

Analysis of Energy-Efficient Devices in the Preparation and Quality Leveling of Land for Planting

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Article Information

Received: April 18, 2023

Accepted: May 19, 2023

Published: June 20, 2023

Keywords:

ABSTRACT

the higher the quality of land processing and leveling, the more products it will be possible to obtain. To achieve the fertility of the Earth, it is necessary to take into account the environmental indicators of the soil. Reducing soil compaction is now important in the agricultural sector. Our implementation of various measures to reduce soil compaction is currently among the pressing problems.

For the effective use of agricultural land, it is necessary to create and put into use quality processing techniques and technologies. The fight against wind erosion or the maintenance of soil moisture it is considered one of the most important agrotechnical measures. Therefore, the parameters of energiyaresurstejamkor chizelli softener, developed on the basis of scientific ENERGIYARESURSTEJAMKOR chizelli, are also being processed before planting crops on agricultural land, created by scientists from the TIAMEBB Bukhara institute of Natural Resource Management.

In order to improve the work efficiency of Chizelli softener in irrigated dexterity there is a gypsum layer especially in desert areas where special technology of soils in newly cultivated land areas without adding a gypsum layer to the fertile layer and maintaining soil moisture in the surface layer aims to properly selectively apply the processing depth, easily equipped with additional working bodies to protect it

To do this, the parameters of the above interpretation are scientifically based and tested in production, a new interpretation is being made for a fully based chizelli softener technique by structural structure, convenient to install on the back of the frame, lightly exploitable and workable soil is recommended to grind existing incisions in the surface layer and apply it with working bodies up to 5-7 cm

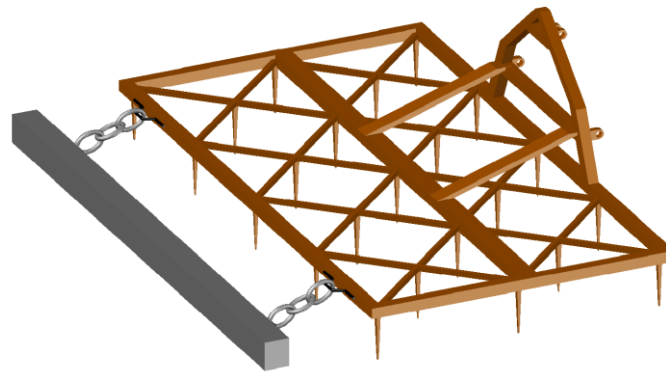


Figure 1. Toothed borona intended to soften the ground

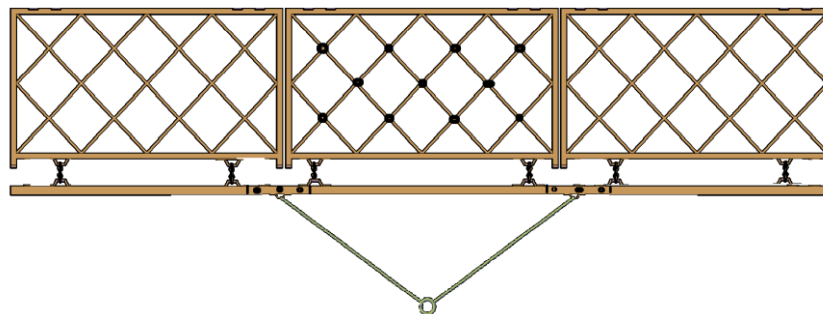


Figure 2. Combined borona intended to soften the land

This device, which is recommended for application on existing land with an irrigated particularly newly mastered gypsum layer of desert areas, is designed to soften gypsum soils with a compacting device, and at the same time use a compacting device, the technique and technology of which is not developed in accordance with scientifically based recommendations for exactly these processes.

For this reason, it is necessary to scientifically substantiate the treatment of gypsum lands in desert regions with special technology and the recommendations for its application with a device that compresses the soil surface layer.

The structure is primarily designed to soften hard gypsum soils and compact the soil surface layer, and the technology of its application is less complex. It is easily machined by a steel (1.0-1.5 m) rope not far from two or three places on the back of the softener frame in tractor-mounted machining. It depends on the soil structure and depends on the demand for soil compaction and is selected depending on the demand for soil compaction. If the existing technique is limited to softening only the hard plaster layer on the basis of a special technology, while the new recommended technique and technology do not differ much from the previous one, but the economic efficiency has proven to be much higher, the mechanical properties of soils in the process of foaming the above-mentioned device will improve, which will lead

From the analysis of the above devices, it should be noted that in ensuring the effectiveness of the activities carried out to improve the reclamation of land, the achievements of Science, the cooperation of scientists and specialists are becoming more important. There is an increasing need to revise the construction of techniques used in the levelling of cultivated land, improve them, and create new high-performance replicas. The study of the work of rectifiers and the information associated with them, the analysis of which shows that land rectification has the following advantages:

- ✓ Water consumption 2 ... Reduced by 2.5 times;
- ✓ Furrow irrigation productivity increases by 4 times;

- ✓ Irrigated lands drink water evenly and the soil is at the same time;
- ✓ The salinity of the soil is taken away, since the rise of groundwater slows down, and as a result, the release of salts into the upper layer of the Earth is reduced;
- ✓ Quality processing between the series is ensured;
- ✓ The ability to carry out all agrotechnical activities with good quality and high speed is created;
- ✓ Crop yields increase;
- ✓ Conditions are created for the growth of labor productivity;
- ✓ The working conditions of the mechanizer are improved;
- ✓ In a well-aligned field, opportunities are created to effectively use a cotton picker;
- ✓ All land in the field contour area is uniformly moistened;

For the purpose of creating rectifiers that meet these requirements and making them widely used in the leveling of irrigated arable land, a base Earth rectifier equipped with the following softening disc device is recommended.



Figure 3. The process of working the ground rectifier with a base on which the device with a softening disc is installed.

It should be noted that more than 90% of agricultural production is produced by irrigation farming. This situation indicates that water resources are extremely important in agriculture, and their shortage negatively affects not only the production of agricultural products, but also the entire economy of the country. One such cost-effective technology is the technology of leveling agricultural land using energy-efficient devices. We can see that the above-mentioned method of leveling the ground using a base Earth rectifier is carried out in a special disc softener device, which allows you to save up to 25% of irrigation water. Ground areas in fields leveled by a disc device into a base rectifier have a uniform surface, differing in the absence and smoothness of Trefoils. As a result, the water is distributed evenly and evenly, the soil of the cultivated area is completely, uniformly moistened, and the crops are evenly grown. An even, even distribution of water will help save it. [3]

Taking into account the above, we can say that high-quality leveling of the lands ensures simultaneous germination of technical crops, increased salt washing efficiency, uniform distribution of water throughout the arable area, and the non-washability of given fertilizers, [3].

In conclusion, it can be said that qualitative leveling of land is of great importance in improving the reclamation of irrigated lands, we can see from the above points and a number of measures. It should also be said that the leveling of land with energy-efficient land rectifiers in combination

with increasing productivity also leads to water economy, which, as it turns out, has a significantly positive effect on the development of Agriculture.

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