

Advanced Processes and Surface Technologies for Development of High-Performance Coating Solutions: from Thin to Thick

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Abstract

Thermal coating technologies are responsible for production of a wide range of products for aeronautics, automotive, heat power plants, off-shore or biomedical applications. Which process, or which coating material to choose will depend not only on the required surface properties but also on economic and technical challenges. Moreover, there is an increasing demand for more cost-efficient processes and materials. In this contribution the latest developments in terms of new technologies and coating solutions are proposed. From laser hardening to laser cladding, including a detour in the latest suspension spraying developments, the required system technology as well as current applications will be presented.