Personnel Protection – Marco Polo Platform

The fin fan cooling lines were placed too close to its above deck on Anadarko's Marco Polo Platform, raising problematic personnel protection issues. The deck above the fin fan cooling lines became so hot that if a worker were to stand still long enough, the rubber soles of their boots would begin to melt. Adding to the concerns, the handrails around the perimeter of the platform conducted an immense amount of heat, exceeding personnel protection limits of 180˚F (82˚C).

Anadarko called on Mascoat for help. Mascoat's DTM coating was specifically formulated for marine applications and would be the ideal solution. Application would be tricky; since the fin fans needed to be shut down, it needed to occur during an outage on the platform. Adding to the complication, temperature readings of the pipes could not be tested; therefore, Anadarko had to assume that that the piping was operating between 325-350˚F.

Considering the obstacles encountered, Mascoat made a very conservative recommendation on the amount of product needed. To cool off the deck and its handrails, 120 mils (3.0 mm) of DTM was applied to the cooling lines' piping and 60 mils (1.5 mm) was applied the underside of the deck that was exposed to the radiant heat.

When the platform was put back into service, the decking and handrails were lowered to ambient temperatures and the platform's workers were able to work safely in the area without fear of burns or melted soles.

After Hurricanes Katrina and Rita rolled into the gulf, and the platform was exposed to multiple storms with wind speeds exceeding 100 mph (160 km/h), Mascoat's coating was still intact and continuing to provide superior insulation for Anadarko's platform.