MACHINE FOR STABILIZATION OF ACCLIVITY

Description
On the base of a tractor (class 4.5 tons) a machine for hammering dowels into ground is constructed. The machine is aimed at stabilization of acclivities and banquette. Under impact-static loading a rod-dowel or pipe of diameter up to 30 mm is immersed into ground of acclivity on depth up to 12 m. Then the free outer ends of dowels (length up to 200 mm) are strapped with reinforcing fabric, and, if necessary, are underpoured with concrete. It prevents inadmissible deformation or destruction of ground near abrupt slopes.

Technical appraisal and economic benefits
In the current practice of construction works, the dowels are immersed into ground manually by sledge hammer or jackhammer, what is extremely unproductive and labour-consuming. The machine created for this purpose will allow to increase productivity of technological process by an order of magnitude and to eliminate heavy manual labour.

Application areas
Customer (LLC “STM Story”) plans to use the machine in house and road construction.

Development stage
Pilot device has been produced and tested under working conditions.

Patent situation
The procedure of a patent application is currently being in progress.

Commercial offers
Joint production of the machine.

Estimated cost
1 million roubles (attached implements).

Contacts
Cand.Sc. Kira N. Gavrilova, Scientific Secretary
Lavrentyev Institute of Hydrodynamics, Siberian Branch of the Russian Academy of Sciences Pr. Ac. Lavrentyeva, 15, Novosibirsk, 630090
Tel.: (383) 333-21-66
Fax: (383) 333-16-12
E-mail: info@hydro.nsc.ru
http://www.hydro.nsc.ru