



Narzędzia i Urządzenia
Wiertnicze "Glinik " Sp. z o. o.
Poland.



Development and verification in real conditions of a new technology for the production of large-diameter multi-core bits and PDC type bits with the use of additive manufacturing methods (3D printing) implemented in the Laser Metal Deposition (LMD) technology.

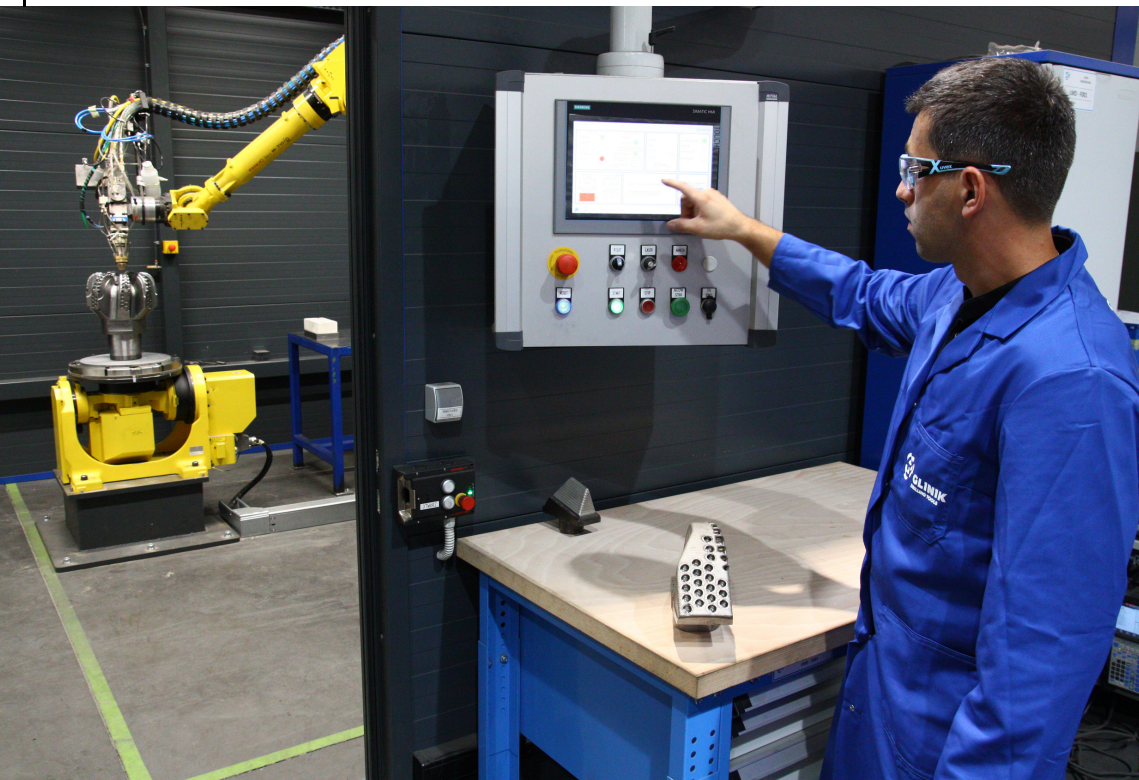
ABOUT PROJECT

Laser Metal Deposition (LMD), also referred to as Directed Energy Deposition (DED), represents an Additive Manufacturing technique facilitating the creation of entirely new geometries or the restoration of pre-existing, damaged components.

LMD is a distinctive methodology that synergizes laser and powder-based processes, optimizing material utilization by enabling the production of high-precision, near-net-shape components utilizing powdered materials. The integration of LMD technology and the development of a bespoke powder formulation have provided us with the prospect of revolutionizing this domain and the methodologies associated with the production and reconditioning of drill bits.

By adopting in GLINIK LMD technology, we are capitalizing on its unique advantages to elevate the quality, efficiency, and innovation of our drill bit products. LMD is an incredibly powerful manufacturing process that from 2023 year finds new applications in GLINIK.





OUR R&D RESEARCH AND IMPLEMENTATION

In LMD technology, the powder plays a crucial role as the raw material for creating layers and components. This powder is carefully selected to meet the requirements of the LMD process and the characteristics of the final new product or products for regeneration.

Our R&D team has successfully formulated a distinct powder compound. Our proprietary powder composition distinguishes itself primarily through its exceptional attributes: precise particle size and distribution, material reactivity, purity level, and elevated melting resistance. Glinik has strategically curated an optimal powder matrix, leading to the attainment of targeted technological benchmarks and stringent quality criteria.

Our innovation, embodied in the unique powder formulation, has substantially fortified impact resilience and significantly amplified abrasion resistance.

GLINIK'S GOALS & NCBR SUPPORT

With pride, we announce the achievement of a milestone - the new powder formula has become a reality! But this is just the beginning.

We've already successfully executed initial applications that validate the potential of our technology. We are currently in the process of introducing our solution to the industrial realm, marking a significant step forward in realizing our vision. Industrial deployment is underway, signaling that we're on the path to complete success. However, there's more to come - this is the moment where we can make a breakthrough together.

Our goal is to achieve widespread industrial utilization of our technology. We invite you to co-create this narrative alongside us. Join us in our mission to collectively achieve extensive implementation of our solution in the industry. We await your participation, so that together, we can make it happen.

