



## Cable Engines, Linear Lawson Caterpillar Engine

**Asset No. CLT1-1 to 3**

Manufacturer	Lawson Engineers
Size: -	
Length	2.14m
Width	1.65m
Height	2.68m
Weight	5.50 Tonne
Speed	3 knots
Cable Size	20 to 100mm Diameter
Maximum Track Opening, (Top Track Lifts)	365mm
Cable Tension	5 Tonnes @ 160 bar Pinch Pressure
Cable Pinch Force	10 Tonnes @ 160 bar
Length of Track	1.238m
Speed & Distance Measurement	Encoder on Measuring Roller
Tension Measurement	Load Cell In Base Frame
Maximum Working Pressure	207 bar
Maximum Flow Rate @ 3 knots	520 Ltr/min
Power Pack	PP2-1, PP1, PPD3, PP18
Control Console	EC1-1 to EC1-3



## GENERAL SPECIFICATION

### 1.1 SPECIFICATION OF CABLE ENGINE

#### GENERAL

A cable haul-off capable of handling various diameters of Umbilical / Cable and driving same in either direction by twin hydraulic powered caterpillar bands applying pressure to the cable. The upper band capable of retraction up to its maximum gap over the full length or either end raised or lowered independently, all arranged as shown on drawing No MO-41-07-001-03 ( BT1013-1) and in accordance with the following:-

#### LEADING PARTICULARS

Normal Maximum Pull applied per engine	5000Kg @ 160 Bar Pinch Press
Hydraulic Pressure for 5000Kg	190 Bar
Maximum Hydraulic Pressure	207 Bar
Maximum Line Speed	3 Knots
Oil Flow at Maximum Speed	520 L/Min
Assumed Friction Co-efficient (Wet Conditions)	0.25
Pressure Exerted on Cable	10,000 Kg @ 160 Bar Pinch Pressure
Centre - Centre length of Caterpillars	1238mm
Maximum Lift on Top Track	365mm
Weight of Engine	5.5 Tonnes With Base

#### MAIN FRAME

Fabricated of Rectangular Hollow sections and rolled Steel Channel Grade 50D quality. Brackets incorporated for upper drive support cylinders and pivots for the reaction link. The lower sections having mountings for the lower caterpillar unit. Lifting Pad Eyes fitted and provision for bolting down to deck stools. At the rear of the frame the hydraulic controls are mounted.