Geothermal Plant End Bell

Client: Withheld
Location: Southern California
Coating used: Mascoat Industrial-DTI
Thickness: 80 mils (2 mm)
Reason for coating: Insulation on end bells of heat exchangers

A geothermal plant in Southern California was having problems with the insulation on the end bells of their heat exchangers. They had to remove the end bells 2-4 times a year for maintenance on the internal tubes. Since they weighed approximately 9,000 pound, whenever they removed them and laid them on the ground, the insulation would be crushed. They, therefore, had to remove the insulation every time they remove the end bells. This was a very costly procedure.

Mascoat offered their Industrial-DTI product as a solution to this problem. It was observed that there was a 3" steel lip running around the rim of the end bell. When it was laid on the ground, the whole weight of the end bell rested on this lip, which meant that the rest of the surface area would be undamaged if it was coated with an insulation coating. After the maintenance was complete, the lip could be quickly repaired with Mascoat's Small Application Sprayer. This would save the company about 7 hours of labor every time they had to remove the end bell and a significant reduction of material costs.

The company decided to insulate the end bell with 80 mils (2 mm) of DTI. Since DTI can be applied to hot surfaces, the application was done while the heat exchanger was in service at 200°F (93.3ºC). The company was very happy with the results.