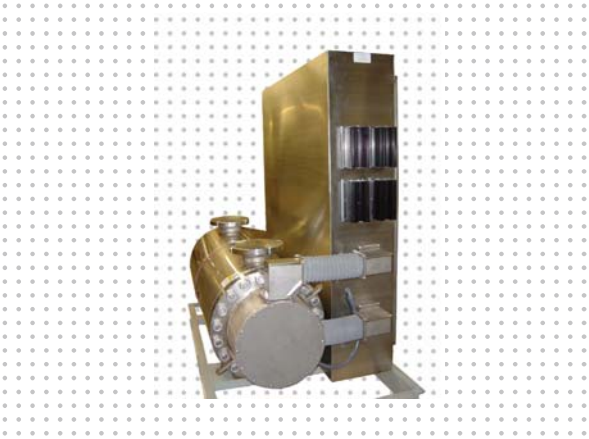
INDEECO

Case Study **Reverse Osmosis: Water Preheat**

Ask **More.**

Indeeco designs and manufactures custom and standard electric heating solutions for industrial skid-mounted process heating applications, at virtually any order volume. Indeeco's expert sales and design engineers are viewed by our customers as an extension of their own engineering team; helping them solve problems, improve performance of their products and systems, and lower thier costs and lead times.



350 SERIES SKID SYSTEM

A custom-built system where the water temperature determines better product flow.

Expect **More.**

In 2015, Burns and McDonnel contracted with Indeeco to build two process heating systems to be installed in large energy plants located in North Carolina. The heating systems were installed at the supply stream of service water to the Reverse Osmosis equipment, which would enable continuous full capacity of demineralized water production during colder ambient conditions.

Do **More.**

Indeeco sales and engineering staff worked closely with Burns and McDonnel to develop the right solution while avoiding unnecessary costs. Additionally, Burns and McDonnel was able to complete thier project ahead of schedule with Indeeco's flexible manufacturing capabilities.

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Discover **More.**

In 2015, Burns and McDonnell was contracted to build two process heating systems to be installed at two large energy plants who were experiencing reduced capacity because of a shortage of demineralized water during colder ambient conditions.

During the course of power generation, the plants closed loop steam line lost demineralized condensate from normal steam drum blowdown or other vents and drains.

To produce demineralized water, the water source had to first be processed through a reverse osmosis system. The lower ambient conditions created two issues; first the lower water temperature made the filtering less efficient since a higher temperature allowed greater flow. Second, reverse osmosis membrane elements and systems are rated at 77°F (25°C).

With the water source being piped into the facility, a circulation heater was the choice for the project. In addition to the circulation heater, Burns and McDonnell requested a control panel to support the heater. They followed the panel request with a desire to have the heater and panel packaged and prewired as a complete unit.

INDEECO provided Burns and McDonnell with two ASME certified 360 Series Skid Systems rated at 660 kW each capable of heating water to 77°F with a flow rate of 150 gpm.

Indeeco's scale of technical, manufacturing, and customer service resources exceeds that of smaller companies while our responsiveness and flexibility distinguishes us from our larger competitors.

Products

- Circulation Heaters
- Process Air Heaters
- Control Systems / Panels
- Immersion Heaters
- Flanged Immersion Heaters
- Screw Plug Immersion Heaters
- Duct Heaters
- Over-the-Side Immersion Heaters
- Die Casting Heater
- Tank Heaters

Industries

- Oil & Gas
- Chemical Manufacturing
- Industrial Equipment
- Power Generation
- Mining
- Waste Water Treatment
- Industrial Construction
- Aerospace
- Pharmaceutical
- Military & Marine

Applications

- Fuel & Gas Conditioning / Fuel Separation
- Ammonia Heating / Flow Control
- Lube Oil Systems
- Fuel Forwarding
- Amine and Glycol Reboiler / Regen heater
- Heat Transfer / Hot Oil Package
- Reverse Osmosis
- Water System Process Heating
- SCR- Selective Catalytic Reduction
- Freeze Protection
- Viscosity Reduction
- Process Air Heating
- Steam Superheating