
Technologies of material destruction and separation based on electrodynamic effects

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We consider the possibility of using technologies of material destruction and separation based on the electrodynamic effects. The first technology is based on electromagnetic effects related to the electric explosion in a liquid medium. The second technology is generation of electrodynamic forces between conductive elements by passing pulsed electric current. The third technology is based on using methods of magnetic pulse material treatment, in particular, throwing metal plate overclocked by pulsed magnetic field. Proposed technologies may replace tradition explosive technologies using chemical explosives the effect of which pollutes the environment and which are not safe to transport and store.

Keywords: technology, destruction of materials, electric explosion, electrodynamic impact, electromagnetic throwing.

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