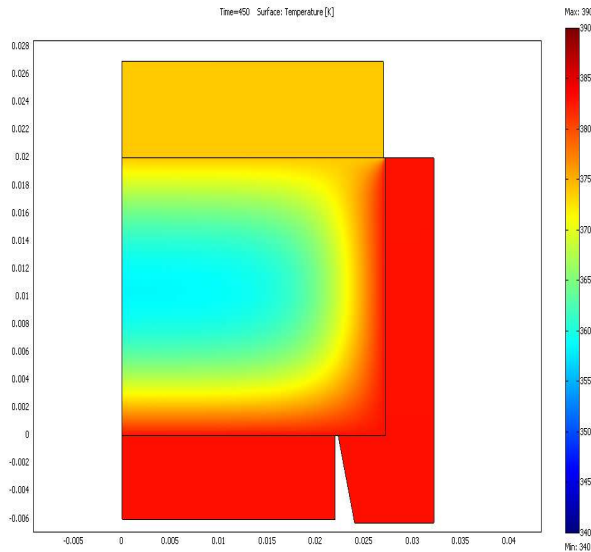


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# Heat Conductivity

## Material Flow Solutions, Inc.

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A bulk solid is a complex mixture of discrete particles. The size of the contacts as well as the type of contacts determines the transient thermal characteristics of bulk materials. The mixture consistency, stress level, and temperature all affect these thermal properties of materials. As a result these properties control the heating rate, drying time and effect of cyclic temperatures on the process. We measure the thermal properties of bulk materials as a function of stress level after subjecting them to typical segregation that the product may see in the field. This data is used for thermal modeling of equipment and helps us predict energy losses from your equipment.

**PRACTICAL APPLICATIONS** of *heat conductivity* data include, but are not limited to:

- ✿ Predicting day / night process temperatures
- ✿ Predicting drying capacity
- ✿ Predicting moisture migration
- ✿ Predicting product cooling
- ✿ Predicting energy losses
- ✿ Predicting mechanical/friction melting problems