

Greetings all. Today's Bulletin is about the hazards of using a boom dolly and the required operator precautions.

The boom dolly's primary purpose is to reduce the axle loading by supporting (some) of the boom weight with 2-4 extra axles.



A boom dolly allows heavier cranes to distribute weight over more axles so that the impact on bridge assets and roads are less severe.

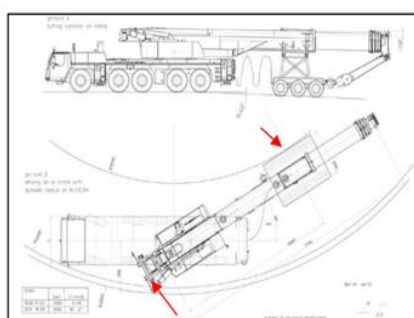
In Australia in the last few years, there are:

1. A notable increase in the number of large cranes on the Australian road network carrying boom dollies.
2. Greater 'heavy configuration access' where crane-dolly combinations have been able to operate at 12t per axle without dollies on certain routes.

Depending on which State you are operating in, the requirements for dollies vary.

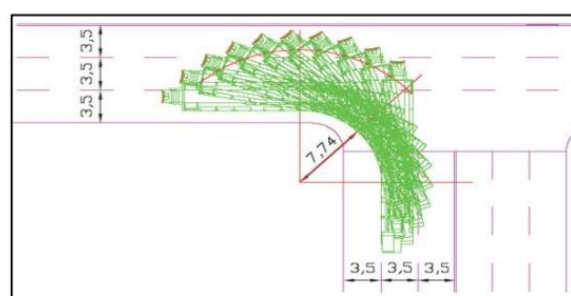
Here are a few points to remember if operating an All-Terrain crane with a boom dolly:

1. Additional weights of up to 10-tonne causes an increase in stopping distances, especially in wet/frost conditions.
2. The weight distribution across all crane axles can be up to 35% below manufacturer's design intent and this can impact the suspension, handling and braking performance. Up to 50% weight reduction on the two front axles (crucial during braking) is not uncommon.



3. The dolly creates up to 50% increase in total length, dramatically reducing the manoeuvrability of the crane.

4. As a result, the area used by the crane when turning (i.e. the swept path) can be significantly increased and 3 lanes can be required to turn the crane. When navigating a turn, you must take into consideration the outer turning arc created by the upper deck (tail swing) and the movement of boom on the inner radius creating an obstruction as illustrated. Appropriate escorting and/or traffic management may be required.



The safety of the operator/s and the public is paramount, so [extreme caution needs to be taken when operating a crane with boom dolly on the road.](#)

5. A working-at-height hazard is created when attaching and removing the dolly. Ensure all necessary safety equipment and restraints are used (refer to [CICA Safety Bulletin #280](#)).

Care needs to be taken when selecting a safe area to unhook the dolly and slew the boom back over the cab, see [CICA Safety Bulletin #276](#).

Prior to dis-connection ensure the dolly is adequately secured from movement via internal braking and/or wheel chocks.

When onsite, unintentional movement of boom dollies can result in crush injuries and major damage. Avoid this by:

- Using wheel chocks on the dolly
- Ensuring the correct dolly connect sequence is used
- Following the operating instructions on the dolly and manual
- Watch for crane air lines automatically supplying air to the dolly when connected
- Avoiding parking the dolly on an incline

Complying with the Heavy Vehicle National Law

The operator of a heavy vehicle must ensure the crane and dolly configuration complies with the [HVN](#) and the heavy vehicle safety standards. *Stay Safe -CICA*