Cahners
Pharmaceutical PROCESSING®
New Technology For The Pharmaceutical Industry

See Over 2500 New Products

Visit us @ www.pharmpro.com

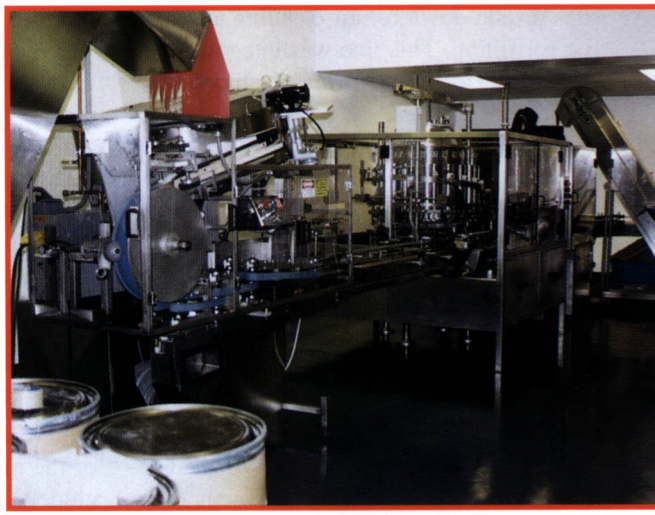
Equipping The Future Of Contract Manufacturing

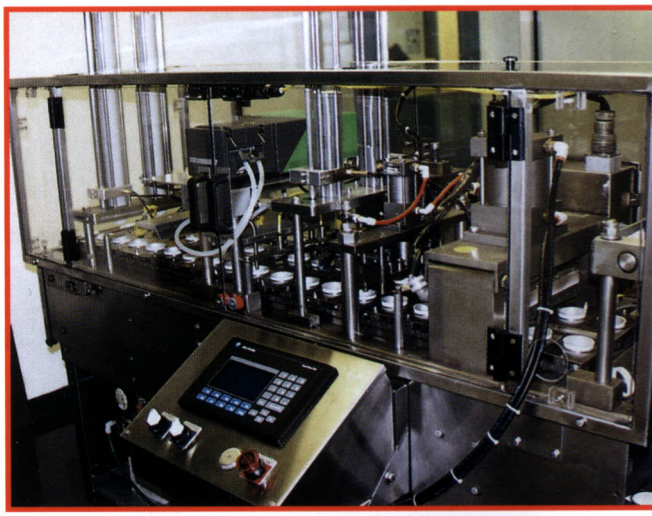
For a contract manufacturer, seamless equipment performance is essential. Frequent, non-stop uptimes and rapid changeovers call for dependable workhorses as well as state-of-the-art technology. For Lyne Laboratories, a pharmaceutical contract manufacturer, efficient machinery is mandatory for securing the confidence and trust of its customers.

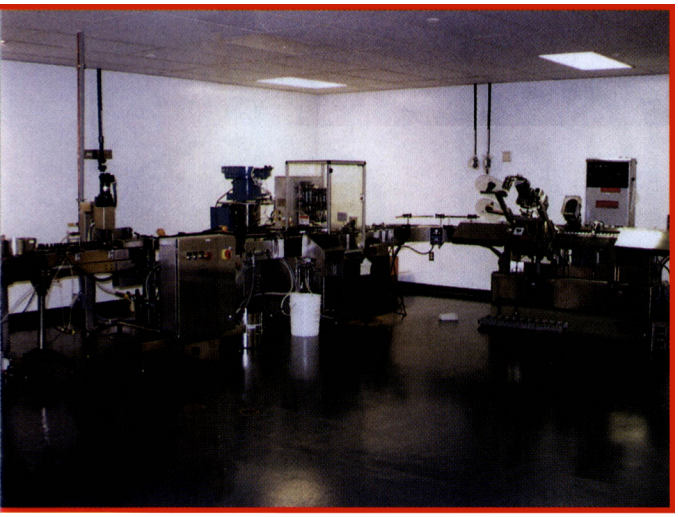
Located in Brockton, Massachusetts, Lyne Laboratories has been a contract manufacturer for pharmaceutical manufacturers, distributors, clinical and biopharmaceutical companies for over 30 years. Operating as a manufacturing resource for these companies, Lyne's equipment needs cover the gamut from formulating and processing product to bottle unscrambling, labeling and packaging. Lyne processes and packages a variety of liquid and powdered products, as well as ointments, gels, capsules and tablets. Clean design machinery and sanitary conditions are a must for its high speed liquid and powder filling machines which are linked to every other piece of equipment by a conduit of conveyors dotted with sensors.

Early in 1999, Lyne president, Steve Tarallo, and engineering manager, Brian Daly, came to HealthStar, Inc. a machinery supplier and line design and integration company, looking for assistance in building a small bottling line. HealthStar's background as a pharmaceutical equipment reseller, rebuilder and a supplier of new machinery was a good fit for Lyne's needs. HealthStar offered engineering expertise as well as the ability to integrate a mix of pre-owned, rebuilt and new equipment at a significant cost savings over utilizing all new equipment. "Pharmaceutical manufacturing is a business of precision and trust," says Steve Tarallo. "Our customers need complete confidence in our ability to manufacture their product precisely as specified and on time. There's no room for error so our equipment has to be first-rate."

Soon after the installation of the smaller line, Tarallo and Daly started plans to design another line that would run liquid products in 2 oz. and 3/4 oz. plastic round containers with childproof caps. HealthStar provided the solution — a monoblock bottle filling/capping line that would incorporate pre-owned and reconditioned equipment. The core part of the line, a pre-owned Filamatic piston filler and capper monoblock was reconditioned and customized to Lyne's speci-


Liquid Filling Line


Unit Dose Filling/Sealing Machine



Filamatic Filler/Capper Monoblock Line

fications. This piece is integrated with an Omega bottle unscrambler, bottle elevator and hopper, an Omega air cleaner and an Accraply pressure sensitive labeler with customized change parts and a full safety-guarding package. HealthStar engineered a special twist-rail assembly to turn the bottles upside-down for air cleaning and back up for filling. This line was integrated and tested at HealthStar prior to shipment to Lyne Laboratories.

Within 2 months, Lyne returned to HealthStar with requirements for two more filling lines, one for liquid products and one for powders. The first line runs pharmaceutical liquids of various viscosities. Containers range from 4, 8 and 16 ounces with child resistant screw caps. Lyne's criteria was quick, easy changeover with versatility for product changes...and they got it. HealthStar designed a line consisting of pre-owned rebuilt and reconditioned equipment combined with new labeling machinery. Specific equipment utilized was a New England Machinery bottle unscrambler, a Pfaudler 21-head piston filler, a Consolidated rotary capper and an Oxe pressure sensitive labeler. Systems integration line controls and accumulation was incorporated.

The second line for powder packaging consists of a New England Machinery bottle unscrambler, 2 Spee-Dee auger-style powder fillers (one purchased new and one pre-owned), a Consolidated rotary capper, a Garvins checkweigher, a new Enercon induction sealer and a new Oxe pressure sensitive labeler including systems integration, line controls and accumulation. Both this line and the liquid filling line were developed as complete turnkey operations from setup at HealthStar's facility to installation and training at Lyne Laboratories' plant.

Lyne Laboratories, an expert with liquid pharmaceuticals, was one of the original developers of unit-dose liquid packaging. Adding to their range of contract manufacturing offerings, the company fills liquids into plastic unit-dose cups extending their customers' product lines to meet the demands of today's hospital drug distribution systems. Mr. Daly came to HealthStar to have Lyne's existing unit-dose filling and sealing machine upgraded. HealthStar's technicians completely rebuilt this piece using only the original base of the machine. It was reengineered to include a peristaltic pump fill system and a new heat sealing system. Several photo eyes were added for cup and lid supply control with a complete safety guarding package including proximity switches and stainless steel framing. The machine was also upgraded to be completely PLC-driven. This was a unique and complex system that was upgraded to state of the art technology and customized to manage Lyne's exact application. The finished product effected increases in production with significantly faster fill speeds and a more sanitary, user-friendly system design.

Maximizing efficiency while minimizing expenditure is key. The right machinery for all applications must optimize accuracy, changeover, technological advancements, operator interface and sanitation.

HealthStar, Inc., 1 Randolph Road, Randolph, MA 02368.

Reprinted with permission from Pharmaceutical Processing