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Child-Safe Project

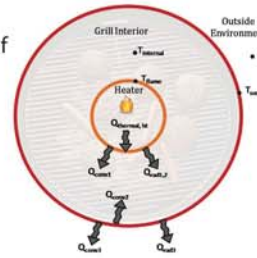
Goal: Create a technology that allows the grill hood to be touched during operation without risk of burn.



Custom Decoration Project

Goal: Create a cost-effective method for decorating grill lids in small to individual batches with customer-supplied graphics.

Developed thermal model of a grill to estimate effect of changing/adding components



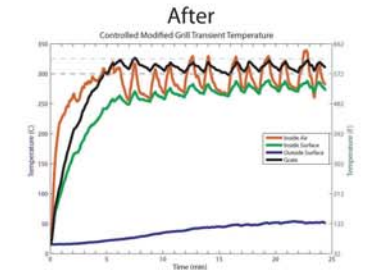
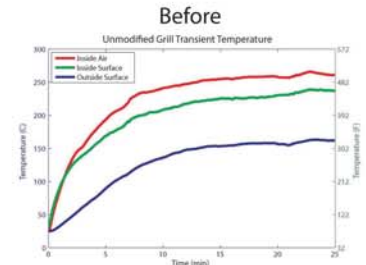
Used model to evaluate potential options for reducing exterior temperature

- Insulation
- Increased radiative area
- Altered emissivity on lid

modeling



testing



The surface temperature can be reduced by:

- Increasing external heat transfer coefficient
- Decreasing propane combustion rate
- Reducing heat flow through the lid

results

Tested market solutions to decoration problem.

- Did not work on a colored background
- Choice between new technology or new methodology

testing



Developed a manufacturing technique for colored backgrounds

results