

# Clamshell/Grapple Capacities

**Boom No. B10:500**  
**165,800 lb VPC (Variable Position Counterweight)**  
**Crawler Machine on a Barge**  
**0 Degree thru 1 Degree and**  
**1 Degree thru 3 Degree Static Machine List**  
**No Travel - 360 Degree Rating**

## MLC300 SERIES 0

 **LIFTING CAPACITIES:** Lifting capacities are for a crawler machine when operating on a barge. Machine shall be positively secured to prevent shifting. Lifting capacities for various boom lengths and operating radii are for freely suspended loads and may be based on percent of static tipping or strength of structural components. Capacities must be reduced by applicable deducts.

Weight of bucket is considered part of load. Where no capacity is shown, operation is not intended or approved.

Clamshell/grapple capacities shown are intended for limited duration applications. Continuous operation at these capacities may reduce component life.

**OPERATING CONDITIONS:** Machine to operate on a firm and uniformly supporting surface with machine list not to exceed degrees noted. Refer to Boom Rigging No. 81023380, Wire Rope Specification chart No. 9572-A, and Counterweight Arrangement No. 9345-A. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to the Operator Manual for operating guidelines.

**WIND CONDITIONS:** Machine may be operated in winds up to 35 mph provided crane operator judgment is used to allow for wind effect on lifted load and other considerations noted on capacity chart are followed. Wind speed to be measured at boom point elevation. **Operation is not permitted when wind is above 35 mph.** Park crane with bucket on barge deck or secured and position boom at 50 degrees. Lower boom onto blocking at barge deck level when wind is above 50 mph.

 **OPERATING RADIUS:** Operating radius is horizontal distance from axis of rotation at barge deck to center of vertical hoist line or load block.

 **BOOM ANGLE:** Boom angle in degrees (°) is angle between horizontal and centerline of boom butt and inserts, and is an indication of operating radius. In all cases, operating radius shall govern capacity.

**MACHINE EQUIPMENT:** Machine equipped with 31 ft 10 in. crawlers, 48 in. or 60 in. treads, 30 ft live mast, 24 part boom hoist reeving, boom support straps, and 165,800 lb VPC.

**Warning:** Free fall operation is limited to 18,300 lb per part of line when lowering load with free fall clutch/brake pedal. Hydraulic power must be used for full line pull. *Structural damage can occur.*

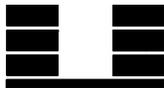
**Warning:** Luffing jib backstay straps must be removed before use of this chart. *Crane tipping or structural damage can occur.*

| Raising Ability Over End or Side of Crawlers  |                    |
|---|--------------------|
| Boom Length (ft)  | Bucket Weight (lb) |
| 98.4  | 22,900             |
| 118.1   | 22,900             |
| 137.8   | 22,900             |
| Bucket weight includes the weight of all blocks, hooks, bucket, weight balls, slings and hoist lines beneath lower and/or upper boom point sheaves. |                    |

## Explanation of Symbols



Boom No. B10:500



VPC (Variable Position Counterweight)



360 Degree Rating



Boom Length



Operating Radius  
(see page 1)



Boom Angle  
(see page 1)



Machine List



Lifting Capacities  
(see page 1)

# MLC300 S-0



B10:500 

 165,800 lb

  
360°

|  98.4 ft |      |         |         |
|---|------|---------|---------|
| ft  | °    | lb      | lb      |
|   |      | 0° - 1° | 1° - 3° |
| 55  | 61.6 | 44,000  |         |
| 60  | 58.1 | 44,000  | 44,000  |
| 65  | 54.5 | 44,000  | 44,000  |
| 70  | 50.8 | 44,000  | 44,000  |
| 75  | 46.8 | 44,000  | 44,000  |
| 80  | 42.5 | 44,000  | 40,900  |
| 85  | 37.8 | 44,000  | 37,700  |

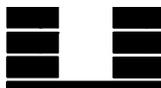
|  118.1 ft |      |         |         |
|--|------|---------|---------|
| ft   | °    | lb      | lb      |
|  |      | 0° - 1° | 1° - 3° |
| 65   | 61.2 | 44,000  | 44,000  |
| 70   | 58.4 | 44,000  | 44,000  |
| 75   | 55.4 | 44,000  | 44,000  |
| 80   | 52.3 | 44,000  | 41,500  |
| 85   | 49.1 | 44,000  | 38,300  |
| 90   | 45.7 | 42,400  | 35,400  |
| 95   | 42.1 | 39,700  | 32,800  |
| 100  | 38.2 | 37,400  | 30,500  |

REFERENCE ONLY

# MLC300 S-0



B10:500 

 165,800 lb



| <br>137.8 ft |      |               |               |
|---|------|---------------|---------------|
| ft  | °    | lb<br>0° - 1° | lb<br>1° - 3° |
| 70  | 63.3 | 44,000        |               |
| 75  | 61.0 | 44,000        | 44,000        |
| 80  | 58.5 | 44,000        | 42,100        |
| 85  | 56.0 | 44,000        | 38,800        |
| 90  | 53.4 | 42,600        | 35,900        |
| 95  | 50.7 | 40,000        | 33,300        |
| 100   | 47.9 | 37,600        | 30,900        |
| 105   | 45.0 | 35,400        | 28,800        |
| 110   | 41.9 | 32,800        | 26,800        |
| 115   | 38.5 | 29,900        | 25,000        |
| 120   | 34.9 | 27,300        | 23,400        |

REFERENCE ONLY!