



R. A. ROSS & ASSOCIATES, INC.

CASE STUDY

# POWER UTILITY

*R. A. Ross & Associates and Neptune Chemical Pump Co. (A Dover Co., PSG-Pump Systems Group) provided a one-source solution to a tough pump and mixer system for ammonia and hydrazine applications.*



R. A. Ross & Associates team up with Neptune Chemical Co. to save a large power utility time and money

Our customer is one of the largest power utility companies in the U.S., providing electric and natural gas service to 4 million customers.

This power utility needed chemical feed systems at their Noblesville, IN Generating Station that would deliver the proper amount of treatment chemicals used to prevent corrosion and help manage SO<sub>2</sub> emissions.

These chemicals include ammonia and hydrazine, chemicals that are not easy to deal with.

R. A. Ross & Associates teamed up with Neptune Chemical Pump Co. ( a Dover Co., PSG-Pump Systems Group) to supply a complete package with every component and all equipment for the chemical metering system. This enabled our customer to shop and buy from one source, saving on engineering and contractor costs.

- ▶ Power utility mixes and pumps ammonia and hydrazine
- ▶ This power utility has been an R. A. Ross & Associates customer since 1990

*Details on page 2*

The Noblesville, IN power utility generating station utilizes Neptune Chemical Co. Chemical Feed systems to deliver 19% ammonia and 35% hydrazine to their drum boilers. The ammonia is used to scrub SO<sub>2</sub> from flue gas. Hydrazine is used to reduce dissolved oxygen to reduce corrosion.

The power utility mixes (dilutes) and then meters each chemical by pumping to a central "mixing reservoir" combining the chemicals with demineralized water. At this point, a high-pressure hydraulically actuated Neptune Chemical Co. metering pump delivers the agents to:

- High pressure drum (800 PSI) and
- Low pressure drum (75 PSI)



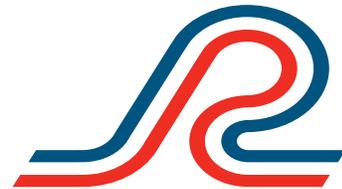
Neptune Chemical Co. Tank Mixer/Pump Package including:

- 50 Gallon polyethylene tank
- Tank cover
- 6150 HP Neptune Chemical Co. hydraulically activated pump
- Mixer with electric or air motor
- Mixer bracket
- PVC suction valve
- Y strainer
- Suction tubing
- 1/2" Drain connection

## CONTACT US

Call us for information on how we can help solve your problems in any of the following areas:

- ▶ Pumps
- ▶ Blowers
- ▶ Filters
- ▶ Mixers
- ▶ Tanks
- ▶ Vacuum Pumps
- ▶ Mechanical Seals
- ▶ Heat Exchangers
- ▶ Repairs



**R. A. ROSS & ASSOCIATES, INC.**

*Keeping process flowing since 1985*

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