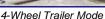


## **CLT Dolly Set**







Shelter Transport



C-130 Aircraft Loading

The CLT Dolly Set is a self-loading transport system designed specifically for Military Tactical ISO Shelters and Containers weighing up to 9,090 KG.

The CLT Dolly Set is actually a variant of the US Military Standard M1022-A1 Dolly Set Mobilizer (800 systems fielded), but customized to meet individual customer and country road regulation requirments.

The system is most useful when used as a shelter handling device (forlifting, handling, truck or aircraft loading), and as a shelter transport device (for highway or rough terrain travel. The self-loading Dolly Set canbe used to lift and load ISO Containers of Shelters, transport them over the eorad or on rough terrain, and unload and position them at their final destination.



Side Lifting (Optional Kit))

The Dolly Set facilitiates the intermodal transport od ISO Shelters and Containers in forward operating areas where more expensive assets such as cranes, fork trucks, container handlers, hooklift systems, trailers and K-Loaders may not be available.

### C-130 Aircraft Loading

The CLT Dolly Set has been certified by numerous countries for roll-on/roll-off loading of 8-ft. or 8.5-ft. ISO Shelters and Containers weighing up to 20,000 lbs (9,090KG) to/from C-130 or larger aircraft (including C160, C17, C141, C5). Up to two shelters can be loaded onto a single C130 Aircraft withthe auxiliary C130 Loading Kit.

### **Description**

Each CLT Dolly Set includes a front steerable dolly and a rear trailer dolly, along with interconnecting brake and electrical lines to connect to



3-Wheel Handling Mode

the tow vehicle. After connecting to each end of a shelter by means of four twistlock bolts, the Dolly Set raises the shelter to ride height in just a few seconds with its on-board diesel powered hydraulic system.

Once raised, the system can be towed at highway speeds up to 90 kph (55 mph) or on rough terrain at reduced speeds. When not connected to a shelter, the dolly set can be coupled together as a 4-wheel trailer for transport by road, rail, ship or air.



Each Dolly half includes a 6.2 hp diesel engine and four hydraulic cylinders to provide the power required for all connection and lift sequences. The unique patented design also provides for a weight balanced 3-wheel handling mode for ease of unloaded movement and positioning.

#### **EU Road Certification**

The latest version of the CLT Dolly Set has been certified for use on all EU Roadways after being certified to the EU Framework Directive 70/156/EEC (Type Approval of Vehicles and Trailers) as an O4 Trailer. This certification permits the CLT Dolly Set to be licensed and to drive on all EU member country roadways without further testing or modification.



EU Certified System

The latest configuration includes state of the art ABS brake systems, rearunder-run protection, fenders and mudguards, spray suppression systems, and up to date lighting.



# **CLT Dolly Set**









Shelter Transport

Shelter Door Opening

C-130 Aircraft Loading Inside C-130 Aircraft

The CLT Dolly Set can be further customized to meet other road regulations upon request.

Other product upgrades (S-280 Shelter Adapters, cylinder bellows, tarps, engine covers) and auxiliary systems such as C-130 Loading Kits are also available and detailed in separate publications.

#### **Test & Certification**

Prior to initial fielding, th eoriginal Dolly Set design (designated Model M1022-A1 by the US Military) was fully tested by the US Army.

A total of 20,000 km (12,000 miles) of testing was performed on two dolly sets on paved highways, gravel roads, cross country terrain, Belgian Block and vibration courses, and both longitudinal inclines (30% grade) and side slopes (20% grade).

The Dolly Set passsed all US Army operational, reliability and maintainability requirements, and the first of more than 800 systems was fielded in 1996.

### **Test / Scoring Results**

- Mean Miles Between Mission Failure: 12,000 miles (20,000 km)
- Mean Cycles Between
   Mission Failure :

55 cycles

• Total Scheduled Maintenance per Semi-Annual Service:

1.2 hours

• Total Unscheduled Maintenance (over 20,000 KM):

1.6 hours

- Maintenance Ratio: .003 (hours per operating mile)
- Mean Time to Reapir: .0.25 hours

The Dolly Set was also successfully operated in a cold chamber at temperatures down to - 25F (-32C) unaided, and at temperatures down to - 50F (-46C) with the assistance of an auxiliary cold start kit.

## **Leading Particulars**

**Groud Clearance (typical)** 

Weight (Empty) 2,795 kg (6,150 lbs) Standard 3,455 kg (7,600 lbs) w/Side Lift Kit

Lift Capacity (Container Weight) 9,090 kg (20,000 lbs)

Transport Capacity 6,818 kg @ 90 kph (15,000 lbs @ 55 mph) 9,090 kg @ 83 kph (20,000 lbs @ 50 mph)\

Max. Lift Height 1.27 m (50 in) Standard

1.57 m (62 in) w/Side Lift Kit

Width 2.44 m (96 in)
Length (with 20-ft Shelter) 11 m (36 ft)
Height Adjustable

Diesel Engine 6.2 hp Kubota, one cylinder, elec tric start

35.5 cm (14 in)

Hydraulic Pump 2 gpm Gear Pump, 2,000 psi Pressure
Lift Cylinders 4 ea, 3.5 in. Bore, 51.75 in. Stroke
Position Cylinders 4 ea, 1.5 in. Bore, 48 in. Stroke
Tires 12Rx22.5 Off-Road Truck Tires

Suspension Air Springs (adjustable)

Brakes 4-Wheel Air Brakes (ABS Optional)

Fenders/Mudguards Optional (w/Spray Suppression)

Towbar Lunette Eye MS 51336 (NATO Stanag 4101)

Air Line Connections MS35746 Compatible

Electrical System 24V, or 12 V with 24V adaptation

Electrical Connectors 12-pin NATO MS75021

Sling/Tiedown Provisions MIL-STD-209

Corrosion Treatment & Paint Galvanized w/CARC Finish MIL-C-46168

Patent No. 5,006,031

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