

NEWSPAPER

# PUMPED UP

New York newspaper finds central vacuum system reduces noise and simplifies maintenance

*Walter Enderley, collating manager of the Newsday newspaper, checks the operation of the paper's centralized vacuum system. The four pumps, including a backup, operate in a rotating cycle to ensure reliability.*



**W**hen New York's *Newsday* finished building a plant on Long Island last spring and moved in six Harris inserters, management decided to replace its aging vacuum pumps.

In the old plant, several reciprocating vacuum pumps were scattered around the production floor. They were noisy, inefficient and required constant maintenance; furthermore, each inserter had its own vacuum pump.

"When we moved our inserting operation to the new plant, we decided to install a central vacuum system to eliminate these problems," says Walter Enderley, *Newsday* collating manager. His department is responsible for production of the Sunday edition color pack, which contains the

comics, Sunday magazine and ad circulars.

Central systems typically free floor space and remove pumps from the workplace. The staff benefits from a less crowded, quieter and cleaner work environment. Maintenance is kept to a minimum because the number of pumps is kept to a minimum.

*Newsday* began by studying the various types of pumps currently available—a search that led to a choice between a rotary screw or a rotary vane vacuum system. A rotary screw vacuum pump uses two intermeshing helical rotors to create the vacuum, while the rotary vane pump has a single rotor using sliding vanes.

Both designs are oil-flooded and have separation sys-

tems to remove the oil from the discharge air. Rotary vane pumps are quieter than the screws, in part because they run at lower speeds; a screw pump can run as high as 6,000 rpm, while the rotary vane pump runs at either 1,150 or 1,750 rpm.

Rotary screw pumps normally are sold as individual pumps, rather than as a completely integrated central vacuum system. Screws also are operated on a continuous basis, whereas the rotary vane system operates on a stop/start basis to meet the actual demand. If the demand is light, only one pump may operate. As the demand increases, additional pumps come on stream.

"We chose the Busch Quadruplex vacuum system because of its ability to provide a sufficient quantity of vacuum regulated to our production requirements," notes Enderley.

This system consists of four 25-hp pumps mounted on separate skids for ease of shipping and handling, a receiver and a PC-operated motor control center. Each pump has a maximum vacuum capability of 29.3-inch Hg. Vacuum pressure is stored in a vacuum receiver, and the pumps run automatically to ensure even wear on all the pumps over their lifetimes. The system also provides a back-up pump.

Other benefits, such as a factory-owned and operated service center, helped make the final decision easier for *Newsday*. Busch, Inc. (Virginia Beach, VA) also conducts service training school for those customers who wish to service their own pumps.

Since being installed, the pumps have proved to be a worthwhile investment. "We have found the pumps to be reliable, smooth running and virtually maintenance free," reports Enderley. ■

