
**CHARACTERISTICS OF CAPILLARY DISCHARGE CHANNEL AND ITS EFFECT
ON CONCRETE SPLITTING OFF BY ELECTRO-BLASTING METHOD**

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The research results of concrete splitting off of the free surface by borehole electro-blast with the discharge initiation by the wire explosion have been presented with the shock and pressure wave dynamics depending on the spatiotemporal distribution of electrical power deposition in plasma channel. The electrical characteristics of plasma channel initiated by exploding wire in polyethylene capillary have been investigated. It has been shown the significant dependence of the stress-wave profile on the pressure pulse wave shape on the borehole wall which is determined by the rate of electrical energy release in the plasma channel and is weakly depended on the time of energy release (at given rate of its release).

Keywords: *capillary discharge, splitting off, borehole electro-blast, wave dynamics, plasma channel.*