



LEAKING SHRIMP TRAWLER

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Background

An epoxy / fiberglass coating was applied to the wooden hull of a shrimp trawler.

Assignment

Stress Engineering was retained to examine the epoxy coating to determine why the newly refurbished shrimp trawler "leaked like a sieve."

Findings

Chemical analysis revealed that the epoxy resin and hardener labels were switched so that incorrect amounts were used. Various ratios of resin-to-hardener were prepared in the laboratory and tested by differential scanning calorimetry to determine the correct ratio; however, the epoxy never cured.

Conclusions

It was concluded that quality control problems in the epoxy manufacturing process were responsible for the leaking shrimp trawler.

