GROUPE CEDRAT

Motor Design Ltd.

CEDRAT is pleased to announce the release of **Flux 10.3** – The ideal tool to model any electromagnetic device: *Accuracy and reduced time-to-market while saving money doing it.*

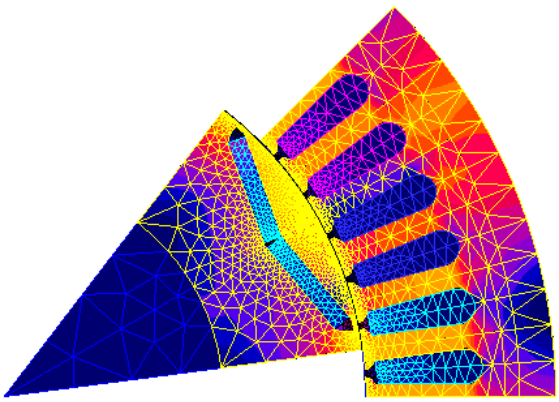
Based on years of research, CEDRAT's advanced simulation package for **electromagnetic and thermal analysis** is used by specialists around the world to **design and optimise electrical devices.** This accurate software helps engineers to address their daily challenges such as **energy efficiency, size and cost reduction.**

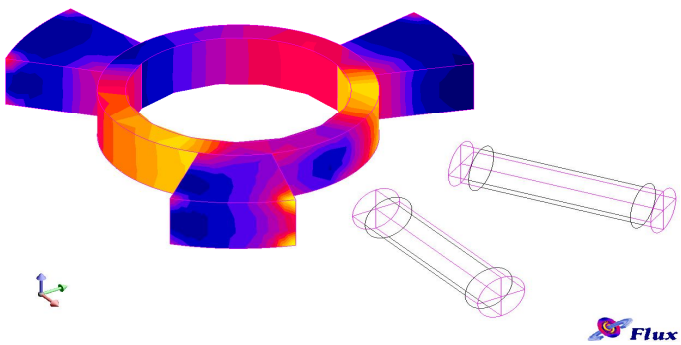
New solutions have been developed to **simplify the use of the software** while **offering more functionality for your daily work:**

- **Improvement of the Flux pre-processor:**
  - » **automatic mesh generation - obtain an expert high quality mesh in one click!**
  - » electrical circuit definition fully integrated into Flux
- **Improvement of the Flux solver:**
  - » optimised calculation time
  - » new algorithm to increase the non-linear models solving speed
  - » enhanced capabilities to model the eddy currents in surface regions
  - » static initialisation for transient simulations in both 2D and 3D
- **Flux – Portunus System Co-simulation**
- **Flux motor overlays** – to simplify geometry creation in the design of BPM and IM machines and import SPEED files directly
- **Full scripting capability** from pre-processing to results analysis for both 2D and 3D models

Flux is suitable for **designing, optimising and analysing** any electromagnetic device such as:

- rotating machines
- linear actuators
- transformers & inductors
- induction heating devices
- sensors
- high voltage equipment
- cables, busbars & conductor layout
- electromagnetic compatibility
- non destructive testing
- and many other applications …





Flux 10.3 solves the problem for the specified physics and provides the user with multiple ways to analyse results and review the success of the idea - all within its modern user friendly interface. There are also many possibilities for the **automation of the simulation process**. The **Flux** command language derived from the well known Java and Python object oriented languages, allows users to define their own macros and interfaces to simplify their work.

Perfectly integrated into the simulation tool chain, **Flux 10.3** communicates with numerous CAD tools:

- **to import geometry files** - CATIA, PRO/E, Inventor, AutoCAD, etc.
- **for co-simulation with other tools** - Portunus, Simulink, FLUENT, EMTP, Ansys, etc.

Flux 10.3 is the most open finite-element electromagnetic solution available on the market.