



History of Successful Assessment

CASE STUDY 1

PROBLEM: Wear of components leading to the repair and replacement of filler bars on rotary kilns, resulting in a need for a lubricant to lubricate the filler bars on a riding ring of a rotary kiln in a safe and effective manor.

REQUIREMENTS: Design a lubricant that was in a form to allow or provide for the ease of application/accessibility to apply a lubricant in between the filler bar sections, with the dimensions of 1 ½ inches by 6 inches, and coat the surface area with a depth of two to five feet, at temperatures reaching 700 plus degrees Fahrenheit.

PREVIOUS PRODUCT/METHOD: A concoction of a carrier composed of water, diesel fuel, oil and a mixture of graphite which requires a laborious preparation time prior to application. The application method is a pressurized sprayer which is time consuming and inefficient. This method also created a safety hazard for the individual applying it as well as environmental concerns. This method required 1 to 2 men and takes at least 30 minutes to apply every other day for each riding ring on the kiln.

C&C SOLUTION & IMPLEMENTATION: Alan Lockett designed and formulated a specialty product that would provide ease of application, effective coating of the lubricant in the appropriate area of concern and ultimately enhance worker safety and reduce application time. The resulting product known as Easy Bar is unique in composition resulting in patents and usage by several industries throughout the world.

UPTIME & DOLLARS SAVED BY C&C SOLUTION: Cost savings were realized immediately in extending replacement part life up to 50% while reducing maintenance costs. Labor costs are lowered by reducing a 20 minute application job performed by 1 or 2 workers, two or more times per week for each tire, *down to less than 1 minute a week for each tire*. Savings to repair filler bar weld fractures, and replacement of filler bars is \$20,000 to \$60,000 per tire section.