

New labeler **filters** out problems

A new high-speed rotary labeler at oil filter manufacturer Champion Laboratories runs up to 200 units/min with improved accuracy and efficiency.

Jack Mans, Plant Operations Editor

Champion Laboratories, Inc. is a major producer of oil filters and other types of filters for vehicles and equipment. The company was born largely out of the vision, dedication and hard work of a single man, Howard Gaither, in the small town of West Salem, in Southern Illinois. In 1955, he purchased a small, one-man filter operation called Kleen Pak Manufacturing Company from the owner, and moved it to West Salem. He scored an early triumph in 1959 when he had the idea for the engine-end relief valve that would effectively trap virtually all contaminants inside a spin-on oil filter. It became a major innovation in the industry, setting the company apart from its competitors and earning the business of many OEM's. Through the years, Champion has been part of several different parent companies, but perhaps no pairing is as famous as when STP Corporation and racing enthusiast Andy Granatelli

acquired Champion in 1970.

Champion Laboratories now manufactures Champ, Lee, STP and Bosch brand filters, as well as accessories and filters for many private-label accounts. Its Kleener Cabin Air Filters clean the air that drivers and passengers breathe inside their cars. The company produces more than 200,000 products/day, encompassing 150 skus in a 187,000-sq-ft plant in York, SC.

To keep up with burgeoning demand, Champion in Feb. 2003 installed a rotary Series 9000 labeling system from Label-Aire to apply pressure-sensitive labels to the auto filters it manufactures. Equipped with 10 turrets, the labeler is currently running 90 to 100 parts/min with the potential to label upwards of 200/min if needed.

"When we decided to install a faster labeler, U.S. Tape & Label, which supplies many of our labels and distributes the Label-Aire equipment, suggested the series 9000, and it has



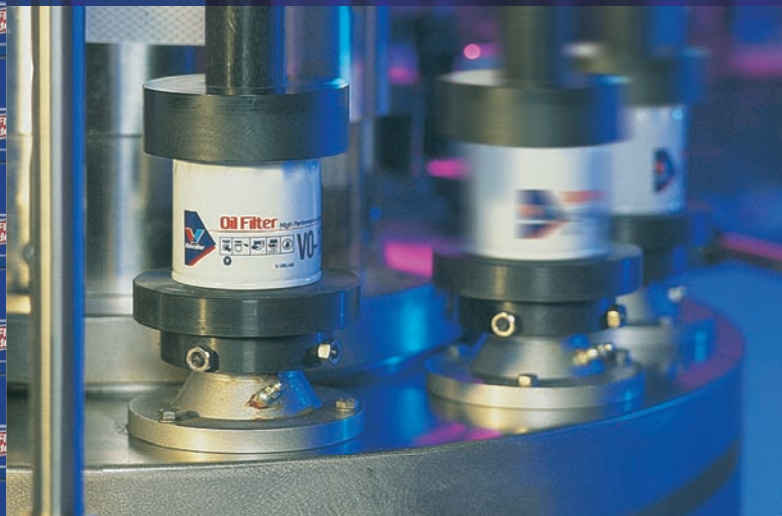
been an excellent choice," says plant manager Warren Morrow. "Its speed and tool-less height adjustment have improved our line efficiency. The filters we run on this line vary in height from 3½- to 7 in. and the labeling assembly can be raised or lowered to accommodate this range without requiring any tools."

Another benefit is the $\pm 1/32$ -in. accuracy of the label placement on the filter. The polyolefin labels from U.S. Tape & Label are flexo-printed in three to four colors and are UV-coated.

Filters are delivered to the labeler on a conveyor, and a feedscrew meters them into a starwheel that places the

More Capacity More Up-Time More Productivity

"The Rotary 9000 has enabled us to increase our production speed by 40% with minimal downtime and maintenance issues, allowing us to keep pace with ever changing market requirements." – Warren Morrow, Plant Manager, Champion Laboratories, Inc.



Champion Labs utilizes our Rotary Series 9000 to label Valvoline, STP and private label brands of oil filters.

For applications where rotary labeling is the best solution, Label-Aire is the best choice. Using the knowledge and experience gained from our long, distinguished history in labeling, we have designed and engineered a rotary labeler that maximizes your labeling operation. Rotary Series 9000 Labeling Systems from Label-Aire are easy to install, and operate at speeds of up to 600 cpm. Configurations range from 4 to 40 stations with up to six applicators, and the machine's small footprint allows it to slip easily into your line. The Rotary 9000's innovative tool-less change parts means more up-time from faster and easier changeovers. And our New Generation applicator heads mean more accurate labeling and faster set-ups.

Our rotary labelers apply a wide variety of labels to products in a wide variety of industries. You can count on the Label-Aire Rotary Series 9000 to give you more.



The Rotary Series 9000



550 Burning Tree Road
Fullerton, CA 92833
714.441.0700

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Ten-turret labeler applies pressure sensitive labels supplied on a roll. After a label is stripped from the web and applied to a filter, the filter continues to rotate, and a rubber squeegee presses the filter flat. The unit features tool-less height adjustments for running filters ranging in height from 3½ to 7 in.

The label web moves through the labeler only when a label is present. An optical sensor detects the presence of a filter on a turret and initiates the label movement.



Labels are applied to different size oil filters at speeds to 200 units/min with an accuracy of +/-1/32-in.



filters onto the turrets on the rotating labeler. The roll of p-s labels is mounted on a horizontal turntable and is pulled through the labeler by a vertical unwind-roller. The web passes over dancer rolls to maintain proper tracking, and then passes over a sharp-edged peeler bar that bends the web back at a sharp angle so the label is stripped from the web and applied to the rotating filter. As the assembly and turrets continue to rotate, the label pushes against a rubber squeegee that presses it against the side of the filter. "This applicator provides a very smooth finish with no wrinkles or bubbles," says Morrow.

An interesting feature of the Series 9000 is that, rather than move continuously, the label web only moves when a filter is present. An optical sensor detects the presence of a filter on a turret and initiates the label movement. If a filter is not present, the web does not move. Once the label is removed from the web, the blank web is pulled by the main drive roller onto the web take-up spool. To facilitate the operation, the machine is equipped with a low-level label detector that alerts the operator that the roll of labels is almost depleted.

For more information, contact:
Label-Aire, 714/441-0700
www.label-aire.com

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550 Burning Tree Rd.
Fullerton, CA 92833 USA
o 714.441.0700
f 714.526.0300
www.label-aire.com