



Laser commanded and hydraulic driven modular system for those navvy machines designed for agricultural land grading

T. C. POPESCU, GH. ȘOVĂIALĂ, C. NICOLESCU - Hydraulics & Pneumatics Research Institute
Bucharest

The modular equipment shall include:

- a laser emitter module mounted on a telescopic frame in the centre of the circular surface to be graded, with a ray of 300 m. It will generate the reference plan for grading with gradient programming options between 0...1,5%;
- a laser receptor module mounted on the equipment next to the operating part. It captures the laser fascicle emitted in an "optimal area", a "maximum area" or a "minimum area" depending on the difference between the ground elevation underneath the equipment and the reference level for grading;
- an electronic monitoring and controlling module mounted on the equipment. It converts and amplifies the received laser information, compares it against a specifically preset grading elevation value, sets the error against the preset value and emits orders in order to cancel the error;
- an electro-hydraulic driven system on the equipment.