

## SPECIAL REPORT

### Quick-change equipment shines

*From contract packaging to pharmaceuticals to frozen veggies, packaging operations depend heavily on the ease with which they can be changed over.*

#### More pharma

Hi-Tech Pharmacal is another pharmaceutical company whose contract packaging responsibilities make *Quick-change equipment* a priority. One area greatly improved about 18 months ago at the Amityville, NY, firm is in shrink bundling of plastic bottles filled with liquid cough/cold remedies. A Model ILB-24-DP shrink bundler with robotic pick-and-place arm replaces a largely manual operation. Polypack ([www.polypack.com](http://www.polypack.com)) supplied the machine.

Not only does the shrink bundler have to quickly accommodate bottle sizes ranging from 2 to 32 oz, it also has to change quickly when shrink bundling of bottles gives way to bundling of folding cartons, or vice versa. In addition, bundles vary from 4- to 6- to 9-count formats.

The ability to make these changeovers in about 15 minutes is largely a function of the bundler's unusually accommodating robotic pick-and-place heads. Each head in the dual-lane system consists of a stationary metal plate and a pneumatically actuated pad that pins containers against the plate. Once pinned, the containers can be lifted and placed on the two conveyors that each carry the group of packages through a shrink-film application station and subsequently through a shrink tunnel.



Quick-change Pick & Place grippers can stack & rotate collated products.

"To change the dual gripper heads for a new format, we use a socket wrench to adjust the two back plates," says maintenance manager John Williams. This shortens or lengthens the stroke made by the pneumatic device that pins the containers against the back plate.

Infeed guide rails must also be adjusted, and this is accomplished via knobs in a tool-free manner. Also contributing is PLC programming that automatically resets parameters such as pitch, speed, and timing. Top speed on the bundler is 20 bundles/min.