# HAWKES BAY CRANE HIRE 2015 LTD

# KATO CR250

## 25 TONNE ALL TERRAIN CRANE


GENERAL DIMENSIONS:

| Description | Dimensions (mtrs) |
|---|---|
| Overall height | 3.40 metres |
| Overall width | 2.40 metres |
| Overall length of carrier including boom | 9.07 metres |
| Regd weight TARE | 24000 kgs |

## RATED LIFTING CAPACITY WHEN OUTRIGGERS ARE USED:

Based on *BS1757 : 1986 *DIN 15019-2 *75% of tipping loads

| Working radius (m) | Outriggers fully extended (6.0m) - 360° full range | | | | | Outriggers intermediately extended (4.5m) - 360° full range | | | | | Outriggers completely retracted (blocked on vertical cylinders) - 360° full range | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6.7m Boom | 11.0m Boom | 15.2m Boom | 21.6m Boom | 28.0m Boom | 6.7m Boom | 11.0m Boom | 15.2m Boom | 21.6m Boom | 28.0m Boom | 6.7m Boom | 11.0m Boom | 15.2m Boom | 21.6m Boom | 28.0m Boom |
| 2.8 | 25.00 | 12.00 | 12.00 | | | 25.00 | 12.00 | 12.00 | | | 10.00 | 9.50 | 7.90 | | |
| 3.0 | 22.00 | 12.00 | 12.00 | 8.00 | | 22.00 | 12.00 | 12.00 | 8.00 | | 8.75 | 8.45 | 7.15 | 6.50 | |
| 3.5 | 20.00 | 12.00 | 12.00 | 8.00 | | 20.00 | 12.00 | 12.00 | 8.00 | | 6.60 | 6.30 | 5.65 | 5.45 | |
| 4.0 | 17.00 | 12.00 | 12.00 | 8.00 | 6.50 | 17.00 | 12.00 | 12.00 | 8.00 | 6.50 | 5.10 | 4.85 | 4.55 | 4.55 | 4.25 |
| 4.5 | 15.00 | 12.00 | 12.00 | 8.00 | 6.50 | 15.00 | 12.00 | 12.00 | 8.00 | 6.50 | 4.10 | 3.85 | 3.70 | 3.80 | 3.65 |
| 5.0 | | 12.00 | 12.00 | 8.00 | 6.50 | | 12.00 | 12.00 | 8.00 | 6.50 | | 3.10 | 3.00 | 3.20 | 3.15 |
| 5.5 | | 12.00 | 12.00 | 8.00 | 6.50 | | 9.80 | 9.70 | 8.00 | 6.50 | | 2.50 | 2.40 | 2.70 | 2.70 |
| 6.0 | | 12.00 | 11.50 | 8.00 | 6.50 | | 8.20 | 8.10 | 8.00 | 6.50 | | 2.05 | 1.95 | 2.30 | 2.35 |
| 6.5 | | 11.30 | 10.60 | 8.00 | 6.50 | | 7.00 | 6.85 | 7.25 | 6.50 | | 1.60 | 1.55 | 1.95 | 2.00 |
| 7.0 | | 10.15 | 9.90 | 7.85 | 6.50 | | 6.00 | 5.90 | 6.55 | 6.50 | | 1.25 | 1.20 | 1.65 | 1.75 |
| 8.0 | | 7.90 | 7m80 | 7.10 | 5.90 | | 4.60 | 4.50 | 5.10 | 5.40 | | 0.70 | 0.60 | 1.15 | 1.30 |
| 9.0 | | 6.20 | 6.10 | 6.35 | 5.35 | | 3.60 | 3.45 | 4.05 | 4.40 | | | | | |
| 10.0 | | | 4.90 | 5.45 | 4.80 | | | 2.65 | 3.30 | 3.60 | | | | | |
| 11.0 | | | 4.00 | 4.60 | 4.30 | | | 2.05 | 2.65 | 3.00 | | | | | |
| 12.0 | | | 3.25 | 3.85 | 3.85 | | | 1.55 | 2.15 | 2.50 | | | | | |
| 13.0 | | | 2.65 | 3.30 | 3.50 | | | 1.15 | 1.75 | 2.10 | | | | | |
| 14.0 | | | | 2.80 | 3.10 | | | | 1.40 | 1.75 | | | | | |
| 15.0 | | | | 2.35 | 2.70 | | | | 1.15 | 1.45 | | | | | |
| 16.0 | | | | 2.00 | 2.35 | | | | 0.90 | 1.20 | | | | | |
| 17.00 | | | | 1.70 | 2.00 | | | | 0.70 | 0.95 | | | | | |
| 18.00 | | | | 1.45 | 1.75 | | | | 0.50 | 0.80 | | | | | |
| 19.0 | | | | 1.20 | 1.50 | | | | 0.35 | 0.60 | | | | | |
| 20.0 | | | [19.7 m 1.05 | | 1.30 | | | | | 0.45 | | | | | |
| 21.0 | | | | | 1.15 | | | | | 0.35 | | | | | |
| 22.0 | | | | | 0.95 | | | | | | | | | | |
| 23.0 | | | | | 0.80 | | | | | | | | | | |
| 24.0 | | | | | 0.70 | | | | | | | | | | |
| 25.0 | | | | | 0.60 | | | | | | | | | | |
| 26.0 | | | | | 0.50 | | | | | | | | | | |
| Standard hook | for 25 ton (optional) | for 22 ton | | | | for 25 ton (optional) | for 22 ton | | | | for 25 ton (optional) | for 22 ton | | | |
| Hook mass | 200 kg | 200 kg | | | | 200 kg | 200 kg | | | | 200 kg | 200 kg | | | |
| Parts of line | 7 | 4 | | | | 7 | 4 | | | | 7 | 4 | | | |
| Critical boom angle | — | — | — | — | — | — | — | — | — | *35°* | — | *20°* | *51°* | 62° | *69°* |

| 28.0m Boom + 5.4m Jib (Standard hook for 4.0ton. Hook mass 60kg) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Outriggers fully extended (6.0m) - 360° full range | | | | | | | Outriggers intermediately extended (4.5m) - 360° full range | | | | | |
| Boom angle (°) | Offset 5° | | Offset 25° | | Offset 45° | | Boom angle (°) | Offset 5° | | Offset 25° | | Offset 45° | |
| | Working radius (m) | Load (t) | Working radius (m) | Load (t) | Working radius (m) | Load (t) | | Working radius (m) | Load (t) | Working radius (m) | Load (t) | Working radius (m) | Load (t) |
| *81.0* | 5.2 | 3.00 | 7.0 | 2.50 | 8.3 | 1.55 | *81.0* | 5.2 | 3.00 | 7.0 | 2.50 | 8.3 | 1.55 |
| *77.7* | 7.2 | 3.00 | 8.9 | 2.50 | 10.0 | 1.55 | *77.7* | 7.2 | 3.00 | 8.9 | 2.50 | 10.0 | 1.55 |
| *75.0* | 8.9 | 3.00 | 10.4 | 2.30 | 11.4 | 1.50 | *75.0* | 8.9 | 3.00 | 10.4 | 2.30 | 11.4 | 1.50 |
| *73.0* | 10.0 | 3.00 | 11.5 | 2.14 | 12.4 | 1.46 | *73.0* | 10.0 | 3.00 | 11.5 | 2.14 | 12.4 | 1.46 |
| *70.0* | 11.7 | 2.60 | 13.1 | 1.94 | 13.9 | 1.42 | *70.0* | 11.7 | 2.60 | 13.1 | 1.94 | 13.9 | 1.42 |
| *65.0* | 14.3 | 2.15 | 15.7 | 1.69 | 16.3 | 1.35 | *69.0* | 12.2 | 2.50 | 13.6 | 1.88 | 14.4 | 1.40 |
| *60.0* | 16.8 | 1.83 | 18.1 | 1.49 | 18.7 | 1.30 | *67.0* | 13.2 | 2.14 | 14.7 | 1.77 | 15.3 | 1.37 |
| *55.0* | 19..2 | 1.55 | 20.3 | 1.35 | 20.6 | 1.25 | *64.0* | 14.7 | 1.63 | 16.0 | 1.46 | 16.8 | 1.33 |
| *54.0* | 19.6 | 1.45 | 20.7 | 1.32 | 21.2 | 1.22 | *60.0* | 16.6 | 1.14 | 17.9 | 1.02 | 18.5 | 1.00 |
| *52.0* | 20.4 | 1.29 | 21.5 | 1.19 | 22.0 | 1.18 | *55.0* | 18.9 | 0.70 | 19.9 | 0.67 | 20.7 | 0.60 |
| *50.0* | 21.2 | 1.14 | 22.3 | 1.05 | 22.7 | 1.08 | *50.0* | 21.0 | 0.39 | 21.9 | 03.7 | | |
| *48.0* | 22.0 | 1.01 | 23.0 | 0.94 | 23.3 | 0.99 | *Critical boom angle* | *48°* | | *48°* | | *53°* | |
| *45.0* | 23.2 | 0.82 | 24.1 | 0.77 | | | | | | | | | |
| *40.0* | 25.0 | 0.58 | 25.8 | 0.54 | | | | | | | | | |
| *35.0* | 26.6 | 0.40 | 27.2 | 0.38 | | | | | | | | | |
| *Critical boom angle* | *33°* | | *33°* | | *46°* | | | | | | | | |

**(Unit : Metric ton)**

| 28.0m Boom + 8.2m Jib (Standard hook for 4.0ton. Hook mass 60kg) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Outriggers fully extended (6.0m) - 360° full range | | | | | | | Outriggers intermediately extended (4.5m) - 360° full range | | | | | | |
| Boom angle (°) | Offset 5° | | Offset 25° | | Offset 45° | | Boom angle (°) | Offset 5° | | Offset 25° | | Offset 45° | |
| | Working radius (m) | Load (t) | Working radius (m) | Load (t) | Working radius (m) | Load (t) | | Working radius (m) | Load (t) | Working radius (m) | Load (t) | Working radius (m) | Load (t) |
| *81.0* | 6.0 | 2.00 | 8.7 | 1.20 | 10.5 | 0.80 | *81.0* | 6.0 | 2.00 | 8.7 | 1.20 | 10.5 | 0.80 |
| *77.7* | 8.7 | 2.00 | 11.1 | 1.20 | 12.7 | 0.80 | *77.7* | 8.7 | 2.00 | 11.1 | 1.20 | 12.7 | 0.80 |
| *75.0* | 10.0 | 2.00 | 12.2 | 1.20 | 13.7 | 0.78 | *75.0* | 10.0 | 2.00 | 12.2 | 1.20 | 13.7 | 0.78 |
| *72.0* | 11.9 | 1.81 | 14.0 | 1.20 | 15.3 | 0.75 | *72.0* | 11.9 | 1.81 | 14.0 | 1.20 | 15.3 | 0.75 |
| *70.0* | 13.0 | 1.71 | 15.2 | 1.18 | 16.4 | 0.74 | *70.0* | 13.0 | 1.71 | 15.1 | 1.18 | 16.4 | 0.74 |
| *65.0* | 15.9 | 1.49 | 17.8 | 1.12 | 18.9 | 0.72 | *65.0* | 15.9 | 1.49 | 17.8 | 1.12 | 18.9 | 0.72 |
| *60.0* | 18.6 | 1.33 | 20.3 | 1.05 | 21.3 | 0.69 | *63.0* | 16.9 | 1.26 | 18.8 | 1.09 | 19.8 | 0.70 |
| *55.0* | 21.2 | 1.20 | 22.7 | 0.98 | 23.5 | 0.67 | *60.0* | 18.4 | 0.98 | 20.2 | 0.87 | 21.3 | 0.69 |
| *53.0* | 22.1 | 1.14 | 23.6 | 0.95 | 24.3 | 0.66 | *58.0* | 19.4 | 0.81 | 21.2 | 0.72 | 22.2 | 0.68 |
| *50.0* | 23.5 | 0.96 | 24.9 | 0.77 | 25.4 | 0.65 | *55.0* | 20.8 | 0.60 | 22.5 | 0.54 | 23.3 | 0.53 |
| *47.0* | 24.7 | 0.80 | 26.1 | 0.63 | 26.5 | 0.64 | *50.0* | 23.1 | 0.31 | | | | |
| *45.0* | 25.6 | 0.69 | 26.8 | 0.56 | | | *Critical boom angle* | *48°* | | *53°* | | *53°* | |
| *40.0* | 27.5 | 0.49 | 28.5 | 0.39 | | | | | | | | | |
| *35.0* | 29.1 | 0.33 | | | | | | | | | | | |
| *Critical boom angle* | *33°* | | *38°* | | *45°* | | | | | | | | |

(Unit : Metric ton)

WARNINGS:

When the outriggers are used

- The lifting capacity chart indicates the maximum load which can be lifted by this crane provided it is level and standing on firm level ground. The values in the chart include the mass of the hook and all other slings etc.
- The area of the rated lifting capacity chart surrounded by a bold line is the area in which capacity determined by the structural strength of the crane. Elsewhere the crane's stability is the deciding factor.
- The working radius is based on the actual radius including boom deflection. Always use the actual working radius as the standard criterion for crane operation.
- The jib working radius is based on the jib mounted on the end of the 28.0 m boom. If the boom is at any other length use the boom angle as the standard criterion for crane operation. (The jib is optional).
- Do not operate the jib when the outriggers are completely retracted.
- If the boom length exceeds the rated length, use the rated lifting capacity for the rated length or for the next highest boom length step, whichever gives the smaller rated lifting capacity.
- In whatever working conditions the corresponding boom critical angle is shown in the chart. The crane can tip over if the boom is lowered below the critical angle even if unloaded. Therefore never lower the boom below these angles.
- Crane operation is permissible up to a wind speed of 10 m/s. Even in relatively light wind conditions, extra care should be taken when handling loads presenting large wind catching areas.

## RATED LIFTING CAPACITY WHEN OUTRIGGERS ARE NOT USED:

| Working radius (m) | Stationary on rubber (without outriggers) | | | | | |
|---|---|---|---|---|---|---|
| | 6.7m Boom | | 11.0m Boom | | 15.2m Boom | |
| | Over front | 360° full range | Over front | 360° full range | Over front | 360° full range |
| 3.0 | | 6.00 | | 5.50 | | 5.20 |
| 3.5 | 8.50 | 4.50 | 8.50 | 4.10 | 8.00 | 3.80 |
| 4.00 | 8.50 | 3.30 | 8.50 | 3.20 | 8.00 | 3.00 |
| 4.50 | 7.50 | 2.55 | 7.20 | 2.55 | 6.50 | 2.40 |
| 5.0 | | | 6.10 | 2.00 | 5.40 | 1.90 |
| 5.5 | | | 5.10 | 1.55 | 4.55 | 1.50 |
| 6.0 | | | 4.25 | 1.20 | 3.85 | 1.15 |
| 6.5 | | | 3.55 | 0.90 | 3.30 | 0.85 |
| 7.0 | | | 3.00 | 0.65 | 2.80 | |
| 8.0 | | | 2.15 | | 2.05 | |
| 9.0 | | | 1.55 | | 1.50 | |
| 10.0 | | | | | 1.00 | |
| 11.0 | | | | | 0.60 | |
| Standard hook | for 22 ton | | | | | |
| Hook mass | 200 kg | | | | | |
| Parts of line | 6 | | 4 | | | |
| Critical boom angle | ___ | ___ | ___ | 30° | 33° | 57° |

(Unit : Metric ton)

| Working radius (m) | Pick & Carry (less than 2km/h) (without outriggers) | | | | | |
|---|---|---|---|---|---|---|
| | 6.7m Boom | | 11.0m Boom | | 15.2m Boom | |
| | Over front | 360° full range | Over front | 360° full range | Over front | 360° full range |
| 3.0 | | 4.80 | | 4.40 | | 4.00 |
| 3.5 | 6.80 | 3.60 | 6.40 | 3.30 | 5.90 | 3.00 |
| 4.0 | 6.80 | 2.65 | 6.40 | 2.55 | 5.90 | 2.40 |
| 4.5 | 6.00 | 2.05 | 5.50 | 2.05 | 5.00 | 1.90 |
| 5.0 | | | 4.75 | 1.50 | 4.30 | 1.40 |
| 5.5 | | | 4.10 | 1.05 | 3.65 | 1.00 |
| 6.0 | | | 3.40 | 0.65 | 3.10 | 0.60 |
| 6.5 | | | 2.85 | | 2.65 | |
| 7.0 | | | 2.40 | | 2.25 | |
| 8.0 | | | 1.65 | | 1.60 | |
| 9.0 | | | 1.00 | | 1.00 | |
| 10.0 | | | | | 0.50 | |
| 11.0 | | | | | | |
| Standard hook | for 22 ton | | | | | |
| Hook mass | 200 kg | | | | | |
| Parts of line | 6 | | 4 | | | |
| Critical boom angle | ___ | ___ | ___ | 42° | 33° | 60° |

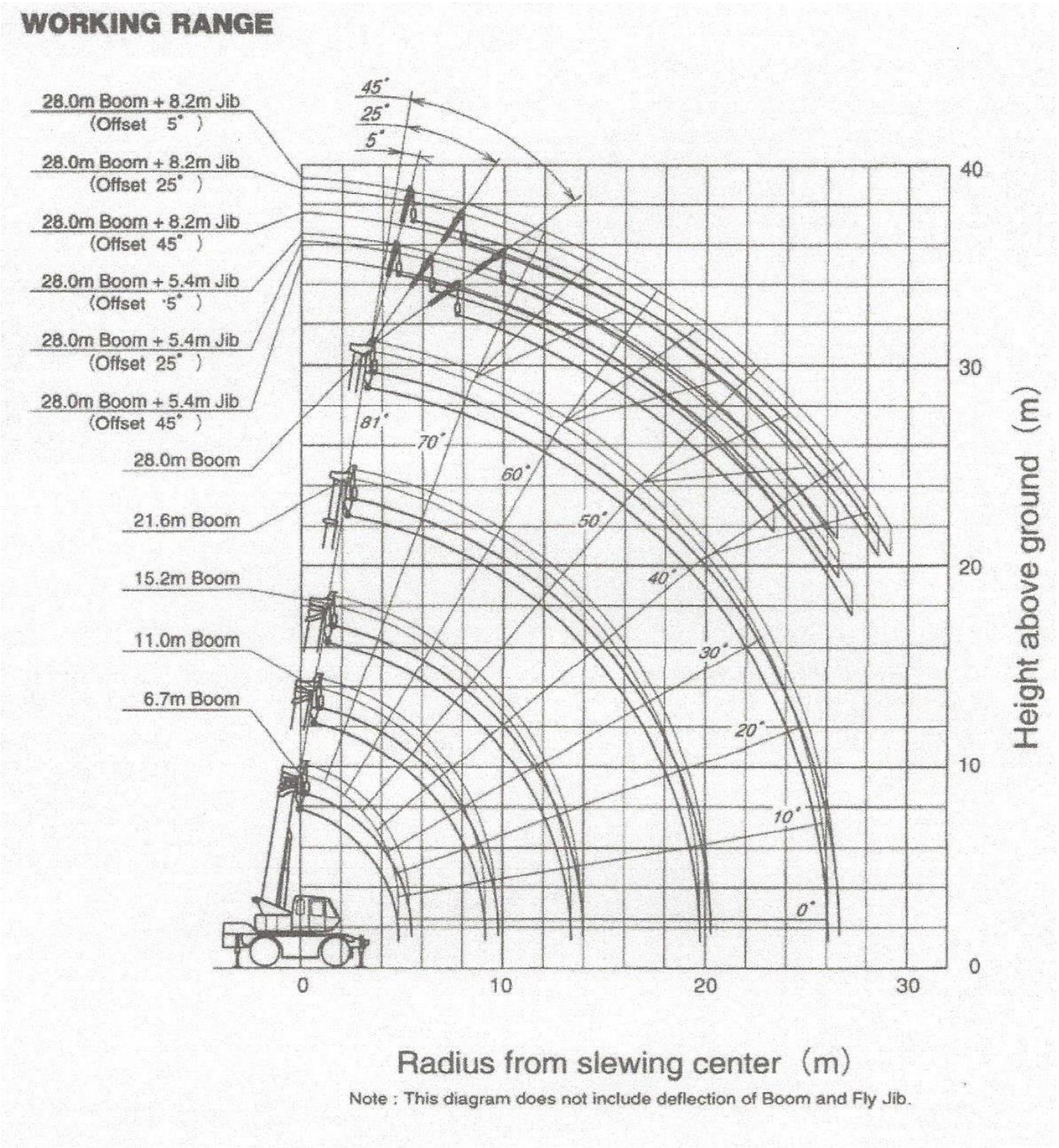
*(Unit : Metric ton)*

WARNINGS:

When the outriggers are not used

- The lifting capacity chart indicates the maximum load which can be lifted by this crane provided it is standing on firm level ground with all tyres inflated to the rated pressure and with the suspension lock cylinders fully retracted. It includes the mass of the hook and all other slings, etc.
- The area of the rated lifting capacity chart surrounded by a bold line is the area in which capacity determined by the structural strength of the crane. Elsewhere the crane's stability is the deciding factor.
- The rated lifting capacity differs between the front area capacity and the full range capacity. When slewing from the front to the side, take care that the crane could not be overloaded.
- Do not work with the jib or with a boom length of more than 15.2m. (The jib is optional).
- Always engage the parking brake before you start stationary on rubber operation.
- For pick and carry operation, the high/low speed switch must be switched to "ON" (low range) and the shift lever set to speed 1.
- For pick and carry operation lower the load to just above the ground and keep your speed strictly less than 2km/h to avoid swinging the load. Take particular care to avoid sharp cornering and sudden starts and stops.
- Never operate the crane during pick and carry operation. The slewing brake must always be engaged.

## WORKING RANGE




Note : This diagram does not include deflection of Boom and Fly Jib.

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