

# Finished plasma strengthening and restoration of fuel equipment details

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## Abstract

© 2018 Institute of Physics Publishing. All rights reserved. The results of the investigation of the physical and mechanical properties of diamond-like coatings of the DLCPateks type (a-C: H / a-SiOCN) obtained on friction surfaces by transporting the atomic and molecular flux of vapor particles of liquid chemical compounds by a plasma jet of an arc plasma torch of atmospheric pressure are presented. The layer formed on the working surfaces is a non-metallic amorphous multilayer coating with a low coefficient of friction, increased microhardness, chemical inertness, hydrophilicity, high heat resistance and dielectric characteristics. To minimize the possible defectiveness of the main material, it is proposed to apply thin-film coatings to them at the final stage of manufacturing fuel equipment parts.

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