approvals processes.

Power and signalling cables used within the railway infrastructure are parts of the infrastructure and any devices used to handle the cable itself will normally require approval by the relevant railway authority. However, it is our opinion that the cable handling products illustrated in this document are not of a type which would normally require approval since they handle the drums and do not directly handle the cable itself.

Nevertheless, prospective purchasers of this equipment are advised to check with the local railway authority. Should approval be required Thomson Engineering Design Ltd will be pleased to provide technical support to facilitate the approvals process.

Contact Details

All technical and sales enquiries should be directed to Thomson Engineering Design.

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Whilst every care is taken to ensure that the contents of this document are true and accurate, the specifications of our products and the scope of our services are constantly changing as part of our policy of continuous improvement.

We strongly recommend contacting the factory to ensure that details given are still current.

Bespoke Solutions

More than half our business comes from special products designed and built as one-off's and we are always pleased to discuss amended specifications should the product detailed here not meet your exact requirements.

