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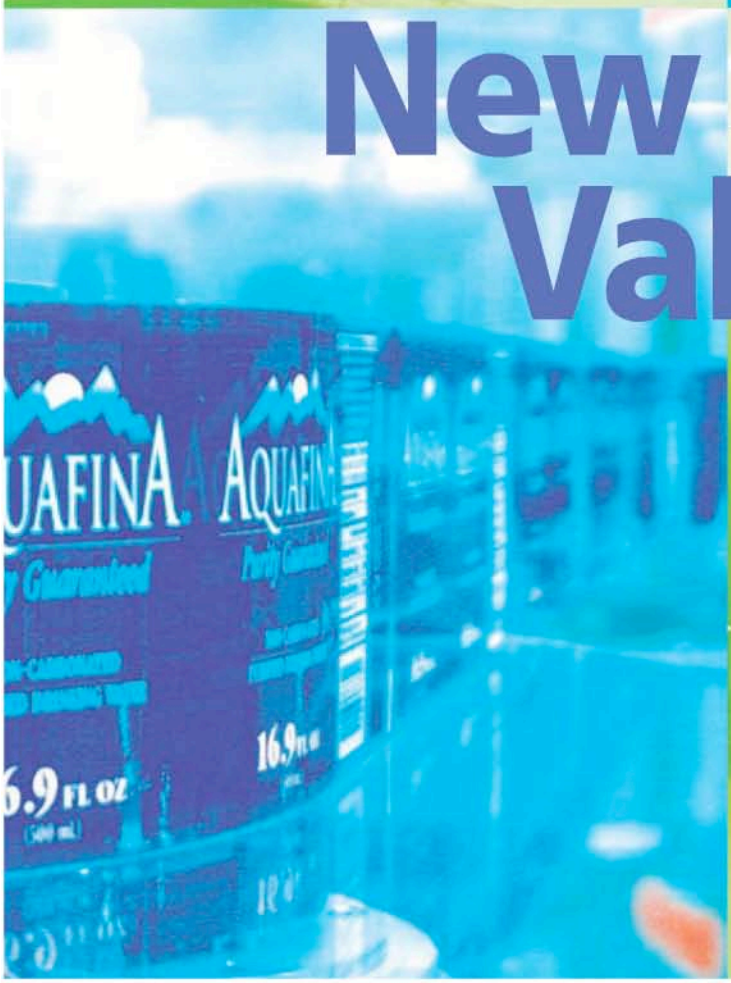
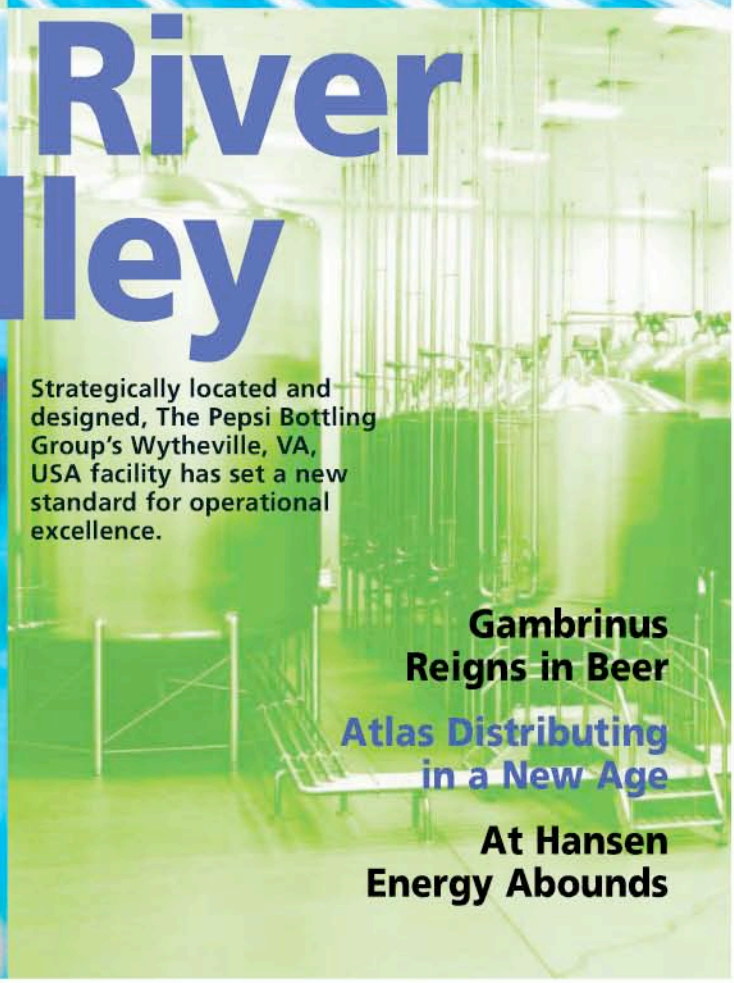
Plant of the Year

PBG New River Valley





Strategically located and designed, The Pepsi Bottling Group's Wytheville, VA, USA facility has set a new standard for operational excellence.

Gambrinus Reigns in Beer

Atlas Distributing in a New Age

At Hansen Energy Abounds

Plant of the Year

PBG New River Valley

State-of-the-art design, technology and manufacturing techniques come together in Wytheville, VA, USA to make The Pepsi Bottling Group's newest bottling facility Plant of the Year.

By Andrea Foote

As the world's largest Pepsi bottler, Somers, NY, USA-based Pepsi Bottling Group (PBG) operates 98 production facilities and 527 distribution centers, each strategically located to meet the growing demand for Pepsi products in the bottler's territories the world over.

The newest beverage plant in this complex matrix is New River Valley (Wytheville, VA, USA), PBG's first greenfield production facility in nearly a decade and one that embodies the bottler's commitment to product quality, operational excellence and innovation to such a degree that it was named Beverage World's Plant of the Year in its second year of operation.

Since its inception in 1999, The Pepsi Bottling Group has succeeded in the increasingly complicated world of soft drinks by keeping it simple. "We Sell Soda," is the company's oft-quoted mission statement. It doesn't get much more straightforward than that, but producing the product is the first step and here, too, the goal is clear:

PHOTOS COURTESY OF PEPSI BOTTLING GROUP

efficiency and excellence.

A focus on applying world-class manufacturing solutions is evident in New River Valley's thoughtful facility design. The plant's open, light-filled design was planned with ease of maintenance and workflow in mind. From the slope-hooded design of electrical panels to self-cleaning filling machines and special materials used for the exterior walls, the facility was designed to minimize maintenance and maximize efficiencies. "[The plant design] allows our employees to stay focused on the work at hand, which is producing the finest quality beverages in the world," says Gary Wandschneider, executive vp of worldwide operations for The Pepsi Bottling Group. "And if you look at the work stations you'll see that they were designed to give operators the knowledge they need to perform their job at a very high level, be it PM tasks that need to be performed or letting them know where they stand via production or line efficiency goals—it is all available to the operator at a touch."

Since New River Valley was a greenfield operation, Wandschneider and the operations team working on the plans for the plant had the luxury of a blank slate and they drew from several sources to optimize the plant design. "The concept of work design and clean design that you see in New River Valley came from a couple of different places," explains Wandschneider. "We took ideas from the Toyota manufacturing systems. We brought them in from our internal facilities where we saw ideas that were state-of-the-art and we thought we could reapply them here. Third, we took them from our vendors in terms of what was possible in a world-class beverage manufacturing environment."

The results, says plant manager Rodney Coleman, a 26-year veteran of the Pepsi system who was involved with the planning of the facility, is a plant designed for tomorrow as much as for today. "We were able to design the box around the processes," he explains. "We looked at our projected growth and the packaging innovations that might be coming. We knew that we didn't have all of the answers at that point in time, so we tried to incorporate the capability of easily changing things. Our goal was to design a facility that would support growth and innovation and to operate as a low-cost, modern beverage facility for the next 50 years."

To that end the 354,000-square-foot plant was built on 34 acres allowing plenty of room for expansion. The spacious floor plan also was designed to allow for additional packaging lines and loading bays to be added to the original four-line, 19-bay configuration and the floors were engineered to support multi-level racking systems for expanded warehousing capabilities.

Innovation starts at the very beginning of the production process with a state-of-the-art GE Osmonics RO system, essential for the plant's considerable Aquafina production, and a fully automated batching and blending system that

allows for quick and reliable changeovers.

Coleman also points to features including the plant layout, which was designed to optimize product and traffic flow throughout the plant with an eye toward efficiency and safety, and a central control system that has all wiring going into a single source, allowing personnel to monitor performance and address problems more quickly than traditional systems. "From the beginning our goal was to incorporate the most advanced proven technology into this plant to make it truly innovative. We were looking for and we found great flexibility and increased productivity in upgradeable systems," says Coleman.

But perhaps most important to the success of New River Valley is the way in which the facility's design and operating philosophy mirror the "Rules of the Road" spelled out in PBG's corporate mission statement:

Rule No. 1: Drive Local

Consolidating production for the Mid-Atlantic region into a facility with the flexibility exhibited by New River Valley was the best way for PBG to meet changing customer needs, says Wandschneider. "The fewer touch points, the more efficient your supply chain, the lower the cost to your trading partners. Everyone is looking for ways to improve economics and their customers' economics. The reality for us is in the New River Valley area is that it makes sense to have the flexibility to deliver both large and small PET as well as cans and B-I-B because that is what the market calls for. We are quite pleased with the flexibility that the facility gives us in providing what we need and what our customers in

the region want."

What those customers want is a diverse range of products—and plenty of them, too. In its first year of production, the facility produced a combined 30 million cases comprised of some 400 SKUs, which made their way to customers in eleven states.

"We built this plant so we could continue to provide world-class service and meet the changing business needs of our customers and tastes—for variety and packaging," explains Coleman. "With the growth of Aquafina, the No. 1 bottled water in the country, we needed additional bottled water capacity for today and for the future. Being at the intersection of I-77 and I-81, we are strategically located to deliver that product to the north, east, south and west. The smaller plants [that had previously served this market] were not equipped to handle that demand. The four production lines allow us to provide excellent service to our customers. We have one location generating a load that can service our customers with one-stop shopping. Of course, with that advantage comes increased complexity in raw materials, scheduling and a need for specific personnel skill sets and we've been pretty successful at New River Valley at meeting those challenges."

Rule No. 2: Act Now. Do it Today. Get Results.

Planning of the New River Valley facility began in 2001 and from then to the groundbreaking in September 2002 to the grand opening in June 2004, the focus has been on creating the best facility to meet the bottler's changing needs.

"We designed this plant to support the business as we knew it in 2002 and to keep up with the fast pace of innovation," says Coleman. The plant's versatility may be best demonstrated by its range of secondary packaging options, which include a Graphic Packaging fridgemate machine, a ring-carrier applier with package orientation from ITW Hi-Cone and a Kisters shrinkwrapper, which is itself capable of creating a variety of secondary packaging options. It's all about meeting customer needs and expectations.

"The flexibility of our production and packaging lines allows us to provide excellent service to our customers," says Coleman. "We can generate a load that services our customers in a one-stop shop."

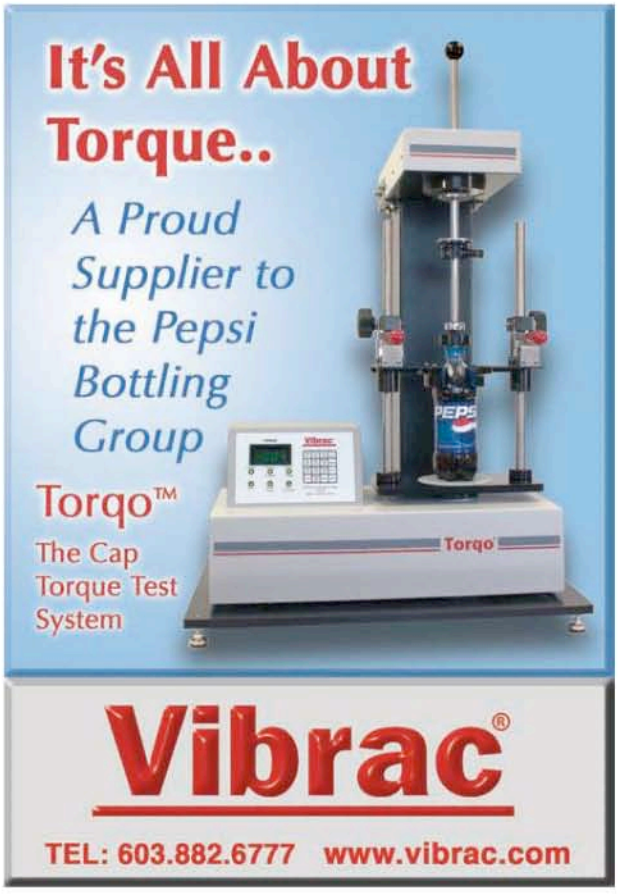
The flexibility built into New River Valley may be all a part of PBG's "get results" mentality, but with it comes the challenge of keeping pace with complex raw material handling, production scheduling and personnel skill set.

Fortunately, the bottler was able to draw on experience from existing facilities. "From Tulsa [OK, USA] we took a lot of the visual factory concepts and principles. For example, the Toyota manufacturing principle of poka yoke, which means when you make a changeover or you make a change you can't do it wrong—fool proofing. This has been successful in Tulsa and was essential for New River Valley as well because it is a facility that has ultimate flexibility," Wandschneider explains. "As you are well aware this business has moved from a pallet business to a cases business and our manufacturing has had to move, similarly, from pallets to cases in order to service our customers. We took those principles of visual factory to help our employees make efficient and reliable changeovers in that facility. We took things from Orlando which were designed to make it easy to clean, with equipment up off the floor and color-coded conveyors to indicate what sanitation rigors are required on each line."

Rule No. 3: Set Targets. Keep Score. Win.

One of the key components in the success of any PBG facility, according to Wandschneider, is tapping into the passion of the workforce and giving them ownership over their role in the company's performance, both major tenets of the New River Valley culture.

"We are pretty clear about our expectations and we operate under the theory of The Game of Work, [based on the



book of the same name written by business consultant Charles A. Coonradt]," explains Wandschneider. "The idea is that if you can turn work into scorekeeping in a way that is similar to the world of sports, you can have a very engaged workforce. We spent a lot of time creating a situation where every employee understands what winning looks like for them and they understood how that translates into the broader goals of the organization and the plant. We started with a very firm understanding of what winning looks like in real time."

Wandschneider recalls that the plant saw a drop-off of performance after the vendor-assisted start-up phase, but credits the real-time transparency of the Game of Work theory with getting the plant back on track. "If you look at that facility today it is performing up to our expectations and even exceeding them," Wandschneider reports.

Rule No. 4: Respect Each Other

Both Wandschneider and Coleman credit the New River Valley team for the plant's success, which includes being honored with PepsiCo's prestigious Caleb Bradham Award for product quality in its first year of operation.

Of course, as with every other detail of the New River Valley plant, the success of the team was carefully considered

from day one. "We started with Rodney Coleman, who is a very experienced Pepsi leader," says Wandschneider. "We also had the advantage of having employees coming from other facilities who wanted to join us in New River Valley and then we were able to leverage a very motivated local talent pool. We are quite pleased with the caliber of individuals we have in that facility and the approach that we took to get us to the point where we are today."

That approach includes an extensive interviewing process and 40-plus hours of training on the bottler's expectations and its corporate culture even before new hires start their first day of work in the plant. Training continues with 200 to 400 hours of job-specific training over the course of their first few weeks on the job. "Our plant is highly automated," says Coleman, "but that requires quite a bit of technical expertise. We've applied tremendous resources to this. We look at every skill set, every safety aspect of every position to determine what training is required for that position."

The resulting matrix is a road map to a customized training program that includes both internal and vendor-run training sessions.

"This plant is staffed with an incredibly talented group, probably the most talented I've ever worked with," says Coleman. "We've actually accomplished our goal of creating what we feel is a very successful culture and that has proven to be beneficial to not only New River Valley, but throughout the PBG organization." **BW**

NEW RIVER VALLEY VITAL STATS

THE PEPSI BOTTLING GROUP NEW RIVER VALLEY WYTHEVILLE, VA, USA

EMPLOYEES: 200+
SKUS: 400+

Annual Shipments*:
30 million cases
Line 1: 1,200 bpm PET
Line 2: 800 bpm PET (large format)
Line 3: 1,200 cpm cans
Line 4: 3,600 gallon per hour B-I-B

KEY SUPPLIERS
Allen Bradley
Alvey Systems
Ambec
Anton Paar
Artic Refrigeration
Avery Dennison
Clancy & Theys
Corter
Cox Kliewer
EF Lea
G.C. Evans
GE Osmonics
Graphic Packaging
Hartness International
ID Filtec
ITW Hi-Cone
Johnson Diversey
Kisters
Krones
Lanfranchi
Mettler Toledo
Millipore
NTS
RA Jones
RAM Controls
Rapac
Ryson
SJ Controls
Sidel
Vacuum Barrier Corp.
Vibrac
Waukesha Cherry Burrell

HONORS & DISTINCTIONS
Caleb Bradham Award for Product Quality from PepsiCo
Beverage World Plant of the Year

**Based on first full-year of production*