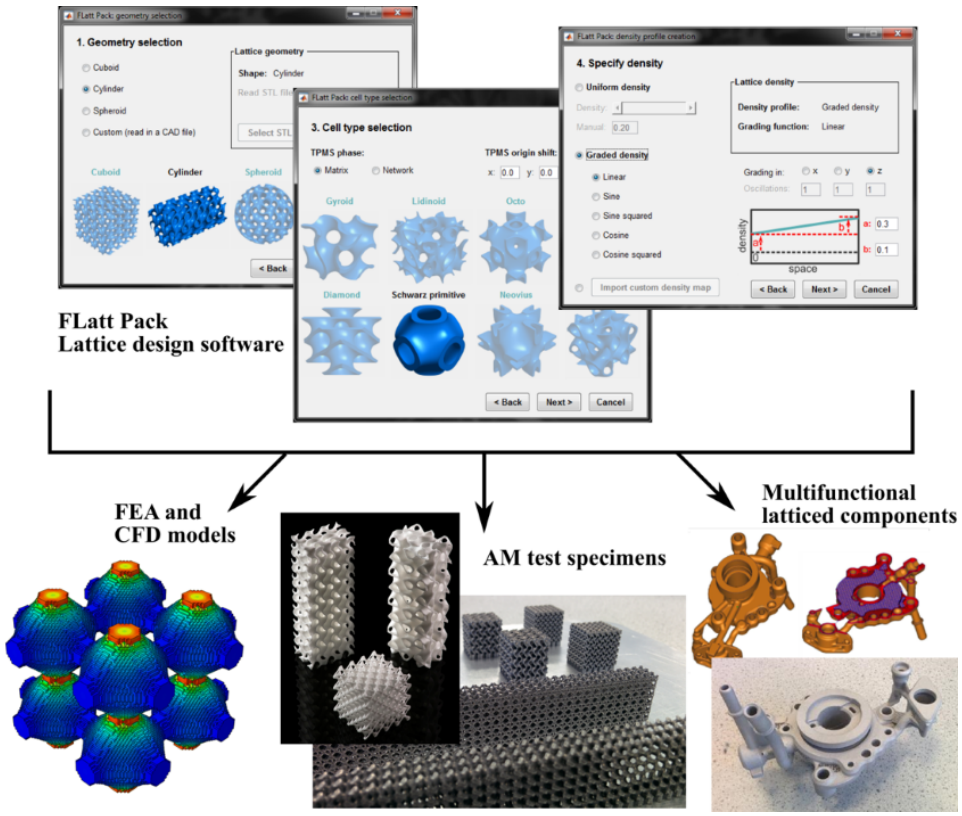
MICRA COMMERCIALISATION OF RESEARCH ACCELERATOR

FLatt Pack

Software for the design of cellular structures, or 'lattices'

FLatt Pack is software created at the University of Nottingham for the design of cellular structures, or ‘lattices’. Its main purpose is to facilitate lattice research, through additive manufacture (AM) and testing, and computational modelling (such as FE and CFD). It gives the user a selection of 23 lattice types and complete control over their volume fraction and cell dimensions. It can also embed lattices in products to deliver significant weight reduction. FLatt Pack has been used in numerous academic publications (References are included below).



- Current version: 3.20
- Latest update: 5th December 2021
- License expiry date: 28th August 2022
- FLatt Pack is currently only available under a non-commercial licence. **Please contact the University of Nottingham to discuss using FLatt Pack for commercial purposes** either on: sarah.newman@nottingham.ac.uk or tto@nottingham.ac.uk

A few notes on installation and use:

Category

Software

Authors

Ian Maskery

View online

1. To ensure the program runs without error, it is best to install it in your user space (your Documents folder or similar) rather than C:\Program Files. If you have admin rights on the PC, you should be able to install it anywhere without problem.
2. The software installer will automatically connect to the internet to download the Matlab Runtime environment. This can take around 20 minutes. Subsequent installations (such as updated versions of the software) will bypass this step and will be quite quick.
3. Please be aware that this is very much a product in-development. The chance of you encountering a bug of some kind is non-zero. Get in touch and I'll try to fix it. I rely on feedback from users of the software to identify bugs and make improvements.
4. Every time the program is run, a log file (FLatt_Pack_log.txt) will be generated. If you have any problems, please attach the log file when you contact me. That way, I will be able to diagnose and fix the issue as quickly as possible.
5. A user manual for FLatt Pack is included in the installation. Users should consult this manual before use.

Please contact Ian at ian.maskery@nottingham.ac.uk if you have and questions about the software, or problems while using it.

FLatt Pack's principal author, Ian Maskery, is a professional researcher and currently a Senior Research Fellow at the University of Nottingham. In 2013, he obtained a PhD in Condensed Matter Physics from the University of Warwick. Since then, Ian has worked at the Centre for Additive Manufacturing (CfAM), mainly undertaking research in the areas of metal AM and design-for-AM (DfAM).

In recent years, Ian's focus has been on the design, manufacture and physical properties of cellular or 'lattice' structures. This has led to several well-cited academic publications in this area.

In 2018, Ian won a three-year fellowship at Nottingham under the NRF funding scheme. He began working on his fellowship research programme in October 2018, investigating novel and advanced applications for AM lattice structures.

https://www.ianmaskery.com/

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