



**Thermal distributions are not the full picture...
or
Three Sides to Every Story**

Abstract

Coke drum cracking causes will be reviewed and discussed regarding these sources:

- ▶ Fast Quenching can create non-uniform cooling of the coke matrix and mal-temperature gradients.
- ▶ Coke stiffness can create friction and resistance to shrinkage of the steel envelope.
- ▶ Bulging can create stress amplifications for pressure and thermal events.