

Section 2: Material Jib Carriage

2.1 System Description

The material jib carriage consists of two sections, an upper and a lower carriage. The lower carriage supports the upper carriage and is mounted on the tracks(existing) installed on the main roof. The lower carriage is equipped with four wheels that allow it to be traversed along the track to the desired location. Two of the wheels are electrically driven (drive wheels) while the other two are idle (idlers). The electrical geared motor (with brake) is also attached to the lower carriage. The upper carriage consists of the boom, powered trolleys and the powered material winch. The boom is attached to the fixed ladder type mast and is counter-weighted. The mast assembly along with the boom can be rotated to position the powered material winch. The existing track allows boom to only rotate 45° each way from the 90° working position. The powered trolleys are attached to the end of the boom to which the powered material winch is hooked. The powered trolleys attached to the boom can traverse (11'-0") along the boom to adjust the position of the powered material winch. The control panel on the lower carriage is used to control the powered material winch, boom rotation and to traverse the material jib carriage as well as the powered trolleys. The remote control is used to control the powered material winch and to traverse the material jib carriage and the powered trolleys. NOTE: Boom rotation is not allowed using the remote control

The material jib carriage's is designed to carry window panels, glass and other equipment only, the total weight must **not** exceed the powered material winch rated capacity. The powered material winch is equipped with upper and lower limit switches.

A minimum of two workers is required for operation of the system. One worker must be located at the main roof level at all times while the other one controls the unit.

Suggestion: Walkie-talkies must be used for communication between the workers while the system is in operation. (Radio Communication supplied by others).

Specifications for the material jib carriage and the powered material winch are listed below:

Caution: When the equipment is under load, it is important to exercise caution.

OPERATORS:

**One on Roof
One on Controls**

Communication:

Radio (supplied by others)

Material Jib Carriage Specifications

Total Weight:	26000 lb.
Maximum Suspension	450'-0"
Maximum Capacity:	5320 lbs
Powered Material Winch Suspension:	From Powered Trolleys on Boom
Powered Material Winch:	Jeamar Winch
Powered Material Winch Model:	NLT8000-20-GD-RLS
Boom Rotation:	45° (Powered)
Traversing System:	Electrically Powered
Length of Power Cable:	200'-0"
Power:	480V / 3 Phase / 60 Hz / 30A

2.2 General Assembly

For the illustration of the material jib carriage used in this application, refer to Fig. 1 to Fig 3.

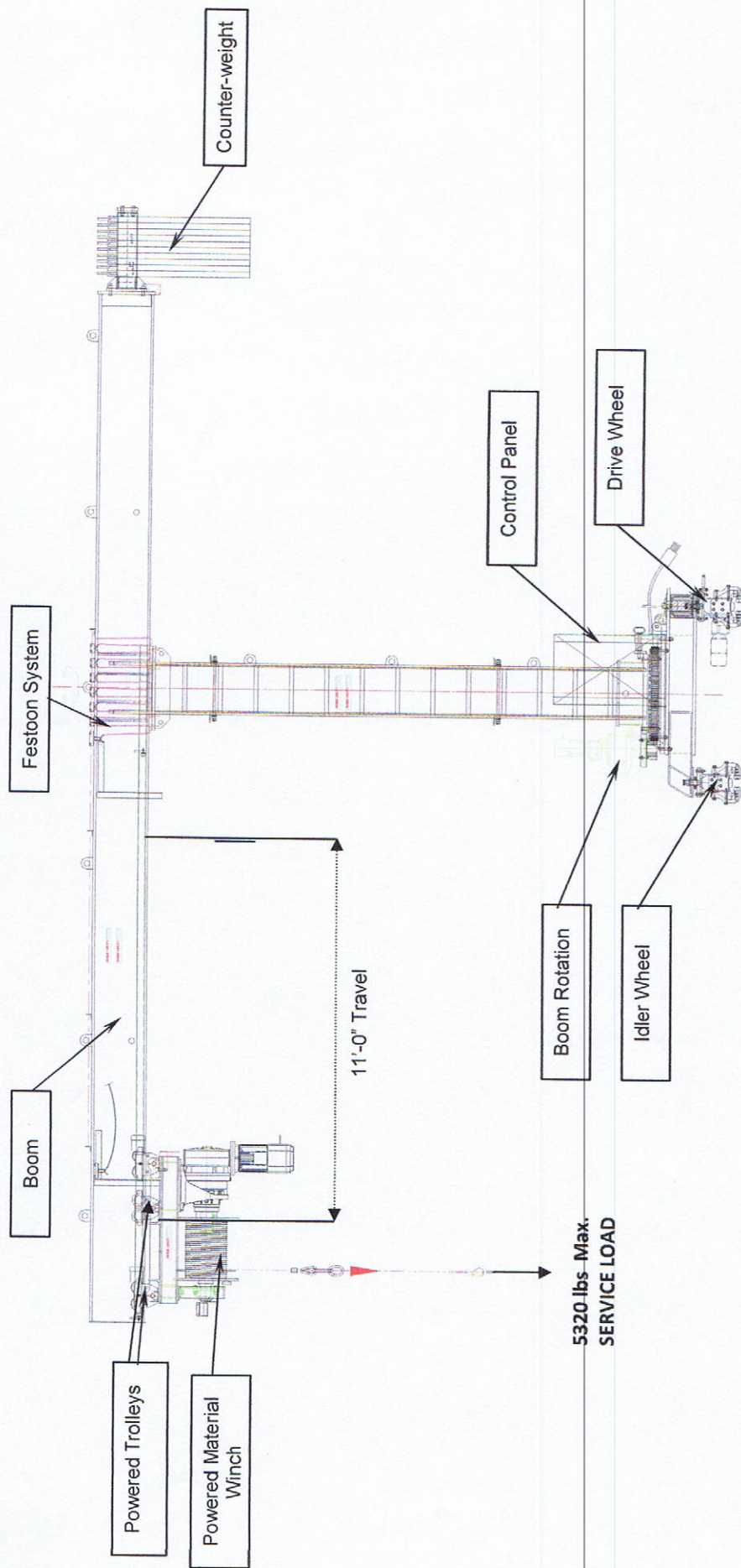


Fig. 1: Material Jib Carriage - Front View

Ser No. 8887-8889

NLT11000-20-GD RLS Electric Lifting Winch

Model No. NLT11000-20-GD-RLS

Serial No. 8887 - 8889

Client Tractel Swingstage Division

Client P.O. PO63220

Date February 4, 2013

Performance Specifications

Winch Line Pull 11000 lbs 1st Layer
8100 lbs 4th Layer

Rope Speed 21.5 fpm 1st Layer
23.3 fpm 2nd Layer
25.2 fpm 3rd Layer
27.0 fpm 4th Layer
28.9 fpm 5th Layer

Rope Travel 480 ft 4th Layer

Wire Rope Diameter 5/8 in

Motor – TEFC

- Power 10 HP
- Voltage 460/3/60
- Full Load Current Amp

Motor Brake (Integral with motor)

Options:
Grooved Drum, Rotary Limit Switch