



Case Study

Seshasayee Paper & Boards Ltd.

GEOGRAPHICAL AREA:
Hyderabad, India

ISSUE:

Looking to increase energy efficiency in paper manufacturing facility and insulate to improve lifespan of sensor units.

SOLUTION:

Heat Shield™ High Heat thermal insulation & corrosion prevention coating.

Coverage: 6-coats

RESULTS:

- ✓ Temperature reduction of 39.6F (15.7% reduction)
- ✓ Additional temperature Reduction of 48.6F (18.7% reduction)
- ✓ Temperature reduction of 28.2F.
- ✓ Corrosion and moisture resistance helps to extend the lifetime of the equipment.
- ✓ Long lasting - 5-10 years.

Award Winning Energy Saving and Asset Protection Coatings



Seshasayee Paper & Boards Ltd. presented a paper at Papertech 2011, held in Hyderabad India. The paper was presented by Dr. T.G. Sundara Raman, Head of Energy and Climate Change Development, Seshasayee Paper & Boards, Ltd, and was presented in the Energy & Environment category. The paper titled, "Energy Conservation Using Nanotechnology Based Insulation Coating in Paper Machine Dryer At Seshasayee Paper" describes the benefits experienced in the pulp and paper industry by using patented thermal insulation coatings by INI for insulation and protection of paper manufacturing equipment.

Equipment was insulated with Heat Shield™ Translucent PT at a 300 micron (12 mil) dry film thickness (six coat coverage). Dryer end covers were coated and showed an average temperature reduction after 30 days (prior to the full 45-60 day cure time being completed) over one dryer of **39.6 F, a 15.7%** reduction in temperature, and on another dryer of **48.6 F, an 18.7%** reduction in temperature. Another piece of equipment insulated to increase

sensor and unit longevity was a scanner sensor unit, which showed an average temperature difference of **28.2F**, prior to cure time being completed, while also showing more effective sensor functioning due to the lower temperature. Comfort for approaching the operating unit and increased longevity of the scanner unit were benefits also noted in the paper due to the INI insulation technology.

Applications areas in the paper mill were noted as: Paper machine dryer unit, hot and warm condensate, boiler feed water and process fluid lines, LP steam pipelines and accessories, heat carrying valves and fittings, satellite cooler annulus exterior of lime kiln, heated HFO lines and storage tanks, chiller lines in CI02 unit, CPU-PHE & EOP head covers.