

# Pilot Project

# All-Terrain (AT) Cranes

# Commercial vehicle regulation

Provincial regulations specify the legal size, weight, and configuration limits for commercial vehicles on all Alberta roads.

Vehicles that exceed these limits must apply for permits (typically with fees and conditions if they are deemed to be oversize or overweight). The conditions applied are to ensure that they can travel safely on roads. Municipalities receive fees from these permits to help offset pavement damage that can occur over time due to these vehicles operating at higher weight thresholds.

AT cranes are a particular subset of these commercial vehicles. They are used to move heavy objects in industries such as construction, oil and gas, wind and renewable energy, electricity and utilities, mining, and forestry and are vital to the success of these sectors.

There are about 185 AT cranes supporting projects across these industries in Alberta.

AT cranes exceed the maximum weights specified in Alberta's Commercial Vehicle Dimension and Weight Regulation and must operate under permit when travelling on Alberta highways.

AT cranes are designed and manufactured to travel with the boom extended beyond the front of the vehicle for greatest efficiency. However, due to the current maximum axle weight limits in Alberta, they are required to rotate the boom to the rear of the unit and rest it on a boom dolly (i.e. trailer) in order to meet seasonal axle weight restriction requirements. While this meets regulated axle limits, it increases the time required to prep equipment for the road and the amount of equipment needed to transport these cranes, costing industry time and money. More importantly, the boom is most safely transported without the dolly attachment.

The 2-year pilot project will allow AT cranes, with fees and conditions, to travel year-round without a boom dolly.

# AT crane operations

AT cranes travel primarily on provincial highways. Travel on municipal roadways is typically limited to short distances, mainly to access work sites. These worksites are often new municipal infrastructure projects.

To meet current provincial weight restrictions, allterrain AT crane operators are required to distribute the weight of the crane over multiple axles, which:

- results in AT crane operators having to bypass manufacturers' specifications such as continually removing and reinstalling parts of the vehicle that were never designed to be removed. Frequently in Alberta, these modifications are undertaken in challenging climatic and environmental circumstances.
- increases the time required to prep equipment for the road and also at the worksite upon arrival.
- Increases the amount of equipment needed to transport these cranes, thereby costing all the stakeholders involved in the project significant time and money.

# Crane Rental Association of Canada (CRAC)

The Crane Rental Association of Canada (CRAC) is a national organization that represents crane rental operations companies, manufacturers and suppliers of cranes and equipment, and suppliers of services used in the specialty crane rental business in Canada. CRAC has 127 member companies across Canada and the United States and operates approximately 185 allterrain AT cranes in Alberta.

# Two-year pilot increasing axle weights for AT cranes

The Government of Alberta is committed to collaborating with industry partners to remove red tape, streamline government requirements to support economic development and jobs, and remove barriers to business, all without compromising safety.

CRAC and the Government of Alberta will launch a two-year pilot starting in September 2020, allowing AT cranes to operate without a boom dolly based on size and season.

- The current axle weights are 7,900, 9,800, and 12,500 kilograms for Spring, Summer, and Winter usage, respectively.
- The proposed axles weights will be 9,500, 11,500, and 12,500 kilograms for Spring, Summer, and Winter usage respectively.



## Benefits to municipalities

### Permitting

Municipalities will continue to approve or deny permits, as they see fit. This allows municipalities the ability to control heavy vehicle traffic by designating truck routes within their boundaries that utilize roads with stronger pavement.

### Revenue

Municipalities will continue to receive permit revenue, as they currently do. The permit revenue can offset costs associated with an increase in pavement damage caused by an increase in axle weights. In addition, increasing the axle weight limit may result in time and cost savings for AT crane companies, as well as the industries that rely on AT cranes, such as municipal governments.

### Infrastructure

It is expected that the pilot will result in minimal impacts to municipal and provincial infrastructure. The pilot will account for bridge infrastructure and AT crane operators will not use bridges with lower load capacity.

#### Environment

It is expected that the pilot will lead to lower greenhouse gas emissions from the AT crane industry. The pilot will reduce the number of vehicle components that will need to be transported separately, leading to less vehicles on the road, less rolling resistance, and less land disturbance.

#### Public safety

Current use of AT crane equipment, required by regulations (i.e. the use of a boom dolly) contradicts manufacturer's specifications and is less safe than when transported without the dolly. This pilot will increase the safety of AT crane workers, as well as the safety of all road users.