



# Project Profile – Dock Pump and Transfer Line Heat-Tracing System

*For over 30 years, Tyco Thermal Controls has satisfied the unique requirements of various industries through innovative engineering, design and construction services complemented by a wide range of products and technologies.*

*The petroleum industry is one example where, through strategic utilization of our resources, Tyco Thermal Controls provides our customers with the best and most cost-effective heat-tracing solutions.*

## Project Description

- ❑ **Client/Owner:** Tesoro Golden Eagle Refinery
- ❑ **Location:** Martinez, CA
- ❑ **Type of System:** Electric heat tracing with electronic control & monitoring
- ❑ **Technology:** Raychem® XTV self-regulating cable with DigiTrace® 920 Control Systems
- ❑ **Project Scope:** 7,000 ft of self-regulating heating cable, 40 control circuits
- ❑ **Date Initiated / Completed:** March 2007 / October 2007
- ❑ **Contract Scope:** Engineering, product and construction

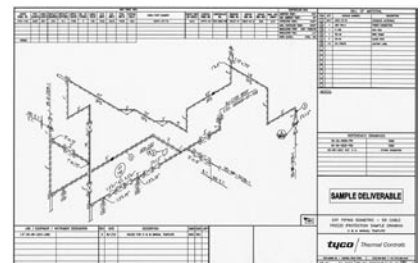


## Project Details

The Tesoro Refinery in Martinez, CA needed its Amorco Wharf pump station and transfer lines heat traced to ensure crude oil flow from its off-load wharf to a series of storage tanks. Detailed engineering drawings for the heat tracing did not exist and the project proved to be complicated due to the intricate valve piping at the pump station. The client had a tight deadline and so they contacted the Tracer Construction division of Tyco Thermal Controls.

## Tracer Services Steps In

Due of the variety of pipe sizes, high number of large and small valve assemblies and the tight maintain temperature requirements, the heat-tracing design required creative solutions and flexibility to best meet the customer's needs. Tracer Construction engineers visited the refinery and completed a field design by taking pipe measurements and designing the heat-tracing system on site. They worked with the local refinery personnel to define the necessary power distribution needs, power-point locations, necessary control & monitoring solutions and heat-tracing cable recommendations.



**Raychem®**

**TRACER®**

**DigiTrace®**



Industrial  
Heat-Tracing

*We manage the heat you need™*

*Experience in design, experience in installation, experience in applications. Tracer's experience and perspective makes the difference on every project, especially on projects where complicated piping layouts and tight schedules require innovative solutions and skilled competency.*

**Experience Makes the Difference**

Our experience with crude oil transfer and marine applications allowed us to develop a timely and cost effective solution for the Tesoro Refinery. Raychem XTV self-regulating cable was specified for all of the piping in order to minimize the installation costs as well as to ensure specified maintain temperatures were met. DigiTrace 920 Control & Monitoring panels were combined with transformers and power distribution panels in a self contained skid to reduce on-site installation time and expense.



**DigiTrace 920 Control & Monitoring**

The installation was completed in accordance with Tracer safe practices resulting in a 100% safety record on the project. Along with the quality installation of the heat-tracing system by experienced craftsmen, Tesoro received a Warm Pipe Warranty as a guarantee of the quality of the installation.

Experience, creativity and flexibility were key in completing this project for Tesoro Golden Eagle Refinery. Put these traits and capabilities to work for you on your next job.



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