

Application Bulletin

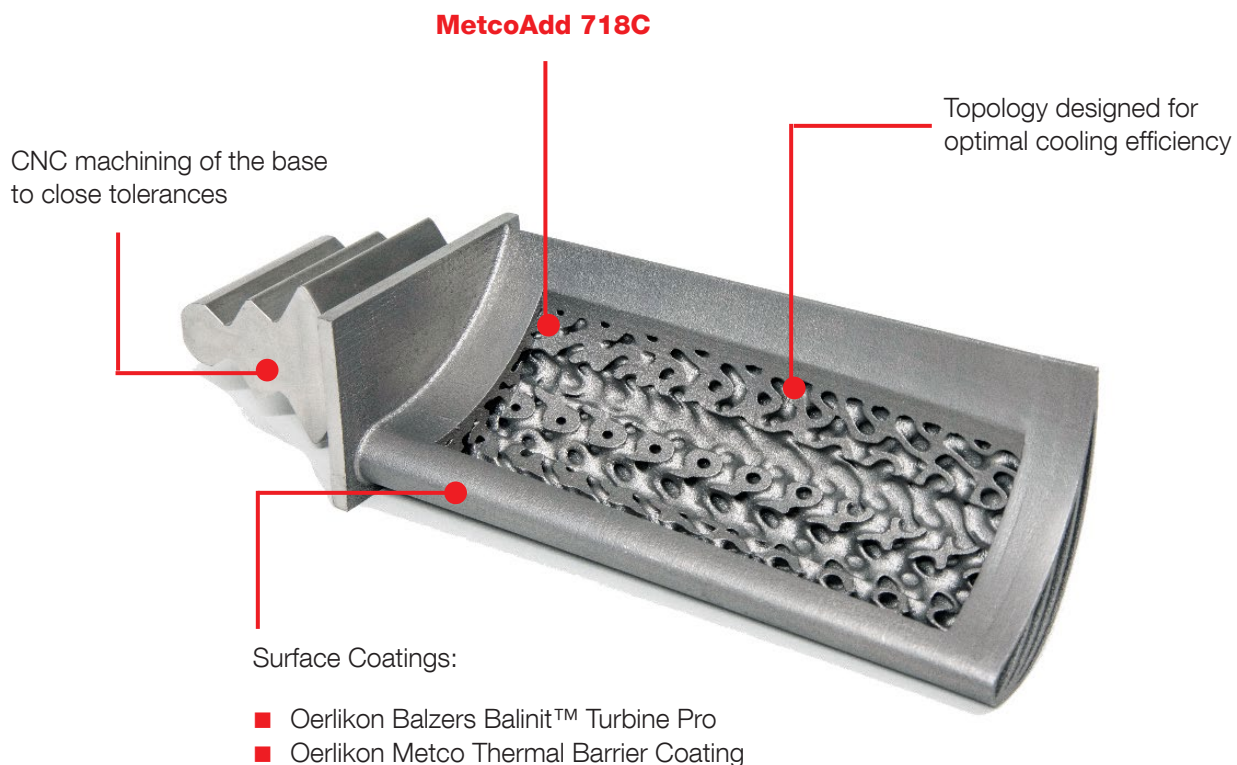
Additive Manufacturing

Hollow Turbine Blade — Power Generation

Efficient cooling is a key driver for blades operating at higher temperatures. Additive manufacturing is the only process that can manufacture complex geometries with optimized inner blade topology. Materials with excellent creep strength and good thermal conductivity are required. Mass reduction is a key factor to reduce creep.

The Oerlikon Metco Solution

Laser Powder Bed Fusion (PBF-LB), using MetcoAdd 718C, can create the optimal cooling pattern to improve performance. Using high-performing AM material allows the production of components with complex geometries and reduced mass. Additional coating solutions protect against erosion, corrosion, and thermal effects while improving overall performance and lifetime.



Recommended Oerlikon Metco Products

MetcoAdd 718C Excellent creep strength and good thermal conductivity

More Information

DSM-0296

Information is subject to change without prior notice.