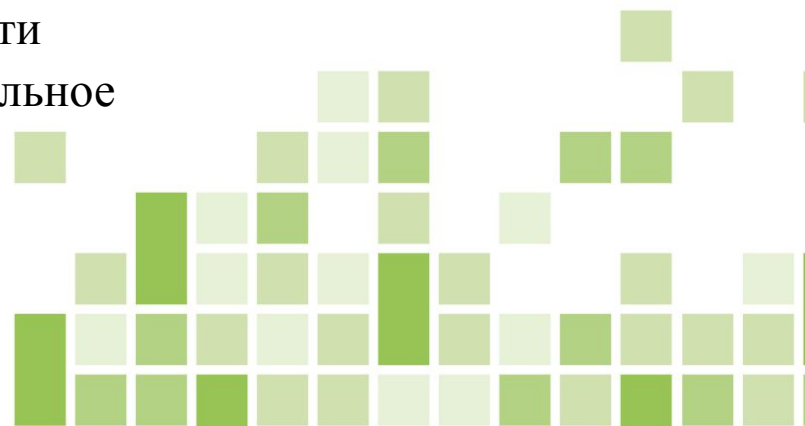


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Electrohydraulic Effect



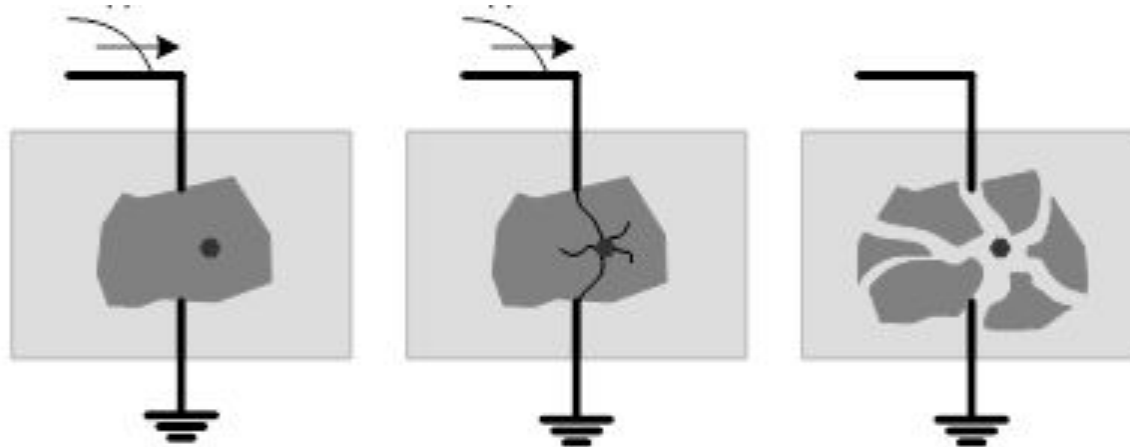
Yutkin L.A.

Electrohydraulic
Effect is the
occurrence of high
pressure in liquid



This stage is characterized by a short-time period and rapid change of channel parameters as in case of discharge channel forming in solid.

During rapid channel expansion a shock wave occurs in adjoining liquid. It propagates from discharge channel as compression zone with very a steep front. The shock wave front separates later from the channel wall, as the speed of wave propagation in liquid is a lot than the speed of discharge channel expansion.



Shock wave	Ударная волна
Discharge gap	Разрядный промежуток
Wave front	Волновой фронт
Energy dissipation.	Диссипация энергии

A dissipative process is a process in which energy (internal, bulk flow kinetic, or system potential) is transformed from some initial form to some final form

Conclusion

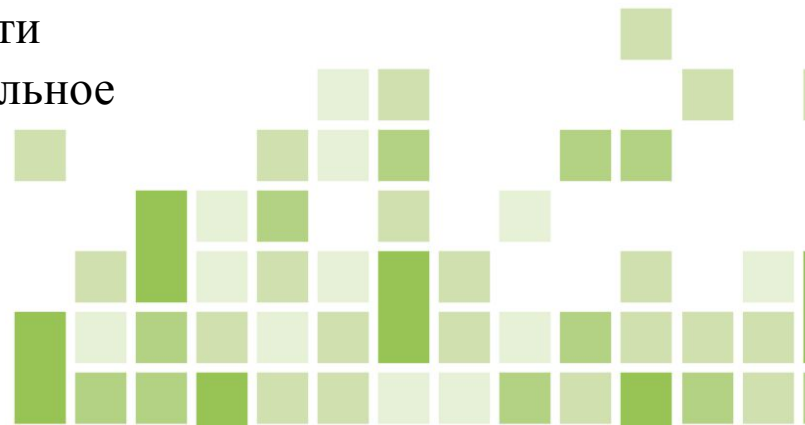
In a series of technologies the primary plasma channel forms not due to electrical breakdown but due to conductor electrical explosion. The right shape of channel is achieved and additional capabilities to adjust with energy-release regime in operating chamber are secured.



References

1. V.Ya.Ushakov «Electrical power engineering and pulsed power»: Textbook. – Tomsk: Publish TPU, 2005. – 240 p.

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