



## **Plant layout entails physical, psychological issue**

BY HAL ETTINGER

The working environment of printing plants is as important as the technology it houses. Managers need to pay as much attention to areas for employees services, training, production and to building systems design, as they pay to production equipment itself. Let's look at training. A suitable area for training new employees and for equipment skills upgrades. Otherwise the training process can be so compromised that it is ineffective. Training programs today use sophisticated educational tools, drawn for multiple media. They have to be sophisticated as the electronic controls found on presses and cutters. Electronic aids such as video players, interactive video CD's, and computer based training programs are increasingly popular. Besides establishing an environment where such aid can be employed in training, adequate storage of the equipment also needs to be considered - for security and care.

Consideration should be given to providing a room big enough to simulate specific tasks or procedures on which the employee is being trained. This room can double as a classroom or meeting room. Since space is a premium in all plants, printers equally place training space as a low priority. But there are ways to work around limitations.

For example, why not create as multipurpose space, clearing out an unused area currently dedicated to an equipment cemetery? Or perhaps build a mezzanine, if ceiling heights permits, for training spaces. Establishing a dedicated training area now only makes the training process more effective. A properly outfitted, learning-conducive also sends a message to new and current employees. It says: "You are important in this operation, and the company wants to provide you the tools and ability to perform better." Picking up a theme from our first article (see July 1993, Executive File), accommodating individual growth within the company goes a long way in building self-esteem among employees, and a spirit of dedication to the company.

Although the subject of production may be discuses at length, it's rare within our industry to see efforts to improve plant layout. Through employee services, training space and the plant's building systems directly influence the working environment, a plant's production method is the quarterback of any printing operation. Improving it should receive top priority.

Any approach must take into account what I call the psychological and the physical aspects of the production environment. On the physical side, you will want to review whether work flow is currently optimized. This analysis requires a thorough discussion among management and plant personnel. Physically arranging or rearranging the



production area to optimize the flow of raw materials, through production and to shipping should be analyzed. Climate control in the production areas, primarily in the sheet fed press room and bindery, should be calibrated and adjusted following any production changes. This will reduce equipment jam-ups and have a positive impact on production.

On the psychological side, creating conditions conducive to a worker's productivity is critical. Lighting schemes in operator areas that reduce eye strain and improves mood can be very beneficial.

One often overlooked element are the plant's building and process systems: mechanical, electrical and plumbing systems operating behind the scenes. In web and gravure operations, items like pollution abatement, chiller systems and central compressed air are part of the story. Sometimes these items can be a weak link in the operation. They may be placed in the back area, with an out-of-sight, out-of-mind mentality. But integrating them efficiently into the plant's layout can maximize efficiency. Close attention can also minimize downtime and maintenance required.

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