

RUN-IN OF METAL POWDER ON SLM SOLUTIONS SYSTEMS

The customer delivers 5L of powder for the testing procedure

Verification of powder

Spark Optical Emission Spectroscopy (OES) on SPECTROMAXx LMX04 system

- Accredited third party evaluations of iron- and copper-based alloys.

Particle Size Distribution (PSD) on Morphology G3 system:

Burn-off test for detection of C, N, O, and S

Two-stage optimization of build quality

Design of Experiments:

- Preparation of DoE and 30 parts for manufacture
- 3D-printing
- X-ray CT scanning with subsequent porosity analysis
- DoE analysis and optimization

Applying DoE optimized parameters:

- Quality artefact manufacture (customer choice)
- Verification of density through X-ray CT scans of 5 parts

Report and project management

As required by the specific project

Output:

- Third party verification of powder certificates
- SLM Solutions process parameter files for your powder with focus on density optimization (> 99.5%)
- Quality artifact for qualitative assessments of print quality

Additional options: *Optimization of down skin surfaces, optimization of support structures, accredited mechanical testing, corrosion characteristics test, hydrogen content measurements.*

Inquire for more information.

