



## Photonics Applications Center (PAC)

### System design and process solutions

Xenon Flash Lamps can be operated with an infinite number of parameter sets; this is an advantage for optimising processes but also means that an off-the-shelf system for all requirements is not desirable.

The Heraeus Noblelight approach to this is to equip our Applications Center with various Flexible Xenon Flash systems in order to meet, all and any, of our customer processing requirements.

We offer a full consultancy service for Rapid Thermal Processing requirements using Xenon Flash.

We can advise on all aspects of thermal processing on many applications from curing to sintering, followed up with sample testing or small production runs, optimising your processes before any capital outlay.



Our fully equipped lab has multiple Flash Systems, utilising different power supply types for all application requirements, including high and low frequency, long and short pulses, high and low power with Spectral enhancement capability.

Following successful trials and proof of process, the Cambridge technical team can design a bespoke system to enable a cost effective Photonic process solution for you to incorporate into your production facility.

#### The Technical Possibilities

We have the technical experience and equipment to provide support in improvements to lamp technology and for application projects:

- Multi-lamp head
- Unique camera system for arc attachment analysis and temperature measurements
- Spectral analysis (UV to NIR)
- Sophisticated ray tracing technology
- Calibrated homogeneity modelling software

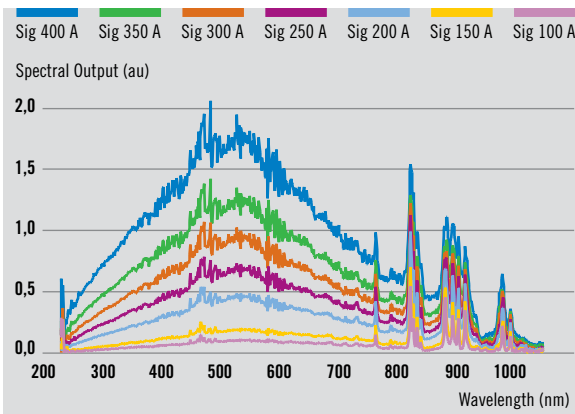
We find solutions in many application fields:

- Sintering of Metal Oxides/Inks/Pastes
- Rapid Thermal Processing (RTP)
- Semiconductor processing
- Flash Lamp Annealing (FLA)
- Photovoltaic cell/module testing
- Curing
- Disinfection

With our Application center we offer our customers the opportunity to answer important questions, from a practical viewpoint.

- Will Xenon Flash work for my process?
- How can it be improved and optimized?
- What parameters are required?
- What lamp array design/power supply combination is best suited for my process?
- How can it be integrated into my production?

Spectral output of a 4 mm lamp/5 ms pulse



See how Xenon Flash adds value to your process!

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