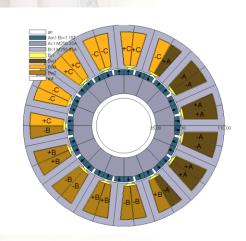


Supercool

Project Goal

- Investigate the possibility to overload an electrical machine by Incorporate direct cooling by forcing air thru the winding.
- This by combine FE-calculations, analytical models, experimental work and measurements.
- Building a air cooled prototype with the developed technique.



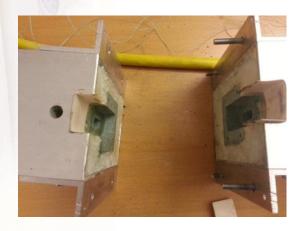


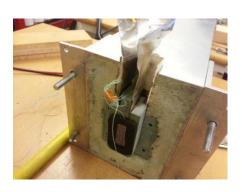


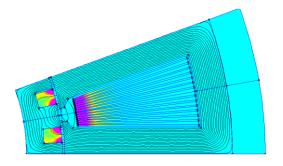


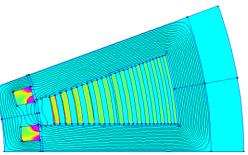
Project Scope

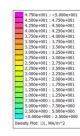
- Study machine design for unconventional windings
- Study additional losses due to winding design.
- Build a wind tunnel for experimental verification of models.

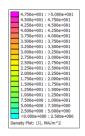














Partners, Resources & Timeframe

Partners

- AB Volvo
- Iprod Lund University

Resources

- Power Systems lab @ Lund University
- Mechanical workshop @ Lund University

Timeframe:

Start: November 2012

Finish: November 2015

Contact Information ...

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More material:

• Papers:

https://www.iea.lth.se/publications/pub pap.html