

# Road User Charges (RUC) for mobile cranes

## Which cranes require RUC?

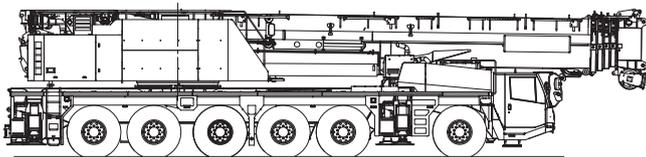
All mobile cranes that use a public road at any time are subject to RUC.

Most mobile cranes are now manufactured with odometers. However, where an odometer has not been fitted, an eRUC distance recorder is available.

## Registration process for mobile cranes

Regardless of what type of mobile crane it is registered as, if it uses a public road RUC is required.

## All-terrain cranes are:



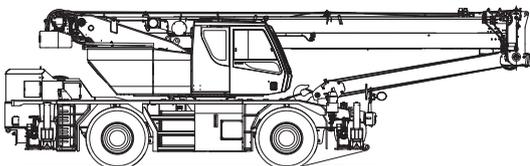
- Designed principally for both on-road and off-road use
- Multi-axle steer
- Multi-axle drive
- Fitted with mega-size tyres
- Capable of travelling at highway speeds (highway speed is considered faster than 50kph)

All-terrain cranes are registered normally on a MR2A and meet the definition of a NB or NC class vehicle.

### EXAMPLE:

**RUC Type 699:** Self-powered all-terrain cranes with 6 axles (Fitted with mega tyres).

## Rough-terrain cranes are:

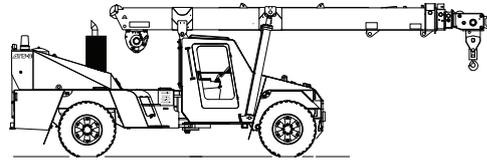


- Designed principally for off-road use
- Incapable of travelling at highway speeds (highway speed is considered faster than 50kph)

Rough-terrain cranes are normally registered on a MR2B as a mobile machine.

Powered vehicles with 2 axles (single standard tyres) would be RUC type 1 or fitted with mega tyres would be RUC type 299.

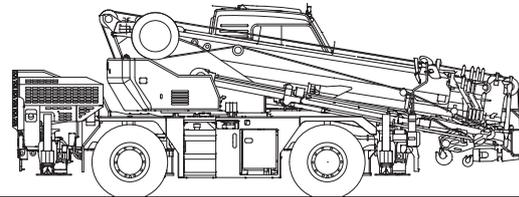
## Pick and carry crane



Registered normally on a MR2A and meet the definition of a NB or NC class vehicle.

**RUC vehicle type 1:** Powered vehicle with 2 axles and single standard tyres of single or dual combination.

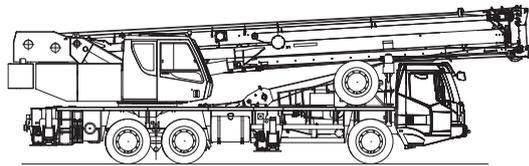
## City crane



Registered normally on a MR2A.

Powered vehicles with 2 axles (single standard tyres) would be RUC type 1 or fitted with mega tyres would be RUC type 299.

## Truck cranes are:



- Designed principally based on a truck-style chassis
- Fitted with standard tyre sizes (either single standard tyres and or dual standard tyres)
- Designed principally as a mobile crane (excluding knuckle boom cranes)
- Unable to carry an additional payload
- Capable of travelling at highway speeds (highway speed is considered faster than 50kph)

Truck cranes are registered normally on a MR2A and meet the definition of a NB or NC class vehicle.

### EXAMPLE:

**RUC type 14:** Powered vehicle with 4 axles and single standard tyres of single or dual combination.

**RUC type 1:** Powered vehicle with 2 axles and standard dual tyres.

**RUC type 6:** Powered vehicle with 3 axles and single standard tyres of single or dual combination.

## What determines the RUC vehicle type for a crane?

Single mega-tyred all-terrain cranes generally fit into the 299 to 799 RUC-type classes. The first number of the RUC vehicle type reflects the number of axles.

If the tyres are smaller, or if any of the axles are twin-tyred, then the standard RUC vehicle types are applied.

Truck-mounted cranes also use standard RUC vehicle types.

## What are the RUC obligations for all-terrain cranes that qualify to be in the 299 to 799 RUC type series?

These cranes are required to have a distance licence and an appropriate additional licence when a permit is in use.

The tyre size determines what basic weight per axle is applied for RUC purposes.

The additional licence should cover the weight difference between the operating permit and the standard RUC weight for the vehicle.

The standard weight per axle for large tyres is:

- Mega-size tyres (width greater than 443mm) = 7600kg per axle.
- Super-single size tyres (width greater than 355mm) = 7200kg per axle.

### Example

A mobile crane with five axles that are single-tyred and fitted with 20.5R25 mega-size tyres will have a RUC vehicle type 599 and a standard RUC weight of 38,000kg (5 x 7600kg). If the permit in use has a maximum weight of 60,350kg, an additional licence would be required for 23 tonnes (61,000kg minus 38,000kg).

Cranes with standard RUC types 1 to 19 are required to have an appropriate distance licence and additional licences. The RUC weight for these is determined by the Vehicle Dimensions and Mass Rule 2016 (VDAM).

### Example

A mobile crane with standard single tyres on the front axle and with dual tyres on the back axle would be a RUC vehicle type 2 and have a standard RUC weight of 14,200kg (6000kg for the front axle and 8200kg for the back axle). This rounds up to 15 tonnes. If the permit in use has a maximum weight of 21,150kg, it is rounded up to 22 tonnes. An additional licence would be required for 7 tonnes (22,000kg minus 15,000kg). In all cases where the permit weight is not a whole tonne, it is rounded up to the nearest tonne.

## Permits

The vehicle must have the appropriate RUC licences that cover the gross weight of the permit. In cases where the vehicle has more than one permit, the RUC additional licence added to the underlying distance licence must cover the gross weight of the permit (rounded up) that is in use at any time.

### Example

A vehicle has a RUC weight of 14,200kg (15,000kg) with two permits, one at 21,150kg (22,000kg) and another at 19,510kg (20,000kg). When using the 21,150kg permit a 7-tonne additional licence must be purchased and when using the 19,510kg permit a 5-tonne additional licence must be purchased. The underlying distance licence is not affected.

## Hubo exempt process

If it is impractical to fit a hubodometer, a hubo exemption can be applied for by emailing [rucassessments@nzta.govt.nz](mailto:rucassessments@nzta.govt.nz)

There must be good reason for this (e.g. hubo when fitted would protrude well outside the normal width of the vehicle). The vehicle must also have a reliable working odometer.

## Counter-weight trailers and boom-support trailers towed by a mobile crane

The use of either trailer changes the required additional weight calculation.

### Example

With a 5 mega-tyred axle crane towing a 3 axle twin-tyred counter-weight trailer, the gross permit weight needs to be for the whole combination.

Therefore, if the permit weight was for 82,500kg (83 tonnes), standard distance licences for both vehicles are required, plus an additional licence to cover up to the permit weight. The crane would have a standard weight of 38 tonnes and the trailer would have a standard weight of 18 tonnes. 83 tonnes - 38 tonnes - 18 tonnes = 27 tonnes of additional RUC licence required.

The calculation would be the same for boom-trailers.

## Special RUC rates

A mobile crane that has a vehicle type in the 1 to 19 range and uses single large dual-tyred axles could be eligible for special rates. Please inquire by emailing [rucassessments@nzta.govt.nz](mailto:rucassessments@nzta.govt.nz) if you feel your crane could fit into this category.

If you require any further information or have questions about this document or about RUC in general, email [rucassessments@nzta.govt.nz](mailto:rucassessments@nzta.govt.nz)