



Agricultural machinery in Russia. Tractors.

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What is agriculture?

- ❖ **Agriculture** is the science or art of cultivating the soil, growing and harvesting crops, and raising livestock.
- ❖ The art of making land more productive is practiced throughout the world – in some areas by methods not far removed from the conditions of several thousands of years ago and in other areas with the aid of science and mechanization, as a highly commercial type of endeavor.
- ❖ Agriculture still drafts into its service more of the world's aggregate manpower than all other occupations combined.

What is agricultural machinery?



Agricultural machinery is machinery used in the operation of an agricultural area or farm.

What is a tractor?

- ❖ Tractor is a high-power, low-speed traction vehicle and power unit mechanically similar to an automobile or truck but designed for use off the road.



- ❖ The two main types of tractors are wheeled, which is the earliest form, and continuous track.
- ❖ Tractors are used in agriculture, construction, road building, etc., in the form of bulldozers, scrapers, and diggers.
- ❖ A notable feature of tractors in many applications is the power-takeoff accessory, used to operate stationary or drawn machinery.



Facts and figures

- ❖ 1855 - Andrei Terentyev artisans and Moses Creek created the first Russian threshing machine.
- ❖ 1888 - Fyodor Blinov mechanic built the world's first model of crawler tractor.
- ❖ 1893 - Yakov Mamin invented the plow with two plowshares.
- ❖ 1910 - Yakov Mamin created tractor "Dwarf", later known as the "Russian tractor".
- ❖ In 1917 there were 165 tractors in Russia.
- ❖ 1921 - SNK (Soviet government) decree "On agricultural engineering".

- ❖ At this time, the release of tractors engaged in Kolomna and Kharkiv Locomotive Factory, Obukhov plant. Most mass production of tractors was organized at the "Red Putilovets" (tractor "Fordson Putilovets").



Facts and figures

- ❖ 1926 - started producing tractor cultivators for continuous tillage .
- ❖ 1928 - started production of tractor plows.
- ❖ In 1928, the country produced 1,300 tractors.
- ❖ 1930 - commissioned in 1930 Stalingrad Tractor Factory design capacity of 144 tractors a day. Since that time, the Soviet Union began the mass production of tractors.

Stalinets S-65 (1937-1941)



Facts and figures

- ❖ 1931 - was built Kharkov Tractor Factory.
- ❖ 1932 - started production of tractor potato harvesters.
- ❖ 1933 - was built Chelyabinsk Tractor Plant.
- ❖ 1937 - USSR on the annual production of combine harvesters went to 1st place in the world - 44 thousand in the U.S. at 29 million in the U.S.



Tractor "Universal" (1934-1940, 1944-1955)



At "Communard" started production of the first Soviet harvester.



By the beginning of the Great Patriotic War, the Soviet Union occupied the first place in the world for the production of crawler tractors .



- ❖ During the war, many tractor factories were destroyed, some of them have relocated to the east of the country and produced for the front .
- ❖ 1944 - resumed production of tractors.
- ❖ After the war, the construction of new enterprises



Facts and figures

- ❖ 1946 - started production of the first tractor with a closed cabin S-80.
- ❖ 1947 - started production of the first self-propelled combine harvester S-4.
- ❖ 1948 - Minsk Tractor Works started production of the first Soviet skidder KT-12.
- ❖ 1956 - started production of the first industrial tractor S-100.
- ❖ 1957 - started production of the first Soviet high-power industrial tractor diesel-electric drive DET-250 .
- ❖ 1960 - USSR won first place in the world to produce tractors .

Tractor DET-250



DT-54 (1949-1979)



Facts and figures

- ❖ 1975 - came the first Soviet tractor with front cabin-industrial tractor-bulldozer T-330.
- ❖ 1983 - launched Europe's largest tractor, designed to work as a crawler dozer, T-800
- ❖ 1991 - disintegration of the USSR, was part of factories abroad.
- ❖ 2001 - state-owned company established Rosagroleasing for the program of state support for agricultural producers and support leasing program.
- ❖ 2003 - was founded Concern Tractor plants, uniting the main Russian producers of tractors.

Tractor T-800



Kirovets K-744



Road bulldozer Kirovets K-702



Types of tractors:

- ❖ crawler tractor skidding choker,
- ❖ forest fire crawler tractors
- ❖ mowers
- ❖ forwarders
- ❖ loaders and forklifts based tractors
- ❖ truck tractors

Types of tractors:

- ❖ wheeled tractors
- ❖ crawler tractors
- ❖ crawler skidders
- ❖ transport tractors
- ❖ wheeled tractor self-propelled chassis
- ❖ wheeled cotton tractors
- ❖ bulldozers

Tractor VT-200



Harvester Don-1500



DT-75



MTZ-80



Firefighting vehicle Onegec 310



Give a name to the tractor:



T-800

DET-250

MTZ-80

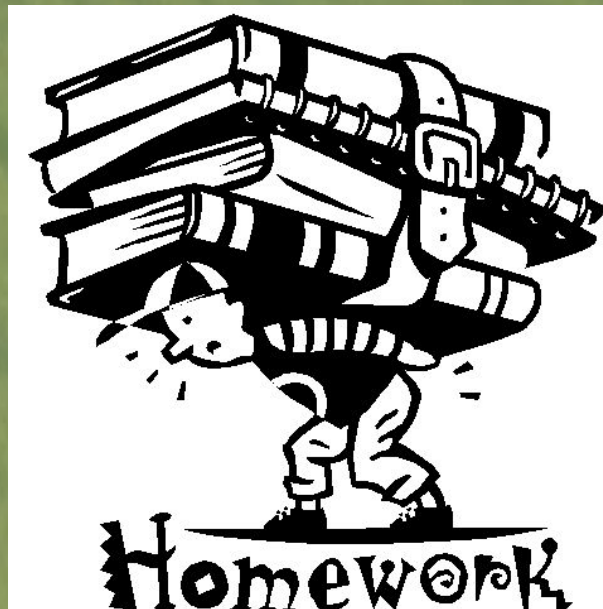
K-702

Answer the questions:

1. What is agriculture?
2. What machinery do we call agricultural?
3. Which are two main types of tractors?
4. Since what time did the Soviet Union begin the mass production of tractors?
5. When did Russia start production of the first tractor with a closed cabin

Home task:

- ❖ Describe the main technical characteristics of any tractor.



Resources:

- ❖ <https://en.wikipedia.org/>
- ❖ <http://www.britannica.com/technology/tractor-vehicle>
- ❖ http://go.mail.ru/search_images

**Thank you for your
work!**

