

FR19 US

PICK AND CARRY
CRANE



MAXIMUM CAPACITY
19 US ton



MAXIMUM BOOM LENGTH
59'9"



MAXIMUM HOOK HEIGHT
56'3"



STABILITY
66.6%



CLUTCH FREE OPERATION

OVERVIEW

Compact and powerful

The FR19 US is a compact pick and carry mobile crane from Franna designed for the North American market with a maximum lifting capacity of 19 US ton. It has a powerful 121 hp Tier 4F emission compliant engine with fully powershift transmission and heavy-duty axles, making it versatile for industrial yards and a wide range of applications.

Smooth and easy to operate

A large torque converter and no clutch pedal reduces driver fatigue during long crane hours. It also combines safety and comfort with smooth steering flexibility, allowing the operator to lift and maneuver in compact spaces.

Durable and reliable

The FR19 US has a heavy-duty U-Section fabricated boom with welding on the neutral axis, offering superior durability and a competitive edge when lifting heavy loads.

KEY FEATURES AND BENEFITS:

- ▶ 19 US ton @ 4'11" radius
- ▶ 1.1 US ton @ 53'7" radius
- ▶ 56'3" maximum hook height
- ▶ 11.5 US ton capacity on 4 part hook block
- ▶ Single line pull 4.6 US ton
- ▶ Single lift cylinder enhances operator's vision.
- ▶ Easy access to all key maintenance points
- ▶ Ergonomic cabin design ensures maximum comfort for the operator



TECHNICAL DESCRIPTION



| 01. Boom | Metric | Imperial |
|------------------------------|---------------|------------|
| Maximum boom length | 18.2m | 59'9" |
| Maximum hook height | 17.1 m | 56'3" |
| Boom elevation angle range | -6° / 60° | |
| Maximum hook height with jib | 19.5 m | 63'11" |
| Articulation | 40° R / 40° L | |
| Machinery hook (rhino) | 8 tonne | 8.8 US ton |

| 02. Winch | Metric | Imperial |
|---|----------------------|--------------------------|
| Maximum line pull | 4.2 tonne | 4.62 US ton |
| Two speed winch | 58 m/min 77 m/min | 190 ft/min 252 ft/min |
| Hook block (4 part) (maximum rated capacity) | 10.5 tonne | 11.5 US ton |

| 03. Engine & Transmission | Metric | Imperial |
|---------------------------|---------------------------------|------------|
| Standard engine | Cummins QSF3.8 Tier 4 F | |
| Engine power | 90 kW (121 hp) @ 2200 rpm | |
| Engine torque | 500 Nm | 369 lb-ft |
| Fuel Type | Diesel | |
| Fuel Capacity | 270 litre | 71 gallons |
| Transmission | Carraro 4 Speed Full Powershift | |
| Transfer case | SACHS W300 2.64 204 | |

| 04. Hydraulic System | Metric | Imperial |
|--------------------------|---------------|---------------|
| Tandem Gear pump | 53cc/rev | 3.2 cu.in/rev |
| Maximum pump flow rate | 115 litre/min | 30 gal/min |
| Maximum working pressure | 220 bar | 3200 psi |
| Hydraulic oil capacity | 210 litre | 55.5 gallons |

| 05. Chassis | Metric | Imperial |
|----------------|-----------|------------|
| Front Axle | 6,700 kg | 14,471 lbs |
| Rear Axle | 10,600 kg | 23,369 lbs |
| Axle total | 17,300 kg | 38,140 lbs |
| Turning circle | 6.7 m | 22'1" |

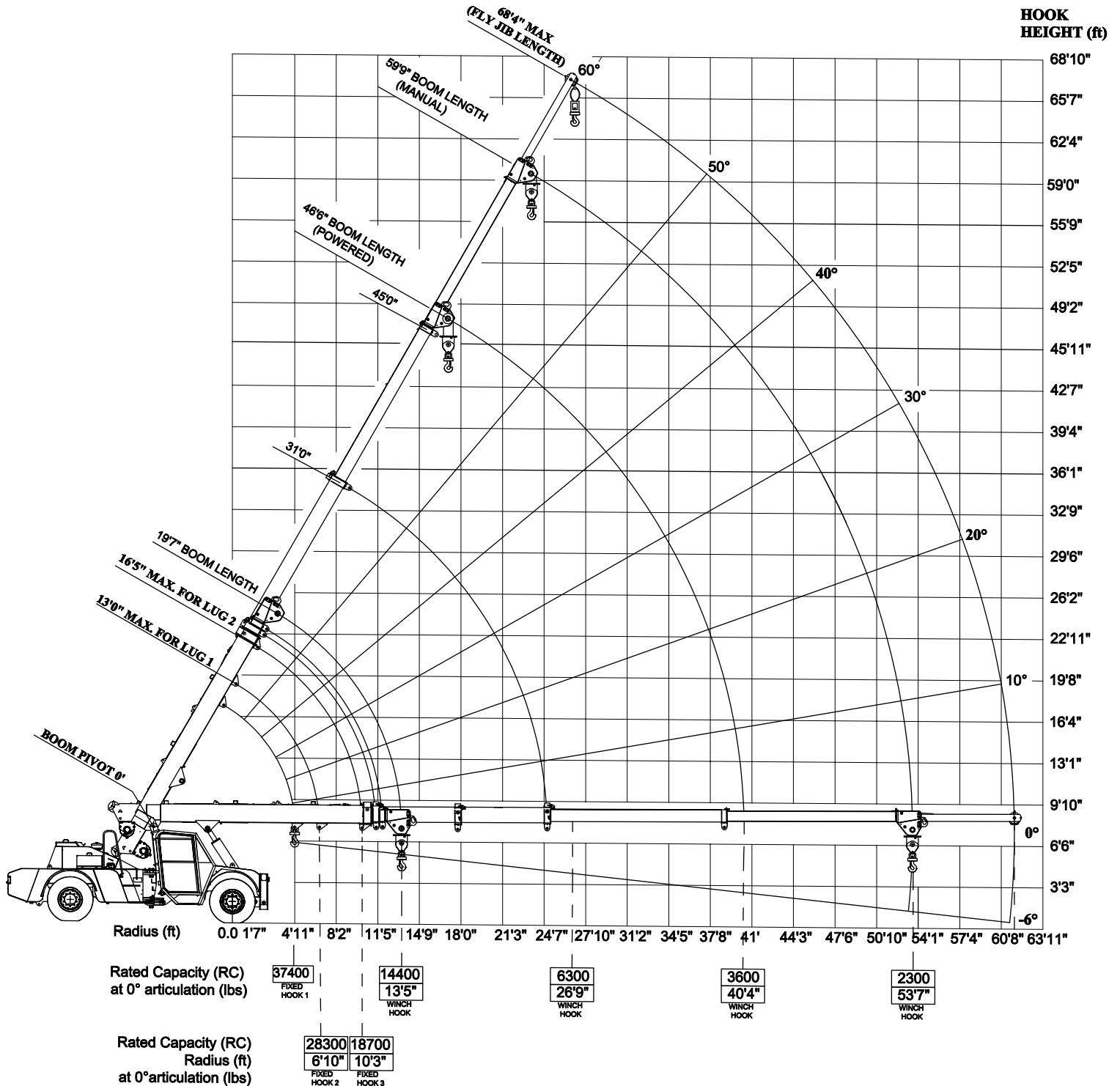
| 06. Brakes & Suspension | |
|-------------------------|---|
| Brake System | Power assisted dual circuit hydraulic |
| Suspension | Two semi elliptic springs on rear axle, front axle rigidly mounted with chassis |

| 07. Vehicle Performance | Metric | Imperial |
|--------------------------------|---------------|-----------|
| Maximum rated travel speed | 35 km/h | 21.75 mph |
| Gradeability (smooth concrete) | (unladen) 74% | |



RADIUS LOAD CHART

IMPERIAL

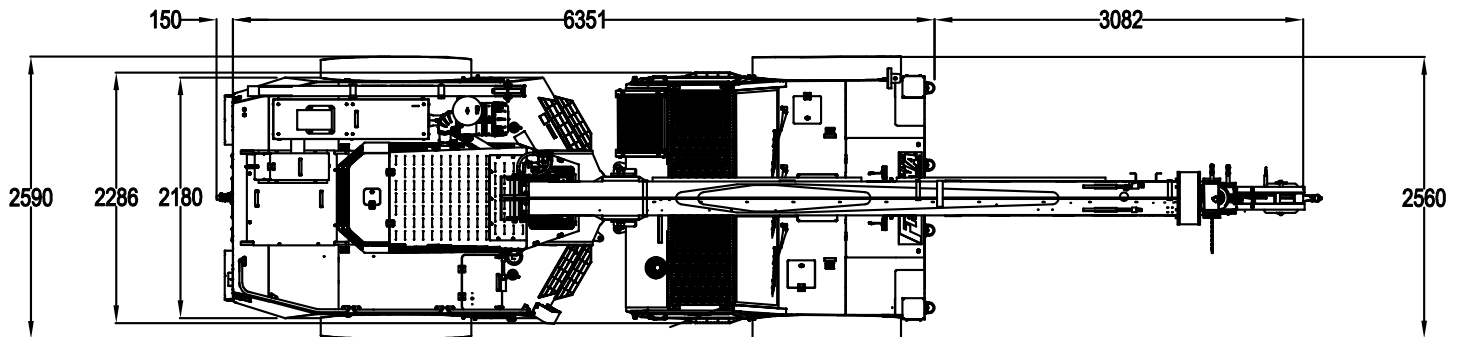


NOTE:

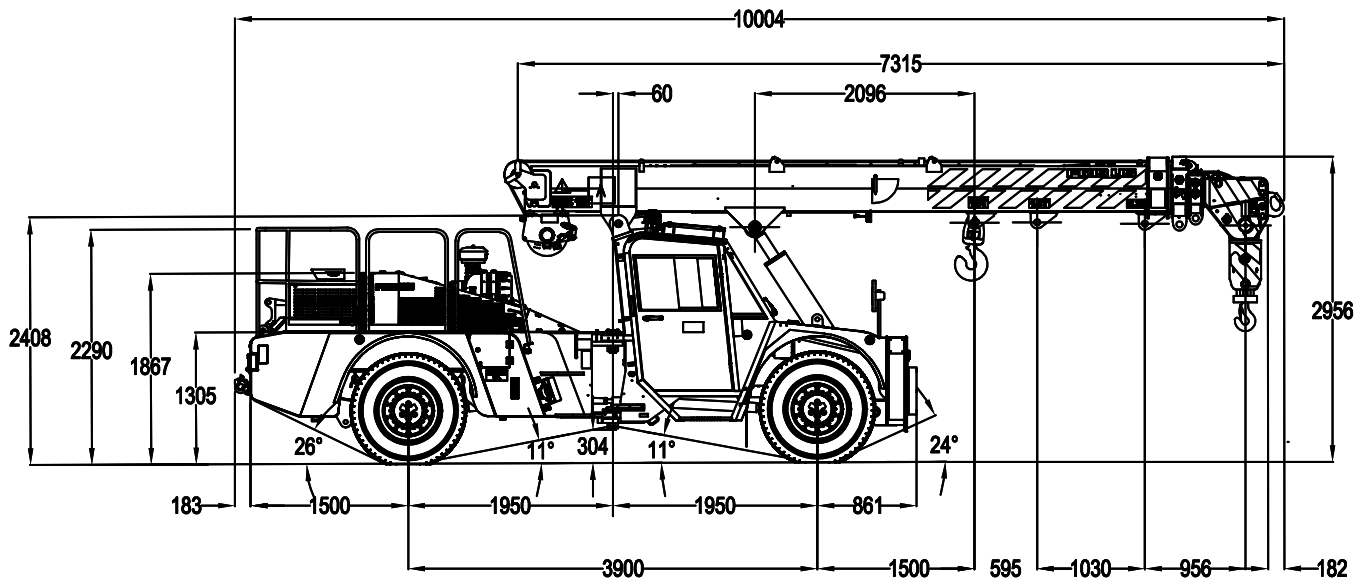
- Radius is the horizontal distance measured from the center of front wheel to the load center point.
- Lifting capacities do not exceed 66.6% of tipping load as per EN 13000.
- Rated capacity values are based on a firm and level surface (up to 1% gradient) tyres 11.00 R 20-18 TR TT inflated to 116 PSI.
- Steel wire rope is Ø13mm (35x7) with minimum breaking force ≥145kN.
- Use 4 fall hoist reeving for powered and manual boom. Use single fall hoist reeving when using fly jib extension.
- Weight of the hook blocks and slings is part of the load, and is to be deducted from the capacity ratings.
- Rated capacity load in pick and carry shall be carried with the minimum boom length & as close as possible to the ground speed not in excess of 1.2 MPH.
- Boom head mounted rhino hook max capacity 17625 lbs (Refer rhino hook load chart in operator manual).
- Hydraulic main relief valve setting is 3200 psi.
- Fly jib shown is an optional item & provided as per customer request.
- Consult Operations and Maintenance manual for further details.

DIMENSIONS / AREA OF OPERATION METRIC

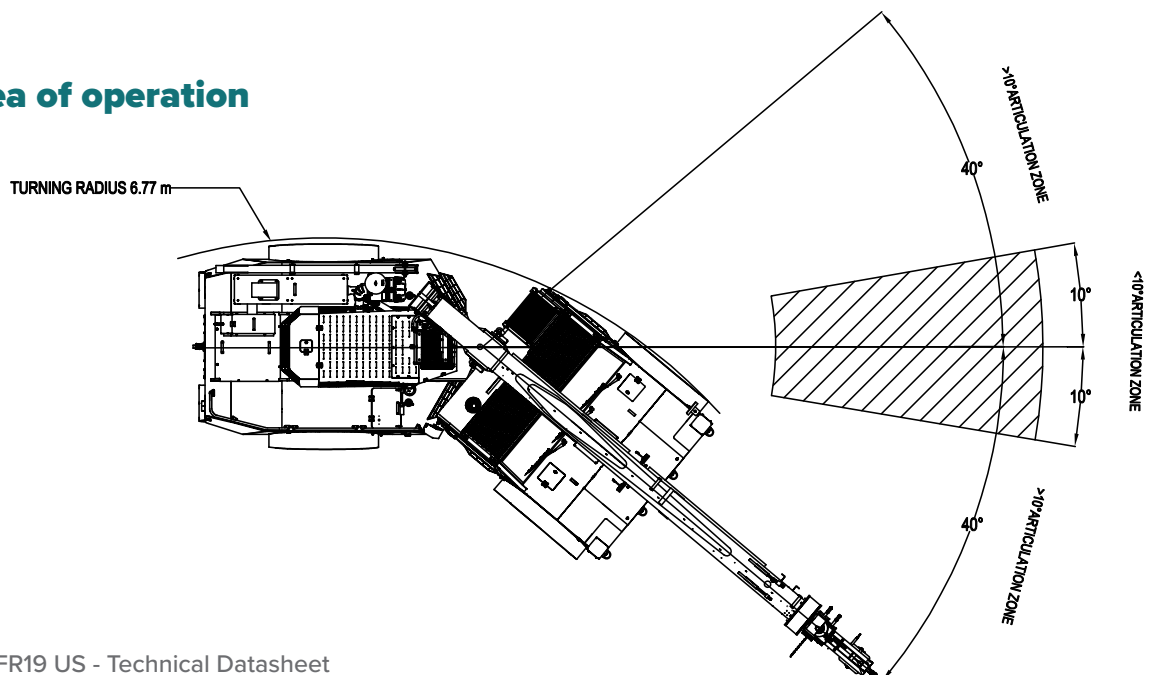
Plan view



Right hand view

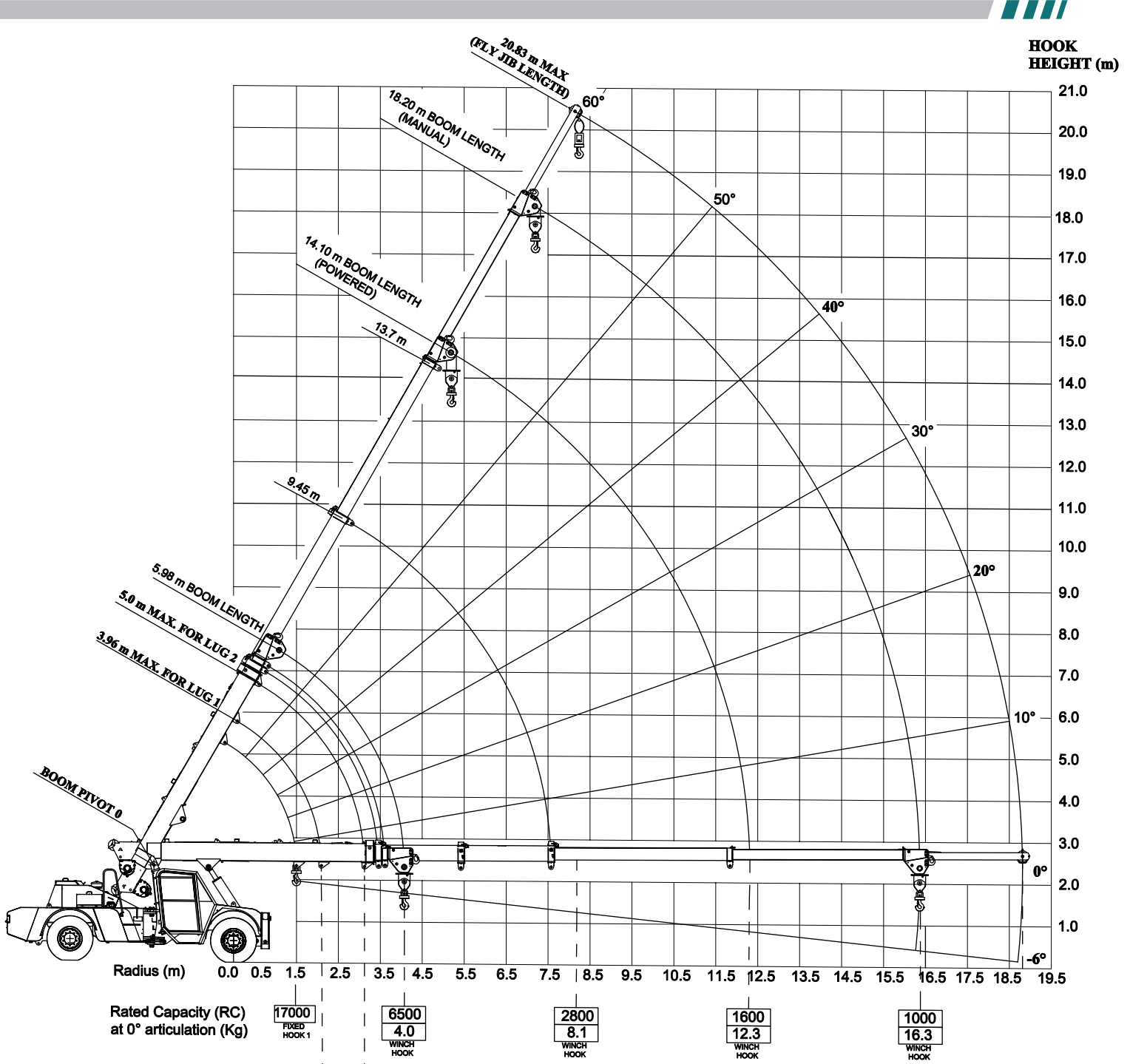


Area of operation



RADIUS LOAD CHART

METRIC



The markings on the crane are in imperial tons. The units above are in metric kg

NOTE:

1. Radius is the horizontal distance measured from the center of front wheel to the load center point.
2. Lifting capacities do not exceed 66.6% of tipping load as per EN 13000.
3. Rated capacity values are based on a firm and level surface (up to 1% gradient) with tyres 11.00 R 20-18 TR TT inflated to 8 kg/sq.cm.
4. Steel wire rope is Ø13mm (35x7) with minimum breaking force ≥145kN.
5. Use 4 fall hoist reeving for powered and manual boom. Use single fall hoist reeving when using fly jib extension.
6. Weight of the hook blocks and slings is part of the load, and is to be deducted from the capacity ratings.
7. Rated capacity load in pick and carry shall be carried with the minimum boom length & as close as possible to the ground speed not in excess of 1.8 KMPH.
8. Boom head mounted rhino hook max capacity 8000 Kg (Refer rhino hook load chart in operator manual).
9. Hydraulic main relief valve setting is 220 bar.
10. Fly jib shown is an optional item & provided as per customer request.
11. Consult Operations and Maintenance manual for further details.

LOAD CHART IMPERIAL

| RATED CAPACITY CHART - FALL BLOCK | | | | | | | | | | | | | | | |
|-----------------------------------|------------------|---------|---------|---------|---------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| RADIUS (ft) | BOOM LENGTH (ft) | | | | | | | | | | | | | | |
| | PITCH 0° ROLL 0° | | | | | | | | | | | | | | |
| | 19'8" | 21' | 23' | 25' | 27' | 29' | 31' | 33' | 35' | 37' | 39' | 41' | 43' | 45' | 46'6" |
| 5' | 21600 | 23100 | | | | | | | | | | | | | |
| | 21600 | 23100 | | | | | | | | | | | | | |
| | 55 | 58 | | | | | | | | | | | | | |
| 7' | 20700 | 21100 | 23100 | 23100 | 23100 | | | | | | | | | | |
| | 20700 | 21100 | 23100 | 23100 | 23100 | | | | | | | | | | |
| | 48 | 51 | 55 | 58 | 61 | | | | | | | | | | |
| 9' | 20300 | 20400 | 20700 | 21300 | 22500 | 21600 | | | | | | | | | |
| | 20100 | 20100 | 20100 | 20100 | 20100 | 20100 | | | | | | | | | |
| | 39 | 44 | 49 | 53 | 56 | 59 | | | | | | | | | |
| 11' | 18100 | 18100 | 18100 | 18100 | 18100 | 18100 | 18100 | 17900 | | | | | | | |
| | 16100 | 16100 | 16200 | 16200 | 16200 | 16200 | 16200 | 16200 | | | | | | | |
| | 29 | 35 | 42 | 47 | 51 | 54 | 57 | 59 | | | | | | | |
| 13' | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 12700 | | | | | |
| | 13300 | 13400 | 13400 | 13400 | 13400 | 13400 | 13400 | 13400 | 13400 | 12700 | | | | | |
| | 12 | 24 | 34 | 40 | 45 | 49 | 52 | 55 | 57 | 59 | | | | | |
| 15' | 14400 | 12900 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 12800 | 11700 | 11000 | 10500 | | | |
| | 12800 | 11400 | 11300 | 11300 | 11400 | 11400 | 11400 | 11400 | 11400 | 11400 | 11000 | 10500 | | | |
| | (13'5") | (14'9") | 23 | 32 | 38 | 43 | 47 | 50 | 53 | 56 | 58 | 60 | | | |
| 17' | | | 11100 | 11000 | 11100 | 11100 | 11100 | 11100 | 11100 | 10900 | 10100 | 9700 | 9200 | 8900 | |
| | | | 9900 | 9800 | 9800 | 9800 | 9800 | 9800 | 9800 | 9800 | 9800 | 9700 | 9200 | 8900 | |
| | | | (16'9") | 22 | 31 | 37 | 42 | 46 | 49 | 52 | 54 | 56 | 58 | 60 | |
| 19' | | | 9800 | 9700 | 9700 | 9700 | 9700 | 9700 | 9700 | 9700 | 9400 | 9000 | 8600 | 8200 | 8000 |
| | | | 8600 | 8600 | 8600 | 8600 | 8600 | 8600 | 8600 | 8600 | 8600 | 8600 | 8600 | 8200 | 8000 |
| | | | (18'9") | 21 | 30 | 36 | 41 | 44 | 48 | 50 | 53 | 55 | 57 | 58 | |
| 23' | | | | 8600 | 7700 | 7700 | 7700 | 7700 | 7700 | 7700 | 7700 | 7700 | 7500 | 7200 | 6800 |
| | | | | 7600 | 6800 | 6800 | 6800 | 6800 | 6800 | 6800 | 6800 | 6800 | 6800 | 6800 | 6800 |
| | | | | (20'9") | (22'9") | 20 | 28 | 34 | 38 | 42 | 45 | 48 | 50 | 52 | |
| 27' | | | | | | | 7000 | 6300 | 6300 | 6300 | 6300 | 6300 | 6300 | 6200 | 6000 |
| | | | | | | | 6100 | 5500 | 5500 | 5500 | 5500 | 5500 | 5500 | 5500 | 5500 |
| | | | | | | | (24'9") | (26'9") | 19 | 27 | 32 | 37 | 40 | 43 | 45 |
| 31' | | | | | | | | | 5700 | 5200 | 5200 | 5200 | 5200 | 5200 | 5300 |
| | | | | | | | | | 5000 | 4600 | 4500 | 4600 | 4600 | 4600 | 4600 |
| | | | | | | | | | (28'9") | (30'9") | 18 | 26 | 31 | 35 | 38 |
| 35' | | | | | | | | | | | 4800 | 4400 | 4400 | 4400 | 4400 |
| | | | | | | | | | | | 4200 | 3800 | 3800 | 3800 | 3800 |
| | | | | | | | | | | | (32'9") | (34'9") | 17 | 25 | 29 |
| 39' | | | | | | | | | | | | | 4100 | 3800 | 3800 |
| | | | | | | | | | | | | | 3500 | 3200 | 3200 |
| | | | | | | | | | | | | | (36'9") | (38'9") | 15 |
| 43' | | | | | | | | | | | | | | | 3600 |
| | | | | | | | | | | | | | | | 3100 |
| | | | | | | | | | | | | | | | (40'4") |

KEY:

- RC (lb) AT 0 DEG ARTICULATION
- RC (lb) AT FULL ARTICULATION
- BOOM ANGLE OR (RADIUS AT 0 DEG BOOM ANGLE)

Weight of slings & hook block to be added to load
 Read and understand warning notes before operating crane
 Lifting capacities do not exceed 66.6% of tipping load as per EN 13000

LOAD CHART METRIC



| RATED CAPACITY CHART - FALL BLOCK | | | | | | | | | | | | | | | |
|-----------------------------------|-----------------|-------|-------|--------|--------|--------|--------|---------|--------|--------|--------|---------|--------|---------|---------|
| RADIUS (m) | BOOM LENGTH (m) | | | | | | | | | | | | | | |
| | PITCH 0° | | | | | | | ROLL 0° | | | | | | | |
| | 5.90 | 6.50 | 7.00 | 7.50 | 8.00 | 8.50 | 9.00 | 10.00 | 10.50 | 11.00 | 11.50 | 12.50 | 13.00 | 13.50 | 14.10 |
| 1.5 | 9800 | 10500 | | | | | | | | | | | | | |
| | 9800 | 10500 | | | | | | | | | | | | | |
| | 55 | | | | | | | | | | | | | | |
| 2.0 | 9400 | 9500 | 10500 | 10500 | 10500 | | | | | | | | | | |
| | 9400 | 9500 | 10500 | 10500 | 10500 | | | | | | | | | | |
| | 48 | 51 | 55 | 58 | 61 | | | | | | | | | | |
| 2.5 | 9200 | 9250 | 9400 | 9600 | 10200 | 9800 | | | | | | | | | |
| | 9100 | 9100 | 9100 | 9100 | 9100 | 9100 | | | | | | | | | |
| | 39 | 44 | 49 | 53 | 56 | 59 | | | | | | | | | |
| 3.0 | 8200 | 8200 | 8200 | 8200 | 8200 | 8200 | 8200 | 8100 | | | | | | | |
| | 7300 | 7300 | 7350 | 7300 | 7300 | 7300 | 7300 | 7300 | | | | | | | |
| | 29 | 35 | 42 | 47 | 51 | 54 | 57 | 59 | | | | | | | |
| 3.5 | 6800 | 6800 | 6800 | 6800 | 6800 | 6800 | 6800 | 6800 | 6800 | 6800 | 5700 | | | | |
| | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 5700 | | | | |
| | 12 | 24 | 34 | 40 | 45 | 49 | 52 | 55 | 57 | 59 | | | | | |
| 4.5 | 6500 | 5800 | 5800 | 5800 | 5800 | 5800 | 5800 | 5800 | 5800 | 5300 | 5000 | 4700 | | | |
| | 5800 | 5100 | 5100 | 5100 | 5100 | 5100 | 5100 | 5100 | 5100 | 5100 | 5000 | 4700 | | | |
| | (4.08) | (4.5) | 23 | 32 | 38 | 43 | 47 | 50 | 53 | 56 | 58 | 60 | | | |
| 5.0 | | | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | 4900 | 4600 | 4400 | 4200 | 4000 | |
| | | | 4500 | 4400 | 4400 | 4400 | 4400 | 4400 | 4400 | 4400 | 4400 | 4400 | 4100 | 4000 | |
| | | | (5.1) | 22 | 31 | 37 | 42 | 46 | 49 | 52 | 54 | 56 | 58 | 60 | |
| 6.0 | | | | 4400 | 4400 | 4400 | 4400 | 4400 | 4400 | 4400 | 4300 | 4000 | 3900 | 3700 | 3600 |
| | | | | 3900 | 3900 | 3900 | 3900 | 3900 | 3900 | 3900 | 3900 | 3900 | 3900 | 3700 | 3600 |
| | | | | (5.75) | 21 | 30 | 36 | 41 | 44 | 48 | 50 | 53 | 55 | 57 | 58 |
| 7.0 | | | | | 3900 | 3500 | 3500 | 3500 | 3500 | 3500 | 3500 | 3500 | 3400 | 3200 | 3100 |
| | | | | | 3400 | 3100 | 3100 | 3100 | 3100 | 3100 | 3100 | 3100 | 3100 | 3100 | 3100 |
| | | | | | (6.32) | (6.93) | 20 | 28 | 34 | 38 | 42 | 45 | 48 | 50 | 52 |
| 8.0 | | | | | | | 3200 | 2800 | 2800 | 2800 | 2800 | 2800 | 2800 | 2800 | 2700 |
| | | | | | | | 2800 | 2500 | 2500 | 2500 | 2500 | 2500 | 2500 | 2500 | 2500 |
| | | | | | | | (7.54) | (8.15) | 19 | 27 | 32 | 37 | 40 | 43 | 45 |
| 9.0 | | | | | | | | | 2600 | 2400 | 2400 | 2400 | 2400 | 2400 | 2400 |
| | | | | | | | | | 2200 | 2100 | 2100 | 2100 | 2100 | 2100 | 2100 |
| | | | | | | | | | (8.76) | (9.37) | 18 | 26 | 31 | 35 | 38 |
| 10.5 | | | | | | | | | | | 2200 | 2000 | 2000 | 2000 | 2000 |
| | | | | | | | | | | | 1900 | 1700 | 1700 | 1700 | 1700 |
| | | | | | | | | | | | (9.98) | (10.59) | 17 | 25 | 29 |
| 11.5 | | | | | | | | | | | | | 1900 | 1700 | 1700 |
| | | | | | | | | | | | | | 1600 | 1400 | 1400 |
| | | | | | | | | | | | | | (11.2) | (11.81) | 15 |
| 13.0 | | | | | | | | | | | | | | | 1600 |
| | | | | | | | | | | | | | | | 1400 |
| | | | | | | | | | | | | | | | (12.29) |

KEY:

- RC (kg) AT 0 DEG ARTICULATION
- RC (kg) AT FULL ARTICULATION
- BOOM ANGLE OR (RADIUS AT 0 DEG BOOM ANGLE)

Weight of slings & hook block to be added to load
 Read and understand warning notes before operating crane
 Lifting capacities do not exceed 66.6% of tipping load as per EN 13000

The markings on the crane are in imperial tons. The units above are in metric kg