

**GROVE**®

**GMK7550**



**Preliminary Information**

## Preliminary Superstructure Specifications

### Boom

52 ft. - 197 ft. (16.025 m - 60 m) five section, full power MEGAFORM™ boom with patented Twin Lock™ boom pinning system. Maximum tip height: 207 ft. (63 m).

### Boom Elevation

Two, double acting, lift cylinders with safety valve provides boom angle from -3° to +82°.

### Lattice Jib

Luffing Jib is a lattice design with lengths of 62 ft. -240 ft. (19 m - 73m) in sections of 26 ft. (8 m). The luffing jib converts to a fixed offset lattice jib using an offset angle adapter and provides lengths of 39 ft. -230 ft. (12 m - 70 m) offsettable at 3° and 25°.

### Cab

The cab is tiltable (approximately 20°) and includes safety glass and adjustable operator's seat with hydraulic suspension. Other features include engine dependent hot water heater, armrest integrated crane controls, and ergonomically arranged instrumentation.

### Swing

3 axial piston fixed displacement motors provide swing speed of 0 - 1.0 RPM thru planetary gear box. Also provided is a spring applied, hydraulically released automatic swing brake with foot operated release for free swing.

### Counterweight

265,000 lbs. (120 Tonnes) consisting of (1) 44,090 lb. base plate and (10) side weights of 22, 045 lbs. each with hydraulic installation/removal system.

### Engine

Mercedes OM 906 LA, diesel, 6 cylinders, water cooled, turbocharged, 255 HP (190 kW) at 1800 rpm. Max. torque: 811 ft./lbs. (1100 Nm) at 1300 rpm. Engine emission: EUROMOT/EPA/CARB (off highway).

### Fuel Tank Capacity

79 gal. (300 L).

### Hydraulic system

4 separate circuits, 3 axial piston variable displacement pumps with electronic power limiting control and 1 axial piston variable displacement pump for slewing. Standard thermostatically controlled oil cooler keeps oil at optimum operating temperature. Tank capacity: 428 gal. (1620 L)

### Hoist

Main and auxiliary hoist are powered by axial piston variable displacement motor with planetary gear and brake. "Thumb-thumper" hoist drum rotation indicator alerts operator of hoist movement.

	Main	Auxiliary
Line length:	1,509 ft. (460 m)	TBD
Rope diameter:	24 mm	24 mm
Line speed:	443 ft./min.	TBD
Line pull:	24,700 lbs. (110 kN)	24,700 lbs. (110 kN)

## Preliminary Carrier Specifications

### Chassis

Box-type, torsion resistant frame is fabricated from high-strength steel.

### Outrigger System

Hydraulic two-stage outrigger beams are extended by a single hydraulic cylinder and two cables. Outriggers can adjust to two positions:

Fully extended (100%) - 29' 2" (8.9 m)

Partially extended (50%) - 20' (6.1 m)

Four (Size TBD), self stowing, steel outrigger pads provide rigid lifting base. Outrigger controls are located on both sides of the carrier. An electronic level indicator is located next to each outrigger control box.

### Engine

Mercedes OM 502 LA, diesel, 8 cylinders, water-cooled, turbocharged, 563 HP (420 kW) at 2000 rpm.

Max. torque: 1990 ft. lbs. (2700 Nm) at 1080 rpm.

Engine emission: EPA/CARB (on highway).

### Fuel Tank capacity

132 gal. (500 L).

### Transmission

Allison automatic HD 4076, 7 forward and 1 reverse speed. Transfer case with 2 speeds and inter-axle differential lock.

### Drive/Steer

14 x 6 x 14.

### Axles

7 axles. 1, 4, and 5 are drive/steer. Axles 2, 3, 6, and 7 are steer only. Note: axle #2 becomes drive/steer with optional 14 x 8 x 14 drive.

### Suspension

GROVE GMK7450 features the Grove exclusive MEGATRAK† suspension. This revolutionary design features an independent hydronematic system with hydraulic lockout acting on all wheels.

The suspension can be raised 6-1/2" (170 mm) or lowered 5" (130 mm) both longitudinally and transversely and features an automatic leveling system for on-highway travel.

### Tires

14 tires, 20.5 R25 mounted on steel wheels.

### Steering

Dual circuit steering system is hydraulic power assisted with a transfer case mounted, ground driven, emergency steering pump. Axles 1, 2, 3, 6 and 7 steer on highway. Separate steering of the 4th, 5<sup>th</sup> and 6th axle for all wheel steer and crab-steer is controlled by an electric rocker switch, axles 4 and 5 steer automatically depending on the other axle positions.

### Brakes

A dual circuit air system operates on all wheels with a spring-applied, air released parking brake acting on axles 2, 4, 5 and 7. An air dryer is fitted to remove moisture from the air system. Engine compression brake and transmission retarder are standard

### Cab

Two-man, aluminum construction driver's cab includes the following features: safety glass; driver and passenger seats with hydraulic suspension, engine-dependent hot water heater, complete instrumentation and driving controls.

### Maximum Speed

52 mph (85km/h) with 20.5 R25 tires.

### Miscellaneous standard equipment

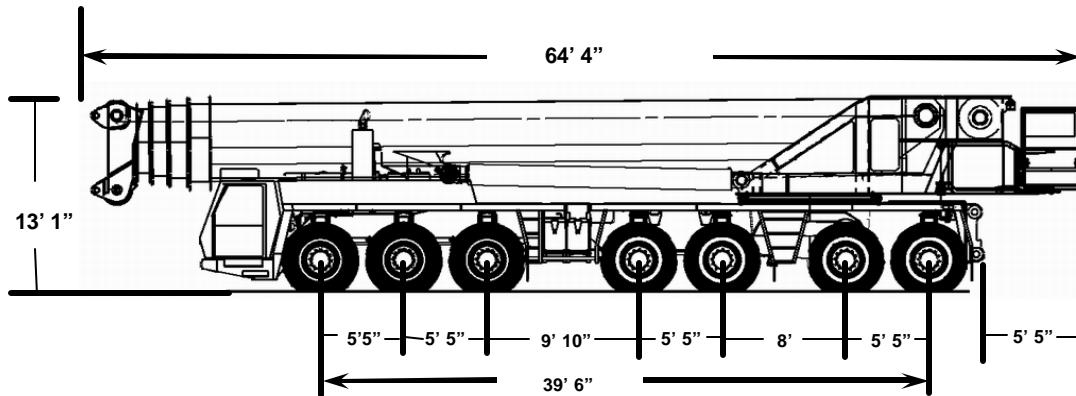
Boom removal kit; trailing boom kit (less dolly); additional hydraulic oil cooler; removable rear outrigger box, spare tire and wheel - 20.5 R25 with carry bracket; flashing amber warning light on carrier cab; working light; tool kit; fire extinguisher; radio cassette in carrier cab, 360 degree house lock, outrigger pad load indicator with readout, air conditioning in both cabs and cruise control.

### \* Optional equipment

- \* Mega Lift
- \* 14 x 8 x 14
- \* 16.00 R25 tires (vehicle width 9 ft. 10 in. [3 m])
- \* Aluminum wheels



## Travel Weights

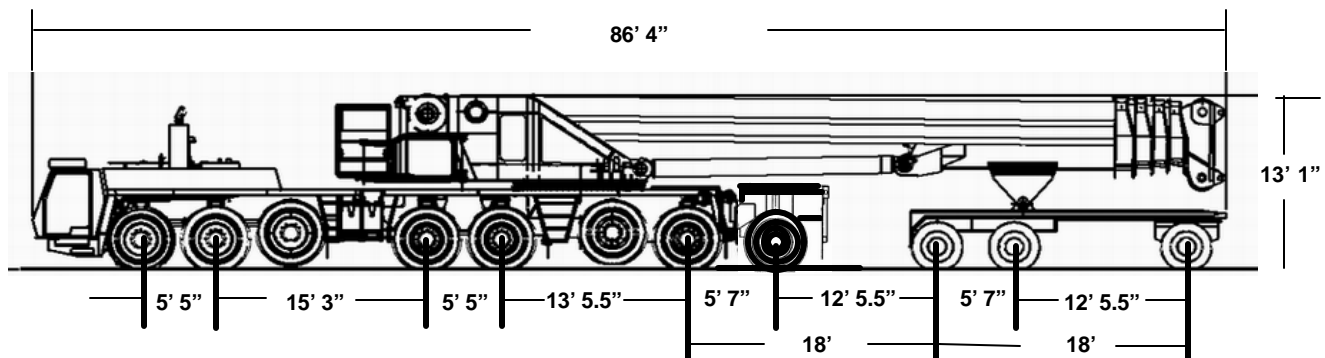


**Unit equipped as follows:**  
 Rear outrigger box removed  
 20.5 tires on aluminum rims  
 --axles 1 through 7  
 Operator, 165 lbs.

**Front 3 Axles**  
 26,920 lbs. per axle

**Rear 4 Axles**  
 26,110 lbs. per axle

**GVW**  
 185,200 lbs.



**Axles 1 & 2**  
 23,530 lbs. per axle

**Axles 4,5,7,& 8**  
 23,030 lbs. per axle

**front (2) Dolly axles**  
 23,900 lbs. per axle

**Rear Dolly axle**  
 14,020 lbs.

### Unit equipped as follows:

- Rear outrigger box removed, 8th axle in place
- 20.5 tires on aluminum rims--axles 1 through 8
- Operator, 165 lbs.

**Total GVW**  
 201,000 lbs.

# GROVE®



Rear outrigger box can be self-removed for roading



OPTIONAL 8<sup>th</sup> axle pins on in place of rear box (shown with optional aluminum wheels)



The exclusive Grove MEGATRAK independent suspension system allows all wheels to be on the ground at all times.



New Superstructure cab is located on right side for crane operation, and rotates to the rear for travel

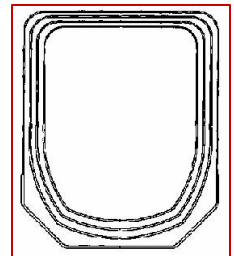
Chassis power is supplied by a 563 hp Mercedes diesel engine driving thru an Allison 7 speed automatic transmission



Inside the operator's cab is the new console housing the EKS5 and ECOS system



The Grove MEGAFORM boom shape eliminates weight and increases capacity compared to conventional shapes



For More Information:  
[www.grovetworldwide.com/](http://www.grovetworldwide.com/)

Grove Worldwide--Headquarters  
1565 Buchanan Trail East  
P.O. Box 21  
Shady Grove, Pennsylvania 17256-0021  
USA  
Tel: (717)597-8121  
Fax: (717)597-0462  
[www.grovetworldwide.com](http://www.grovetworldwide.com)

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