**Mobile cranes**

### *Translate from Russian into English using words from the previous texts:*

### кран-балка, портальный кран, мостовой кран, башенный кран, портовый кран. кран с поворотной стрелой, кран с ручным управлением, управлять при помощи кнопочного пульта, грузоподъемность крана, подъемный механизм крана

1. ***Read and translate the text:***

Mobile [crane](https://en.wikipedia.org/wiki/Crane_(machine)) generally operate a boom from the end of which a [hook](https://en.wikipedia.org/wiki/Lifting_hook) is suspended by [wire rope](https://en.wikipedia.org/wiki/Wire_rope) and [sheaves](https://en.wikipedia.org/wiki/Sheave_(mechanical)). The wire ropes are operated by whatever [prime movers](https://en.wiktionary.org/wiki/prime_mover) the designers have available, operating through a variety of [transmissions](https://en.wikipedia.org/wiki/Transmission_(mechanics)). [Steam engines](https://en.wikipedia.org/wiki/Steam_engine), [electric motors](https://en.wikipedia.org/wiki/Electric_motor), and [internal combustion engines](https://en.wikipedia.org/wiki/Internal_combustion_engine) have all been used.

#### Truck-mounted crane

A crane mounted on a [truck](https://en.wikipedia.org/wiki/Truck) carrier provides the mobility for this type of crane. This crane has two parts: the carrier, often referred to as the Lower, and the lifting component which includes the boom, referred to as the Upper. These are mated together through a turntable, allowing the upper to swing from side to side. These modern hydraulic truck cranes are usually single-engine machines, with the same engine powering the undercarriage and the crane. The upper is usually powered via hydraulics run through the turntable from the pump mounted on the lower. In older model designs of hydraulic truck cranes, there were two engines. One in the lower pulled the crane down the road and ran a hydraulic pump for the outriggers and jacks. The one in the upper ran the upper through a hydraulic pump of its own. Many older operators favor the two-engine system due to leaking seals in the turntable of newer design cranes. Hiab invented the world's first hydraulic truck mounted crane in 1947.

#### Rough terrain crane

[](https://en.wikipedia.org/wiki/File:Omega_18.jpg)

A crane mounted on an undercarriage with four rubber tires that is designed for pick-and-carry operations and for off-road and "rough terrain" applications. Outriggers are used to level and stabilize the crane for hoisting.

These telescopic cranes are single-engine machines, with the same engine powering the undercarriage and the crane, similar to a crawler crane. In a rough terrain crane, the engine is usually mounted in the undercarriage rather than in the upper, as with crawler crane. Most have 4 wheel drive and 4 wheel steering which allows them to traverse tighter and slicker terrain than a standard truck crane. In addition, there are rough terrain cranes with the operating cab mounted on the lower.

### *Find the English equivalents for the following words in the text above:*

mobile crane  -

boom –

#### truck-mounted crane –

to mate -

turntable –

to swing –

engine –

hydraulics –

outrigger –

jack -

#### rough terrain crane –

undercarriage –

rough terrain –

crawler crane –

1. ***Match up the words from the columns, translate:***

|  |  |
| --- | --- |
| "rough terrain"  hydraulic  internal  Mobile  prime  [railway](https://en.wikipedia.org/wiki/Flatcar)  telescopic  to power  truck  wire | carrier  combustion engine  crane  crane  application  mover  pump  rope  vehicle  via hydraulics |