New Heat Transfer Lab Conduction Experiments
(2008 – 2009)

Previous Experiments:
- Had ongoing electrical grounding issues that made the unit unreliable.
- Bulky and occupied the entire table.
- Cooling water temperature had effect on performance.
- Technical support was not available.
- Thermal conductivity and Fourier’s law experiments were done on two identical versions of the equipment.

New Experiments – Conduction:
- Small package – each of them occupy 1/5th the space compared to the old unit.
- Cost is 1/5th of the old unit.
- Use Labview™ for data acquisition.
- Two non-identical units (one for the thermal conductivity and one for Fourier’s law experiments) are in operation at the same time, leading to better student–to–equipment ratio.
- New manufacturer has better technical support.
- More materials can be tested for thermal conductivity.