CL20-03 CABLE DRUM HANDLER
Specifications

Specifications for a Basic Cable Drum Handler for use on trucks and rail trailers

Issue 2

JULY 2022

THOMSON
ENGINEERING
DESIGN

A QM SYSTEMS COMPANY

Contents

Introduction

Thomson Engineering Design Ltd has been designing and manufacturing cable handling and de-coiling equipment since 2005 and has developed a wide range of equipment for all parts of the cable installation process.

The range of products includes drum stillages, de-coilers and handling equipment for excavators and telehandlers.

This document presents the specifications and key features of one product within this range: the CL20-03 Cable Handler, a device designed specifically to be mounted on trucks, wagons or rail trailers and used to carry and dispense cables.

This device is designed for cable drums up to 5 tonnes in weight. The basic model is shown in this document but other models in the range incorporate brakes and / or power drive to the drum shaft.

A unique feature of the standard model is the way the drum shaft is supported. Rather than being supported by plain bushes which have a relatively high friction, the drum shaft of the Thomson Cable Handler rests on hardened steel rollers which themselves run on low friction ball bearings. This means that very little force needs to be applied to the cable when dispensing from the drum and this feature makes the Thomson Cable Handler especially suitable for delicate cables such as optical fibre.

Each unit is built to order so that precise specifications may be altered and the specifications presented herein should be considered as for guidance only. Thomson Engineering Design Ltd will be pleased to discuss alterations to the specification to suit individual requirements.

Specifications

|		
Tare Weight	1,725	kg
Max. WLL	5,500	kg
Max. Drum Diameter	3,000	mm
Max. Drum Width	1,775	mm
Min. Drum Spindle Hole Diameter	90	mm
Max Drum Spindle Hole Diameter	125	mm
Max. Fork Dimensions	200 mm x 100	mm
Fork Pocket Centre to Centre Distance	1,200	mm

Key Features

The Thomson Cable Drum Handler has been developed to make transport and laying of cables as simple and quick as possible.

In the following pages the key features of the Thomson Cable Drum handler are illustrated and described.

Shaft Support

The drum shaft rests on hardened steel rollers which themselves run on low friction ball bearings to make de-coiling of cables as easy as possible.
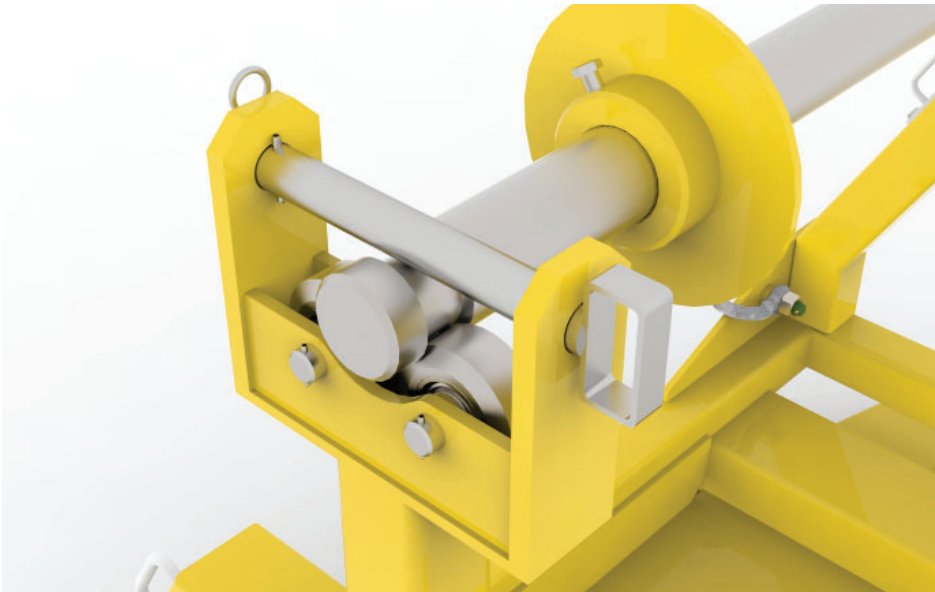

Rotating Upper Section

The upper section of the frame can be rotated on the base and pins at 15 degree increments to allow cables to be drawn off to the side of the vehicle.

Handles for Alignment

White painted (as per railway regulations) handles are provided at all four corners to help align the unit with the vehicle (when lifted on chains) or for turning the upper section to the desired angle. Handles are carefully placed away from any moving parts.
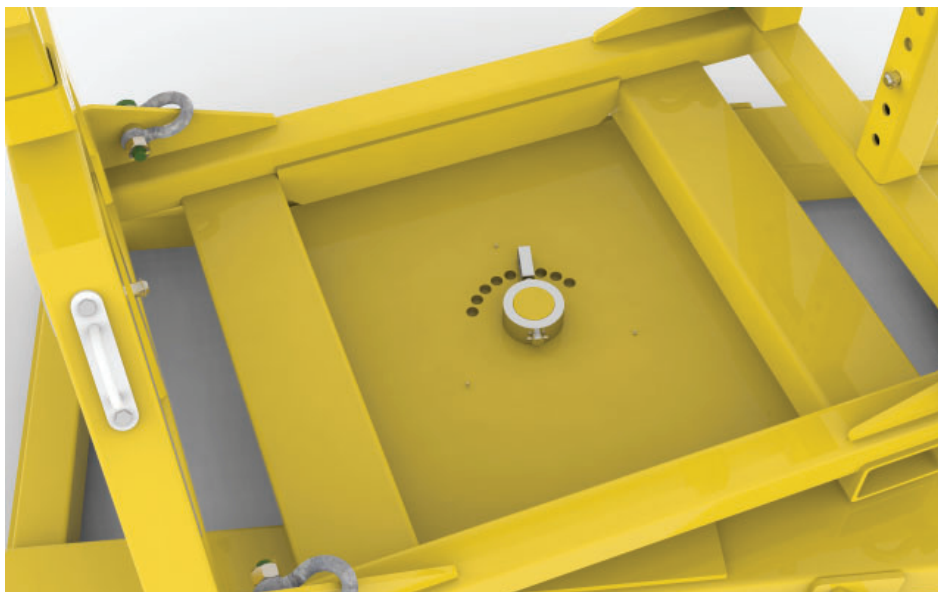
## Shackles and Fork Pockets for Handling

Four shackles are provided for attaching lifting chains and two sets of fork pockets are provided allowing the unit to be handled with a telehandler or large fork-lift.

Two sets of fork pockets allows the unit to be loaded or unloaded from the side or the rear of the vehicle.
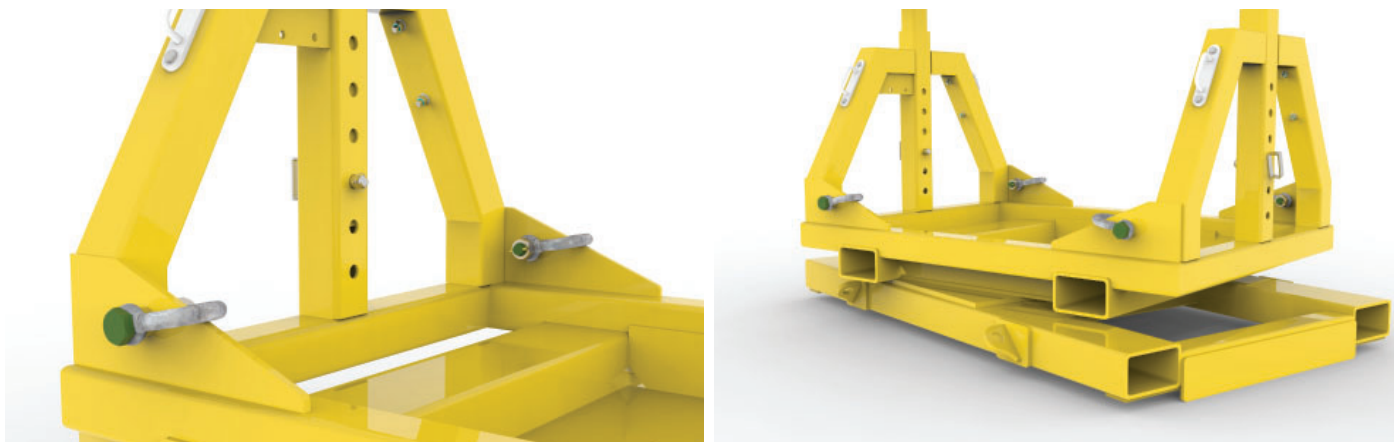
Simple Adjustment

A 24mm spanner is the only tool required to use the Cable Handler. This is to adjust the position of the coned flanges which adapt the standard 90mm shaft to suit cable drums with holes from 90mm to 125mm diameter.
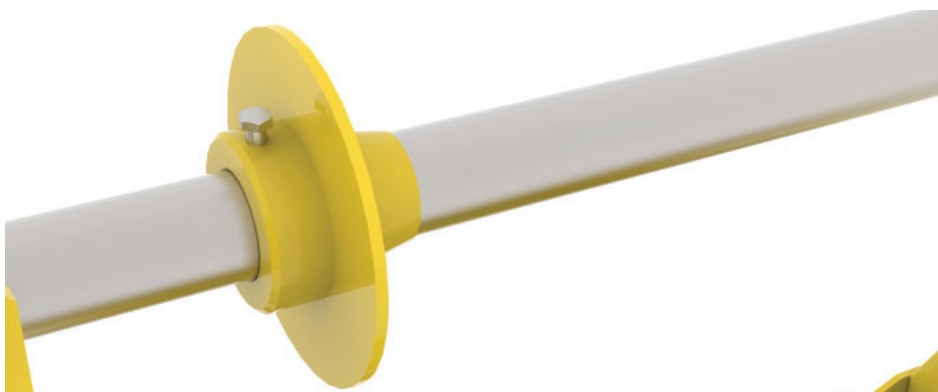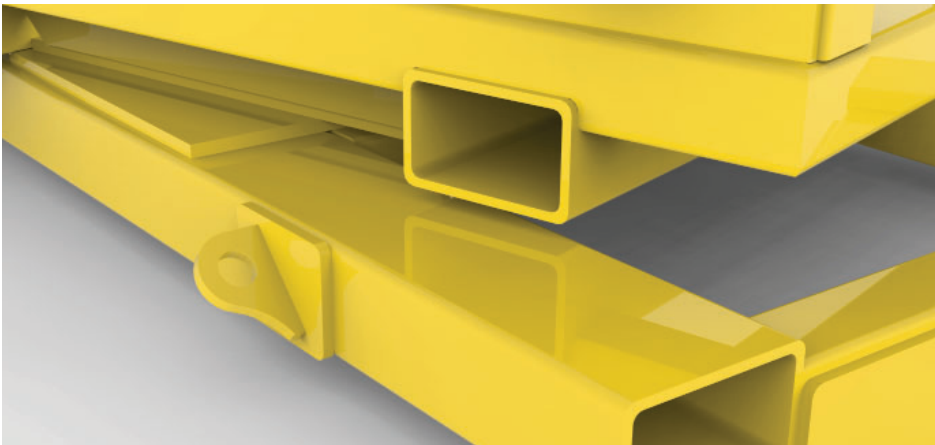
Adjustable Shaft Height

At its lowest setting the Cable Handler can accommodate drums up to 2m diameter.

The shaft may be raised in 100mm increments to provide a maximum capacity of 3m diameter drums

Heavy Duty Lash Down Points

Four heavy steel eyes are provided as lashing points or securing the Cable Handler to the vehicle.

Edge Plates to Secure on Vehicle

To further secure the Cable Handler to the vehicle, 15mm thick steel 'lip plates' are provided which fit over the edges of the vehicle body.

Optional Equipment

Optional equipment available for this unit includes the following:

Cable Drum Brake System

A disc mounted on the shaft fits into a spring loaded caliper to provide a braking load for tensioning cables as they are de-coiled.

Both hydraulic and mechanical brake systems are available and the hydraulic brake can be fitted with a pressure gauge or pressure transducer to provide an indication of the cable tension.
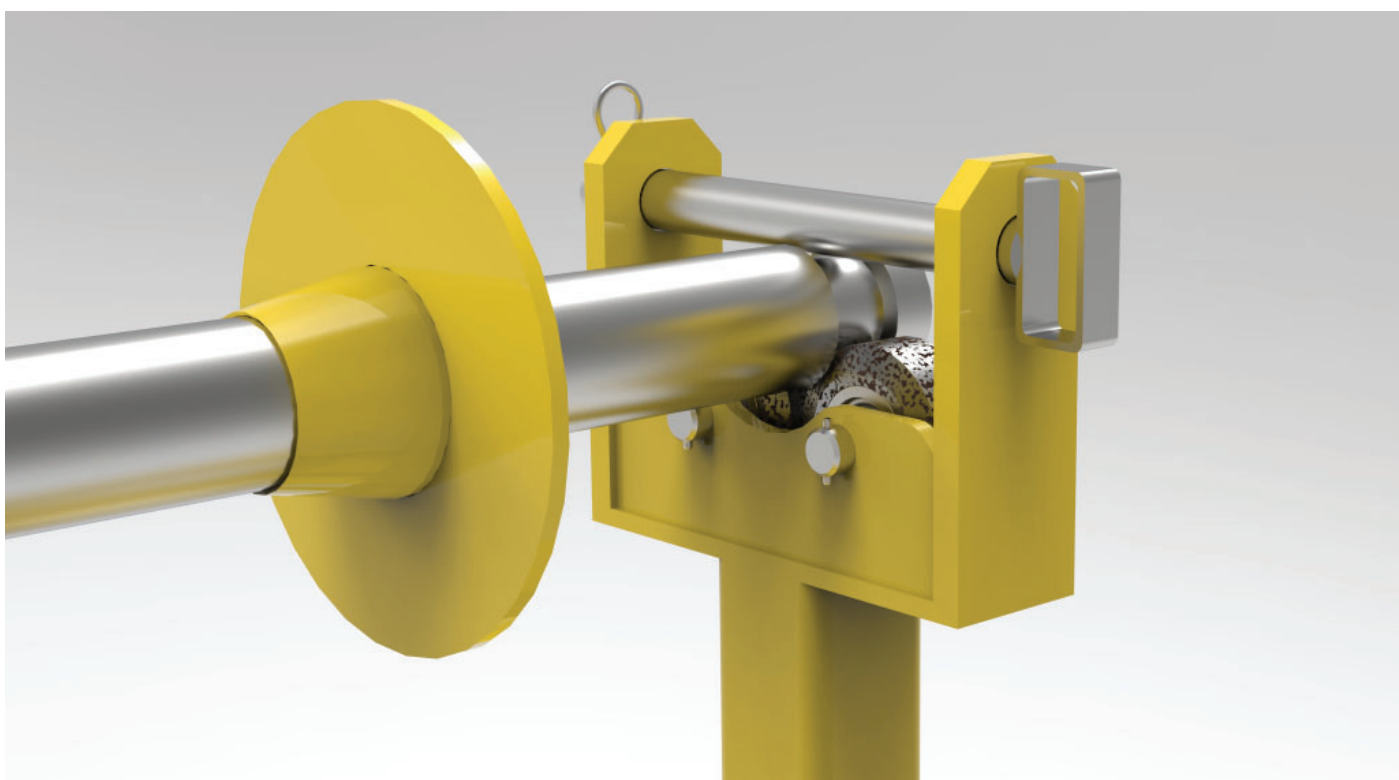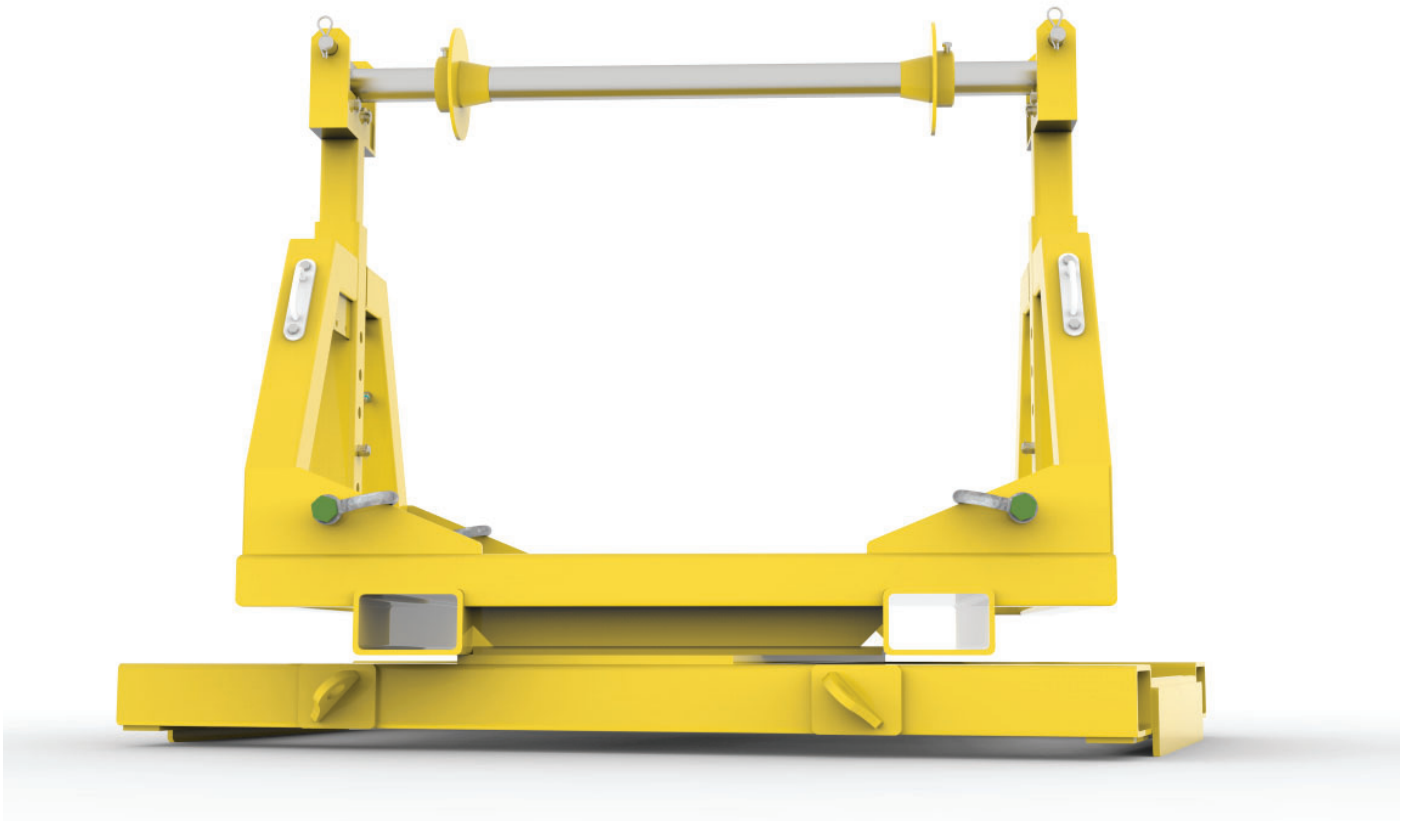
Power Drive

A hydraulic motor drive with integral brake can be specified for cable recovery operations. This system can be powered by the host machine / vehicle or a variety of diesel and petrol powered options are also available.
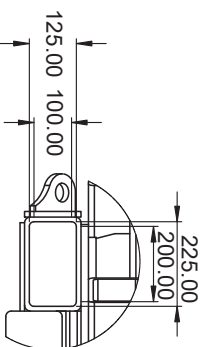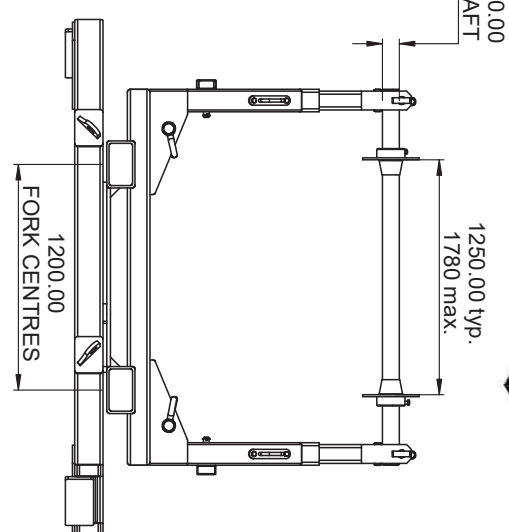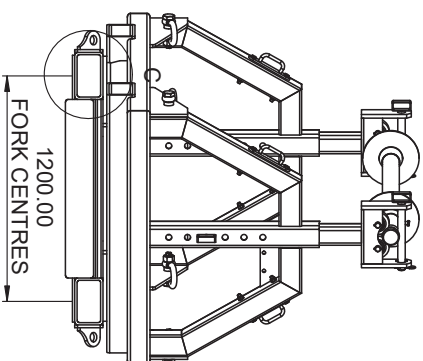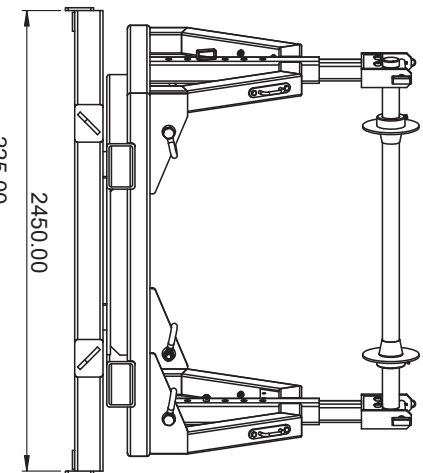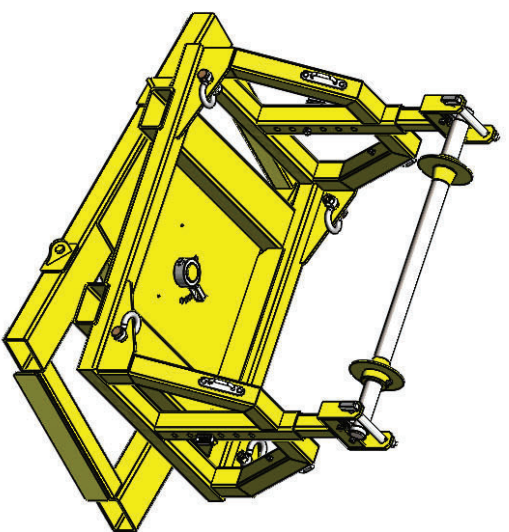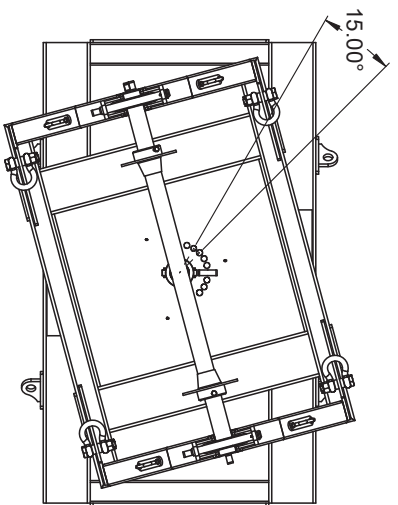
Drum Lifting Equipment

Spreader beam and chains for lifting the drum and shaft in and out of the Cable Handler.

Images and Drawing

DETAIL C
SCALE 2 : 25

125.00
100.00
225.00
200.00

15.00°

2450.00

38.00

1200.00
FORK CENTRES

Ø90.00
SHAFT

1200.00
FORK CENTRES

1250.00 typ.
1780 max.

Stock Size		
Stock Length		
Vendor		
Vendor No.		
Where Used		
Configuration	**Default**	
QTY REC'D	1	
Client	THOMSON ENGINEERING DESIGN LTD	

PROJECT
CL20-03 CABLE DRUM CARRIER

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN MILLIMETERS
SURFACE FINISH:
TOLERANCES:
LINEAR +0.5 / -0.5mm
ANGULAR +-/ 0.50deg

FINISH:
COLOUR: **AS PARTS**
SOURCE:

	NAME	ORGANISATION	DATE
DRAWN	D. Thomson	Thomson ED Ltd	15/01/2020
CHKD			
APPVD			
MFG			
Q.A.			

Third angle Projection ⊕

DEBUR AND
BREAK SHARP
EDGES

DO NOT SCALE DRAWING

REVISION
01

The information contained in this drawing is the sole property of THOMSON ENGINEERING DESIGN Ltd. Reproduction in part or as a whole is prohibited

WEIGHT: 1722.54

MATERIAL:

TITLE:
CABLE DRUM CARRIER ASSEMBLY

SCALE 1:25

DWG NO.
CL20-03-01A

SHEET 1 OF 1

A3

Contact Details

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*P*LEASE NOTE

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.

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.