

COOL... Motor-Cad saves your time and your energy.

Dave Staton - MOTOR DESIGN Ltd, Marc Vilcot - CEDRAT.

Motor-CAD is dedicated software for THERMAL analysis of rotating machines. It provides a wide range of motor models and cooling types.

Motor-CAD is already used by famous group as Bosch, Delphi, Dupont, Eaton, Globe Motor, Muirhead, Parker, Rolls Royce, Schindler, Siemens, TRW, Valeo, Visteon, WEG and a wide range of university labs.

All these R&D departments found in Motor-CAD an appropriate tool for the daily optimisation of motor cooling.

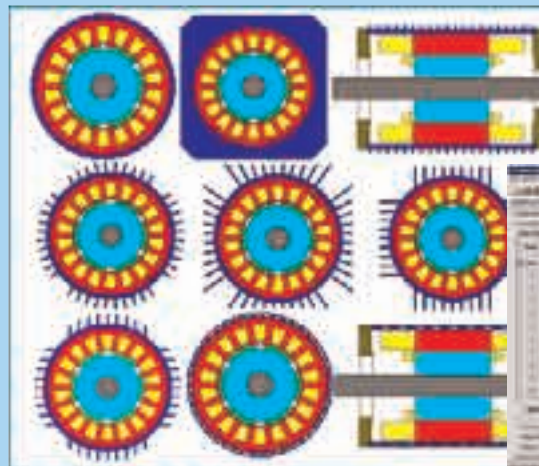
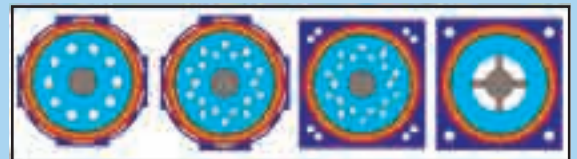


Mawdsley's Ltd Through Ventilated Motor (from ICEM 2002 paper '1150 hp motor design, electromagnetic and thermal analysis, Qasim Al'Akayshee & David A Staton).

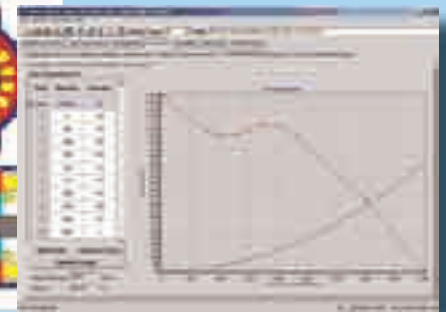
Motor-CAD Cooling Types

- Totally Enclosed Natural Ventilation (TENV)
 - With options for orientation and mounting
- Totally Enclosed Fan Cooled (TEFC)
 - Many housing fin types included
- Through Ventilation
 - Model of flow and heat transfer
- Liquid Cooling
 - Stator and rotor water jackets
 - Wet rotor and wet stator
 - Submerged motor
 - Spray cooling.

Wide range of housing fin type.



Through ventilation fan characteristic shown above – used to calculate flow of air in the machine. For some of the different housing types see the motor pictures that follow.



Machines Availables

- Brushless Permanent Magnet (**BPM**)
- Induction Motor (**IM**)
- Switched Reluctance Motor (**SRM**)
- Synchronous Machine (**SM : Autumn 2003**)
- Permanent Magnet DC Machine (**PMDC : Autumn 2003**)

