

# Premiere Package Makers' Vacuum System Increases Productivity

In the Pohlig Brothers, Inc.'s new facility in Richmond, Virginia, a remotely located dual pump vacuum system replaced 16 single pumps, which lowered energy costs, greatly reduced maintenance, uses less floor space, lowered work area noise and heat levels, and increased productivity. That's the kind of efficiency and planning that has kept the company in the lead for more than 133 years.

Pohlig Brothers is a packaging manufacturer of all kinds of paper based boxes, including folding cartons, rigid boxes, specialty items such as posters, tubes, book sleeves and archival storage products. The company was founded by August Pohlig, a knife-grinder, along with his friend Otto Meister, in 1866 shortly after the Civil War.

Equipment consisted of a cobbler's knife to cut and score cardboard into box blanks, and wooden frames used to form the blanks into boxes. Daily production was limited because of the manual labor required, and the shortage of materials in the post-war period. In spite of these difficulties, they kept their box-making enterprise alive and growing.

When August Pohlig died in 1900, his two sons, Emil and Charles, inherited the business. The company continued to flourish over the years, manufacturing all kinds of boxes for pills, cigarettes, the millinery and supermarket industries, to mention a few.

In 1987, after four generations of Pohlig family ownership, the business was sold to a newly organized corporation. The new corporation, named Pohlig Brothers, Inc., dedicated itself to the tradition of strong commitment to quality products, customer satisfaction and employee relations. One of the reasons Pohlig Brothers has been successful for more than a century is their consistent embrace of the latest technology for the manufacturing of their products.

When Pohlig Brothers moved to their current location in 1996, Mike Southard, the plant manager, decided to trim operating and maintenance costs by replacing all of their 16 oil-reciprocating air/vacuum pumps with remotely located compressed air and vacuum systems. These pumps, located throughout the plant on almost all of their setup equipment, die cutters, and presses, constantly broke down, needed new parts, and sometimes blew out oil on the product. This slowed down production and increased their maintenance costs.

After extensive research, Mike selected a Busch duplex central vacuum system. This system uses two large capacity pumps which replaced all 16 individual vacuum pumps. Vacuum lines were installed throughout the plant with connections to each machine. The com-



*Mike Southard (above), plant manager at Pohlig Brothers, believes the plant's vacuum system (below) has helped to reduce costs.*



pressed air system was set up the same way.

The Busch Duplex Central Vacuum system is a complete and ready-to-run automatic alternation system. It uses two Busch RC0400 rotary vane, oil-recirculating vacuum pumps with direct coupled TEFC motors mounted on a skid along with electrical controls, and a vertical ASME coded receiver tank that "stores" vacuum for maintaining consistent vacuum at all times. It can be expanded to a triplex or quadruplex system with easy-to-install mechanical and electrical expansion modules. The PC operated, automatic alternating motor control center offers alternation on-demand and alternation on a timed basis, ensuring even wear on both pumps.

The Busch central vacuum system offers many advantages over individual pumps such as less floor space requirements, remote location for reduced noise, heat, contamination from paper dust or glue and easy access for maintenance. Instead of having to maintain 16 individual pumps, Mike only has two pumps with low maintenance requirements. "All I have to do is make sure the oil and exhaust filters are changed at the recommended time," says Mike.

Energy costs have also been reduced. Electrical controls provide only the vacuum that is needed for the operation of the equipment. One pump works as the lead pump and meets the majority of the system's demand, while the second pump comes on stream only when demand conditions increase. The second pump also serves as a backup pump, should the lead pump be out of service, which eliminates downtime.

Pohlig Brothers' outstanding background of high quality products and service, using the latest production methods, will ensure the success of the company for many years to come.