

**Greetings all. Today's topic looks at the issues with conducting certain High-Risk Work (HRW) on night shifts.**

There is a lot of construction work on now in Australia, especially the east coast. Melbourne and Sydney both have major bridge and tunnelling works underway as well as a large volume of residential and commercial towers in both the CBD's and suburbs.



Due to timing constraints and obvious traffic disruptions, many road managers both state and council will only grant crane access and road closure permits in the hours of midnight to 5am. Certainly, this is inevitable for many jobs like the one above, but it should not be the default option as this is by far the worst time for the human body to be conducting HRW. As we see in the photo above, adequate lighting can easily be achieved as the lifting is relatively close to the ground.

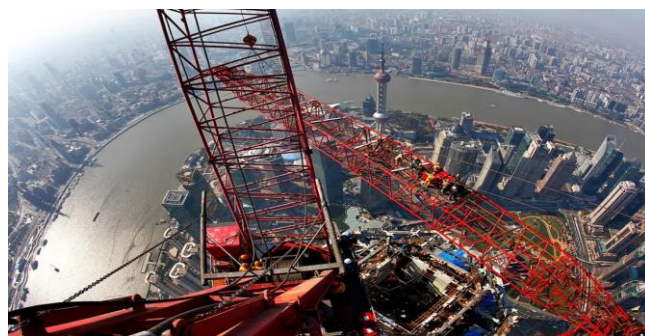
Tower Crane dismantling is another story. It involves considerable heights, awkward shaped loads, riggers out, walking the boom and a difficulty in achieving the same level of lighting as other kinds of lifting. Shadows can also become an issue, due to the sub optimal position of the lights. We talk about the 'Swiss Cheese' model when all the risk factors (holes in the cheese) align, and an adverse incident occurs. Insufficient lighting is a significant factor here or a 'hole in the cheese'



Also, the human body is never as alert during these hours as it is during the day. No matter how much rest

you've had prior, the body simply will not function as well at 2:00am as it does at 11:00am. Unless you've been on night shifts for a while, your body will not automatically sleep during the day. Studies have shown that after 17 hours of being awake your reaction times are the equivalent of a 0.05 blood alcohol reading. If you've been awake for 21 hours, reaction times mimic 0.08. This does not mean you can't conduct HRW, it's just another hole in the cheese.

Tower crane erecting and dismantling from the crane crew's perspective, is better during daylight hours. Often work starts early in the morning or might even run into the evening sometimes but the majority is conducted in daylight. This is a far cry from completing the entire job in darkness.



Road managers need to consider that while nightworks are the most convenient for them, they are not the safest. However, ample time to process daytime road closure permits is required. Permits should be applied for well in advance from when the tower crane is to be erected or dismantled.



The same amount of room, (lane closures and traffic management) required for setting up for the tower crane erection needs to be granted by the council or state authority when the time comes for dismantling. Night work is crucial for all stakeholders in the industry, but we need to avoid it where possible and where we can't we must understand the added risks and allow for the extra holes in the cheese. *Stay Safe -CICA*