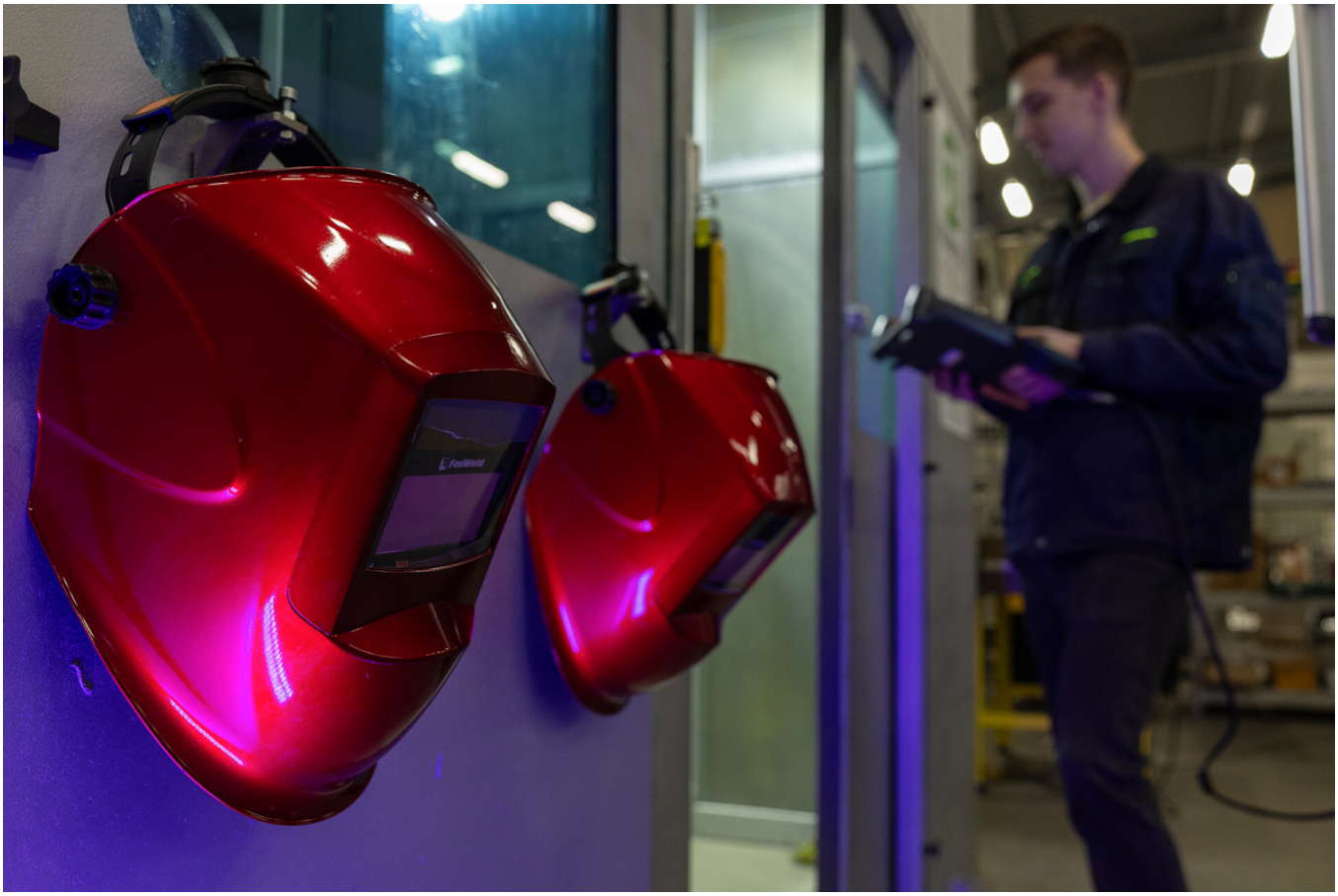
The Polytechnic investigate the mechanical properties of metal on the restored surfaces of pipelines

Specialists of the Laser and Additive Technologies Research Laboratory of the Institute of Machinery, Materials and Transport of SPbPU are studying the mechanical properties of metal applied by laser cladding to the surfaces of equipment and pipeline components and parts to be restored. The work is carried out for the company Kirishinefteorgsintez, which is part of Surgutneftegas.

Employees solve tasks on prompt restoration of sealing and working surfaces of pressure devices.

Modern methods allow us not only to extend the service life of products, but also to significantly improve their performance characteristics. Using additive technologies, we can control the performance characteristics and quality of the clad material, which is critical for equipment operating in aggressive environments, commented Mikhail Kuznetsov, Head of the L&AT Research Laboratory at IMM&T SPbPU.



One of the keys is to minimize the risks associated with corrosion processes.

By researching corrosion resistance, we try to anticipate potential problems in advance. This allows us to develop better and more reliable solutions for industrial enterprises, Mikhail Kuznetsov emphasized.

According to the scientist, a multidisciplinary approach is important in this work. Such interaction opens up new opportunities for developing innovative solutions and improving equipment reliability.

Now the laboratory staff is faced with the task of selecting Russian powder material and technological equipment for laser surfacing.

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