## **UDC 631**

## ENHANCING THE EFFICIENCY OF THE USAGE BELARUS-2022 TRAKTOR BY DEVELOPMENT OF THE FRONT LOAD

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At present, more and more attention is being paid to the use of the front mounted attachment, which has become standard operating equipment. Hinged implements for the anteroom are increasingly being developed, such as seeders, mowers, seedlings, harvesting machines, fertilizer machines. The tractors of the brand "Belarus" of various traction power, which are equipped with an anteroom [1], became very popular on the farms of Ukraine.

The most important requirement for hoisting devices is the requirement for their load-carrying capacity. Over the past 10 years there has been an increase in the load capacity of hinged devices, due to the fact that increasing the power of tractors within each class has led to an increase in the working width of the capture of agricultural machines, and, consequently, to increase their mass.

Together with a hydraulic drive, which is used for lifting guns in the transport position and adjusting their working position, the hinged device forms a hinged system - one of the most important tractor systems.

There are a number of ways to increase the load capacity of the hinged device: an increase in pressure in the hydraulic system or the diameter of the power cylinder, the use of additional cylinders, rational selection of kinematic parameters of the hinged device. The diameter of the power cylinder can not always be increased, because it is located, usually in a zone of limited free space or built into the body of the transmission.

The authors propose a front harness for the tractor Belarus-2022, which consists of a welded frame attached to the bracket of forward loads by means of stretch marks and a rod on which all assemblies and parts are assembled; hydraulic cylinders, whose stem plug is connected to the lever, the lower legs; slides associated with lifting levers and lower traction; the upper thrust, located in the grooves of the frame. Such a construction of a nacelle can withstand a greater weight of the working machine than the serial nipples.

Such a modernization of the tractor Belarus-2022 allows to increase the productivity of the machine-tractor unit on its basis in various operations, by hanging on the front of the heavy-duty agricultural machines, allowing several operations to be carried out simultaneously.

## **References**

1. Подригало М.А. Синхронизація руху транспортного агрегату під час виконання спільних технологічних операцій рослинництва / М.А. Подригало, М.П. Артьомов, М.Л. Шуляк, Д.В. Берладін // Вісник ХНТУСГ, вип. 159, – Харків, 2015, – с. 34-40.