

## St. Lawrence Seaway Development Corporation

### 30 Ton Rough Terrain Crane

#### Specifications

##### SCOPE

It is the intent of this specification to describe a 30 ton rough terrain crane that meets the following minimum lift requirements:

1. On outriggers, 360 degrees, 40,000 pounds at a 15-foot work radius.
2. On rubber, over the front, 2.5 MPH, 11,500 pounds at a 20-foot work radius.

The word "approximate" shall be interpreted as covering all of the following information, unless specifically noted otherwise.

Prior to Delivery, the rough terrain crane shall be completely serviced including lubrication, ignition check, wheel alignment and all other checks and adjustments required for proper servicing of a new vehicle.

ENGINE — tier three reference: Cummins QSB4.5 or equal.

Type	4 cylinders
Displacement	275 cu. in.
Gross Horsepower	130 HP @ 2,500 rpm
Aspiration	turbocharged
Air Filter	dry type
Electrical System	12 volt
Alternator	130 amp
Battery	2 each @ 12v-1600 CCA.
Fuel Capacity	50 gal
Starting	Include a cold weather starting aid
Engine block heater	
Manual pump disconnect	
Resonator and muffler	

##### HYDRAULIC TANK

To be equipped with oil immersion heater.

##### MAIN WINCH

Hydraulic winch with planetary reduction gearing that provides 2-speed operation with equal speeds for power up and down. Winch to be equipped with a hoist rope monitor device with audible and visual warning, integral automatic brake, grooved drum, tapered flanges, storage capacity of 590 feet, spring loaded cable roller on drum, with third wrap limit indicator, and electronic rotation indicator. Winch shall be designed for a maximum first layer line pull of 12,500 lbs. with 590 ft. of 5/8 in. rotation-resistant wire rope.

##### AUXILIARY WINCH

Hydraulic winch with planetary reduction gearing that provides 2-speed operation with equal speeds for power up and down. Winch to be equipped with a hoist rope monitor device with audible and visual warning, integral automatic brake, grooved drum, tapered flanges, storage capacity of 590 feet, spring loaded cable roller on drum, with third wrap limit indicator, and electronic rotation indicator. Winch shall be designed for a maximum first layer line pull of 12,500 lbs. with 590 ft. of 5/8 in. rotation-resistant wire rope.

### HOOK BLOCK & BALL

25-ton quick reeve design hook block. Two metallic sheaves on anti-friction bearings with Crosby 319N hook and S-4320 latch. Seven (7) ton top swivel ball with Crosby 319N hook and S-4320 latch or equal.

### RATED CAPACITY INDICATOR

Visual and audible warning system and automatic function disconnects. Pictographic display includes: boom radius, boom angle, boom length, allowable load, actual load, and percentage of allowable load registered by bar graph. Operator settable alarms provided for swing angle, boom length, boom angle, tip height, and work area exclusion zone. Anti-two block system includes audio/visual warning and automatic function disconnects.

### OPERATOR'S CAB

Environmental cab with all steel construction, tinted safety glass throughout, and rubber floor matting mounted on vibration absorbing pads. The cab is to have a sliding door on the left side; framed sliding window on the right side, hinged tinted all glass skylight and removable front windshield. Acoustical foam padding to insulate against sound and weather. A deluxe six-way adjustable operator's seat equipped with a torsion bar suspension and includes head and arm rests. Cab to include independent propane heater and defroster. Included shall be a 360 degree positive house lock.

### INSTRUMENTATION AND ACCESSORIES

In-cab gauges include tachometer, air pressure, bubble level, engine oil pressure, fuel, engine coolant temperature, engine hour meter, voltmeter, transmission temperature, transmission charge pump pressure. Indicators include low air, high coolant temperature, low engine oil pressure, high transmission temperature audio/visual warning, low coolant audio/visual, hoist drum rotation indicator, and Rated Capacity Indicator. Accessories include light package including headlights, tail lights, brake lights, directional signals, four-way hazard flashers, dome and dash lights, work lights, revolving amber light, and backup lights with audible backup alarm; windshield washer/wiper; skylight wiper; R.H. and L.H. rear view mirrors; and seat belt. Twelve (12) volt connection for communications radio.

### STANDARD CARRIER EQUIPMENT

#### CARRIER CHASSIS

High strength chassis with four-wheel drive and four steer (4x4x4). Has box beam type construction with reinforcing cross members, a precision machined turntable mounting plate and integrally welded outrigger boxes. Decking has anti-skid surfaces, including tool storage compartment, and access steps and handles left and right side and front and rear corners. Pintle hooks mounted front and rear.

#### AXLES AND SUSPENSION

Rear axle is a planetary drive/steer type with automatic oscillation lockouts that engage when the superstructure is swung 10° in either direction. Front axle is a planetary drive/steer type, rigid mounted to the frame.

#### STEERING

Hydraulic four-wheel power steering for two-wheel, four or crab, plus independent rear wheel steer.

#### TRANSMISSION

Full power transmission with integral torque converter, neutral safety start, 6 speeds forward, and 6 speeds reverse. Automatic back-up alarm.

#### MULTI-POSITION OUT AND DOWN OUTRIGGERS

Fully independent hydraulic three positions out and down outriggers extended fully, to 20ft - 6in., may also be utilize in the extended, and half extended, or fully retracted position. Easily removable floats which can be stowed on the frame.

Complete controls and sight leveling bubble are located in the operator's cab.

#### WHEELS.

Disc type wheels with full tapered bead seat rim.

#### TIRES

20.5x25-24ply

#### SERVICE BRAKES

Air over hydraulic drum type brakes on all four wheels: 17in. x 4in. drum brakes.

#### GENERAL DIMENSIONS

Length Overall: 37' - 7"

Carrier: 21' - 11"

Width: 8' - 8"

Height: 11'-8"

Wheelbase: 11'-2"

Gross Weight: 55,000 lbs. approx.

#### STANDARD BOOM EQUIPMENT

##### BOOM

Prefer 30ft.-72 ft. three section full power, mechanically synchronized boom. High-strength four plate construction with side plate holes. Anti-friction slide pads. Single boom hoist cylinder. Maximum tip height is 79 ft.

##### BOOM HEAD

Welded to outer section of boom. Four or five load sheaves and two idler sheaves mounted on heavy duty, anti-friction bearings. Quick reeving boom head. Provisions made for side-stow jib mounting.

##### JIB

Twenty six (26) ft. side-stow swing-on lattice type jib. Single sheave mounted on anti-friction bearing. Jib is offsettable at 0, 15, or 30 degrees Maximum tip height is 104 ft. with 72 ft. boom.

#### SPECIFICS

All manufacturers' standard equipment not previously noted shall be included.