

**TEREX®****ROUGH TERRAIN CRANE
RT 345-1 XL****DATASHEET - IMPERIAL**

RT 345-1 XL

**Features:**

- ▶ Rated capacity:
45 ton @ 9 ft working radius
- ▶ Maximum boom length:
105 ft
- ▶ Maximum tip height:
147 ft

WORKS FOR YOU.™

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RT 345-1 XL

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KEY

RT 345-1 XL

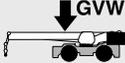
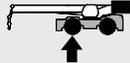
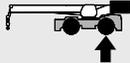
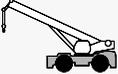
| | | | |
|---|--|---|---|
|  | Counterweight |  | General performance |
|  | Main boom |  | Telescoping mode |
|  | Boom length |  | Boom luffing angle |
|  | Tip height |  | Working radius |
|  | Boom with extension |  | Max. boom length with extension |
|  | Main boom with aux head |  | Distance from the hook to the head sheave pin |
|  | Slewing / Allowable slewing range |  | Slewing locked / Slewing locked at specified position |
|  | Slewing brake |  | Slewing gears |
|  | Outriggers / Lifting on outriggers (100/50/0% extended) |  | Lifting on wheels / Pick & Carry |
|  | 1 Main hoist |  | 2 Auxiliary hoist |
|  | Hoist speed |  | Rope length |
|  | Rope - Standard / Optional |  | Max. line pull |
|  | Rope diameter |  | Tire |
|  | Hook block |  | Controls |
|  | Cab |  | Engine |
|  | Operator aids / Load limiter / Load indicator |  | Steering |
|  | Mechanical transmission |  | Speed |
|  | HYDR Hydraulics |  | Heating / Air conditioning |
|  | Working temperature |  | Gradeability |
|  | Lights |  | Gross vehicle weight |
|  | Crane / Crane in standard configuration |  | Weight on front axle |
|  | Crane without counterweight |  | Weight on rear axle |



CRANE WEIGHTS

RT 345-1 XL

Approximate Weights

| | |  |  |  |
|---|--|---|---|---|
|  | STD (without hook block and auxiliary hoist) | 67,915 lb | 34,527 lb | 33,388 lb |
| Add / Subtract for main optional equipment | | | | |
|  | 32 ft to 49 ft swing on jib stowed | + 1,789 lb | + 1,343 lb | + 446 lb |
|  | Auxiliary boom head | + 100 lb | + 170 lb | - 70 lb |
|  | 2 Auxiliary hoist* | + 264 lb | - 56 lb | + 320 lb |
|  | 4 sheaves, 45T | + 736 lb | + 1,084 lb | - 348 lb |
|  | 4 sheaves, 40T | + 690 lb | + 1,017 lb | - 327 lb |
|  | 3 sheaves, 30T | + 670 lb | + 987 lb | - 317 lb |
|  | 2 sheaves, 25T | + 682 lb | + 1,005 lb | - 323 lb |

NOTE: Values are subject to 2% variation

* Weight includes rope



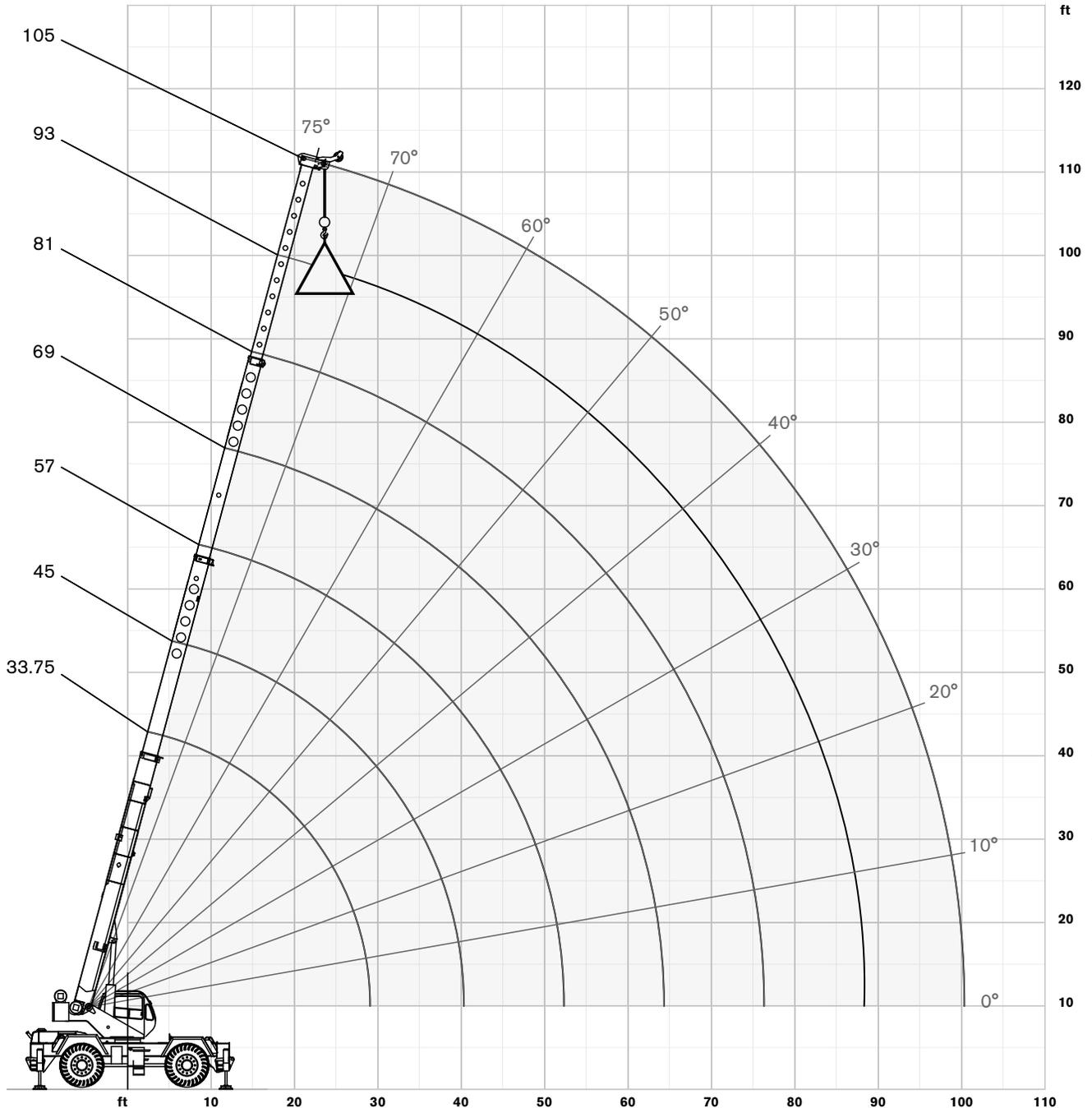
RANGE DIAGRAM - MAIN BOOM

RT 345-1 XL

Outriggers Fully Extended (100%)



with hook block:
6 ft



LOAD CHART- MAIN BOOM

RT 345-1 XL

Outriggers Fully Extended (100%)

 13,000 lbs counterweight

 Outriggers extended 22 ft (100%)

 360 degree rotation

Standard ASME B30.5

|  | Boom Length | | | | | | |  |
|---|-------------|--------|--------|--------|--------|--------|--------|---|
| | 33.75 ft | 45 ft | 57 ft | 69 ft | 81 ft | 93 ft | 105 ft | |
| ft | lb | lb | lb | lb | lb | lb | lb | ft |
| 9 | 90,000 | | | | | | | 9 |
| 10 | 64,400 | 46,500 | | | | | | 10 |
| 12 | 58,000 | 46,500 | 46,500 | | | | | 12 |
| 15 | 50,700 | 46,500 | 44,500 | 41,600 | | | | 15 |
| 20 | 40,400 | 38,800 | 36,400 | 34,800 | 30,600 | | | 20 |
| 25 | 30,600 | 31,600 | 31,000 | 29,400 | 26,000 | 23,400 | | 25 |
| 30 | | 25,000 | 25,600 | 25,600 | 22,500 | 20,300 | 18,600 | 30 |
| 35 | | 20,300 | 20,900 | 21,300 | 19,600 | 17,700 | 16,200 | 35 |
| 40 | | 16,700 | 17,400 | 17,800 | 17,400 | 15,600 | 14,400 | 40 |
| 45 | | | 14,700 | 15,100 | 15,300 | 14,100 | 12,900 | 45 |
| 50 | | | 12,400 | 12,900 | 13,100 | 12,600 | 11,600 | 50 |
| 55 | | | | 11,100 | 11,300 | 11,500 | 10,400 | 55 |
| 60 | | | | 9,500 | 9,800 | 9,900 | 9,500 | 60 |
| 65 | | | | | 8,400 | 8,500 | 8,600 | 65 |
| 70 | | | | | 7,200 | 7,300 | 7,400 | 70 |
| 75 | | | | | 6,100 | 6,300 | 6,400 | 75 |
| 80 | | | | | | 5,500 | 5,600 | 80 |
| 85 | | | | | | 4,700 | 4,800 | 85 |
| 90 | | | | | | | 4,200 | 90 |
| 95 | | | | | | | 3,600 | 95 |
| 100 | | | | | | | 3,100 | 100 |

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.



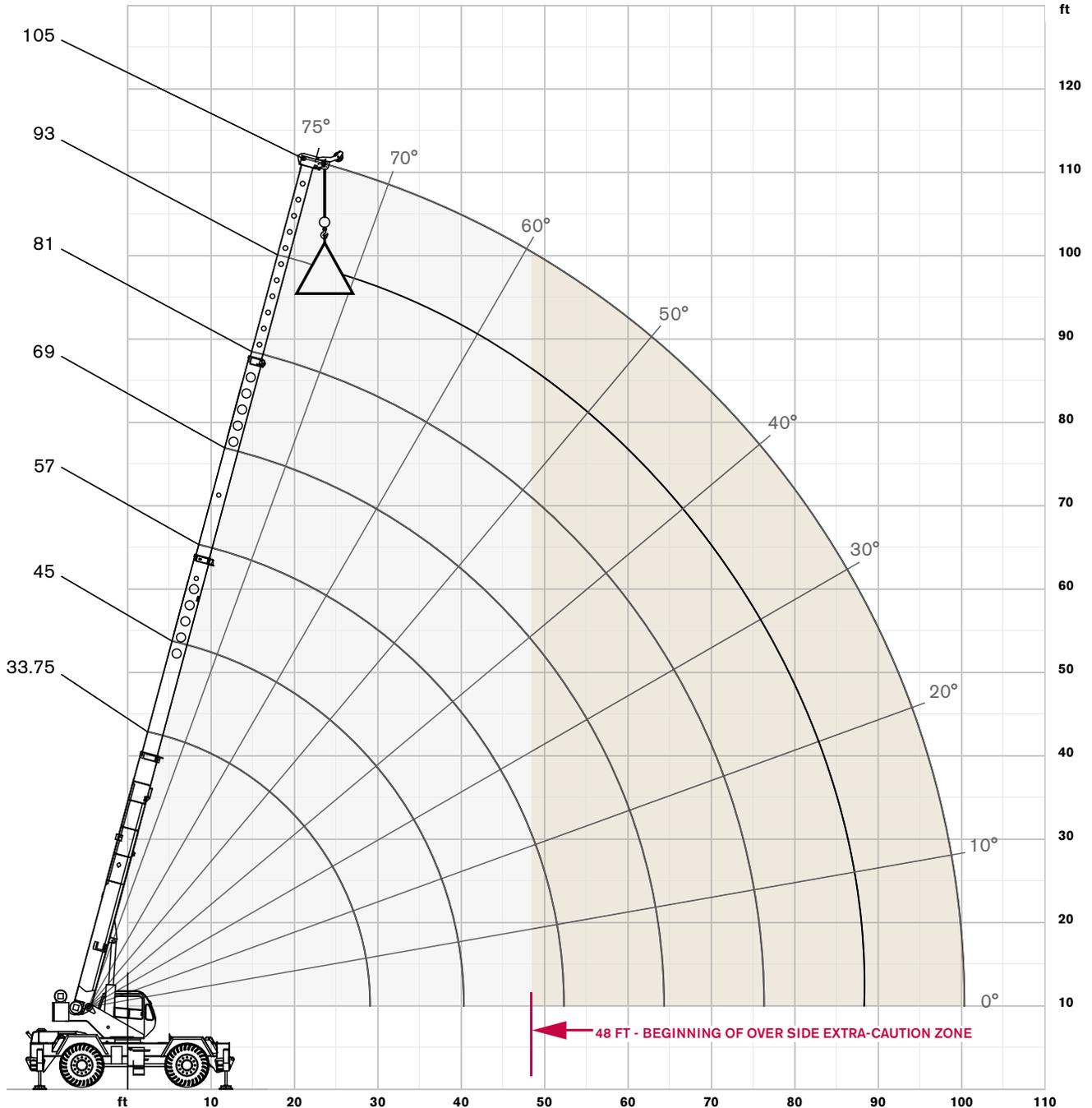
RANGE DIAGRAM - MAIN BOOM

RT 345-1 XL

Outriggers Fully Retracted (0%)



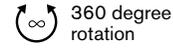
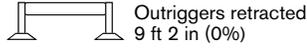
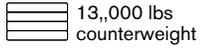
with hook block:
6 ft



LOAD CHART- MAIN BOOM

RT 345-1 XL

Outriggers Fully Retracted (0%)



Standard ASME B30.5

| ft | Boom Length | | | | | | | ft |
|----|-------------|--------|--------|--------|--------|--------|--------|----|
| | 33.75 ft | 45 ft | 57 ft | 69 ft | 81 ft | 93 ft | 105 ft | |
| 10 | 62,100 | 46,500 | | | | | | 10 |
| 12 | 43,500 | 44,500 | 45,000 | | | | | 12 |
| 15 | 29,000 | 29,800 | 30,300 | 30,600 | | | | 15 |
| 20 | 17,100 | 18,100 | 18,500 | 18,800 | 19,000 | | | 20 |
| 25 | 10,900 | 11,900 | 12,500 | 12,700 | 12,900 | 13,000 | | 25 |
| 30 | | 8,200 | 8,700 | 9,000 | 9,200 | 9,300 | 9,400 | 30 |
| 35 | | 5,600 | 6,200 | 6,600 | 6,700 | 6,900 | 6,900 | 35 |
| 40 | | 3,700 | 4,400 | 4,700 | 5,000 | 5,100 | 5,200 | 40 |
| 45 | | 3,500 | 3,000 | 3,300 | 3,600 | 3,700 | 3,800 | 45 |
| 50 | | | 1,900 | 2,300 | 2,500 | 2,700 | 2,800 | 50 |
| 55 | | | | 1,400 | 1,600 | 1,800 | 1,900 | 55 |
| 60 | | | | | | 1,100 | 1,200 | 60 |

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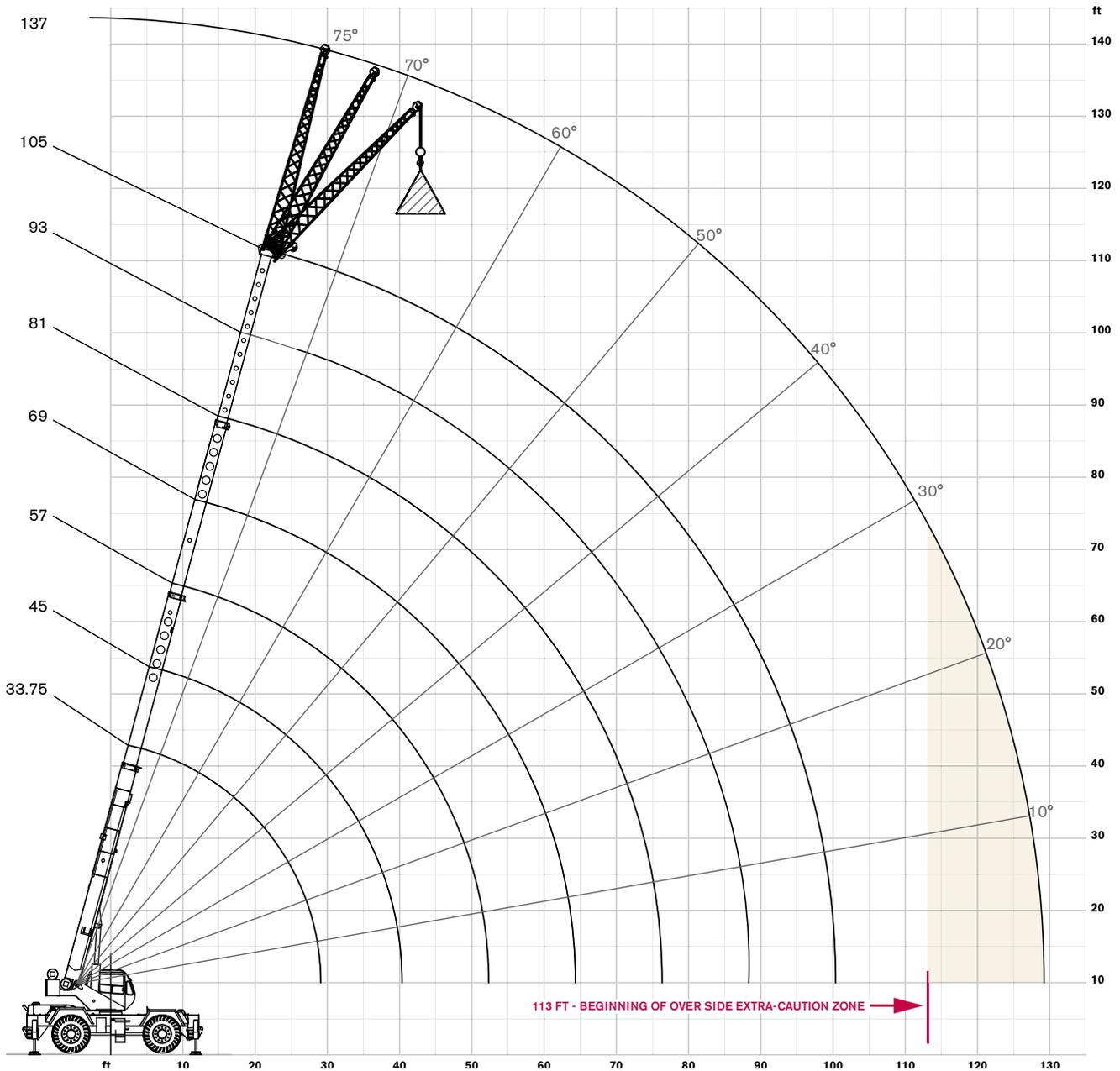
RANGE DIAGRAM - MAIN BOOM

RT 345-1 XL

With Jib, 32 ft offset



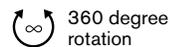
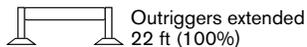
with hook block:
6 ft



LOAD CHART- MAIN BOOM

RT 345-1 XL

With Jib, 32 ft offset



Standard ASME B30.5

| 32 ft Offsettable Jib | | | | | |
|---|-------|---|-------|---|-------|
| 0° Offset | | 15° Offset | | 30° Offset | |
|  Radius (ft) | lbs |  Radius (ft) | lbs |  Radius (ft) | lbs |
| 49 | 9,100 | 59 | 8,300 | 65 | 6,400 |
| 50 | 8,700 | 60 | 8,000 | 66 | 6,200 |
| 51 | 8,300 | 62 | 7,600 | 68 | 6,100 |
| 59 | 7,700 | 68 | 7,200 | 73 | 5,800 |
| 66 | 7,100 | 74 | 6,900 | 78 | 5,700 |
| 68 | 6,500 | 79 | 6,500 | 83 | 5,500 |
| 78 | 6,000 | 84 | 5,900 | 88 | 5,300 |
| 86 | 5,200 | 91 | 4,900 | 94 | 4,500 |
| 92 | 4,400 | 97 | 4,100 | 100 | 3,800 |
| 97 | 3,600 | 103 | 3,300 | 105 | 3,200 |
| 103 | 2,900 | 108 | 2,700 | 109 | 2,600 |
| 109 | 2,200 | 114 | 2,000 | 115 | 2,000 |
| 116 | 1,500 | 121 | 1,500 | 120 | 1,500 |
| 123 | 1,000 | 127 | 1,100 | 126 | 1,100 |

Notes to lifting capacity

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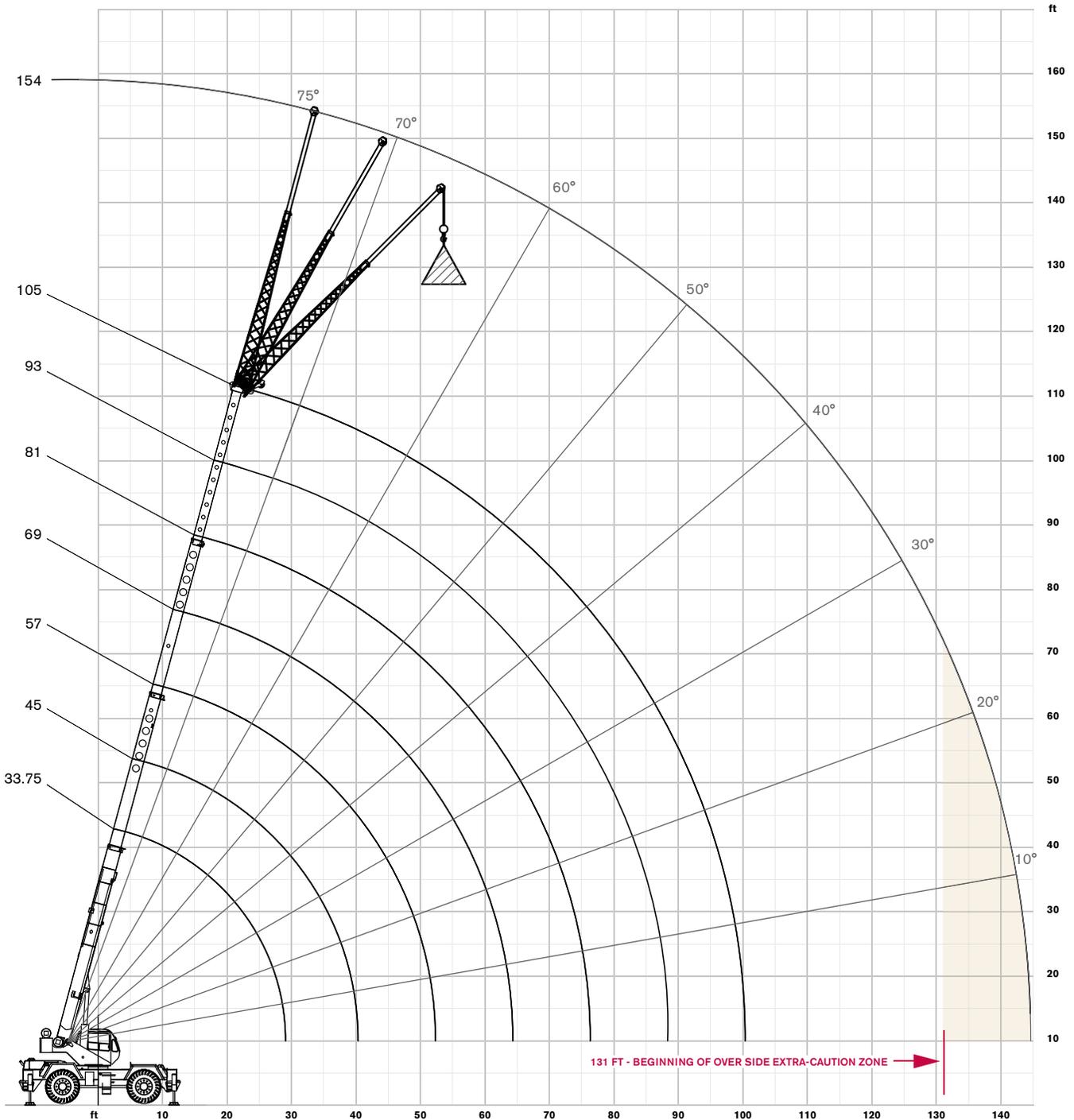
RANGE DIAGRAM - MAIN BOOM

RT 345-1 XL

With Jib, 49 ft offset



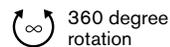
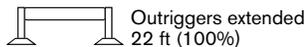
with hook block:
6 ft



LOAD CHART- MAIN BOOM

RT 345-1 XL

With Jib, 49 ft offset



Standard ASME B30.5

| 49 ft Offsettable Jib | | | | | |
|---|-------|---|-------|---|-------|
| 0° Offset | | 15° Offset | | 30° Offset | |
|  Radius (ft) | lbs |  Radius (ft) | lbs |  Radius (ft) | lbs |
| 65 | 4,900 | 62 | 3,200 | 65 | 2,500 |
| 67 | 4,600 | 67 | 3,100 | 70 | 2,500 |
| 68 | 4,300 | 72 | 3,000 | 75 | 2,400 |
| 75 | 3,900 | 79 | 2,800 | 82 | 2,300 |
| 81 | 3,600 | 86 | 2,700 | 89 | 2,300 |
| 87 | 3,400 | 92 | 2,600 | 96 | 2,200 |
| 92 | 3,200 | 98 | 2,500 | 102 | 2,200 |
| 99 | 2,900 | 106 | 2,400 | 109 | 2,100 |
| 106 | 2,700 | 112 | 2,300 | 116 | 2,100 |
| 113 | 2,600 | 119 | 2,200 | 121 | 2,000 |
| 119 | 2,500 | 124 | 2,100 | 127 | 2,000 |
| 126 | 2,000 | 131 | 1,900 | 132 | 1,700 |
| 133 | 1,500 | 137 | 1,500 | 136 | 1,300 |
| 141 | 1,100 | 142 | 1,100 | 140 | 900 |

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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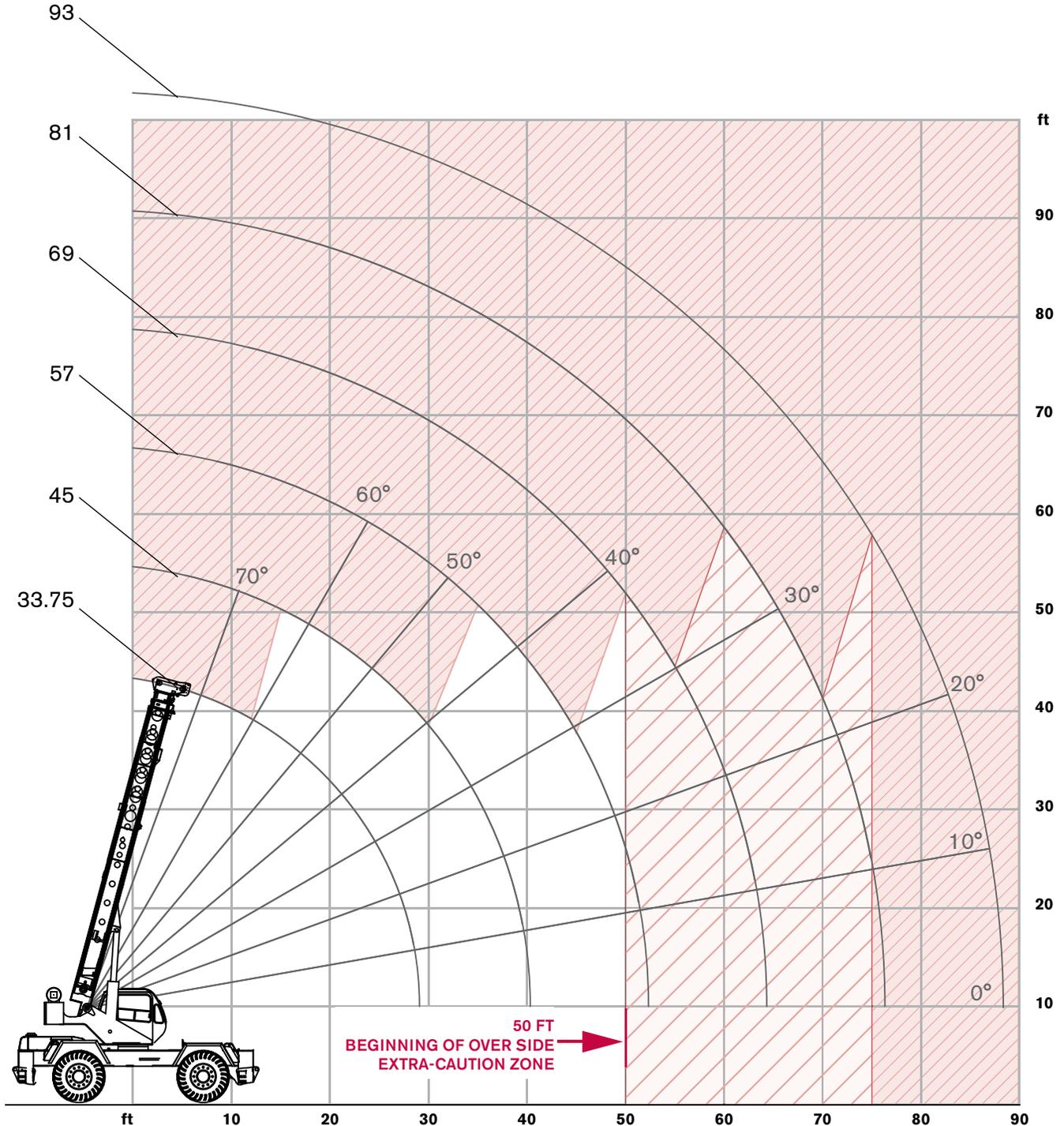
RANGE DIAGRAM - MAIN BOOM

RT 345-1 XL

On Tires



with hook block:
6 ft



LOAD CHART- MAIN BOOM

RT 345-1 XL

On Tires

 13,000 lbs counterweight

 360 degree rotation

 On tires
26.5 x 25-26 PR

Standard ASME B30.5

| Boom | | Travel Speed Boom straight over front | | |
|--------|--------|--|--------|---------|
| Radius | Length | 0 mph | Creep | 2.5 mph |
| ft | ft | lb | lb | lb |
| 10 | 33.75 | 64,500 | 48,600 | 40,600 |
| 12 | 33.75 | 56,200 | 42,100 | 33,300 |
| 15 | 45 | 46,800 | 34,800 | 28,700 |
| 20 | 45 | 30,300 | 26,400 | 21,500 |
| 25 | 45 | 20,300 | 20,300 | 16,500 |
| 30 | 45 | 14,600 | 14,600 | 12,900 |
| 35 | 57 | 11,200 | 11,200 | 10,700 |
| 40 | 57 | 8,700 | 8,700 | 8,700 |
| 45 | 57 | 7,000 | 7,000 | 7,000 |
| 50 | 69 | 5,700 | 5,700 | 5,700 |
| 55 | 69 | 4,600 | 4,600 | 4,600 |
| 60 | 81 | 3,800 | 3,800 | 3,800 |
| 65 | 81 | 2,900 | 2,900 | 2,900 |
| 70 | 81 | 2,100 | 2,100 | 2,100 |
| 75 | 93 | 1,300 | 1,300 | 1,300 |

Notes to lifting capacity

Lifting capacities do not exceed 75% 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

RT 345-1 XL

Boom

| Standard configuration: | |
|---|--|
|  | 4 sections hydraulic actuated boom |
|  | Full power mechanically synchronized |
|  | Min. / Max. 33.75 ft / 105 ft |
|  | Boom elevation angle range (min. / max.) -4° / 76° |
| Optional configuration: | |
|  | Single sheave |
|  | One section, side stowable Angular offsets 0, 15 and 30 degrees |
| | Two sections bi-fold, side stowable Angular offsets 0, 15 and 30 degrees |
|  | With one section jib (max.) 140 ft |
|  | With two section jib (max.) 158 ft |

Hoist, Rope and Hook

| Standard configuration: | |
|---|--|
|  | Grooved drum Storage capacity 570 ft |
|  | Two speed ratios |
| | Without load in 5th layer (low range / high range) 266 ft/min / 533 ft/min Without load in 1st layer (low range / high range) 184 ft/min / 369 ft/min |
|  | 6 x 19 IWRC XIPS, right regular lay, preformed |
|  | 5/8 in |
|  | 450 ft |
|  | Max. line pull; 1st layer low-range 15,639 lb |
| | Max. line pull permissible 9,000 lb |



TECHNICAL DESCRIPTION

RT 345-1 XL

Optional configuration:

| | | |
|---|--|--|
|  | 2 sheaves 3 sheaves 4 sheaves | 25 ton 30 ton 40 ton |
|  | Grooved drum Storage capacity | 570 ft |
|  | Without load in 5th layer (low range / high range) Without load in 1st layer (low range / high range) | 266 ft/min / 533 ft/min 184 ft/min / 369 ft/min |
|  | Rotation resistant compacted strand 18x19 or 19x19 | |
|  | | 5/8 in |
|  | | 450 ft |
|  | Minimum breaking strength Max. line pull permissible | 45,200 lbs 9,000 lbs |

Superstructure

Standard configuration:

| | | |
|---|---|-----------------|
|  | Non stop Maximum rotation speed without load | 360° 2.8 rpm |
|  | Hydraulic motor Planetary reducer | |
|  | Manually actuated by foot pedal | 360° house lock |

Cab, Controls, Operator aids and Load limiter / Load indicator

Standard configuration:

| | | |
|---|--|--|
|  | Sliding door Hinged, tinted all glass skylight Six way adjustable seat | |
|  | Armrest mounted dual axis electro-proportional joysticks Steering wheel column with gear selector on the left and directional light selector on the right Dashboard mounted switches for outrigger operation | |
|  | Graphic interface for load indicator | |

TECHNICAL DESCRIPTION

RT 345-1 XL

Optional configuration:



Hydraulic powered air conditioner
 Hydraulic powered heater
 Work lights
 Rotating beacon

Carrier, Engine, Drive-line and Hydraulic system

Standard configuration:



Hydraulic, independent extension:
 Diameter of outtrigger pads 24 in
 Area of outtrigger pads 452 in²



Cummins QSB6.7 6 cylinders
 Rated power 160 hp @ 2,200 rpm
 Maximum gross torque 540 ft-lb @ 1,400 rpm
 Intake: turbocharger with intercooler
 Fuel type Diesel
 Fuel tank capacity 50 gallons



6 x 6 powershift transmission with torque converter
 Full time 4WD (Four-Wheel Drive)
 Rigid mounted front axle
 Oscillating rear axle
 Differential lock on front axle and rear axle
 Rear axle oscillation lock - manual or automatic actuation
 Air-over-hydraulic disc brakes
 Parking brake on front axle
 Hydraulic oil cooler on carrier



Hydraulic power steering
 Front wheel steering
 Four wheel steering concentric
 Four wheel steering crab
 Optional rear wheel steering package



Hydraulic Pumps:
Tandem pumps:
 Boom lift / Telescope 38.5 gal/min @ 3,500 psi
 Power steering / Outriggers and Swing 21 gal/min @ 2,500 psi
Single pump:
 Main and auxiliary hoist pump 59.5 gal/min @ 3,500 psi

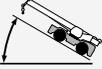
Hydraulic oil reservoir capacity 114 gallons
 Hydraulic oil suction filter 250 microns
 Hydraulic oil return filter 5 microns



TECHNICAL DESCRIPTION

RT 345-1 XL

Vehicle performance

| | | Standard configuration: | |
|---|------------------------------|--------------------------------|----------|
|  | Max. in 1 st gear | | 240% |
| | Max. in 6 th gear | | 5.2% |
| <hr/> | | | |
|  | Max. (6 th gear) | | 24.5 mph |

Tires

| | | Standard configuration: | |
|---|---------------------------------------|--------------------------------|------------------|
|  | Wide tread - Earth mover pattern (E3) | | 26.5 x 25 - 26PR |



RT 345-1 XL**www.terexcranes.com**

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