ABSTRACT

The aim of study is to give ideas for plough kinematic test bench. There are 2 opportunities, the first with hydraulic system and the second with chain hoist. There have made a comparison, which shows, that hydraulic system is changable and the movement of plough can be easily changed. The purpose of the test rig was set to measure the force and the movement of the transfer of the plow.

A thesis starts with plow and stone protector classification review. There are given short overview of similar solutions and their analyzes. Possible solutions are offered for stone protector testing – one with chain hoist and the second with hydraulic drive unit. There have done initial hydraulic transmission and solution of hydraulic circuit. The annexes contain illustrative examples of the stone protector and the assembly drawing and detail drawings of a possible case of test bench with hydraulic transmission.

Keywords: plough test bench, kinematics, plowing, measuring, stone protector, chain hoist, hydraulic transmission, technical drawings.