Satellite



MATERIALS HANDLING TECHNOLOGY NEWS AND INFORMATION FROM WESTFALIA TECHNOLOGIES

OCTOBER 2002

10 Years of Success

My career with Westfalia began at our German headquarters at the age of 17, and I knew right away that the combination of technical sales and running a business was something I wanted to do. As my roots were in the United States, I wanted to replicate the success we experienced in Europe here in the U.S. My partner and I did this by way of a Foreign Direct Investment that ultimately turned into the Westfalia we know today.

My main objective was to secure Westfalia's status as the overall top producer of high quality materials handling equipment – one with the ability to create niche markets within the AS/RS industry. Westfalia's main focus has always been quality, to be recognized as the

AS/RS company that has the least down time. We have always been consistent in giving our clients what they ask for. When we began, for example, our customers voiced that pallet integrity was the main concern with AS/RS applications. We resolved this by triple supporting our pallets and putting an end to the damage incurred by pallets of inferior quality. Deflection within the system has since been virtually eliminated.



"Westfalia's main focus has always been quality."

Dan LabellPresident,
Westfalia Technologies

Alongside our commitment to excellence in customer service, several things have led to Westfalia's irrefutable success. Diverse product lines (see "A Brief History of Westfalia" on Page 2) have allowed Westfalia to cater to the specific needs of a wide variety of customers throughout the years. We've concentrated on user friendliness and data accessibility for the users of our Warehouse Management Systems - especially those without a computer background. Westfalia has also maintained control of the key technical disciplines necessary for implementing sophisticated material handling systems. The communication required to integrate these disciplines (i.e., mechanical engineering, electrical controls, software development, structural engineering or manufacturing) properly and effectively is only possible when everything is done under

one roof – which is exactly how we operate.

It has been 10 years since Westfalia opened its doors in the U.S. There have been quite a few changes in the world of material handling since that time, and it's easy to track the progressive acceptance and desire for automation. Hardware and networking

Automation

An AS/RS from Westfalia helps get a South American dairy headed in the right direction. – **Page 5**

Spotlight

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Westfalia On Tour

Find out where we've been and where we're going.

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systems are faster, and integration of machinery and software is not just keeping up – it's also simplifying the process. Add to that the difficulties involved with finding and sustaining reliable labor, and it is simply more cost effective to purchase and implement an automated system these days. As land becomes increasingly valuable in congested areas, the need for vertical storage solutions will broaden. Consistent manual labor of high quality will become increasingly difficult to obtain, and labor markets in the high technical and service sectors will continue to expand. America's appetite for automation will not be subsiding any time soon.

The basis of Westfalia's success continually comes down to one thing: we deliver. Our clients always walk away with 100% of what we promised. Our systems work, and they work well. Better still, they don't stop working. Neither do we. Westfalia will continue to equip our clients with the best there is to offer.

Best regards,



resident, Westfalia Technologies



- 1971 Westfalia in Germany is founded.
- 1978 Germany's headquarters implements its first AS/RS, a flow-through system for beer, Herforder Pils.
- 1984 The High Density Satellite® System is developed. Replacement technology was needed for powered flow through systems – which were quite expensive – and a complete static rack structure capable of providing multiple deep storage was also desired. The Satellite® rack entry vehicle becomes the product line primarily responsible for Westfalia's growth and success in the industry.
- 1987 Maintaining the notion of a niche AS/RS product, Westfalia develops the Single Deep Telescopic Satellite® System, utilizing Satellite® technology. The Telescopic Satellite® design allows one storage/retrieval machine to access all pallets within the warehouse.
- 1992 Westfalia begins operation in the U.S. York, PA.
- 1993 U.S. headquarters implements its first AS/RS the Single Deep, T-Sat System for flavors and fragrances, Firmenich, Princeton, NJ
- 2000 The new Westfalia facility is built in York, PA, providing greater efficiencies in equipment production as well as an opportunity to upgrade finishing systems to a powder coating process.



Step Right Up and Meet DeepLane

As a leader in high density systems, Westfalia has recently developed a First-in First-out (FIFO) gravity flow ware-housing solution to expand upon their product offerings in order to adapt to the needs of both existing and potential customers. "There is a large conventional market that is not yet ready to go fully automated, and we wanted to be able to provide the flexibility of multiple solutions," states Daniel Labell, President. "We want to be there for

our clients as their material handling needs progress.

By offering both conventional and automated systems we are able to render as much or as little automation as their current requirements demand."

Westfalia's Deeplane™ storage system provides numerous valuable advantages – especially to manufacturers that deal with a high volume of products. Deeplane™ storage systems have proven to be one of the most effective material handling solutions, servicing industries

such as fluid milk and ice cream products, meat and poultry products, beverages, snack foods, automotive, paper products and pharmaceuticals.

The Deeplane™ product line includes a variety of components that depending on the pallet type and system design requirements – include both "spring mounted drum style brakes" and "direct mounted (all steel gear) braking mechanisms." When pallets are deposited in the Deeplane $^{\text{\tiny TM}}$ storage system, the Gravity Flow design allows pallets to automatically convey and accumulate at the discharge end. This easy gravity flow operation and high-volume FIFO product rotation is a trademark of Deeplane™ that serves its users well. "Everyone wants the first product in the lane to be the first one shipped in order to rotate stock -Deeplane[™] does that," remarks Hinchey.

With the introduction of the Gravity Flow product line among other conventional systems such as pick modular and push-back rack systems, Westfalia can provide almost any solution with varying degrees of automation.

Coupled with the existing AS/RS, WMS, Conveying Systems and Palletizing Systems, Westfalia's product offerings are now complete and offer a multiplicity of solutions.

Bigger, Better, & Beyond

An improvement of inventory accuracies and faster response times by upgrading to Westfalia's new state-of-the-art Warehouse Management System

The fluid milk business is an industry where few items are produced in great quantities, and yet more and more items are routinely added to stay ahead of consumer trends. Not surprisingly, corporate strategists are always looking for ways to differentiate themselves from the competition. The simple truth is that the difference between companies in this industry is often depicted by service levels, which means products must be shipped to customers when needed and in the quantity required.

Santee Dairies, Inc. in City of Industry, Ca., provides a full range of fluid milk products including more than 300 purchased items such as cultured products. Santee Dairies processes 320,000 gallons of fluid milk and juice products per day and prides itself on filling any size order, right down to the individual unit for smaller retail stores.

The requirement for a higher level of service

Westfalia is persistent with its concept of providing customized Warehouse Management Systems, requiring specification development, design, coding and implementation. This approach is in response to continuous feedback from customers who have been disappointed with off-the-shelf solutions, sold by salespeople and implemented by "trainers." "We see a lot of functions that are neither required or used by corporations and, more importantly, required ones that are nonexistent," says Westfalia's President Dan Labell.

Santee Dairies, Inc. had several needs specific to its operations, calling for a highly customized Warehouse Management System (WMS) solution.

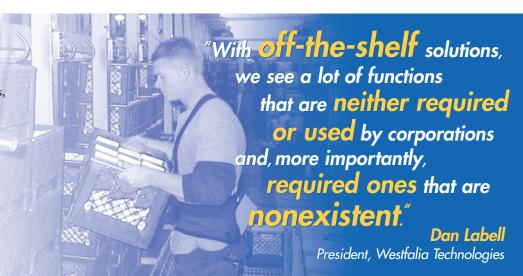
"Of course we can fix that..."

Westfalia met Santee's technical objectives through its automated Satellite* system for high-density storage, which includes conveyors for linking production to the new warehouse. After the new facility was built, Santee's storage capacity doubled, saving valuable floor space. The new

speed – particularly as it interfaced with communications technologies such as Radio Frequency Terminals and Pick-to-Light units.

"...With our eyes closed."

Santee's main objective was to update all programming tools (i.e., the database needed an update from the old Sybase to SQL Server). Another goal was to increase the accuracy of processing orders and to reduce the error rate in the distribution cycle. Through the



automated system is also able to increase the accuracy of processing Santee's daily production orders.

"We can fix that, too..."

Santee's outdated software had not been meeting response time requirements. Additionally, Santee was dependent on one individual for software services – quite a risk when taking long term goals into account. The wait time for order downloads, although measured in seconds, was too long for order selection personnel. Outside purchased products were still being picked by paper, leading to inaccuracies and lower productivity. With all this in mind, a more powerful database and a new order management program were required to increase processing

modern programming techniques of Component Object Modeling (COM), rapid customization and streamlined database communication became possible. With the new interface of COM and upgrade of communications methods with PLC controls (RS485 to Ethernet), a paperless system was implemented. The paperless system provided by Westfalia improved inventory accuracy and measured shrinkage. The overall result? Improved support and faster response and development time, better and easier report writing capabilities, and a subsequent reduction in operating cost.

For more information visit our web site at www.WESTFALIAUSA.com.

Spotlight On: Customer Service

As the new head of customer service at Westfalia, I would like to take this opportunity to update our readers on the changes being made to enhance service for and relationships with our clients.

Our customers should and do expect to have access to

an individual who will keep them informed, put their needs as top priority and see that timely results are achieved. Westfalia's staff adamantly believes that customer service can always be improved upon. One of our first major strides in acting on this belief is to provide our clients with this outlet.

My position was created to give customers the convenience of one-on-one interaction with someone at Westfalia – a person who can be contacted regardless of the need or question at hand. In essence, this position will ensure that any issues that arise will be resolved directly and promptly, and the coordination of Westfalia's departmental

services will be quicker and more efficient. I expect our level of service to continue to grow to the point where every company that works with Westfalia will feel like they are our only client.

I bring with me about ten years of combined customer service experience in retail and corporate settings. It has been about two years since I began working with Westfalia. Although I have served in a different capacity prior to this time, I have been

involved, if on a smaller scale, in supporting customers when they were unable to contact the people they thought could help. I always strive to improve things for those I serve, and nothing is more rewarding then when a customer walks away feeling like we worked hard for them.

In the near future we will be sending a questionnaire to all of our customers asking them to give us their opinions on a number of areas of our business. Feedback will be used to map out a plan of how we can improve our approach to business. The questions will encompass not just customer service, but many other areas in which we interact with our customers, such as quotes, repairs, warranties, etc. We hope that our clients will take a few minutes to fill out these questionnaires, as they will serve as the most important resource used to determine what

will and will not change in the future. It is

necessary that we hear suggestions and input from the people we serve so that we can continue to serve them better.

I look forward to carrying out Westfalia's commitment to excellence in customer service. Don't hesitate to contact me with any questions or comments.

Best Regards,
Patty Moffitt, Customer Service



Patty Moffitt

Automation in: Western Organics

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Western Organics is the largest supplier of bagged "green" products in the Western U.S. Along with green products, which are composts made from waste such as wood, lawn cuttings and manure, Western Organics also specializes in seeds and gardening supplies. The business began in 1972 and is currently celebrating its 30th year in operation.

The main plant and corporate offices for Western Organics are located in Phoenix, Arizona, with four additional bagging plants located in New Mexico, Texas, Idaho and Ganada.

The decision was made to automate the Phoenix plant in order to reduce labor costs and increase production, and Western Organics chose Westfalia to do the job.

Prior to the installation of Westfalia's equipment, bag palletizing was performed by hand. Since the company purchased Westfalia's Model 870 Automatic Bag Palletizer – which is currently installed and palletizing products at a rate of 35 bags per minute – production rates have gone up and manpower has been reduced dramatically. The fact that per-bag labor costs have consequently decreased significantly is quite gratifying for Western Organics, and the company has plans to automate two more of its plants within the next two years.

A Successful Turnaround with Westfalia

The South American Dairy Industry is controlled by several very large players. One of these companies, Mastellone Hnos., processes approximately 1 Million gallons of raw milk per year into products ranging from fluid milk, cultured products, and powdered milk. Distributing this product throughout the country is quite challenging; regions such as Buenos Aires have thousands of corner retail stores, often ordering no more than 5 or 10 cups of various types of yogurt, while other supermarket chains purchase in larger case or pallet quantities.

Before Westfalia...

A number of factors attributed to Mastellone's extremely labor-intensive distribution process. Cumbersome inspection procedures caused poor order accuracy, inevitably slowing shipments. Order selection for both piece picks and case picks was performed in one location,



resulting in confusion and congestion for order pick personnel. Poor inventory accuracy resulted in inaccurate production planning, and finally, theft, pilferage, and worker quality issues resulted in significant product loss. The time had come for Mastellone to head in a new and improved direction starting from the ground up. The first step – build a new, state-of-the-art distribution center.

Getting on the Right Path...

Mastellone selected Westfalia's Satellite® System, an automated, high density storage system designed specifically to handle over 10,000 orders/450 trucks per day. The system is designed to elegantly combine the order selection of piece picks, case picks and full-pallet picks, and deliver them to a staging

system capable of holding approximately 120 truck-loads. All orders are shipped in a 10-hour period in order to permit route trucks to deliver their goods in the morning hours.

Going in the Right Direction...

The movement of all pallets in the Satellite® System is fully automated. The system is designed to handle a workload of 6000 pallets per day (3000 in, 3000 out). The pallets are stored in pairs when possible, allowing this high throughput to be handled by only 3 Storage/Retrieval Machines. All pallets are triple supported, ensuring that pallet deflection and the resultant pallet damage is taken out of the equation.

A Closer Look at The Picking Process

To pick 10,000 orders with 100% accuracy requires technology that simplifies the process for humans to the greatest extent possible. Westfalia implemented a "pickto-light" system for piece picking, as well as a RF-based pick system for case picking. These systems permit the flexibility of picking multiple orders to pallet jacks or to a belt conveyor system. The split orders are combined later in one of 66 truck staging lanes that are capable of holding 2 to 3 truck-loads each.

Almost There...

Perhaps the most significant design attribute of the Satellite* System is the Warehouse Management System – a program developed by Westfalia to run all automation and inventory of Mastellone's warehouse. With split second efficiency, the Warehouse Management System – or WMS – directs and manages all RF units, pick-to-light units, and Storage/

Retrieval machines, along with the pallet conveying system and host interface... amongst many other functions.

"The most impressive aspect is the speed of the system," says Pablo Nietto, Mastellone's distribution manager. "Complex report queries are fast. The machinery receives immediate instructions, no matter how many people are picking or using the system at any given time."

Looking Back at the Ground Covered...

All in all, Mastellone's dairy distribution operation is able to process the required volume of orders with unparalleled accuracy and speed in less than 10 hours.



Completing orders on time with 99.9% order accuracy has changed the service and image of Mastellone. Overall distribution cost has declined while market share has risen. In fact, the system was projected to provide an Internal Rate of Return (IRR) of 22% to shareholders. Not bad considering Mastellone's customdesigned Satellite® System is expected to pay for itself in four years. Perhaps the most rewarding aspect of the system is that it is the most advanced, yet uncomplicated distribution center in Argentina. This competitive edge has secured Mastellone's leadership position in the rapidly changing food industry.

For more information visit our web site at www.WESTFALIAUSA.com.



 The 2002 Food Industry Productivity Convention and Exposition – October 20-23, 2002, Georgia World Congress Center, Atlanta, GA • www.fdi.org

The productivity EXPO is the only logistics-focused trade show in the food distribution industry.

Attendees can visit the best products and service providers supporting distribution operations. Visit Westfalia as we showcase our AS/RS, WMS and Conventional warehousing solutions.

 ProMat 2003 – February 10-13, 2003, McCormick Place North, Chicago, IL • www.Promat2003.com
 Visit Westfalia Technologies at the largest material handling logistics show in North America. Westfalia will be showcasing AS/RS, Conventional Warehousing methods, Warehouse Management Systems including picking capabilities, and our NEW electrical controls division.

Westfalia Technologies

3655 Sandhurst Drive York, PA 17402 P.717.764.1115 F.717.764.1118 www.WESTFALIA**USA**.com

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