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Improvement of Reclamation by Reducing the Passage of Aggregate in the Leveling of Arable Land

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ABSTRACT

The article is based on the experiments carried out to bring the base ground rectifiers to an optimal position of the cross width and the speed of movement in the alignment, depending on the number of transitions from one place, and covers information on increasing the working performance of the rectifier.

One of the main factors in improving the reclamation of irrigated arable land in agriculture is its leveling. The yield of agricultural crops in leveled areas increases by 40 – 45 percent compared to unregulated areas, water consumption in irrigation decreases by up to 2 times, and working conditions are improved, as well as the impact on ecology, increasing the work performance of agricultural techniques for further exploration. The soil is spread over the entire area in the same plane, and when watering, the water is evenly distributed over the entire area. Uniformly distributed water causes the soil to co-occur. This creates conditions for the implementation of boronization, plotting, fertilizing, planting and other technological processes at the deadline. 1. in the Republic of Bukhara, the relatively low location of HUD in the region of Bukhara leads it to the salinity of the irrigated lands, turning it into a natural assembler Today , about 50% of the irrigated land of our Republic is saline, while this indicator is 88% in the Bukhara region. The surface of the field is aligned with the long-base P-2.8 A, P-4, PA-3, PPA-3.1 and other rusted ground rectifiers before washing the brine. Studies have shown that areas where rice is washed and farmed should have a surface plane close to the zero horizon. To form such agrotechnical planes, there is a leveling aggregate 4 from the surface of the field...It can be achieved as a result of passing 6 times. The question of whether these can be overcome by applying laser rectifiers is corrected, but laser rectifiers are usually designed to lose micronotheciality. When aligning larger irregularities with laser rectifiers, the rectifier groove is 20 thick in one pass..Due to the lack of tractor capacity when pruning up to 25 cm of soil, the aggregate hydrosystem is forced by a mechanizer that controls the aggregate due to a deterioration in performance, changing the cross-cutting thickness with a richag located in the cabin. As a result, the leveling aggregate has

to pass through the surface of the field many times to generate an agrotechnical demand. Studies show that when the speed of movement is increased to 8.5 km/h, the moderate movement of the rectifier and the uniform grinding of the incision pallets increase the leveling level, ensuring that the ground plane is of good quality.When the speed of movement of the rectifier exceeds 8.5 km/h, the vibration of the machine frame increases, and the tactile begins to negatively affect the quality of work. In this case, lowering the working organ more than the established norm and moving it through a large cutting of the soil layer under the influence of its own weight, causes vibration, vibration and resistance in the loop to appear. This causes the drag resistance to change larger. As a result, the plane quality of the field is impaired, the surface becomes wavy.

The difference between the volumetric weight of the soil is 6.5 percent for Horizon 1, 5.5 percent for Horizon 2, and 3 percent for Horizon 10...15sm, at the limit of high and small rates of motion. The difference in volumetric weight of the soil at an average depth of 15cm is 5 percent. This change reduces the working organ and the time of contact of the pushing soil with the ground at a high speed,which causes a decrease in the volumetric weight of the soil.

If we take the initial state of the soil as 100 percent, then the aggregate composition of the soil,between high and low speeds, will be as follows: large cuttings (100...50mm) is reduced by 52.8 percent, while the mid-size cutouts (50...10mm) remained numerically nearly unchanged. While useful soil fractions (10...0.25 mm) increase by 72 percent. As can be seen from the figure, fine-grained (<0.25 mm) soil particles are less variable within the limits of permitted agrotechnical requirements.

In conclusion, it can be noted that in the improvement of the reclamation condition of irrigated lands, the plane of the surface of the area has a great acuity, and it must be leveled in accordance with the agrotechnical requirement. Improved long-base rectifiers aggregated to high-power tractors to make better use of existing rectifiers, it is effective to increase the coverage width to 3400 mm and ensure a working speed of 8.5 km/h.

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