

Maximum Allowable Wind Conditions

European
Standards

15000 SERIES 3, 4

Boom No. 57
Luffing Jib No. 149A

General

Wind adversely affects lifting capacity and stability. The result could be loss of control over the load and crane, even if the load is within the crane's capacity.



WARNING

Tipping Crane Hazard!

Judgment and experience of qualified operators, job planners, and supervisors must be used to compensate for affect of wind on lifted load and boom by reducing ratings or operating speeds, or a combination of both.

Failing to observe this precaution can cause crane to tip or boom and/or jib to collapse. Death or serious injury to personnel can result.

Wind speed (to include wind gusts) must be monitored by job planners and supervisors.

Wind speed at the boom or jib point can be greater than wind speed at ground level. Also be aware that the larger the sail area of the load, the greater the wind's affect on the load.

As a general rule, ratings and operating speeds must be reduced when:

Wind causes load to swing forward past allowable operating radius or sideways past either boom hinge pin.

Wind speed to be measured at jib point elevation.

Operation Permitted

Operation is permitted in steady winds or wind gusts up to the maximum speed given in the following table.

Maximum Operating Wind Speeds (all boom lengths)

13 m/s with 21.3 m thru 33.5 m Luffing Jib
11 m/s with 36.6 m thru 42.7 m Luffing Jib
9 m/s with 45.7 m thru 51.8 m Luffing Jib
7 m/s with 54.9 m thru 67.1 m Luffing Jib
5 m/s with 70.1 m and 73.2 m Luffing Jib

Do not operate luffing jib higher than 60 degrees with loads less than 1 770 kg in steady winds or wind gusts above 9 m/s at front of boom. ***Boom and jib could be blown over backwards if this precaution is not observed. Refer to luffing jib capacity chart for specific backward stability problems (b on capacity chart).***

Operation Not Permitted

Operation is not permitted when wind is above conditions stated in maximum operating wind speed table. Observe the following two options for each jib length:

Boom with 21.3–42.7 m Luffing Jib

- Above working limit to 22 m/s —
Park crane (upper in line with crawlers) with load blocks and weight balls on ground or secured and position boom at 75 degrees and luffing jib at 55 degrees.
- 22 m/s and Above —
Lower boom and luffing jib onto blocking at ground level.

Boom with 45.7–51.8 m Luffing Jib

- Above working limit to 18 m/s —
Park crane (upper in line with crawlers) with load blocks and weight balls on ground or secured and position boom at 80 degrees and luffing jib at 60 degrees.
- 18 m/s and Above —
Lower boom and luffing jib onto blocking at ground level.

Boom with 54.9–64.0 m Luffing Jib

- Above working limit to 16 m/s —
Park crane (upper in line with crawlers) with load blocks and weight balls on ground or secured and position boom at 80 degrees and luffing jib at 60 degrees.
- 16 m/s and Above —
Lower boom and luffing jib onto blocking at ground level.

Boom with 67.1–73.2 m Luffing Jib

- Above working limit to 13 m/s —
Park crane (upper in line with crawlers) with load blocks and weight balls on ground or secured and position boom at 80 degrees and luffing jib at 60 degrees.
- 13 m/s and Above —
Lower boom and luffing jib onto blocking at ground level.