

Case in Point



Lochinvar® ARMOR® Improves Efficiency, Profitability for California Laundromat

In January 2012, Art Jeager opened his sixth laundromat, Simi Valley Laundry Center, in Simi Valley, California. With its 44 high-efficiency, self-service washers and dryers, the Simi Valley Laundry Center prides itself on running an energy-efficient operation. When it came time to choose a water heater, Jeager turned to Lochinvar to help reduce utility costs and maximize his return on investment.

“One of the most important things any laundry owner can do is to ensure they’re running an efficient operation. This keeps utility costs as low as possible, which means your gross margin will be as high as possible,” Jeager noted. “The efficiency of each element of the system must be taken into consideration, starting with the water heater.”

After meeting with Lochinvar representatives at the Clean Show, an international trade show for the laundry and textile services industry, Lochinvar helped Jeager design an installation that would provide the utmost advancements in energy efficiency for the 6,000 square-foot laundry center. With its ability to deliver thermal efficiencies as high as 98 percent and its turndown ratio of 5:1, the fully modulating ARMOR Condensing Water Heater was the ideal fit for the job.

Jeager worked with Lochinvar to install two 199,000 Btu/hr ARMOR units, stacked with two 120-gallon insulated storage tanks, for a total system load of 400,000 Btu/hr. Prior to the introduction of today’s advanced water heating equipment such as ARMOR, a laundry center of this size would have required a system with significantly higher capacity levels. This highly efficient system was designed for redundancy, future expansion and overall footprint.



PROJECT:

SIMI VALLEY LAUNDRY CENTER



LOCATION: SIMI VALLEY, CALIFORNIA

LOCHINVAR PRODUCTS INSTALLED:

(2) AWN199 COMMERCIAL WATER HEATERS



(2) RJA120 STORAGE TANKS

SIMI VALLEY LAUNDRY CENTER IS ONE OF SIX LAUNDROMATS OWNED BY ART JEAGER IN SIMI VALLEY, CALIFORNIA



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The ARMOR units are equipped with Lochinvar's exclusive SMART SYSTEM interface, which provides complete control of all ARMOR functions, simplifying installation and operation while also offering complete access to system performance data and history. SMART SYSTEM also features a built-in cascading sequencer that allows the two ARMOR units to work together to fire as low as 20 percent of total maximum input and smoothly modulate up to 100 percent as demand increases, keeping operating costs to an absolute minimum. To help save energy and reduce costs, the SMART SYSTEM includes a night setback feature that is pre-programmed to shut off when the laundry is closed and start up an hour before it opens. In addition, SMART SYSTEM enables ARMOR to communicate seamlessly in real time with building management systems by utilizing an on-board MODBUS protocol.

The unique ARMOR design also protects against the harmful effects of lime scale buildup, which can cause a traditional water heater to fail in as little as two to five years and substantially increase operating costs. For example, just 1/4-inch of scale in the tank can increase operating costs by as much as 25%. Since ARMOR heats the water and then deposits it in an unfired storage tank, lime scale buildup does not impair the heat transfer efficiency. Another ARMOR advantage is its venting flexibility. The setup strategically selected for this system was sidewall venting since it prevents any contamination with dryer venting and lint. This helps to ensure that the ARMOR units operate at optimal performance over time.

"I have worked with a number of different water heating companies and technologies, but only Lochinvar gives me complete peace-of-mind around the clock," stated Jeager. "One of the greatest benefits of the SMART SYSTEM control is that it allows for a direct connection with my outside alarm company, which alerts me if there is ever a problem." Following the installation, Jeager estimates that he has experienced a 50 percent savings on utility costs at the Simi Valley Laundry Center, compared to his other laundry facilities with less efficient equipment. Jeager is planning to add a third ARMOR unit as he works to expand the Simi Valley Laundry Center, further increasing the efficiency of the operation.

"I could not be more pleased with my decision to work with Lochinvar to help increase the energy efficiency of my laundry center," Jeager said. "Out of my six stores, the Simi Valley Laundry Center is operating at the lowest utility cost, which I attribute primarily to the ARMOR units."

For more information, visit www.Lochinvar.com.



ABOUT LOCHINVAR

Lochinvar, LLC is a leading manufacturer of high-efficiency water heaters, boilers, pool heaters and storage tanks. Based in Lebanon, TN, with facilities in Detroit, Orlando, Tampa, Pompano Beach, Dallas, Phoenix and Chicago, Lochinvar stocks all products in all locations.

