

LIMA

75-C

CRANE

DRAGLINE • CLAMSHELL

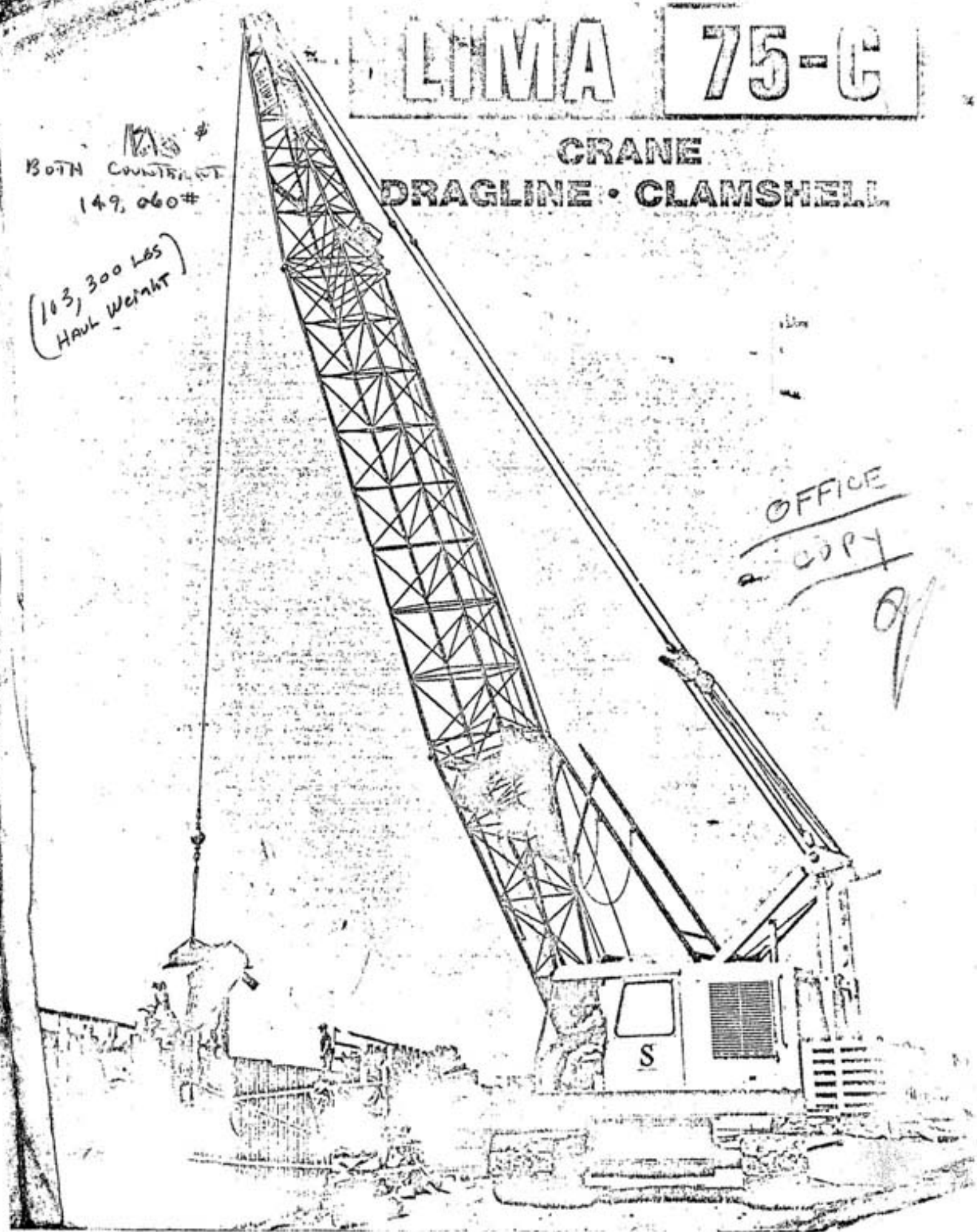
BOTH COUNTERS
149,060#

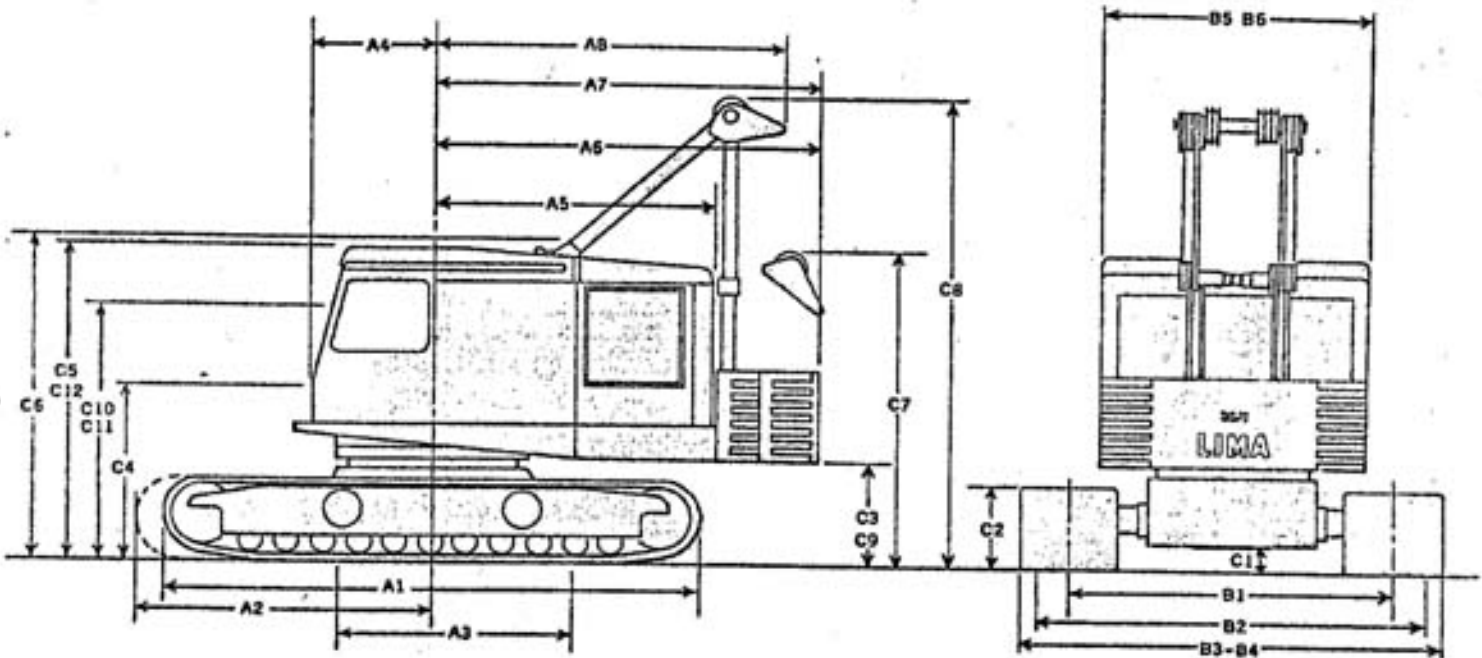
(103,300 LBS)
HAUL WEIGHT

OFFICE

a COPY

9





FRONT TO BACK

| | | |
|-----|--|-------------------------------------|
| A1. | Crawler Length | 19'-0" |
| A2. | Over Corner Crawlers Retract—30" Trd's | 11'-0 ¹ / ₈ " |
| | Over Corner Crawlers Retract—35" Trd's | 11'-3 ¹ / ₄ " |
| | Over Corner Crawlers Retract—42" Trd's | 11'-7" |
| | Over Corner Crawlers Extend.—30" Trd's | 11'-9" |
| | Over Corner Crawlers Retract—35" Trd's | 12'-0" |
| | Over Corner Crawlers Extend.—42" Trd's | 12'-1 ¹ / ₈ " |
| A3. | Truck Base Length | 9'-9 ¹ / ₄ " |
| A4. | C Boom Foot to C Rotation | 3'-4 ¹ / ₁₆ " |
| A5. | Rear End Swing—Corner of Cab | 11'-1 ¹ / ₄ " |
| A6. | Rear End Swing—23,100# C'w't | 12'-4 ³ / ₄ " |
| | Rear End Swing—40,800# C'w't | 13'-8 ³ / ₄ " |
| A7. | C Rotation to Rear Telescopic Backhitch Gantry Lowered | 13'-10" |
| A8. | C Rotation to Rear Telescopic Backhitch Gantry Raised | 12'-5 ³ / ₈ " |

SIDE TO SIDE

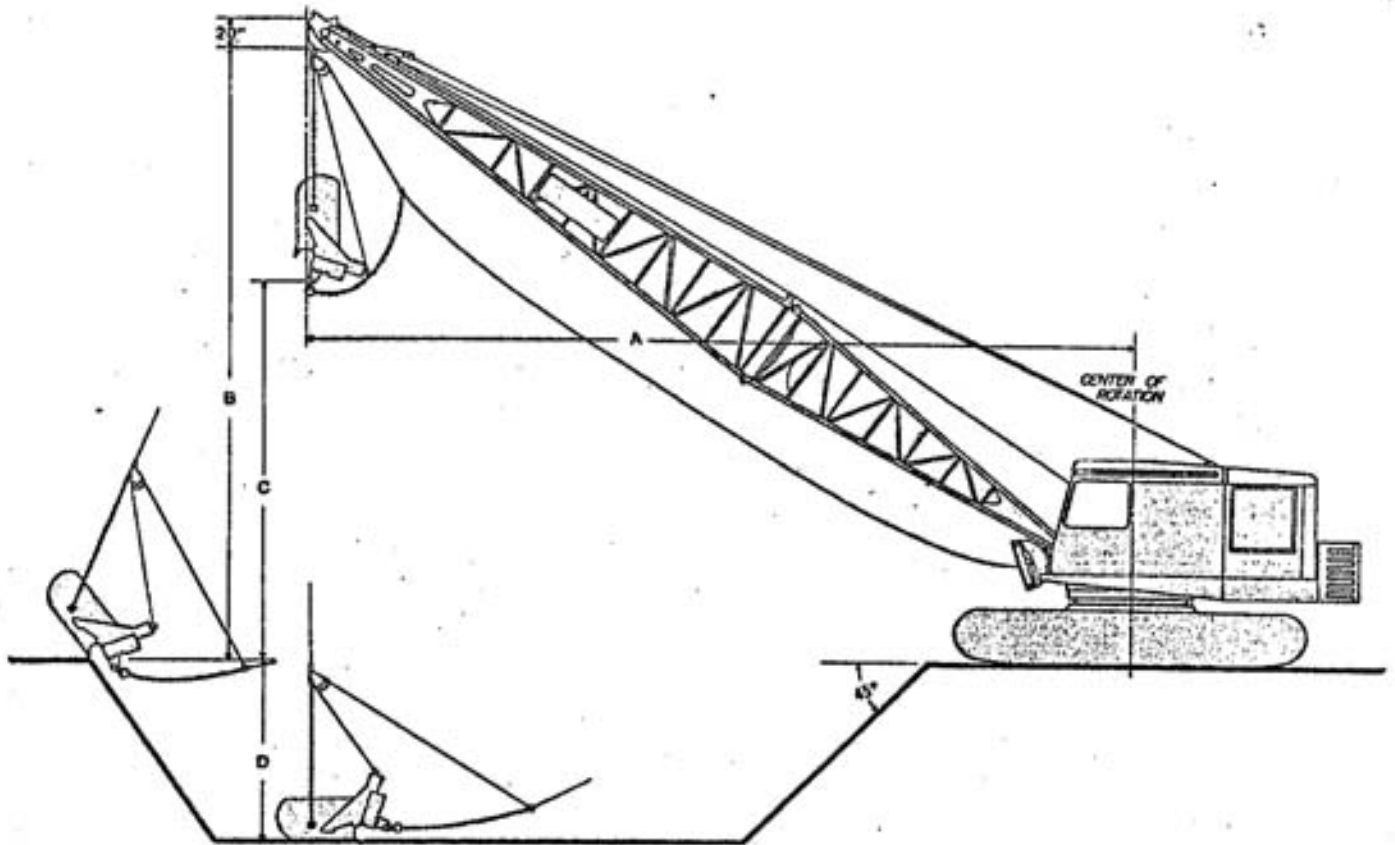
| | | | |
|-----|--|------------------------------------|--------|
| B1. | C to C Tread Rollers—Cawlers Retract. 30" and 35" Treads | 8'-11" | |
| | C to C Tread Rollers—Cawlers Retract. 42" Treads | 9'-8" | |
| | C to C Tread Rollers—Cawlers Extend. | 11'-6" | |
| B2. | Overall Length of Axles | 11'-4" | |
| B3. | Overall Width Crawlers Retracted | 30" Treads | 11'-2" |
| | | 35" Treads | 12'-0" |
| | | 42" Treads | 13'-2" |
| B4. | Overall Width Crawlers Extended | 30" Treads | 13'-9" |
| | | 35" Treads | 14'-7" |
| | | 42" Treads | 15'-0" |
| B5. | Overall Width Cab | 9'-7 ¹ / ₈ " | |
| B6. | Overall Width Rot. Unit and C'w't | 9'-5" | |

VERTICAL

| | | |
|-----|--|-------------------------------------|
| C1. | Ground Clearance | 11" |
| C2. | Ground to Top of Crawlers | 3'-1" |
| C3. | Ground to Bottom of Counterweight | 3'-10" |
| C4. | Ground to C of Boom Foot Pin | 6'-5" |
| C5. | Ground to Top of Cab | 11'-6 ³ / ₈ " |
| 5. | Ground to Top of Low Gantry | 11'-8" |
| C7. | Overall Height Telescopic Backhitch Gantry Lowered | 11'-9 ¹ / ₄ " |

| | | |
|------|---|-------------------------------------|
| C8. | Overall Height Telescopic Backhitch Gantry Raised | 17'-2 ⁵ / ₈ " |
| C9. | Ground to Bottom of Rot. Unit | 3'-10" |
| C10. | Eye Level Standard Cab | 9'-8" |
| C11. | Eye Level Elevated Cab | 14'-3" |
| C12. | Overall Height Elevated Cab | 16'-4 ³ / ₄ " |

DRAGLINE-CLAMSHELL WORKING RANGES



| Boom Lengths | 50' | | | | 60' | | | | 70' | | | |
|---------------------------------------|--------|--------|--------|--------|---------|---------|--------|---------|---------|--------|---------|---------|
| Boom \angle | 30° | 35° | 40° | 45° | 30° | 35° | 40° | 45° | 30° | 35° | 40° | 45° |
| A. Dumping Radius | 46'-5" | 44'-4" | 41'-8" | 38'-9" | 55'-5" | 52'-6" | 49'-3" | 45'-9" | 64'-0" | 60'-9" | 56'-11" | 52'-11" |
| B. Height (to bottom of Point Sheave) | 30'-4" | 34'-2" | 37'-8" | 40'-9" | 35'-5" | 40'-0" | 44'-2" | 47'-11" | 40'-6" | 45'-8" | 50'-6" | 55'-0" |
| C. Clear Dump Height (Dragline) | 19'-9" | 19'-7" | 23'-1" | 26'-2" | 20'-10" | 25'-5" | 29'-7" | 33'-4" | 25'-11" | 31'-1" | 35'-11" | 40'-5" |
| C. Clear Dump Height (Clamshell) | 20'-8" | 24'-6" | 28'-0" | 31'-1" | 25'-9" | 30'-4" | 34'-6" | 38'-3" | 30'-10" | 36'-0" | 40'-10" | 45'-4" |
| D. Normal Digging Depth | 34'-0" | 31'-8" | 29'-0" | 26'-2" | 42'-9" | 39'-10" | 36'-8" | 33'-3" | 51'-5" | 48'-0" | 44'-3" | 40'-3" |

Dragline digging depths shown are theoretical. They are based on the first layer of drum capacity and may be altered by digging and job conditions.

DRAGLINE—CLAMSHELL—MAGNET LIFTING CAPACITIES

Machine On Firm Level Ground

| Load Radius in Feet | BOOM LENGTH AND BOOM ANGLE | | | | | | 23,100# C'w't |
|---------------------|----------------------------|----------|--------|----------|--------|----------|---------------|
| | 50' | \angle | 60' | \angle | 70' | \angle | |
| 30 | 21,400 | 58 | — | — | — | — | |
| 35 | 17,300 | 51 | 17,175 | 58 | — | — | |
| 40 | 14,300 | 42 | 14,250 | 52 | 14,100 | 58 | |
| 45 | 12,200 | 34 | 12,075 | 46 | 11,900 | 53 | |
| 50 | 10,550 | 21 | 10,375 | 39 | 10,175 | 48 | |
| 55 | — | — | 9,025 | 31 | 8,825 | 43 | |
| 60 | — | — | 7,925 | 19 | 7,725 | 36 | |
| 65 | — | — | — | — | 6,800 | 28 | |
| 70 | — | — | — | — | 6,025 | 18 | |

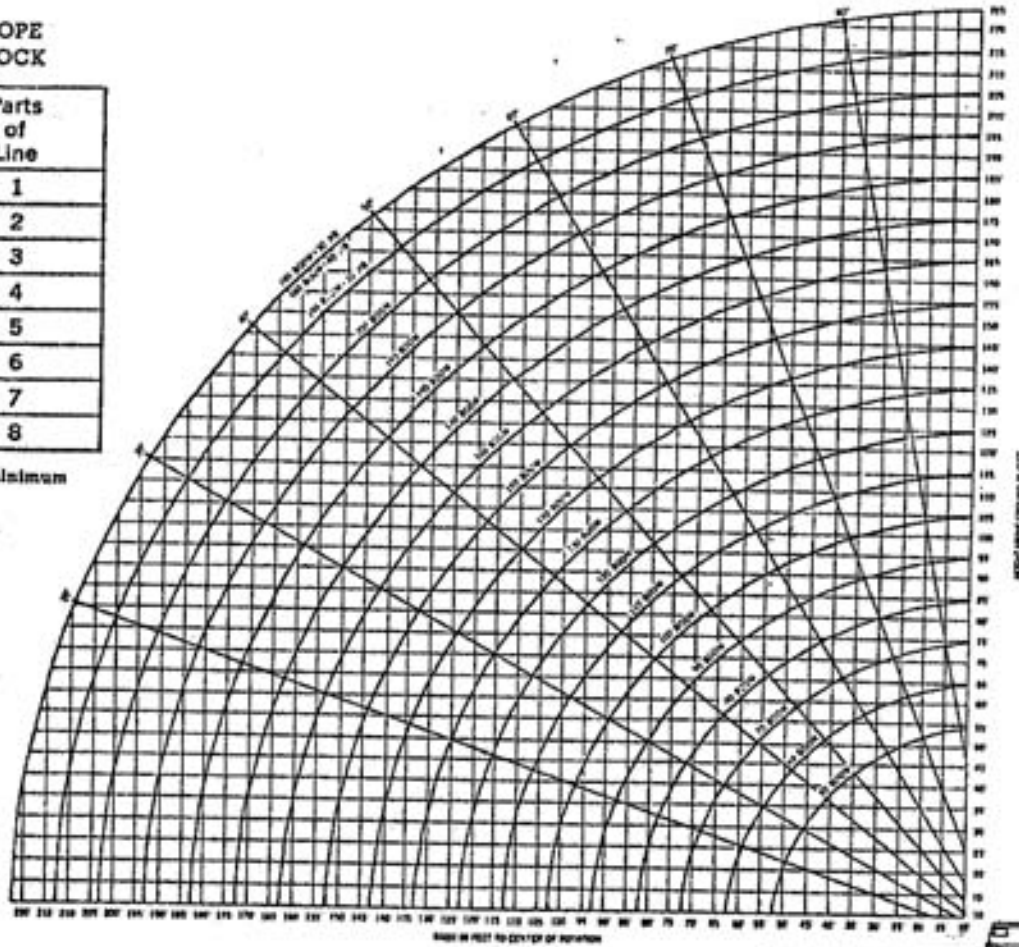
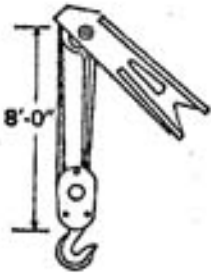
To maintain normal operating speeds, the loaded bucket or magnet weight must not exceed 12,000 lbs. (Loads greater than this require multiple reeving at the hoist line for Magnet Duty.)

Digging and footing conditions, together with the skill of the operator, will determine whether or not maximum loading conditions stated above can be used.

**RECOMMENDED WIRE ROPE
REEVING FOR HOOK BLOCK**

| Load in Pounds | Parts of Line |
|----------------------|---------------------|
| To 19,000 | 1 |
| Over 19,000 | 2 |
| Over 38,000 | 3 |
| Over 57,000 | 4 |
| Over 76,000 | 5 |
| Over 95,000 | 6 |
| Over 114,000 | 7 |
| Over 133,000 | 8 |

Requires 1/2" wire rope having minimum breaking strength of 69240#.



JIB DATA

| Length | Rating | Effective Weight | Offset |
|--------|-----------|------------------|---------|
| 20' | 7 Ton | 2,050# | 6'-0" |
| 30' | 5 Ton | 2,350# | 11'-0" |
| 40' | 3 1/2 Ton | 2,650# | 15'-10" |

Jib capacities are the same as boom capacities at any given radius, but not to exceed the rating listed above. Effective jib weight to be subtracted from boom capacity chart if load is raised on boom point when jib is assembled on boom.

Maximum Length Boom, Or Boom Plus Jib That Can Be Handled Horizontally

| With 23,100# Counterweight | | | | With 40,800# Counterweight* | | | |
|----------------------------|-------------------|----------------|-------------|-----------------------------|-------------------|----------------|-------------|
| Over Side | | Over Rear | | Over Side | | Over Rear | |
| Crawlers Retracted | Crawlers Extended | Without Wedges | With Wedges | Crawlers Retracted | Crawlers Extended | Without Wedges | With Wedges |
| 150' | 170' | 170' | 190' | ----- | 190' | 200' | 200' |
| 130'+20' | 150'+20' | 150'+20' | 170'+20' | ----- | 170'+20' | 170'+20' | 190'+20' |
| 130'+30' | 140'+30' | 150'+30' | 160'+30' | ----- | 170'+30' | 170'+30' | 190'+30' |
| 120'+40' | 140'+40' | 140'+40' | 160'+40' | ----- | 160'+40' | 170'+40' | 180'+40' |

*With 40,800# counterweight, crawlers must always be in extended position.

CRANE LIFTING CAPACITIES

75% Of Side Overturning Loads

| 75 Ton Class 12-283** Tubular Boom (50' Basic) | | | Chart No. 993-SA-797 Crawler Crane Lifting Capacities | | | | | | | | | 30" Treads Machine On Firm Level Ground* | | | | | | | | | | | | | | |
|---|-------------|--------|--|--------------|--------------|--------------------|-------------|--------|--------------|-------------------|--------------|---|--------------------|--------|--------------|--------------|------------------------|--------|------------------------|--------------------|------------------------|--------------|--------------|--------|--------|-------|
| Boom | | | Crawlers Extended | | | Crawlers Retracted | Boom | | | Crawlers Extended | | | Crawlers Retracted | Boom | | | Crawlers Extended | | | Crawlers Retracted | | | | | | |
| Length | Load Radius | Angle | 40,800# C'WT | 23,100# C'WT | 23,100# C'WT | Length | Load Radius | Angle | 40,800# C'WT | 23,100# C'WT | 23,100# C'WT | Length | Load Radius | Angle | 40,800# C'WT | 23,100# C'WT | 23,100# C'WT | Length | Load Radius | Angle | 40,800# C'WT | 23,100# C'WT | 23,100# C'WT | | | |
| 50' | 12" | 80 | 150,000 | 132,175 | 92,950 | 120' | 70' | 56 | 12,550 | 8,775 | 6,800 | 180' | 35' | 80 | 31,600 | 23,075 | 18,050 | 190' | 40' | 78 | 26,000 | 18,500 | 14,750 | | | |
| | 15" | 77 | 144,025 | 87,100 | 65,050 | | 80' | 50 | 10,325 | 7,075 | 5,400 | | 40' | 77 | 26,000 | 18,500 | 14,750 | | 45' | 77 | 22,000 | 15,800 | 12,275 | | | |
| | 20" | 71 | 72,300 | 55,025 | 42,975 | | 90' | 44 | 8,650 | 5,775 | 4,300 | | 50' | 75 | 18,900 | 13,423 | 10,350 | | 50' | 72 | 14,425 | 9,575 | 7,525 | | | |
| | 25" | 64 | 52,600 | 39,675 | 31,725 | | 100' | 36 | 7,325 | 4,750 | 3,450 | | 60' | 72 | 14,425 | 9,575 | 7,525 | | 60' | 68 | 11,375 | 7,600 | 5,575 | | | |
| | 30" | 58 | 41,100 | 31,025 | 24,975 | | 110' | 27 | 6,250 | 3,975 | | | 70' | 68 | 9,125 | 5,850 | 4,150 | | 70' | 65 | 9,125 | 5,850 | 4,150 | | | |
| | 35" | 51 | 33,575 | 25,250 | 20,450 | | 120' | 14 | 5,375 | 3,250 | | | 80' | 61 | 7,425 | 4,575 | 3,050 | | 80' | 58 | 6,075 | 3,500 | 2,175 | | | |
| 40" | 43 | 28,275 | 21,175 | 17,200 | 130' | 30' | 78 | 39,700 | 29,650 | 23,450 | 140' | 30' | 79 | 39,500 | 29,425 | 23,225 | 150' | 40' | 79 | 29,800 | 18,700 | 14,525 | | | | |
| 45" | 34 | 24,350 | 18,150 | 14,750 | | 35' | 76 | 32,150 | 23,825 | 18,900 | | 35' | 77 | 31,950 | 23,625 | 18,675 | | 45' | 77 | 21,800 | 15,600 | 12,050 | | | | |
| 50" | 21 | 21,300 | 15,800 | 12,850 | | 40' | 74 | 26,825 | 19,700 | 15,625 | | 40' | 75 | 26,625 | 19,500 | 15,425 | | 50' | 76 | 18,700 | 13,200 | 10,125 | | | | |
| 60' | 15" | 80 | 113,950 | 87,025 | | 64,925 | 45' | 71 | 22,850 | 16,650 | | 13,175 | 45' | 73 | 22,650 | 16,450 | | 12,975 | 60' | 73 | 14,225 | 9,750 | 7,300 | | | |
| | 20" | 75 | 72,175 | 54,900 | | 42,775 | 50' | 69 | 19,775 | 14,300 | | 11,275 | 50' | 71 | 19,600 | 14,100 | | 11,075 | 70' | 70 | 11,125 | 7,350 | 5,350 | | | |
| | 25" | 70 | 52,425 | 39,700 | | 31,550 | 60' | 64 | 15,375 | 10,900 | | 8,500 | 60' | 66 | 15,175 | 10,700 | | 8,300 | 80' | 66 | 8,900 | 5,625 | 3,900 | | | |
| | 30" | 65 | 40,925 | 30,850 | 24,775 | 70' | 59 | 12,325 | 8,550 | 6,575 | 70' | 63 | 12,125 | 8,300 | 6,300 | 90' | 63 | 7,175 | 4,300 | 2,800 | | | | | | |
| | 35" | 59 | 33,400 | 25,075 | 20,225 | 80' | 54 | 10,100 | 6,850 | 5,150 | 80' | 59 | 9,900 | 6,600 | 4,900 | 100' | 59 | 5,825 | 3,275 | 1,925 | | | | | | |
| | 40" | 53 | 28,075 | 20,975 | 16,975 | 90' | 48 | 8,425 | 5,550 | 4,075 | 90' | 56 | 8,225 | 5,300 | 3,850 | 110' | 56 | 4,750 | 2,425 | 1,225 | | | | | | |
| 45" | 47 | 24,125 | 17,950 | 14,575 | 140' | 100' | 42 | 7,075 | 4,525 | 3,225 | 150' | 100' | 45 | 5,575 | 3,250 | 2,100 | 200' | 40' | 80 | 25,500 | 18,500 | 14,500 | | | | |
| 50" | 40 | 21,075 | 15,600 | 12,625 | | 110' | 35 | 6,000 | 3,675 | 2,525 | | 110' | 39 | 4,700 | 2,575 | 1,525 | | 45' | 78 | 21,500 | 15,600 | 12,050 | | | | |
| 60" | 20 | 16,675 | 12,200 | 9,850 | | 120' | 26 | 5,125 | 3,000 | 1,950 | | 120' | 33 | 3,950 | 2,000 | 1,225 | | 50' | 77 | 18,400 | 13,200 | 10,125 | | | | |
| 70' | 20" | 77 | 72,000 | 54,725 | | 42,550 | 130' | 13 | 4,375 | 2,425 | | | 130' | 25 | 3,825 | 1,925 | | 1,125 | 60' | 74 | 13,950 | 9,750 | 7,300 | | | |
| | 25" | 73 | 52,225 | 39,500 | | 31,325 | 150' | 30' | 80 | 39,350 | | 29,275 | 23,050 | 160' | 35' | 78 | | 31,750 | 23,400 | 18,450 | 210' (190' +20') | 45' | 80 | 14,000 | 10,000 | 7,000 |
| | 30" | 69 | 40,700 | 30,650 | | 24,525 | | 40' | 76 | 26,425 | | 19,325 | 15,225 | | 40' | 77 | | 26,400 | 19,300 | 15,175 | | 50' | 79 | 14,000 | 10,000 | 7,000 |
| | 35" | 63 | 33,175 | 24,850 | 19,975 | 45' | | 74 | 22,450 | 16,250 | 12,775 | 45' | 75 | | 22,400 | 16,200 | 12,700 | 60' | 76 | 13,900 | | 10,000 | 7,000 | | | |
| | 40" | 58 | 27,850 | 20,750 | 16,725 | 50' | | 72 | 19,375 | 13,900 | 10,850 | 50' | 73 | | 19,325 | 13,825 | 10,775 | 70' | 73 | 10,725 | | 7,000 | 5,000 | | | |
| | 45" | 55 | 23,900 | 17,700 | 14,275 | 60' | | 68 | 14,950 | 10,475 | 8,075 | 60' | 69 | | 14,850 | 10,375 | 7,950 | 80' | 70 | 8,425 | | 5,500 | 4,000 | | | |
| 50" | 49 | 20,850 | 15,350 | 12,375 | 70' | 64 | | 11,900 | 8,125 | 6,150 | 70' | 65 | 11,800 | | 8,025 | 6,000 | 90' | 71 | 7,550 | 5,250 | | 3,750 | | | | |
| 55" | 43 | 18,125 | 13,950 | 10,975 | 160' | 80' | 66 | 15,175 | 10,700 | 8,300 | 170' | 35' | 79 | 31,750 | 23,400 | 18,450 | 220' (180' +40') | 100' | 64 | 4,225 | 2,425 | 1,575 | | | | |
| 60" | 37 | 16,425 | 11,950 | 9,600 | | 90' | 62 | 12,125 | 8,350 | 6,375 | | 80' | 61 | 9,550 | 6,300 | 4,575 | | 110' | 61 | 4,125 | 2,425 | 1,575 | | | | |
| 70" | 19 | 13,400 | 9,625 | 7,675 | | 100' | 57 | 8,675 | 6,425 | 4,725 | | 90' | 57 | 7,850 | 4,975 | 3,475 | | 120' | 64 | 3,225 | 1,825 | | | | | |
| 80' | 20" | 79 | 71,850 | 54,575 | | 42,375 | 110' | 53 | 6,900 | 4,200 | | 2,950 | 100' | 53 | 6,500 | 3,950 | | 2,625 | 220' (190' +30') | 50' | 80 | 10,000 | 10,000 | 7,000 | | |
| | 25" | 75 | 52,075 | 39,300 | | 31,150 | 120' | 46 | 6,900 | 4,225 | | 3,025 | 110' | 48 | 5,575 | 3,250 | | 2,100 | | 60' | 78 | 10,000 | 10,000 | 7,000 | | |
| | 30" | 72 | 40,575 | 30,500 | | 24,375 | 130' | 40 | 5,825 | 3,500 | | 2,325 | 120' | 40 | 4,700 | 2,575 | | 1,525 | | 70' | 75 | 10,000 | 10,000 | 7,000 | | |
| | 35" | 68 | 33,025 | 24,700 | 19,825 | 140' | 34 | 4,950 | 2,825 | 1,750 | 130' | 33 | 3,950 | 2,000 | 1,225 | 80' | 72 | 8,825 | | 5,500 | 4,000 | | | | | |
| | 40" | 61 | 27,700 | 20,600 | 16,575 | 150' | 25 | 4,200 | 2,250 | 1,375 | 140' | 25 | 3,825 | 1,925 | 1,125 | 90' | 69 | 7,000 | | 5,500 | 4,000 | | | | | |
| | 45" | 60 | 23,750 | 17,550 | 14,150 | 170' | 140' | 13 | 3,575 | 1,775 | | 150' | 12 | 2,775 | | | 100' | 68 | | 5,500 | 4,000 | 3,000 | | | | |
| 50" | 55 | 20,700 | 15,200 | 12,275 | 30' | | 80 | 39,350 | 29,275 | 23,050 | 160' | 35' | 78 | 31,750 | 23,400 | 18,450 | 110' | 64 | 4,225 | 2,425 | 1,575 | | | | | |
| 55" | 50 | 18,150 | 13,800 | 10,975 | 40' | | 76 | 26,425 | 19,325 | 15,225 | 170' | 35' | 79 | 31,750 | 23,400 | 18,450 | 120' | 60 | 3,450 | 1,950 | | | | | | |
| 60" | 46 | 16,300 | 12,200 | 9,450 | 45' | | 74 | 22,450 | 16,250 | 12,775 | 180' | 35' | 77 | 31,950 | 23,625 | 18,675 | 130' | 57 | 2,650 | | | | | | | |
| 65" | 40 | 14,500 | 10,800 | 8,400 | 50' | | 72 | 19,375 | 13,900 | 10,850 | 190' | 35' | 75 | 22,400 | 16,200 | 12,700 | 140' | 54 | 1,950 | | | | | | | |
| 70" | 35 | 13,275 | 9,475 | 7,525 | 60' | | 68 | 14,950 | 10,475 | 8,075 | 200' | 35' | 73 | 19,325 | 13,825 | 10,775 | 220' (180' +40') | 50' | 80 | 10,000 | 10,000 | 7,000 | | | | |
| 75" | 30 | 11,950 | 8,425 | 6,125 | 70' | 64 | 11,900 | 8,125 | 6,150 | 200' | 40' | 80 | 25,500 | 18,500 | 14,500 | 60' | | 76 | 13,900 | 10,000 | 7,000 | | | | | |
| 80" | 18 | 11,050 | 7,775 | 6,125 | 80' | 62 | 9,925 | 6,650 | 4,975 | | 100' | 45 | 5,575 | 3,250 | 2,100 | 70' | | 73 | 10,725 | 7,000 | 5,000 | | | | | |
| 90' | 20" | 80 | 71,875 | 54,375 | 42,150 | 90' | 57 | 8,675 | 6,425 | | 4,725 | 110' | 45 | 5,575 | 3,250 | 2,100 | | 80' | 70 | 10,875 | 7,000 | 5,000 | | | | |
| | 25" | 77 | 51,875 | 39,150 | 30,925 | 100' | 50 | 6,650 | 4,100 | | 2,750 | 120' | 39 | 4,700 | 2,575 | 1,525 | | 90' | 67 | 8,650 | 5,500 | 4,000 | | | | |
| | 30" | 74 | 40,350 | 30,275 | 24,125 | 110' | 45 | 5,575 | 3,250 | | 2,100 | 130' | 33 | 3,950 | 2,000 | 1,225 | | 100' | 64 | 6,950 | 5,000 | 3,500 | | | | |
| | 35" | 70 | 32,800 | 24,475 | 19,600 | 120' | 39 | 4,700 | 2,575 | | 1,525 | 140' | 25 | 3,825 | 1,925 | 1,125 | 110' | 61 | 5,250 | 3,750 | 2,750 | | | | | |
| | 40" | 67 | 27,475 | 20,375 | 16,325 | 130' | 33 | 3,950 | 2,000 | 1,225 | 150' | 12 | 2,775 | | | 120' | 51 | 4,875 | 3,500 | 2,500 | | | | | | |
| | 45" | 63 | 23,525 | 17,325 | 13,900 | 140' | 25 | 3,825 | 1,925 | 1,125 | 200' | 40' | 80 | 25,500 | 18,500 | 14,500 | 130' | 51 | 4,875 | 3,500 | 2,500 | | | | | |
| 50" | 60 | 20,475 | 14,975 | 11,975 | 150' | 12 | 2,775 | | | 50' | | 78 | 21,500 | 15,600 | 12,050 | 140' | 47 | 4,225 | 2,425 | 1,575 | | | | | | |
| 55" | 52 | 16,950 | 11,975 | 9,200 | 180' | 35' | 78 | 31,750 | 23,400 | 18,450 | | 190' | 40' | 78 | 26,000 | 18,500 | 14,750 | 150' | 43 | 3,675 | 1,925 | 1,125 | | | | |
| 60" | 46 | 15,300 | 11,025 | 8,450 | | 45' | 74 | 22,450 | 16,250 | 12,775 | | | 45' | 75 | 22,400 | 16,200 | 12,700 | 160' | 40 | 3,500 | 1,825 | 1,125 | | | | |
| 65" | 40 | 13,800 | 9,925 | 7,725 | | 50' | 72 | 19,375 | 13,900 | 10,850 | | | 50' | 73 | 19,325 | 13,825 | 10,775 | 170' | 35' | 3,225 | 1,825 | 1,125 | | | | |
| 70" | 33 | 13,025 | 9,200 | 7,275 | | 60' | 68 | 14,950 | 10,475 | 8,075 | | | 60' | 69 | 14,850 | 10,375 | 7,950 | 180' | 35' | 2,925 | 1,625 | 1,125 | | | | |
| 75" | 25 | 11,800 | 8,425 | 6,575 | | 70' | 64 | 11,900 | 8,125 | 6,150 | 70' | | 65 | 11,800 | 8,025 | 6,000 | 190' | 35' | 2,625 | 1,425 | 1,125 | | | | | |
| 80" | 18 | 11,050 | 7,775 | 6,125 | | 80' | 62 | 9,925 | 6,650 | 4,975 | 80' | | 61 | 9,550 | 6,300 | 4,575 | 200' | 35' | 2,325 | 1,225 | 1,125 | | | | | |
| 100' | 25" | 78 | 51,675 | 38,950 | 30,700 | 90' | 57 | | | | | | | | | | | | | | | | | | | |

| Lagging Location | Usage | Lagging P.D. | Lagging Width | Type of Lagging | Eff. Cap'y. 1st Layer | Maximum Cap. & Layers | Wire Rope Dia. | **Line Speed (F.P.M.) | *Line Pull (Approx.) |
|------------------|---|--------------|---------------|-----------------|-----------------------|-----------------------|----------------|-----------------------|----------------------|
| R. H. | Dragline Drag | 16" | 18 3/4" | Grooved | 58' | 621' In 6 | 3/4" | 154 | 23,045# |
| L. H. | Dragline Hoist | 18" | 13 3/4" | Grooved | 66' | 456' In 5 | 3/4" | 173 | 20,485# |
| R. H. | Clamshell Closing | 18" | 18 3/4" | Grooved | 95' | 794' In 6 | 3/4" | 173 | 20,485# |
| L. H. | Clamshell Holding | 18" | 13 3/4" | Grooved | 66' | 456' In 5 | 3/4" | 173 | 20,485# |
| R. H. | Crane-Main Hoist less or with Power Load Lowering | 16" | 18 3/4" | Smooth | 78' | 641' In 6 | 3/4" | 154 | 23,045# |
| L. H. | Crane Aux. Hoist less Power Load Lowering | 16" | 12 3/4" | Smooth | 51' | 529' In 7 | 3/4" | 154 | 23,045# |
| | | 18 3/4" | 13 3/4" | | 61' | 311' In 4 | | 175 | 20,345# |
| L. H. | Crane Aux. Hoist with Power Load Lowering | 16" | 11 3/4" | Smooth | 44' | 386' In 6 | 3/4" | 154 | 23,045# |
| | | 18 3/4" | 11 3/4" | | 50' | 340' In 5 | | 175 | 20,345# |
| Boom Hoist Shaft | Boom Hoist | 11 1/4" | 10" | Smooth | 32' | 428' In 8 | 3/4" | 137 | 25,240# |
| Third Drum Shaft | Third Drum | 13 1/2" | 17 3/4" | Smooth | 73' | 366' In 4 | 3/4" | 163 | 14,500# |
| | | 13 3/4" | 17 3/4" | Smooth | 62' | 321' In 4 | 3/4" | 165 | 19,500# |

*Theoretical Line Pull and Speed are based on the first layer on Drum and with full load engine power. See Crane, Drag or Clam Chart for recommended use. (Above table is an average and not necessarily applicable to any particular engine.)
 **With Torque Converter applications line speeds will vary dependent on line pull.

BASIC MACHINE

| | | |
|-----|---|---------|
| B-1 | Equipment includes: fabricated truck and rotating base; standard removable crawler side frames (19'0" overall length) with hydraulic extension system; 30" treads; ball bearing swing circle and swing gear; engine (See Item Nos. BO-100 thru BO-105); one drum planetary gear driven boom hoist; positive swing lock; air controls; mechanical hoist brakes; telescopic backhitch gantry. (No laggings or counterweight.) | 87,780# |
|-----|---|---------|

FOR ADDITIONAL OPTIONAL EQUIPMENT OVER STANDARD—ADD:

| | | |
|----|--|---------|
| A. | Swing Snubber | 90# |
| B. | Cab-Elevated | 2,065# |
| C. | Counterweight 1. Two (2) Pieces | 40,800# |
| | 2. One (1) Piece | 23,100# |
| D. | Crawler Treads 1. 35" in Place of 30" | 1,860# |
| | 2. 42" in Place of 30" | 3,530# |

| | | | |
|----|---|----------------|--------|
| E. | Power Controlled Load Lower.—R. H. | 875# | |
| F. | Power Controlled Load Lower.—L. H. | 885# | |
| G. | Power Controlled Load Lower.—Both Sides | 1,220# | |
| H. | Independent Propel | 2,285# | |
| I. | Counterweight Handling Kit | 270# | |
| J. | Running Boards—Left and Right Hand | 275# | |
| K. | Third Drum (less cable) | W/Ind. Propel | 1,905# |
| | | WO/Ind. Propel | 1,955# |

FOR REMOVAL OF:

| | | |
|----|----------------------|--------|
| A. | 30" Treads per Side | 5,145# |
| B. | 35" Treads per Side | 6,075# |
| C. | 42" Treads per Side | 6,910# |
| D. | Drive Chain per Side | 395# |

| | | |
|----|--|---------|
| E. | Side Frame Assembly Less Treads and Chains per Side | 8,415# |
| F. | Truck Base with Ring Gear and Swing Circle but Less Side Frames and Treads | 23,465# |
| G. | Telescopic Backhitch Gantry | 3,200# |

| | | |
|-----|--|---------|
| A-2 | Equipment includes: 50' pin connected tubular boom (60 1/4" x 65 1/4") with 4 point sheaves with wire rope guards; 10 part boom hoist crossover and swaged type pendants for basic boom; 18" L.H. smooth lagging (3/8"); 16" R.H. smooth lagging (3/8"); foot accelerator; swing snubber; pantograph boomstop with air shutoff; boom angle indicator; controls; wire rope and 40,800# counterweight. | 49,635# |
|-----|--|---------|

When machine is equipped as a Crane, the following parts included above are installed in the Rotator and can be deducted from the above weight to obtain correct reduction for removing the front.

| | |
|---|----------------|
| 1. 18" L.H. Smooth Lagging (3/8") | 395# |
| 2. 16" R.H. Smooth Lagging (3/8") | 395# |
| 3. Swing Snubber | 90# |
| 4. Boom Stop | 905# |
| 5. Accelerator, controls and Wire Ropes | 1,305# |
| 6. Counterweight | 40,800# |
| Total Rotator Crane Parts | 43,890# |

BOOM AND SUSPENSION

| | |
|--------------------------------------|---------------|
| 1. Base Section | 2,085# |
| 2. Point Section with Sheaves | 2,555# |
| 3. 10 Part Boom Hoist Crossover | 765# |
| 4. Pendants for Basic Boom | 340# |
| Total of Above Four (4) Items | 5,745# |

OPTIONAL CRANE ACCESSORIES — ADD

| | |
|--|--------|
| 1. Boom Extensions (With Pendants) | |
| A. 10' Extension | 815# |
| B. 20' Extension | 1,365# |
| C. 30' Extension | 1,735# |
| D. 40' Extension | 2,365# |
| 2. Jib—Heavy Duty—Tubular—Pin Connected Max. Length 60' | |
| A. Jib Base | 410# |
| B. Jib Point and Point Shaft | 500# |
| C. 10' Extension with Pendants | 390# |
| D. 20' Extension with Pendants | 690# |
| E. Basic Wire Ropes and Pendants | 270# |
| F. Strut | 670# |

| | |
|---|------|
| 3. Jib—Tubular—Pin Connected—Standard Max. Length—40' | |
| A. Jib Base | 315# |
| B. Jib Point and Point Shaft | 450# |
| C. 10' Extension with Pendants | 270# |
| D. Basic Wire Ropes and Pendants | 245# |
| E. Strut | 475# |
| 4. Midpoint Suspension | |
| A. Tubular Boom (160', 170' and 180') | 440# |
| B. Tubular Boom (190' and 200') Add | 45# |
| 5. Mast Assembly (Req'd on all Booms 160' in Length or Over) | 760# |

DRAGLINE ATTACHMENT

| | | |
|-----|---|---------|
| A-3 | Equipment includes: 50' pin connected tubular boom (60 1/4" x 65 1/4") with 1 point sheave wire rope guard; 10 part crossover and swaged type pendants for basic boom; 18" L.H. grooved lagging (3/4"); 16" R.H. grooved lagging (3/4"); full revolving fairlead; drag wire rope guard; controls; wire ropes and 23,100# counterweight. (Less Dragline bucket.) | 31,165# |
|-----|---|---------|

When machine is equipped as a Dragline, the following parts included above are installed in the Rotator and can be deducted from the above weight to obtain correct reduction for removing the front.

DRAGLINE ATTACHMENT (CONTINUED)

| | |
|---|---------|
| 1. Full Revolving Fairlead and Drag Wire Rope Guard | 1,115# |
| 2. Wire Ropes | 625# |
| 3. 18" L.H. grooved lagging (3/4") | 410# |
| 4. 16" R.H. grooved lagging (7/8") | 405# |
| 5. Counterweight | 23,100# |
| Total Rotator Dragline Parts | 25,655# |

BOOM AND SUSPENSION

| | |
|---------------------------------|--------|
| 1. Base Section and Planking | 2,085# |
| 2. Point Section with Sheaves | 2,320# |
| 3. Pendants for Basic Boom | 340# |
| 4. 10 Part Boom Hoist Crossover | 765# |
| Total of Above Four (4) Items | 5,510# |

OPTIONAL DRAGLINE ACCESSORIES

| | |
|------------------------------------|--------|
| 1. Boom Extensions (with Pendants) | |
| A. 10' Extension | 815# |
| B. 20' Extension | 1,365# |

CLAMSHELL ATTACHMENT

| | | |
|-----|---|---------|
| A-4 | Equipment includes: 50' pin connected tubular boom (60" x 65") with 2 point sheaves and wire rope guards; 10 part crossover and swaged type pendants for basic boom; 18" L.H. and R.H. grooved laggings (3/4"); Model 6-48 Rudomatic tagline winder; controls; wire ropes and 23,100# counterweight. (Less Clamshell bucket.) | 30,660# |
|-----|---|---------|

When machine is equipped as a Clamshell, the following parts included above are installed in the Rotator and can be deducted from the above weight to obtain correct reduction for removing the front:

| | |
|------------------------------------|---------|
| 1. Rudomatic Tagline Winder | 360# |
| 2. Wire Ropes | 715# |
| 3. Counterweight | 23,100# |
| 4. 18" R.H. grooved lagging (3/4") | 440# |
| 5. 18" L.H. grooved lagging (3/4") | 410# |
| Total Rotator Clamshell Parts | 25,025# |

NOTE: Boom, suspension and accessories are the same as Dragline, but with 2 point sheaves add 125#.

TRUCK BASE: The truck base is all welded construction, with machined hubs to receive round alloy steel axles.

CRAWLER SIDE FRAMES: Crawler side frames are all welded construction with machined hubs, for assembly to truck axles. Side frames feature hydraulic extension and retraction. Hydraulic cylinders and controls are standard.

VERTICAL PROPEL SHAFT: One piece hollow shaft mounted in bronze bearings in center pinion of crawler base. Powered by gear type jaw clutch connection with horizontal gear train in rotating assembly. Bevel gear transmits power to horizontal propel shaft.

HORIZONTAL PROPEL SHAFT: The shaft is in three (3) pieces mounted in bearing hubs bored in the base. Assembly is made by threading the shafts thru the outside bore. Shaft includes, bevel gear drive from upper works, steering jaw clutches, and truck lock brakes.

INDEPENDENT PROPEL SHAFT: Clutch shaft mounted on anti-friction bearings; driven by hoist gears. Air operated clutches, mounted outboard of right hand machinery frame, transmit power through a bevel gear to the idler shaft which drives the vertical

propel shaft. Forward and reverse is achieved by engaging the appropriate clutch on the independent propel shaft.

STEERING AND TRUCK LOCK: Steering is controlled by multiple jaw clutches, engaging for either drive or positive lock. Either crawler may be positively locked while the other is driven. Two large diameter and wide face brakes serve as digging locks and safety propel brake. Brakes are spring-set and air-released and each is **AT ALL TIMES** directly connected to its crawler, regardless of whether driving jaw clutches are engaged or disengaged. With this design it is impossible for machine to "run away" on grades due to accidentally disengaging driving jaw clutches. Air controls permit independent control of the two jaw clutches and the digging and safety brakes. Air cylinders for actuating jaw clutches and brakes are mounted high in the truck base. Air control valves are located at operator's station.

TREAD ROLLERS: Cast steel rollers run on bronze bushings. The roller wear surface or outer rim is hardened.

CRAWLER BELTS: Treads have wide connecting lugs, hinged together with hardened pins. treads are available in 30"-35"-42" widths. Each belt is independently driven by a roller chain.

UPPER MACHINERY

ROTATING BASE: Heavy duty rotating base with integral machinery frames. Steel plate welded fabrication with horizontal gear train housing and fuel tank built in. Fuel tank capacity 100 gallon.

SHAFTING: All shafting heat treated alloy steel ground to size. Involute splines used extensively.

VERTICAL SWING SHAFT: The vertical swing shaft and pinion is of one-piece design, made from alloy steel, heat treated and hardened forging. The shaft is mounted on ball and roller bearings.

POSITIVE SWING LOCK: Manually operated mechanical lock engages in truck ring gear teeth.

SWING SNUB: Operates on the outside of the swing clutch housing for momentarily holding, while setting loads.

REVERSING CLUTCH SHAFT: This shaft is mounted on ball bearings. The reversing bevel gears, which carry the clutch housings, are mounted on ball bearings. Clutches are of the two-shoe design, air actuated.

SWING SHAFT EXTENSION: This shaft is chain driven from engine and is coupled to the swing clutch shaft by means of a flexible coupling. This type of design permits easy removal of the swing clutch shaft without disturbing chain case and chain drive.

Extension shaft is mounted on ball bearings and carries hoist spur pinion, boom hoist chain sprocket, main drive chain sprocket and V-belt pulley driving lubricating oil pump.

HOIST DRUM SHAFT: This shaft is mounted on ball bearings. Hoist brake drums are well finned for cool operation. High capacity internal expanding hoist clutches are air actuated. Both drums are split lagging design, either smooth or grooved, are mounted on self aligning, anti-friction bearings.

HOIST BRAKES: The hoist brakes are of the external contracting, friction band type, mechanically operated by pedals. Pedals are mounted on needle bearings for maximum ease of operation.

BOOM HOIST: This shaft is chain driven from the swing shaft extension and is mounted on anti-friction bearings. Mounted on this shaft are the boom hoist drum, planetary lowering brake, boom hoist holding brake, boom hoist clutch, and the safety ratchet. Lowering brake and hoisting clutch are air set and holding brake is spring, plus air, set—air released. The brake is automatically controlled by the boom hoist control valve, being engaged when control lever is in neutral and released when lever is in hoisting or lowering position. The safety ratchet is independently air operated.

BOOMS AND JIB: Refer to boom and jib data.

BOOM STOP: Pantograph with or without automatic air cut-off of boom hoist clutch.

BOOM SUSPENSION: Ten part line with crossover, crossover and mid-point or mast with mid-point depending on boom length.

THIRD DRUM: One piece high capacity drum running on ball bearings, mounted on right hand machinery frame. Actuated by air operated clutch and brake. Refer to "lagging data" table for specifications.

LOAD LOWERING DEVICE: This device is geared to either drum or to both drums and provides controlled precision lowering with speeds reduced considerably without the use of the hoist brakes. The device is equipped with clutches which may be disengaged at any time, permitting full release of load in cases of emergency or when control of load by brakes is desirable. Clutches are air set—spring released.

SWING CIRCLE: Large diameter anti-friction bearing with shielded ball race. The outer race bolts to the upper unit whereas the inner race is welded to the truck base. The swing gear is a separate part welded to the truck base.

COUNTERWEIGHT: Two pieces of cast iron counterweight. Castings have lifting eyes and assembly hooks cast integral. NO bolts required.

COUNTERWEIGHT REMOVAL EQUIPMENT: Gantry power up and down feature is used to position counterweight with slings provided.

GANTRY: The gantry consists of a basic low gantry to which is attached a high gantry having telescopic back legs. Gantry can be pinned in low position at cab height for traveling or raised to full height for machine operation. Boom hoist cable provides power up and down for positioning gantry.

CONTROLS: All controls are air except hoist brakes which are mechanical.

CAB: The cab is of all steel construction and is equipped with full vision, rubber set windows. Roller mounted doors are located at right hand and left hand sides and at rear. A sliding window is located at right hand side of operator's compartment. A high tower cab is available as an option, raising the operator's position 50" and provides a 360° view.

GEARING AND CHAIN DRIVES: All deck gears and reversing bevel gears are fully enclosed and lubricated by an oil bath, pump circulated. The boom hoist planetary gears are fully enclosed, oil bath lubricated.

Main machinery drive chain and boom hoist drive chain are fully enclosed in oil tight casing, oil bath lubricated. The hoist gear and mating spur pinion are well guarded and hand lubricated with gear compound. All anti-friction bearings and bronze bushed bearings are pressure gun lubricated.

| Function | Clutches | | | | Brakes | | | |
|--------------------|----------|-------|----------|---------------------|--------|-------|----------|---------------------|
| | Type | Width | Diameter | Area | Type | Width | Diameter | Area |
| Hoist or Drag | Band | 4" | 27" | 309 In ² | Band | 4" | 36" | 349 In ² |
| Swing | 2 Shoe | 5½" | 23" | 348 In ² | | | | |
| Propel | 2 Shoe | 5½" | 23" | 348 In ² | | | | |
| Independent Propel | Band | 4½" | 20" | 248 In ² | | | | |
| Third Drum | Band | 4½" | 20" | 248 In ² | Band | 4" | 26" | 257 In ² |
| Power Lowering | Band | 4" | 18" | 199 In ² | | | | |
| Boom Hoist | Band | 4" | 22½" | 251 In ² | Band | 3" | 24" | 163 In ² |
| Swing Snubber | | | | | Band | 2½" | 27¼" | 171 In ² |
| Steering Brake | | | | | 2 Shoe | 4" | 21" | 255 In ² |

BOOM DATA

| |
|--|
| Backhitch Gantry |
| Backhitch Gantry Required With All Boom Lengths. |

| |
|--|
| Mast, and Mid-Point Suspension |
| Mast, and Mid-Point Suspension Required on Boom Lengths 160' and Over. |

| |
|---|
| Boom Can Be Furnished With 1 or 2 Sheaves With Guard For Dragline or Clamshell Service. |
|---|

| Boom Description | Tubular |
|----------------------------------|----------------------------|
| Type Service | Drag-Clam-Crane |
| Type Boom Point | Straight |
| Quantity Point Sheaves | 1, 2, or 4 |
| Quantity Sheaves at Second Shaft | 2 |
| Diameter Point Sheaves | 15½" P.D. |
| Basic Boom Length | 50'-0" |
| Type Connections | Pin |
| Maximum Length | 200' |
| Extensions | 10', 20', 30', 40' |
| Cross Section | 60¼" x 65¼" Over Chords |
| Type Chords | Tube |
| Chord Material P.S.I. Yield | 100,000 |

POWER PLANT DATA

| Make | Model | Fuel | Cyl. | Bore and Stroke | Gross Rated H.P. | Torque Conv. Engine H.P. @ Governed R.P.M. |
|--------------|-----------|--------|------|-----------------|------------------|--|
| G.M. w/T. C. | 6030-C | Diesel | 6 | 4¼" x 5" | 196 @ 2,300 | 167 @ 2,000 |
| Cumm. w/T.C. | H-743-190 | Diesel | 6 | 5½" x 6" | 190 @ 2,000 | 150 @ 2,000 |
| Cat. w/T. C. | D-333-C | Diesel | 6 | 4¾" x 6" | 300 @ 2,200 | 153 @ 2,000 |

Fuel Tank Capacity—100 Gal.