



RS 70100
35 US t Lifting Capacity
Boom Truck Cranes
Datasheet
Imperial

RS 70100



Features: RS 70100

- ▶ 35 US t @ 5 ft capacity at rated distance from center of rotation
- ▶ 100 ft maximum boom length
- ▶ 110 ft maximum tip height
- ▶ 30.5/55 ft optional jib
- ▶ 163 ft maximum tip height with 55 ft jib
- ▶ Electronic rated capacity indicator
- ▶ Quick reeving boom head

WORKS FOR YOU.™

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Technical description

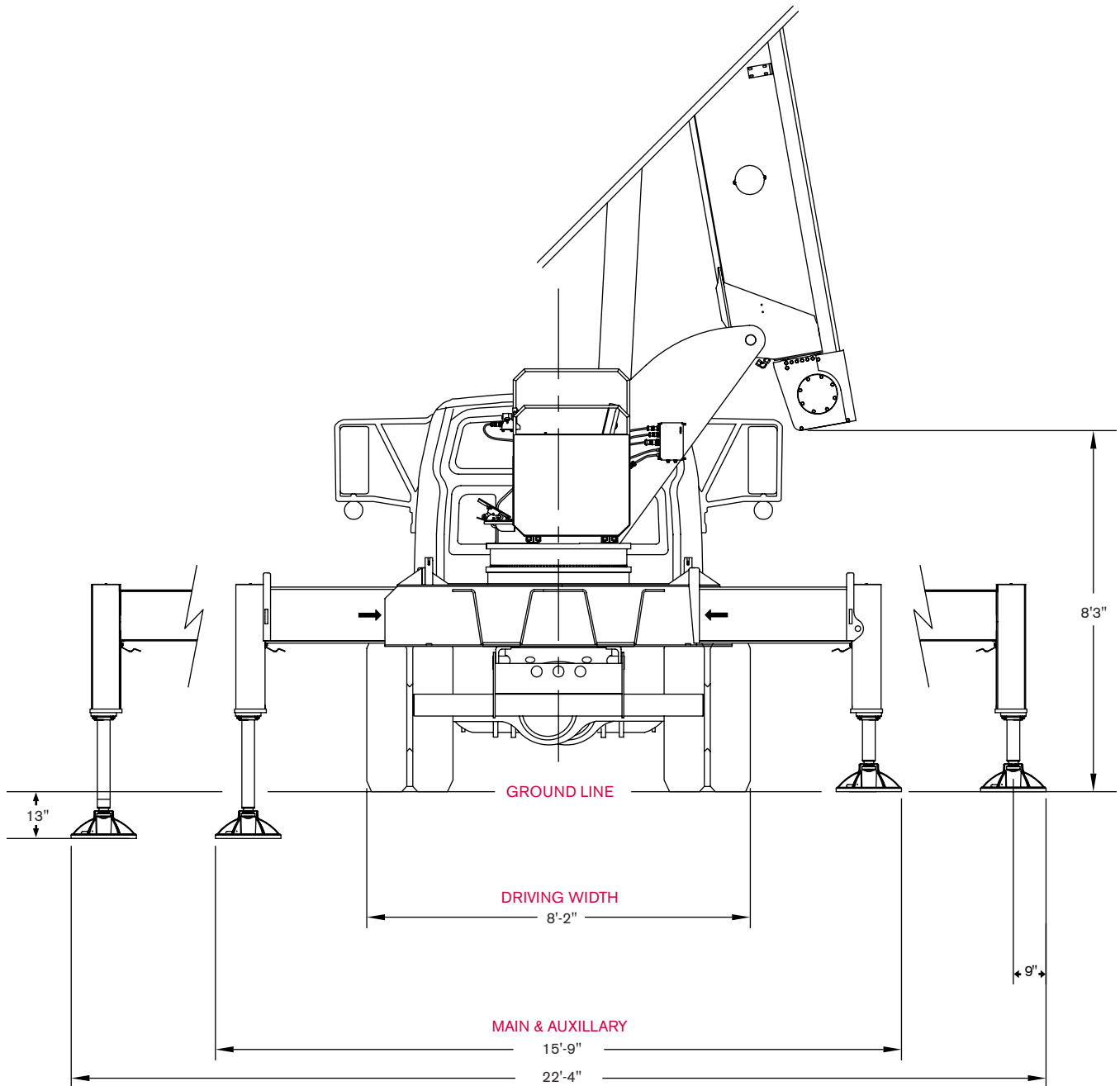
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| | | | |
|---|-------------------------------------|---|----------------------------|
|  | Main boom |  | Main Hoist |
|  | Boom length |  | Hoist line speed |
|  | Tip height |  | Part line |
|  | Telescoping mode |  | Operator aid |
|  | Boom angle |  | Controls |
|  | Working radius |  | Hydraulics |
|  | Boom with jib |  | Working temperature |
|  | Boom head |  | Outriggers |
|  | Hook block |  | Working speeds |
|  | Hook to head sheave pin |  | Rope – Standard / Optional |
|  | Rotation / Allowable rotation range |  | Rope diameter |
|  | Performance |  | Rope length |
|  | Boom over the front/rear |  | Line pull |

DIMENSIONS

Crane Dimensions

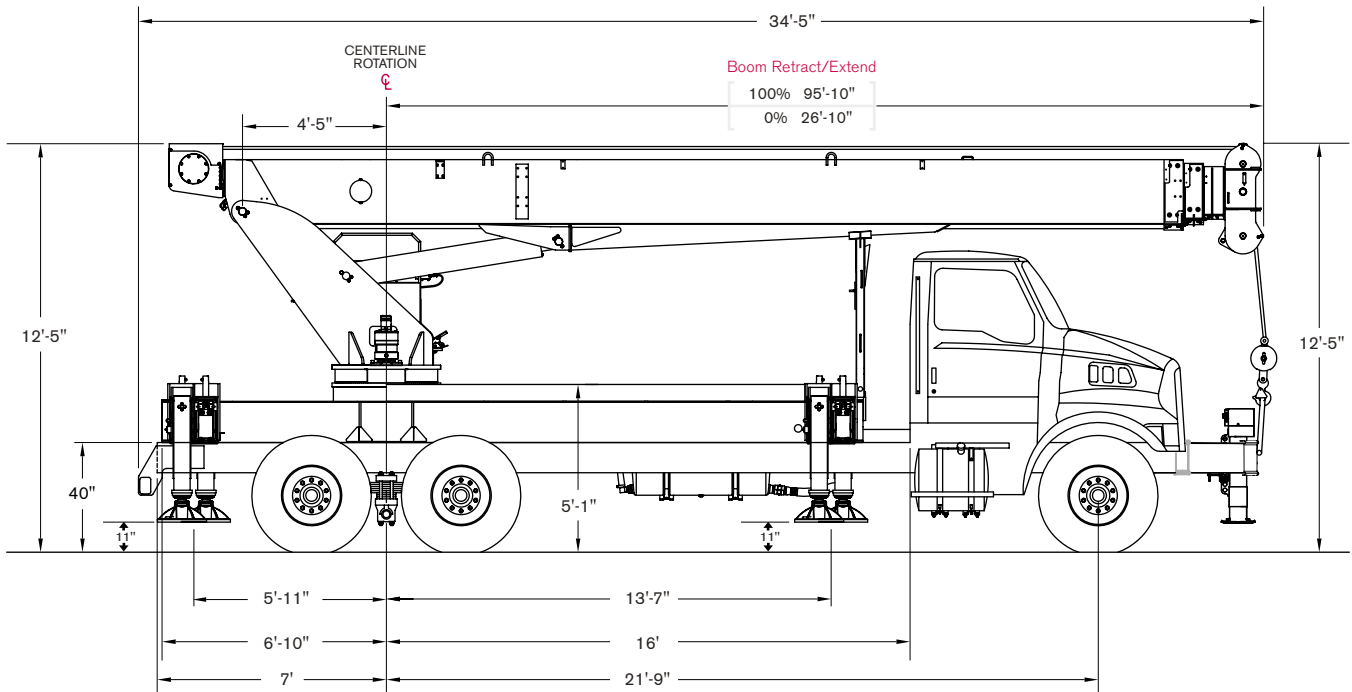
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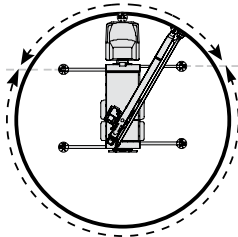
DIMENSIONS

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Crane Dimensions



Area of Operation



Mounting Specifications

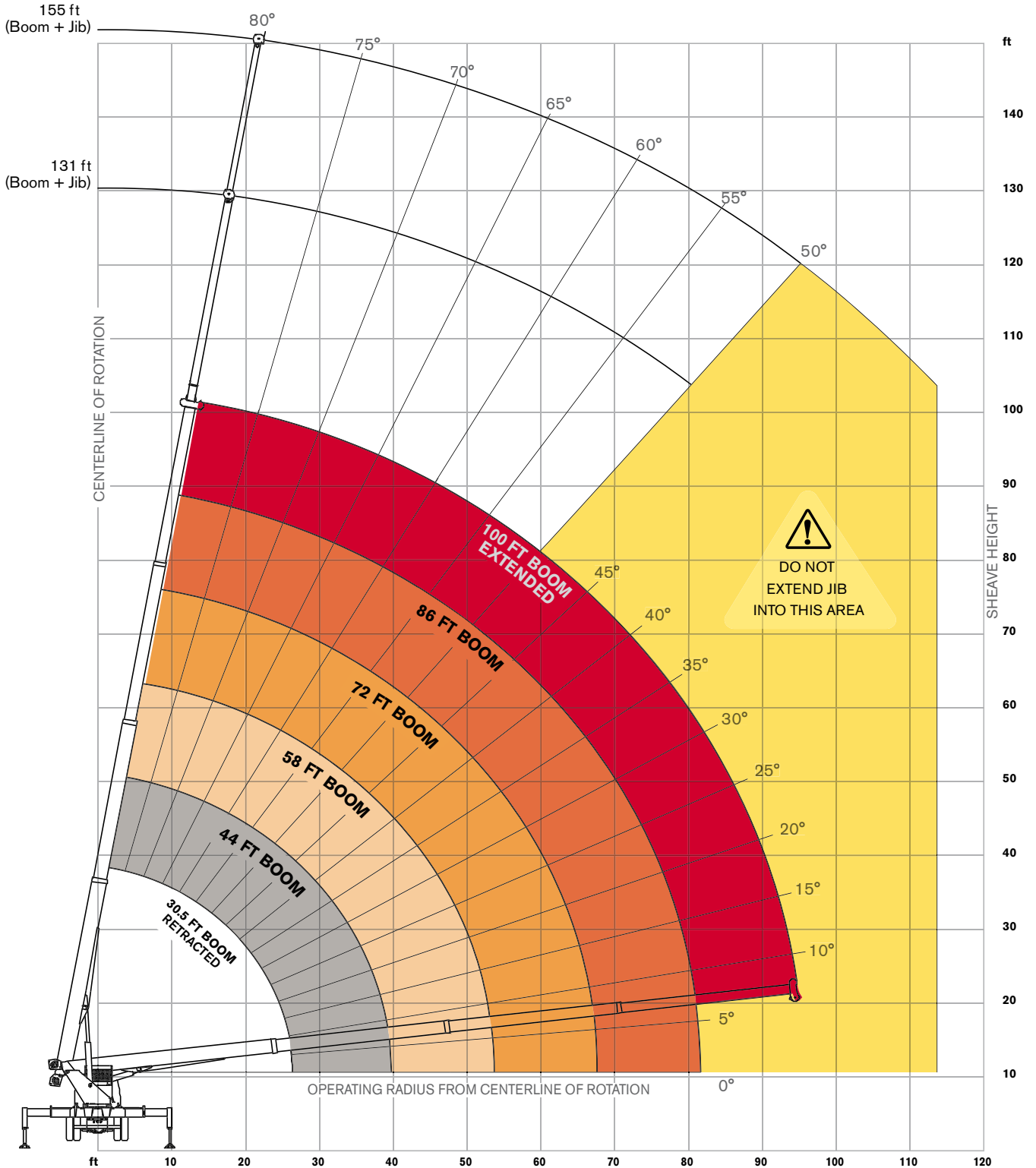
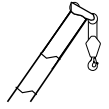
Chassis Recommendation

| | |
|-----------------------------------|---------------------|
| Gross Vehicle Weight Rating | 60,000 lb |
| Front Axle Weight Rating | 20,000 lb |
| Rear Axle Weight Rating | 40,000 lb |
| Wheelbase | 258 +/- 8 in |
| Crane Weight | 29,200 lb |
| Cab to Axle | 190 +/- 8 in |
| Afterframe | 92 +/- 4 in |
| RBM per Frame Rail | 3,300,000 lb/in |
| Frame Height (Unloaded) | 40 in |
| Exhaust | Vertical Right Side |

RANGE DIAGRAM

Outriggers Fully Extended (100%)

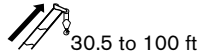
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

BOOM LOAD CHARTS

RS 70100

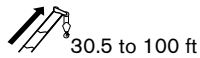
Outriggers Fully Extended (100%)





Standard ASME B30.5

|  | Boom Length | | | | | |  |
|---|-------------|--------|--------|--------|--------|--------|---|
| | 30.5 | 44 | 58 | 72 | 86 | 100 | |
| ft | lb | lb | lb | lb | lb | lb | ft |
| 5 | 70,000 | | | | | | 5 |
| 8 | 44,900 | | | | | | 8 |
| 10 | 39,000 | 31,700 | | | | | 10 |
| 12 | 34,400 | 32,200 | 31,400 | | | | 12 |
| 15 | 29,100 | 27,800 | 26,700 | 24,200 | | | 15 |
| 20 | 22,300 | 22,000 | 21,200 | 19,200 | 17,000 | | 20 |
| 25 | 14,900 | 18,000 | 17,500 | 16,000 | 14,400 | 12,100 | 25 |
| 30 | | 14,800 | 14,700 | 13,300 | 12,000 | 10,500 | 30 |
| 35 | | 11,600 | 12,000 | 11,500 | 10,300 | 9,100 | 35 |
| 40 | | | 9,200 | 9,400 | 9,100 | 6,500 | 40 |
| 45 | | | 7,200 | 7,400 | 7,500 | 5,600 | 45 |
| 50 | | | 5,700 | 5,900 | 6,000 | 4,900 | 50 |
| 55 | | | | 4,700 | 4,900 | 4,200 | 55 |
| 60 | | | | 3,800 | 3,900 | 3,600 | 60 |
| 65 | | | | 3,000 | 3,200 | 3,100 | 65 |
| 70 | | | | | 2,500 | 2,600 | 70 |
| 75 | | | | | 2,000 | 2,100 | 75 |
| 80 | | | | | 1,500 | 1,600 | 80 |
| 85 | | | | | | 1,200 | 85 |
| 90 | | | | | | 900 | 90 |
| 95 | | | | | | 600 | 95 |

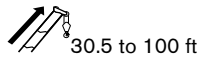
Boom at 0°





Standard ASME B30.5

|  | Boom Length | | | | | |  |
|---|-------------|-------|-------|-------|-----|-----|---|
| | 30.5 | 44 | 58 | 72 | 86 | 100 | |
| ° | lb | lb | lb | lb | lb | lb | ° |
| 0 | 8,800 | 5,000 | 2,900 | 1,600 | 700 | - | 0 |

With Jib, Retracted and Extended



Standard ASME B30.5

|  | Jib Capacities for All Boom Lengths | | | | | | | |  |
|---|-------------------------------------|-------|-------|-------|-------|-------|-------|-----|---|
| | 80° | 78° | 75° | 70° | 65° | 60° | 55° | 50° | |
| ft | lb | lb | lb | lb | lb | lb | lb | lb | ft |
| 30.5 | 6,450 | 6,000 | 5,300 | 4,000 | 3,300 | 2,300 | 1,400 | 800 | 30.5 |
| 55 | 3,500 | 3,500 | 3,500 | 3,000 | 2,300 | 1,700 | 1,050 | 700 | 55 |

Notes to lifting capacity

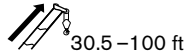
Lifting capacities do not exceed 85% of tipping load. Weight of hook blocks and slings is part of the load, and is to be deducted from the capacity ratings. Consult operation manual for further details.

Note: Data published herein is intended as a guide only and shall not be construed to warrant applicability for lifting purposes. Crane operation is subject to the computer charts and operation manual both supplied with the crane.



BOOM LOAD CHARTS

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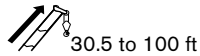
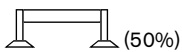
Outriggers Extended Mid-Position (50%)





Standard ASME B30.5

|  | Boom Length | | | | | |  |
|---|-------------|--------|--------|--------|--------|--------|---|
| | 30.5 | 44 | 58 | 72 | 86 | 100 | |
| ft | lb | lb | lb | lb | lb | lb | ft |
| 5 | 70,000 | | | | | | 5 |
| 8 | 44,900 | | | | | | 8 |
| 10 | 39,000 | 31,700 | | | | | 10 |
| 12 | 34,400 | 32,200 | 31,400 | | | | 12 |
| 15 | 27,200 | 27,800 | 26,700 | 24,200 | | | 15 |
| 20 | 14,800 | 15,500 | 15,900 | 16,100 | 16,300 | | 20 |
| 25 | 8,900 | 9,900 | 10,300 | 10,500 | 10,600 | 10,700 | 25 |
| 30 | | 6,800 | 7,100 | 7,300 | 7,400 | 7,500 | 30 |
| 35 | | 4,600 | 5,000 | 5,200 | 5,300 | 5,400 | 35 |
| 40 | | | 3,600 | 3,800 | 3,900 | 4,000 | 40 |
| 45 | | | 2,500 | 2,700 | 2,900 | 2,900 | 45 |
| 50 | | | 1,600 | 1,900 | 2,000 | 2,100 | 50 |
| 55 | | | | 1,300 | 1,400 | 1,500 | 55 |
| 60 | | | | | | 1,000 | 60 |

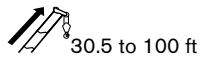
Boom at 0°





Standard ASME B30.5

|  | Boom Length | | | | | |  |
|---|-------------|-------|-------|----|----|-----|---|
| | 30.5 | 44 | 58 | 72 | 86 | 100 | |
| ° | lb | lb | lb | lb | lb | lb | ° |
| 0 | 7,900 | 3,100 | 1,100 | - | - | - | 0 |

With Jib, Retracted and Extended



Standard ASME B30.5

|  | Jib Capacities for All Boom Lengths (VERIFY OPERATIONAL MODE SETTING ON LMI DISPLAY BEFORE LIFTING) | | | | |  |
|---|--|-------|-------|-------|-------|---|
| | 80° | 78° | 75° | 70° | 65° | |
| ft | lb | lb | lb | lb | lb | ft |
| 30.5 | 6,450 | 6,000 | 5,300 | 3,175 | 1,650 | 30.5 |
| 55 | 3,500 | 3,500 | 3,500 | 2,800 | 1,275 | 55 |

Notes to lifting capacity

Lifting capacities do not exceed 85% of tipping load. Weight of hook blocks and slings is part of the load, and is to be deducted from the capacity ratings. Consult operation manual for further details.

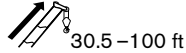
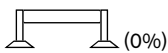
Note: Data published herein is intended as a guide only and shall not be construed to warrant applicability for lifting purposes. Crane operation is subject to the computer charts and operation manual both supplied with the crane.



BOOM LOAD CHARTS

RS 70100

Outriggers Fully Retracted (0%)



Standard ASME B30.5

| ft | Boom Length | | | | | | ft |
|----|-------------|--------|--------|-------|-------|--------|----|
| | 30.5 lb | 44 lb | 58 lb | 72 lb | 86 lb | 100 lb | |
| 5 | 64,700 | | | | | | 55 |
| 8 | 26,100 | | | | | | 8 |
| 10 | 16,200 | 17,000 | | | | | 10 |
| 12 | 11,000 | 11,700 | 12,100 | | | | 12 |
| 15 | 6,600 | 7,300 | 7,700 | 7,900 | | | 15 |
| 20 | 2,600 | 3,600 | 3,900 | 4,100 | 4,200 | | 20 |
| 25 | | 1,500 | 1,900 | 2,100 | 2,200 | 2,200 | 25 |
| 30 | | | | | | 1,000 | 30 |

Notes to lifting capacity






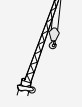

Lifting capacities do not exceed 85% of tipping load. Weight of hook blocks and slings is part of the load, and is to be deducted from the capacity ratings. Consult operation manual for further details.

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



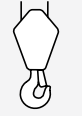
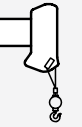
TECHNICAL DESCRIPTION

RS 70100

Boom, Jib and Rotation

| | | |
|---|--|---------------|
|  | Full power fully synchronized telescopic keel boom | 4 sections |
|  | Boom length | 30.5–100 ft |
|  | Boom maximum tip height | 110 ft |
|  | Boom elevation angle range (min/max) | -8° / 82° |
|  | Boom head | Quick reeving |
|  | Maximum tip height: With optional jib 30.5–55 ft | 163 ft |
|  | 360° continuous rotation | |

Operator Controls and Operator Aid

| | | |
|---|------------------------------|------------------------|
|  | Hoist line pull | 15,000 lb |
|  | Hoist line speed (3rd layer) | 196 ft/min |
|  | Rope diameter | 5/8 in |
|  | Breaking strength | 45,400 lb |
|  | Overhaul ball | 7 US t |
| | 1 Sheave block | 20 US t |
| | 2 Sheave block | 30 US t |
| | 4 Sheave block | 40 US t |
|  | 1 part line | 12,971 lb / 196 ft/min |
| | 2 part line | 25,942 lb / 98 ft/min |
| | 3 part line | 38,913 lb / 63 ft/min |
| | 4 part line | 51,884 lb / 49 ft/min |
| | 5 part line | 64,855 lb / 32 ft/min |
| | 6 part line | 70,000 lb / 32 ft/min |



Fully proportional
Independent outrigger controls



Rated capacity indicator



Oil cooler

Understructure



"H" pattern (out and down),
To outer edge of pad

22 ft 4 in

Single front bumper outrigger

Optional Features

Single or two-stage jib

Rotation resistant rope

Multi-part load blocks

Two-man baskets

Hoist drum tensioner

Tool box

Enclosed operator's cab with circulation fan only

Enclosed operator's cab with propane heater (No tank provided)

Effective Date: July 2015. Product specifications and prices are subject to change without notice or obligation. The photographs and/or drawings in this document are for illustrative purposes only. Refer to the appropriate Operator's Manual for instructions on the proper use of this equipment. Failure to follow the appropriate Operator's Manual when using our equipment or to otherwise act irresponsibly may result in serious injury or death. The only warranty applicable to our equipment is the standard written warranty applicable to the particular product and sale and Terex makes no other warranty, express or implied. Products and services listed may be trademarks, service marks or trade-names of Terex Corporation and/or its subsidiaries in the USA and other countries. All rights are reserved. Terex® is a registered trademark of Terex Corporation in the USA and many other countries.

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