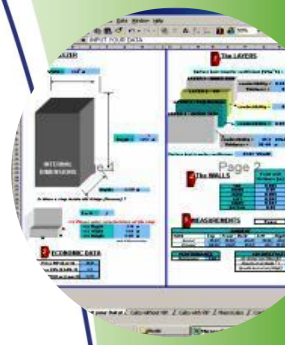
# Mathematical modelling



## Modelling of:

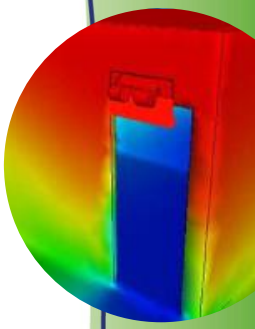
- Air flow
- Heat transfer
- Refrigeration system performance
- Refrigeration system design
- Energy usage
- Structures/insulation/ packaging performance

## Areas include:

- Retail display
- Professional cabinets
- Domestic refrigerators
- Bottle coolers
- Cold stores
- Air curtains
- Cold boxes
- Food production facilities
- Food chilling
- Food freezing
- Food tempering
- Packaging

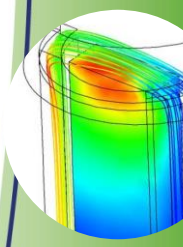
### CFD

- Design of air flow in refrigerated retail display cabinets
- Ventilation around supermarket refrigerated aisles
- Entrainment through cold store entrances
- Simulating airflows within cold stores



### Heat transfer models

- Heat transfer in foods
- Prediction of heat loads for cooling processes
- Prediction of food thermophysical properties

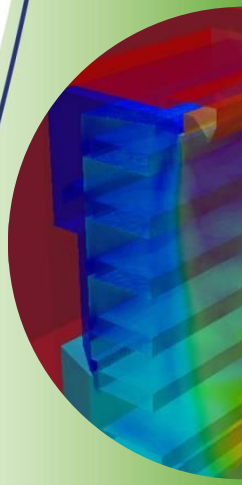


### Refrigeration design

- Models to aid design and specification
- Prediction of energy consumption

### Bespoke models

- Development of new or novel technologies
- Energy use
- Design of test facilities

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Tested by RD&T

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