

3D Printing of Metal Components Component Qualification

**How can you be sure that your 3D printed parts comply with standards and norms ?
How can you prove that they're just as good as conventionally manufactured parts?**

Close academic and industrial collaborations and testing have given ENGIE Laborelec a wealth of knowledge and experience in rigorous and scientific part qualification. This, and their 3D printing expertise means that they can focus on how such things as powder quality, process parameters and hardware configuration feed into final part properties. And what difference does orientation and position on the platform make?

Full-service qualification process

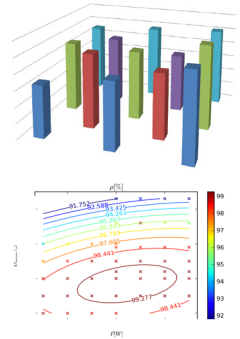
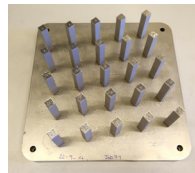
- ♥ Process stability and reproducibility
- ♥ Parameter window optimization
- ♥ Defectology
- ♥ Mechanical tests
- ♥ Overhang angle and fill contour
- ♥ Residual stress
- ♥ Platform configuration with sacrificial parts
- ♥ Qualification approach
- ♥ Mitigation solutions to ensure consistent part quality

Would you like to know more?

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Ensure your 3D printed parts comply with existing standards and norms. Prove equivalence with conventionally manufactured parts.



Nuclear, aerospace and other mission-critical environments need complete A-Z proof of integrity and functionality



To assure qualification, the 3D Printing team works with colleagues from the metallurgy and non-destructive testing departments

Five reasons for you to choose Laborelec

- Wide-ranging technical expertise in electricity generation, grids, and end-use
- Customers enjoy enhanced profitability and sustainability of energy processes and assets
- Unique combination of contract research and operational assistance
- Independent advice based on certified laboratory and field analysis worldwide
- More than 50 years of experience

