



Employees feed flatwork on the finishing side of Reino Linen Service's 92,000 square-foot healthcare plant that opened last July in Brownstown, MI.

Reino Linen— Clean, Green Partnering

New healthcare plant in suburban Detroit focuses on saving hospitals money and promoting reusables

By Jack Morgan



Reino Linen's new plant ... inside and out. At left is a view of flatwork ironers. Above is the employee entrance, which requires an ID card to enter. At lower left is an outside view of the plant, a refitted U.S. Postal facility. Below is the company's recently revamped logo.



The catchphrase printed in green ink on Plant Manager Nate Adams' business card effectively sums up Reino Linen Services' strategy for growing a customer base for its new 92,000 square-foot healthcare plant in Brownstown, MI: "Partners for a cleaner today and a greener tomorrow."

Educating customers

Flanked by a cool-blue revamped version of the company's logo and (of course) a universal "recycling" symbol, the card reflects a concept that strikes at the heart of this company's marketing effort: Helping hospitals and other healthcare providers control costs, while at the same time reducing their impact on the environment.

"The thing is, we want to be more than a laundry," says COO Don Pedder, a 40-year industry veteran who's based at the company's headquarters in Gibsonburg, OH. "We want to be real partners. Most hospitals need to save money. They come to us for solutions."

Many of the answers healthcare providers are looking for also include improving their environmental performance. If a hospital can control costs and help the planet too, that's a value-added proposition.

Reino Linen is happy to assist hospitals and clinics in this endeavor as well—with its new, ultra-efficient Brownstown laundry and by seeking to replace environmentally wasteful disposable goods with "greener" reusable textiles.

"When they think it through and they think about the cost of dis-



Leonard Reino's parents, Mary and Dan Reino, founded Reino Linen in 1943 as a dry-cleaning business in Gibsonburg, OH. Their son Leonard Reino led an effort to target healthcare linens in the 1960s. The company won its first healthcare contract with Wood County Hospital, Bowling Green, OH, in 1968 and they haven't looked back since. The company still has that contract today and healthcare is Reino Linen's main focus.

posing of these goods, then they see," says Reino President Judy Reino, speaking of her outreach efforts to customers of the Michigan plant that opened on July 20, 2009. "Then they're convinced. It's an educational process." She illustrates that point by describing her experience with one particular customer who was reluctant to accept the idea that reusable goods make more sense economically and environmentally than disposables. "It took a while for him to come around," says Reino, who operates the company with her husband and CEO Leonard Reino. "But he came around, and he's a tough cookie. He really scrutinizes everything. But by showing him examples, by working with him, he understood that it's going to benefit his hospitals to go with reusable pads. If you can convince him, you can convince anyone." Judy preferred not to identify the customer.

The Reinos, Pedder, Adams, Vice President of Operations Bob Pfeifer and the Brownstown plant's 87 employees are putting their marketing and production skills to the test as they seek to grow busi-

ness for the new plant.

Pedder, a jocular man with a Kennedy-like accent and a 'can-do' attitude to match that of our 35th president, is bullish on the plant's prospects. "We don't want to come in and have this cocky attitude that we'll probably own the market in 36 months," he cautions, adding (with a laugh), "But that's a fact! You know the old saying: How can you eat an elephant? A bite at a time."

In the wash aisle

Stepping onto the floor of the \$8 million Brownstown plant, your *Textile Rental* correspondent sees a well-equipped facility that makes Pedder's prediction of near-term market dominance seem plausible. The plant services a 150-mile area from this site southwest of downtown Detroit. While the economy here reflects the decline of the "Big Three" U.S. automakers, healthcare providers continue to offer opportunities to companies like Reino Linen. "When we did the original marketing plan for Michigan, we looked



At the formal opening of the plant on Oct. 21, 2009, Don Pedder, Judy and Leonard Reino pose with a 3-D sketch of the plant with staff from American Laundry Systems (ALS), who helped with the planning and installation of equipment at the new facility. (l/r) Charles Berge, ALS; Pedder, Judy and Leonard; Gerard O'Neill and Glen Broome, ALS. Also shown above is a Reino semi-trailer parked the plant's loading dock and the U.S. and company flags that are flown outside the plant.

at about a 50-mile radius from the plant," Pedder says. "Within that 50 miles there were 47 hospitals. But since then, we've relooked at the program, and within 150 miles there's 93 hospitals. That means that within a 150-mile radius of this plant we have 93 opportunities."

Our walk-through of the plant shows how Reino Linen will seek to fulfill its ambitions in the Wolverine state. The tour begins as we pass by a wall fitted out with eight, 35 lb.-150 lb. pony washers and eight dryers. These Unimac machines are used to launder specialty and rewash items, says Pedder. But Judy adds, "This plant is a Kannegiesser plant." In fact, Kannegiesser provided virtually all the wash aisle equipment, dryers and the finishing machinery. There are some exceptions, such as the aforementioned pony washers and a custom-made cart washer that was developed by American Laundry Systems, the company that consulted with the Reino team on the plant design and handled the installation of machinery, plumbing and wiring systems.

On the Monday morning of our visit, several dozen carts filled with blue bags of soiled linens that arrived that morning and over the weekend stand by the loading dock, where they await processing. The soiled linens are rolled onto a scale for weighing before sorting and laundering begins. An employee scans a barcode on the cart that includes customer information so that Reino Linen knows the source of all incoming soiled goods.

Moving to the soil-sort area, carts are moved up from the loading dock to an E-Tech cart dumper that places them on a three-way circular belt that moves them up to the sorting area. At the initial sort station, an employee places bulk items such as sheets onto the center belt. These move directly to a sling and then are carried on the E-Tech Inc. overhead rail system to the tunnel for processing. Other goods are placed on a belt that moves them up to the sorting area. Employees there can tell which goods go into which bin by glancing at a video monitor that shows both the name and a picture of the item. The assembly line-style production here and in other parts of

Plant



Above, carts loaded with soiled linen from the weekend await weighing and processing near the loading dock. Reino Linen provides the blue bags to customers and recycles them. One hospital is saving nearly \$80,000 annually through this program.



This sheet picker, or linen separator, breaks up tangled clumps of sheets to make it easier for employees to feed them into the ironer.



An exterior view of the Reino Linen plant, including loading bays at right.

the plant has eased the transition for many new employees. “We have a lot of people that came from the auto industry,” Judy says. “They have a great work ethic and they’re used to a production environment.” The soil-sorting line is able to move 12,000 lbs. per hour, says Pedder. That high productivity reflects the sound design of the system, adds Production Supervisor Tim Kelly. He notes that the soil belt runs in a continuous loop that helps employees keep pace. “Both lines go to the back side, so you’re able to catch what you dropped,” he says.

Our next stop is a twin set of Kannegiesser tunnel washers, which are part of what the Reino team refers to as “phase I” of the plant construction. The cart washer is an example of a phase I system—it’s perfectly functional for now, but it’s likely to be upgraded in phase II. As for the tunnels, each of which has 14, 165 lb. compartments, space is available for two additional machines to handle future growth. These tunnels process goods at roughly one-half gallon of water per pound.

Advanced safety mechanisms are included on the tunnels and shuttle systems. For example, a security fence with a double-key locking system surrounds the wash aisle. Unauthorized entry will cause the entire system to shut down. Each tunnel also is equipped with a video monitor just above eye level. The images are transmitted from cameras mounted near the chutes where slings drop goods into the tunnels. This enables staff to see what’s going on at all times, Pedder says. Judy adds that the monitors help enhance safety and simplify troubleshooting if a jam occurs. “It really helps us a lot on the safety side,” she says. “It’s not necessary to climb up there.” The tunnels don’t combine two “cakes” of clean wet textiles for drying, as many healthcare laundries do. Instead, Pedder prefers a single-cake system. “We’re running single cake all the way through the plant.” It’s easier for staff to manage smaller quantities, he says. “We feel that we’re getting more productivity.” The plant processes 132 lbs. per operator hour (PPOH) on a single, six-hour shift that runs six days a week.



A clean-side view of the discharge end of the tunnel and press, where cakes of clean goods will emerge for movement to the finishing department or the dryers.



A view of the boiler makeup tank.



Another view of the loading area. Doors are numbered and customer names are written on the inside to help make sure the right goods get on the right truck.

The plant's chemical-injection system boasts advanced features as well. "Everything is under the floor, all the lines," says Pedder of the system provided by Diamond Chemical Co. Inc. The placement of lines under the machines reduces clutter on the plant floor and enhances safety by making it highly unlikely for employees ever to come into direct contact with wash chemicals. What's more, the Reino team uses environmentally friendly chemicals. "Our wash chemicals are 100% 'green,'" Judy says, "They are EPA-certified chemicals. We were the first in Ohio and the first in Michigan to have them. This plant has always been 100% green for chemicals. Shortly after our visit early last month, Reino's Brownstown plant received accreditation from the Healthcare Laundry Accreditation Council (HLAC). The plant currently is processing goods at a rate of roughly up to 40 million lbs. per year. When phase II is implemented, production is expected to ramp up to 75 million to 80 million lbs. annually. That's double the current rate of the company's Gibsonburg plant. Leonard's parents, Dan and Mary Reino, founded

Reino Linen in 1943 as a dry-cleaning business. Leonard, whom Judy describes as a "calculated risk taker," initiated the company's shift to healthcare linens in the late '60s. The company won its first healthcare contract in 1968 when it began working with Wood County Hospital, Bowling Green, OH. The company still has that account, and today healthcare is the main focus of the business.

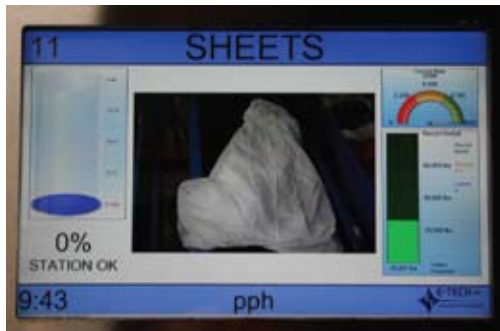
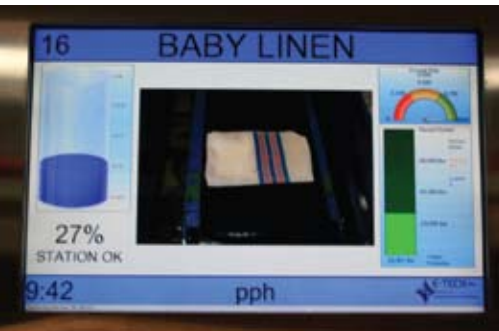
As clean wet goods emerge from the tunnel every 110 seconds, a lifting conveyor next to the tunnel press raises the textiles up to a mezzanine level and drops them on shuttle conveyor that moves them to one of two rows of seven, 165 lb. dryers. Sheets, or other goods that can go straight to the ironers, move on a separate conveyor that bypasses the dryers.

Boiler room savings

As we pass out of the soil area of the plant, which is walled off from the clean side, Pedder, Judy and I each apply hand sanitizer before entering the clean side. Our next stop is the boiler room. There we



Employees at left hand fold linens and place stacks onto a conveyor belt that moves them to packout. On the right side, goods emerge from ironers and folding/stacking equipment. Employees place these goods on the conveyor as well.



In the soil sort area, these computer monitors take the guesswork out of knowing which goods go down which chute by showing employees both an image and the name of the item.



(l/r) Plant Manager Nate Adams and VP of Operations Bob Pfeifer, take a timeout from the tour for a photo.

see a significant commitment to water/energy conservation. The main source of steam for washing and ironing in the plant is a 400 HP, 3-pass, tube-and shell boiler from Hurst Boiler. As with the tunnel washers and much else in this plant, there's room for growth. "There's a second boiler coming in phase II," Pedder says.

On the energy-savings side, the boiler area has several pieces of equipment provided by Kemco Systems Inc. These include a stack economizer and a wastewater heat-recovery system. In a separate room nearby is a collection of three air compressors and air-drying equipment. Reino Linen maintains redundant capacity in this area to ensure continuing operations, should an equipment breakdown occur. The air dryers take humidity out of the air to enhance employee comfort. What's more, the system includes extensive ductwork that allows Reino to use hot air from machinery to help heat the plant in winter. Next up is a plan to divert hot air to the outside during the warm-weather months. "We're working on an air circulation system for spring, but it's still in the 'infant stages,'" Pedder says.

Safe, green and secure

While walking between the wash aisle and boiler room, we pass the employee check-in area. Safety and security are high priorities for this plant, and Reino Linen carefully monitors the comings and goings of employees and visitors. At the check-in/check-out station, employees must swipe an identification card fitted with a radio frequency identification (RFID) chip to begin or end their shifts. "It tracks who it was and when they came in," says Judy. She adds that all employees are trained on the card system. They understand that it's in everyone's interest to maintain a secure facility. Outside doors are usually locked, including the employee entrance, where staff must swipe their cards to gain entry. "We were very safety conscious in building this plant," Judy says. Pedder adds that, "This plant was built 100% to HLC specifications." These standards include policies/procedures and documentation that are designed to maximize safety and ensure compliance with Occupational Safety and Health Administration (OSHA) regulations.



At left, an employee places finished, folded goods on a cart. Above, a monitor screen tracks goods in one of the plant's two tunnel washers, each of which has 14, 165 lb. compartments.



Here is a view of the safety fence with a double-key lock to secure the shuttle area where goods emerge from the tunnel. Unauthorized entry will cause the entire system to shut down.



Another view of the sheet picker that separates textile goods before employees feed them into the ironer.



Employees feed separated sheets into the spreader/feeder before entering the ironer. Company President Judy Reino stands at left.

Another aspect of Reino Linen's commitment to corporate responsibility is its recycling program. "Our goal for 2010 is to be 100% green," says Pedder. To that end, the company is recycling a variety of waste goods, including paper, cardboard and plastic. A large trash compactor from Load King Manufacturing sits in the middle of the wash floor to facilitate the recycling initiative. Reino Linen has arranged for a local hauler to pick up recyclable goods from the plant on a regular basis.

Finishing side, packout

As clean goods move on an Alba Conveyor system from the dryers, or directly from tunnels or washer/extractors, they head for the ironers or folding/finishing. Reino Linen has three, two roll, flex heating band ironers. Each one is equipped with pickers, feeders and folders—all from Kannegiesser. These machines are designed to process 1,000 pieces per hour. On the day we visited, one of the sheet feeders was moving 134 feet per minute, exceeding the average of 125

feet per minute. On the small-piece side, Reino Linen has two blanket folders and eight small-piece folders, again all from Kannegiesser.

Finished, folded goods move via conveyor to employees who place them on carts. Loaded carts are rolled onto a scale for weighing. Employees scan the barcode on the cart to record product information for the customer. They then pull down plastic sheeting from an overhead dispenser. They wrap plastic around the bottom of the cart to ensure that linens arrive at the healthcare facility in hygienically clean condition. "We cover it in plastic, weight it, manifest it and out it goes," says Pedder. Employees attach a packing list to the cart that tells recipients what items and quantities are on the carts. The cart then moves to a loading dock where it's rolled onto trucks for delivery. The names of customers, such as "St. Joe" (for St. Joseph Hospital) are painted onto the doors so everyone knows what goes where. "Every customer has its own door," says Adams, the plant manager. "When the trucks come in, the driver knows exactly



At left is Reino Linen COO Don Pedder; below are President Judy Reino and CEO Leonard Reino.



‘Hospitals are looking to cut costs ...’

Q&A with the ‘Reino Team’

By Jack Morgan

After touring Reino Linen Services’ new healthcare plant in Brownstown, MI, Textile Rental asked a few questions of owner/operators Judy and Leonard Reino and COO Don Pedder. Excerpts of that interview are featured below.

What surprised you about the plant since operations began last summer?

Judy Reino: What we’ve done and the planning we’ve put into it, it’s really worked out well for us. We were surprised that no one else really wanted to do it because of the market.

Don Pedder: We had minimal issues. We actually came in within budget. We had some costs that we didn’t anticipate because of some changes in utilities and regulations in Michigan from the time we started the project to the time we got to the end. There were some changes and issues in Michigan. But other than that, we didn’t have any surprises. Things went extremely well.

Judy Reino: And another key: Don worked very closely with the officials in Brownstown Township. They are so supportive. They continue to be supportive. He’s cultivated that relationship. He goes to them. They want the jobs here. They want the revenue for their township. They’re appreciative of what we bring and they’re highly

supportive. It’s really a good relationship. Without them it couldn’t have happened.

We all know about the economic troubles facing the Detroit metro area. Yet you’ve made a major investment there with a new healthcare laundry. What’s your take on the market dynamics you’re facing?

Don Pedder: When it comes to a co-op or a competitor (i.e., an OPL) thinking about retooling, they’ll have to take and do a comparison of costs, whether to retool, or ask Reino Linen to provide a quote or a proposal at that time.

Has the transition of so many people losing auto-related jobs complicated your efforts to recruit staff?

Don Pedder: What we learned in the first couple of months that is there are different tiers in the auto system. We learned that a tier I auto worker would never work for Reino Linen Services because of the discrepancy in the wages. Tier II may come and try it here and realize it’s not what they’re cut out to do. So we’ve had to look at other avenues of labor. We’ve looked at various markets in the area and have come up with a combination of people that fit in perfectly with the Reino pay scale.

Leonard Reino: It's not a problem. It's just if you want a job, you've got to work for what we're offering.

Judy Reino: It's not hard to recruit people. What people are finding is that this is a very pleasant, fair working environment.

And your turnover rate?

Judy Reino: At first it was a little high, but now it's down.

What innovative things are you doing at this point to help you grow the business?

Don Pedder: Over the last several months, we've introduced the pillow-reconditioning program. The pillows come in here, we have a 27-step process that we put them through, and we culture them. So we're actually reconditioning pillows, packaging and sending them back out, which saves the hospital about 50% of the original acquisition costs.

How do you do it?

There are two kinds of pillows that are used in healthcare today. There are the disposables, and there are reusable pillows that if properly handled and cleaned can be used again. Most hospitals today are not taking advantage of it being a reusable (item). So we're putting them through the process. We clean them. We have a set procedure that we put in place with the help of one of our customers; they helped us design a program. We actually do a culture twice a week, to show that the pillows are meeting the highest standards of infectious control. We repackage it and we send them back to the hospitals that are reusing them.

Judy Reino: They're all done by hand and inspected. You can't have any tears, any rips— anything to compromise the integrity of the pillow. It has to be in perfect condition.

Quality control is also crucial in managing your reusable OR pack business too, isn't it?

Leonard Reino: If you send out 2,000 and one of them is bad, the whole batch is bad. They'll only take that in OR a couple of times before they go back to disposables.

What other innovative things are you doing at this plant?

Judy Reino: Squad packs are another example of how we're saving hospitals money. It's just a reality that when the medical squads come into the emergency room that they're going to take linen. And a lot of times they'll just grab a whole stack of something. So what we're helping them with is we've designed a 'squad pack.' We actually met with the emergency personnel on the receiving end, the ones who receive the linen and know what the patients need. We designed this pack and it meets their needs. And we're helping them cut costs because we're helping them procure a lower grade of linen, brand new, but a lower grade of linen. One hospital is saving 25% on the linen that goes out the door to their emergency department. So that's a significant savings.

I saw an RFID system in the plant. Is that a cost-effective investment?

Don Pedder: That's the latest program that we're introducing to help hospitals reduce their inventory losses, to have tighter control on their merchandise, such as scrubs, microfiber mops, isolation gowns and underpads. We're just getting it installed. Hopefully, it will be up and running by the 1st of March. We feel it's going to pay for itself by reducing losses.

You have a major focus on recycling here. Does that help hospitals save money?

Judy Reino: Our recyclable bag program is another way we help. The blue bags that they use for dirty linen. They purchase the bags from us and they get the stands for free. We're saving one hospital a significant amount of money on that.

Don Pedder: By going to our system, we reduced their plastic bag costs by almost \$80,000 a year for one hospital, one system. I think the biggest thing you're going to see throughout healthcare—especially what we're seeing in the Midwest—is it's a significant service that's going to have to be offered. Hospitals are looking to cut costs. A lot of them have been forced to unionize their secondary labor force. As a linen provider, we'll be able to go in and provide the labor and the expertise to distribute the linens through the facilities more economically.

You've relied on two key vendors to put this plant together: Kannegiesser for equipment and American Laundry Systems (ALS) for planning and installations of machinery, wiring, piping etc. How have those decisions worked out?

Don Pedder: In the case of Reino Linen Service and Kannegiesser, it was timing. We were trying to build a plant. Of course, we were trying to do it as economically as possible. Kannegiesser was looking to have a full-service facility, and I think that things worked out in everyone's best interest. I think putting all your eggs in one basket ... it could be an issue, if you don't have the solid support behind you. On the other side of it, the training for us has worked out remarkably well because when they send their technicians, they're training on all the equipment, it's helped us reduce our parts inventory because it's similar on both the clean and the wet side. There are a lot of advantages.

And ALS?

Actually it went very well. We knew that we were busy trying to run a plant (in Gibsonburg, OH). We were going to all dedicate so much time to getting Brownstown up and going that we hired American Laundry Systems to manage the project. Not only did they manage the project, they did all the mechanical installation on this operation. And I must say, and I think Judy and Leonard will concur, I think they did an outstanding job.

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Plant



A cart dumper deposits soiled linens near a ramp where they'll soon move up to the sorting area. Bulk items such as sheets that don't require sorting will go onto a center belt that moves them to a sling that goes directly to the tunnel washer.



Employees place sheets on a spreader/feeder before ironing



Cakes of clean wet goods move on the conveyor at left and then onto the platform for movement into the dryer.



A view of three air compressors in the plant.

where to park. If it's St. Joe, they know it's gate No. 16."

The plant doesn't run conventional routes, but rather services seven major hospital accounts and 25-30 clinics, doctor's offices, outpatient centers, etc. To meet the demand, Reino Linen currently operates seven tractor trucks, 17 trailers, three 26-foot trucks and one retail van out of Brownstown. The trucks run on the PIMS route-accounting system from ABS Laundry Business Solutions. The standard turnaround time for goods is 24 hours, Pedder says.

The plant's customer mix includes roughly 90% hospital work processing customer-owned goods (COG). But surgicenter and other outpatient businesses constitute a growth area using primarily rental textiles. "Every system is looking to reduce overhead, and it appears that the freestanding day outpatient service area and the day surgery center is the trend today," says Pedder. "Which means that side of the business is going to grow significantly over the next couple of years."

OR packroom operations

Donning a set of personal protective equipment (PPE), including a coat, hairnet and booties that go (after several tries) over my shoes, our next stop is the plant's surgical packroom. In this walled-off area, employees fold and assemble towels, scrubs and other reusable goods for surgical packs for use in hospital operating rooms. The plant currently is preparing 600 packs a day, says Pedder, who adds, "We just signed two new contracts that are starting in March."

Leonard is realistic about the challenges Reino Linen or any healthcare operator faces in growing a packroom business in the face of competition from disposable OR goods. "We've got a strategy, but it's a tough row to hoe," he says. "For people that don't know, it's an educational process that you've got to go through.

"You've got to have product that meets their needs and is of the same quality as what they get from a disposable manufacturer. So there's no issue when they open a pack."



Pedder and Judy Reino stand at right looking over the finishing area from a mezzanine level where the plant's twin rows of seven, 165 lb. dryers are located.



A computer monitor registers the weight of incoming soil goods. Goods are weighed on both the soil and clean sides of the plant.



Above is a view of one of two tunnel presses in the plant. At right, an employee prepares clean textile goods in the plant's OR packroom for use in hospital operating rooms.



Able partners

While few would dispute Leonard's assessment of the challenge of winning OR business for reusables, the flip side of the coin is the huge opportunities this area poses for textile services companies. It's said that the OR textile business alone represents as much as \$14 billion annually—that's comparable to the estimated value of the entire U.S. textile services business in all sectors today.

What's clear is that Reino Linen's growth potential in Michigan hinges on its ability to partner successfully with healthcare customers, whether it's on OR goods or other textiles. If the Reino team can outperform its competitors, and at the same time convince more skeptical hospital managers about the cost and environmental advantages of reusable textiles, then business will expand.

The Reino team's new facility, a former U.S. Postal Service distribution center, is geared for growth, given that it has the latest in wash-aisle equipment, a fully equipped packroom, an energy-efficient boiler area, a fuel-saving route-accounting program, environ-

mentally friendly wash chemicals, advanced safety features and room to expand. Add to that a number of innovations, such as a newly implemented RFID program from Positek RFID for tracking scrubs and other apparel, and it's clear that the Brownstown plant is a competitive facility.

Bottom line? By all appearances, the Reino team has the human and material resources to move its Michigan facility to phase II by focusing on 'clean green partnering.'



"It's not only cost savings, it's being able to work together as a partner," says Pedder of the Reino approach to healthcare. "The common goal is to reduce costs and increase quality. And, yes, it's easy to go back to a disposables ... but everybody's thinking about the environment today. That's the key." **TR**

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