Installer: Sadler Coating Systems
Location: Mason City, Iowa
Type of Job: Spray foam insulation to exterior surface of tank
Square Footage of Job: 1100 square feet
Equipment Used: Gusmer 20/35 Pro proportioner and Gusmer GX-7 spray foam gun
Number of people needed for the Job: 2
Number of days required by the Job: 1 day
Special Requirements: Owner required mandatory their own onsite training of contractor workers. Certain
Foam and coatings used: BASF 2.7 lb foam and Benchmark protective coatings

Project Description: Install a 3 inch average of 2.7 lb density spray foam to the exterior surface of a steel conditioner tank located at a major soybean processing plant. Spray foam insulation was specified to maintain the 130 degree temperature inside the tank. Insulation also required a weatherproof coating to protect the foam. The unique aspect of the project was spray applying the foam while the heated tank continually revolved. A different spray technique was needed in spraying the moving tank than normally sprayed to a stationary surface. The timing of the project was a major concern since work began during the peak of the soybean harvest with a daily line of 20-30 semi tractor trailers waiting to unload the newly harvested beans just 100 feet away from the conditioner tank. Prepared planning coupled with a calm day assured the successful and rapid application of both foam and coatings without need for plant shutdown.

Benefits of using Foam: The plant project manager was very pleased to have the tank completely encapsulated with the spray foam insulation protected with coatings in maintaining the 130 degree temperature required during this critical stage of soybean oil extraction. Other types of insulation methods such as mechanically fastened insulation would have necessitated plant shutdown – an impossible option they could not afford. He was most impressed that the spray foam could be applied while the conditioner tank rotated and remain operational with no disruption of facility operations while at the same time voicing approval on the finished uniform foam application.

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