

Constructive Classification of a Rotating Plug in a Horizontal Plane with a Geometric Combined Working Surface

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ANNOTATION

This article describes the updated type of plow used in plowing the Earth. Theoretical studies have been carried out in the preparation of a 3D model and technical development of a rotating plug in a horizontal plane with a geometric combined working surface. Scientific research work carried out by scientists from foreign and the Republic of Uzbekistan on the main processing plugs on the Earth. The advantages and disadvantages of a rotating plug in a horizontal plane with a geometric combined working surface are highlighted.

Introduction. In the complex of measures of the deconning system, the agro measure of the main processing of soil is important. Especially since today, the production of innovative plugs, which are energy efficient, high performance, low fuel lubricants, remains an urgent issue.

According to the decree of the president of the Republic of Uzbekistan on the strategy of agricultural development for 2020 — 2030s, PF-5853 of October 23, 2019, only 20.7% of the 20.2 million hectares of agricultural land are irrigated agricultural land [1]. In accordance with this decree, 1.1 million hectares of agricultural land will be appropriated by 2030, 535.6 thousand hectares aimed at improving the efficiency of the use of tulips, pastures and other lands and the development of new lands will reveal the importance and relevance of the topic.

We have examined the work of scientists who have carried out a lot of research and design work on the creation of working parts of agricultural techniques and have developed a number of models and methods. Including in a fundamental way from foreign scientists V.P.Goryachkin, V.A.Jeligovsky, L.V.Gyachev, G.N.Sineokov, I.M.Panov, V.A.Sakun, V.I.The work of korabelsky and others.

Scientific work aimed at research of working parts of Agriculture and reclamation equipment

with a complex surface in Uzbekistan M.M.Muradov, R.I.Baymetov, A.T.To xtakuziev, F.M.Mamatov, N.S.Bibutov T.X.Jo we reviewed the work of scientists like rayev [2].

On geometric working surfaces and their constructive drawings, we studied the scientific work carried out by Zhurayev Tojiddin Khairulloevich, associate professor of the Institute of Natural Resource Management of the MTU Bukhara [3].

Today, collar plugs (Figure 1) with tipping bodies mounted to the left and right are common. In them, the bodies will be mounted on the frame under 1800 in relation to each other. With the help of a special Hydro-cylinder mechanism, the plug frame is turned to 1800, and the left and right bodies are launched [4,5].

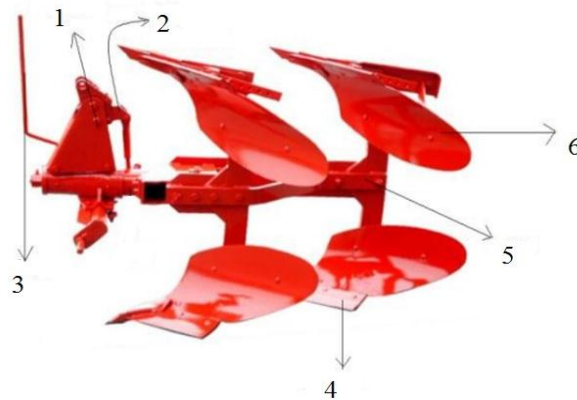


Figure 1. Collar plug

1st wheel, 2nd kojukh, 3rd twist mechanism, 4th cutter knife,
5th rama, 6th otval

Collar plugs fall into the order of plugs with high performance depending on the operating situation-the collar plug shown in Figure 1 is made up of details and nodes attached to rama 5. To Rama 5, otval 6 is fastened, a cutting knife 4 is attached to the otval and together they form the body. Changing the situation of the hulls and ramani changes the turning mechanism 4. The twisting mechanism and hinge 3 are attached to kojux 1 and all together form a single construction [7,8,9].

We have envisaged the development of a new type of plough structure designed for flat ploughing in local conditions, consisting of a geometric combined working surface, tilted in a horizontal plane, equipped with a double-sided limestone body.

The expansion of agricultural land leads to a further increase in demand for ploughs plowing land. The Plough is the most widely used in agriculture and is an agricultural device with a geometrically complex working surface. Equipped with geometric combination working surface Crushers, the twisting plug is an innovative technical development with energy-efficient, high performance .

It consists of two front and rear parts according to the constructive structure of the turning plug, which is equipped with geometric combined working surface limbers. The front of the plug is shown in Figure 1, with the lemex 1 and chest 5 attached to the saddle 6. The saddle is in turn attached to the track Board 8 and 8a, the column 3 and the column fixator 4 are attached to the saddle 6 as well as the blind 5. Also shown in Figure 1 is the back of the plug, which merges with the front using ribbon 9 and handle 12. The rear track boards are 10.10 a otval and the working surface consisting of the wing is coupled with 13.14 [10]. The Plug can rotate parallel to the horizontal plane and change the working position. In order for the soil to turn the palaxsa to the right, the above-mentioned twist should be twisted along the right shoulder figure 2.

In conclusion, a twisting plug equipped with geometric combination working surface crushers saves costs and time in the plowing process and increases productivity. The use of this novel plough in agriculture in a wide mashitab saves energy at a high level.

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