Experimental verification of abrasive mass flow impact on the technological head acceleration amplitude and vibrations frequency in the production system with AWJ technology

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During the operation of manufacturing systems with hydroabrasive jet technology, arising in the production system vibrations, which affeon ct its reliability and durability, operating costs and consequently economic efficiency and operational safety. The emergence and spread of vibrations generated by water jet technology remains actual and theoretically difficult issue, which is currently not sufficiently developed. Despite the best efforts of researchers and a good knowledge of the operation in PS with water jet technology remains unexplained facts. One of them is the abrasive mass flow technological parameter affecting the acceleration amplitude and vibrations frequency on technological head, which is the subject of experimental investigation during cutting steel abrasion resistant HARDOX 500.

Keywords: hydroabrasive water jet, technological head, vibration acceleration amplitude, frequency, cutting of material

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