Description
A technology and equipment were developed for cleaning walls of thin lengthy channels from the products of mechanical processing, sediments, and burnt-on. The development provides processing 1.8–2.5-mm channels of length 50 mm or more. The equipment ensures the elimination of burrs at the channel intersection and microasperities, and removal of metal particles expanded into channel walls under drilling. The cleaning eliminates the ingress of processing products into the pulverizer nozzles and guarantees high work capacity of jets. The working principle of the setup is based on the use of hydroabrasive high-pressure jets of 300-800 atm. Optimal operational cleaning characteristics, the concentration, the method of injection and the type of abrasive material were selected. The equipment is designed for closed water cycle.

Technical appraisal and economic benefits
The hydroabrasive cleaning method is more effective for cleaning lengthy channels of small diameters than chemical and thermal/detonation methods.
Application area
Metal-working industry.

Development stage
The setup has been successfully working for several years at a plant in the Altai region.

Patent situation
The production prototype is protected by a Russian patent.

Commercial offers
Production and supply contract.

Estimated cost
To be negotiated.

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