Want proof there's still opportunities in the healthcare textile market? You need look no further than Reino Linen Service Inc.'s new plant in Brownstown, MI. The photos below and at right show the plant in various stages of construction. American Laundry Systems led an effort to rehabilitate an 87,000-square-foot structure for a new role as an ultra-modern, super-efficient healthcare laundry. The plant celeberated its grand opening on Oct. 21.

Gearing Up for Recovery

American Laundry Systems TURNS 50!

Industry consultant highlights work on the new Reino Linen plant, and a new contract—the company's 51st plant retrofit

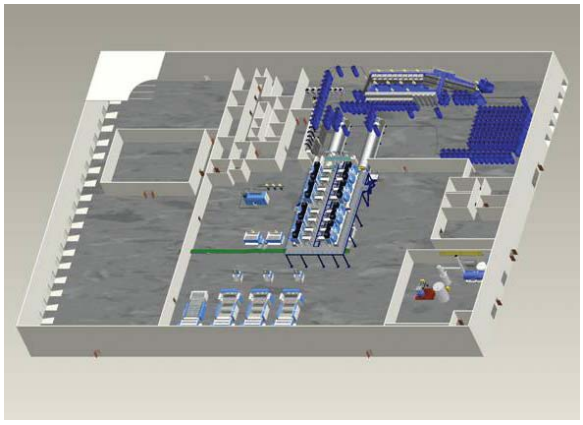
By Gerard O'Neil

No, I have NOT turned 50 years of age NOR has my business operated for 50 years. What we are celebrating is the completion of our 50th NEW OR RETROFITED LAUNDRY PLANT. American Laundry Systems recently completed (August, 2009) our 50th New/Retrofitted facility. (We started our 51st in October and will begin our 52nd and 53rd in February/March 2010.)

We had the pleasure of working with Leonard and Judy Reino and Don Pedder at their new plant location in Brownstown, MI. Reino Linen was fortunate enough to find an empty building (always a better option then building new!) that was able to house the equipment needed to handle the poundage (75+ million lbs./year). The existing building is approx. 87,000 square feet with 30-foot clear ceiling height. A grand opening was set for Oct. 21.

Design efficiency

Our customer was able to take advantage of "using the cube" and



One issue that Reino Linen and American Laundry Systems had to overcome was the fact that the building was located on a high water table. This required the installation of two large-diameter pipes to drain water from the washroom to the wastewater pit (see photo, above/left. At left is a 3-D computer representation of what the finished plant would look like. At lower left and right are images of the finished plant floor before and after the installation of equipment.

put all of the dryers (gas fired) on a mezzanine which discharges to a common conveyor system below this level. The mezzanine was fabricated from a "floor supported" steel frame with a poured-in-place concrete floor (four inches thick).

The vendors involved and equipment installed include:

- Kannegiesser (2) x 75kg, 14 module tunnel batch washers with (2) hydraulic power presses, 14 gas-fired dryers and associated shuttles and take-away conveyors
  Note: Plant designed for four systems total.
- (3) Kannegiesser steam heated 2-roll ironers and (1) 6-roll Hypro with associated feeders, folders and take away conveyors
  Note: Plant designed for seven ironers total.
- (3) Kannegiesser pickers/separating machines
- (4) Kannegiesser towel-folding machines
- (2) Kannegiesser fitted-sheet folding machines
- (2) Blanket folding machines
  Note: Plant designed for (3) more towel folders, (2) more sheet folders & (1) more blanket folder
- (1) Kannegiesser garment finishing tunnel
- E-Tech soil sorting deck with Sort-On-Rail sorting system
- E-Tech classified soil-storage system (automated feeding to tunnel washers)
- (7) Unimac pony washers (60 lbs.-150 lbs.)
- (7) Unimac pony dryers/gas fired (120 lbs-170 lbs.)
- (1) 400BHP Hurst Steam boiler (plant sized for two boilers total)
- (1) Kemco process water system with heat reclaimer, stack economizer, hot and tempered water system (all sized for future plant expansion)
- Ingersoll Rand air compressors (3 x 60 hp) with Ingersoll Rand "Simplair" air distribution system
- American Laundry Systems (plant layout CAD work, infrastructure engineering, project management, all mechanical infrastructure and equipment installation)

Latest innovations

Some issues to overcome were: the high water table (We had to use two large-diameter pipes to drain water from the washroom to the wastewater pit.) as opposed to typical trenching. In addition, we had to deal with a very short timeframe/window to get this plant up and running. We started in the first week of May, and the plant was testing in mid-August (14 weeks) as our customer had to begin accepting new customers by the end of August. Nights and weekends were a must, but nevertheless the project was completed on time and within budget.

This type of modern, efficient and eco-friendly/green laundry facility is fast becoming the standard in our industry today. While

Energy efficiency was and is a high priority for this plant and other, ongoing American Laundry Systems projects. Of special concern is that the recovering economy is likely to signal the end of a recent spate of lower natural gas prices. Companies need to prepare for price hikes in water as well, as demand in some drought-prone areas is driving fees as high as $19-$20 per 1,000 gallons. Conservation of energy and *water is a must.*

the price of gas has been relatively low for the last year or so, it recently started to climb. The days of $4-$5 per MMBTU/THERM may be over (remember the $17 per MMBTU/THERM days?). The cost of water (city and sewer) in some parts of the country is really getting out of hand. We at ALS are seeing $19-$20 per 1,000 gallons for some of our customers. Who knows what the EPA and other government agencies have coming our way?

Water recycling and re-use, heat reclamation on water, ironer and dryer systems, steamless & boilerless facility designs are fast becoming the NORM for our industry and when the utility costs eventually rise (as they surely will), we'll be scrambling for answers and quick fixes.

Path to competitveness

As stated earlier, we at ALS started our 51st plant retrofit last month with an estimated completion date of June/July 2010. This existing, 28 million lbs. per year facility (single shift) has engaged our company to complete a new addition of 30,000 square feet and upgrade/modernize all existing equipment and systems now operating in this facility.

The expected growth over the next 10 years is 50%-60%. (All plants should plan for at least 10 years of growth … average healthcare growth in North America is 6% per annum.) This newly retrofitted plant is being designed for 60 million/lbs. per year (single shift) capacity and will take advantage of every infrastructure trick I know of to reduce utility costs by an estimated 40%-50% (gas and water). It will be the most forward-thinking, cutting-edge (technologically speaking) facility in North America. Not only are we going to re-use every BTU we can by incorporating heat reclamation, water recycling, 100% steamless and water re-use systems, but the level of automation will be such that we expect PPOH in the range of 175-200. (This is an acute-care healthcare facility.) Furthermore we are incorporating a "production management" software system. This program will enable the operator to track all production employees at their workstations, all equipment parameters and—last but not least—all energy consumed (electrical, gas and water) at each piece of equipment, with plasma screen monitors, historical tracking/reporting and remote software tunneling capabilities. This is where we and the laundry industry at large are going today to stay competitive and prepare for the future demands on our industry!

People get ready!

Start doing your homework now … analyze your facility … get a plan of action in place and be ready!

The economy *will* turn around and new regulations and/or increases in utility costs will be there, waiting for you. Your competitors are getting ready and gearing up (so are we at ALS). Are you? TR

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