PACKAGING MACHINERY FOR THE DAIRY & FOOD INDUSTRIES
We constantly monitor our goals, methods and results so that customers benefit from our efficiency and cost effectiveness.

Carton sizes and products are reviewed to establish machine specifications prior to manufacturing. All orders receive special individual attention.

Computers are used for engineering, scheduling, purchasing, inventory control, bills of material, manuals, spare parts, accounting and other manufacturing operations.

Skilled craftsmen prepare component parts for assembly. Precision workmanship and quality inspection insures a dependable and efficient end product.

NiMCO's HISTORY: NiMCO was founded in 1958 as Northern Illinois Machinery Company, a machine job shop and manufacturer of small milling machine tools. The packaging division was formed in 1962 when the milk carton was changed from a wax coated to a heat sealable plastic-coated paperboard carton. They designed a carton erecting and bottom sealing machine for the small dairies who already had filling and top sealing equipment. In 1965, a new filler/sealer was introduced to compliment its bottom former. Then in 1967, NiMCO marketed the Model 500 Former/ Filler/ Sealer which helped with the growth and survival of many small and medium sized dairies.

NiMCO was acquired in 1972 by George L. Bachner (1917-1987), CMfgE, and with the help of his twin sons Larry and Jerry, many technological innovations were incorporated into the machines which resulted in simplifying the design, improving quality, reliability and making the machines easier to operate and maintain. With the same devotion and pride of quality craftsmanship, his sons continue with the knowledge and experience passed onto them over the years.

NiMCO TODAY: Today, we are recognized as the foremost American manufacturer of world-class carton form/fill/seal machines. NiMCO has a wealth of experience and is a leader in the industry for its reliable efficient machinery, a high standard of quality control, customer service and its ability to respond to customer needs. We offer a significant number of customer benefits including: paperboard carton manufacturing expertise, systems consulting, application engineering, custom design, supply and complete turn-key packaging system installation. Our in-depth knowledge of the industry is reflected in the design and quality of our packaging machines. NiMCO machines are field proven in over 1,100 installations that produce billions of cartons around the world under the most demanding conditions. They are now specified throughout the food and dairy industries for dependable, low cost easy maintenance and performance efficiency. For over two decades, dairies have depended on NiMCO equipment.

We employ experienced engineers, skilled machinists and knowledgeable craftsmen that take pride in the exceptional quality they can produce using our proprietary manufacturing techniques, and who constantly monitor quality and strive for excellence. Their knowledge and expertise gained over the years has resulted in many copyrights and patents. NiMCO machines are the result of advanced engineering and cost efficient manufacturing, backed by a well established progressive private family company with financial and
technical strength. We are dedicated to the manufacturing of precision packaging machinery and to perpetuating the gable-top carton philosophy. NiMCO is small enough to provide the personal service customers deserve yet large enough to meet all requirements and requests. Much of our business is repeat business from longtime satisfied customers.

**THE MACHINES:** In a world of high technology where some machines are becoming too sophisticated and overly complicated, NiMCO has kept things simple. Our machines offer options in carton sizes, speed and flexibility in the 30 standard models available. All models share many mechanical and structural components. Most replacement parts are available locally off-the-shelf which helps lower your inventory costs and simplifies maintenance procedures.

The NiMCO product line is the most comprehensive in the industry from manual and semi-automatic up to fully automatic high speed equipment with different carton size flexibilities and output. No other manufacturer offers such a wide choice. There is sure to be one that will match your production perfectly. Whether standard or special, NiMCO has the machine for you.

Today plant engineers are specifying multiple medium speed machines because they are less complicated, give more product flexibility and most important is that it assures continuous operation.

**COMMITMENT TO QUALITY:** NiMCO packaging machines are made of the highest quality beginning with the finest raw materials, precision manufacturing of all components and careful sourcing of parts for exceptional quality and reliability. We maintain strict quality control throughout the manufacturing process and thoroughly test each machine before shipping. The final result is a quality product engineered for a long service life which gives reliable and efficient performance. Our equipment represents the state of the art combined with time proven designs and quality that our customers have come to expect.

**TECHNICAL SUPPORT:** Through NiMCO technical service, we offer seminars and training of customers’ operators and maintenance staff at NiMCO’s factory before taking delivery of new machinery or at customer’s location. Throughout the working life of each machine, a full spare parts inventory and service capability is assured and available through NiMCO and its worldwide distributor network. Our periodic mailings of Technical Bulletins keep all customers informed about updates, the latest product and packaging developments and special new product applications.

**NiMCO’s FUTURE:** While other companies have come and gone, NiMCO has grown because of its simplistic machine design, technical leadership and customer service. The significance of this long history is valued by prudent customers who want to be assured that the company they choose will continue to serve their needs long after the machine installation.

With R&D currently developing new package designs and machinery of higher capacity and flexibility to meet changing market demands, we are taking the lead with more experience and installations around the world. NiMCO is actively opening new markets, expanding existing markets and continuing the international leadership role in the carton packaging industry. We are looking forward to the future as a strong partner to existing and new customers.
Perfecting the Simple Machine

At NiMCO, we have or will design the model to meet your specific packaging needs. It will be a precision 100% mechanically driven machine, constructed of the finest materials available in the industry and designed to operate all day, every day. It will cost you less to purchase, less to operate and may well be the most profit oriented form/fill/seal machine in the industry! Check out these unique construction features and benefits.

- **Simplicity of design** using all cam, gear and lever mechanisms make it possible for less specialized personnel to service and maintain our machines.
- **Low Cost Easy Maintenance** because no complicated hydraulics, pneumatics or electronics are used.
- **Minimizes in-plant inventories** because NiMCO’s common and standard machine design allows all models to share locally available commercial replacement parts.
- **Low Energy Consumption** means minimum utility requirements. World-wide operating voltages are available.
- **Flexible design** enables all models to handle multiple carton sizes. Multiple lines can be assembled to meet production needs. Optional fillers are custom fitted to fill a variety of food and non-food products.
- **Fast carton changeover** and be back operating in 15 minutes or less. Sure, simple and positive every time.
- **Controlled fill accuracy** with our Exclusive Micro-Fill adjustment. Precision positive displacement piston filler with drip proof valves meet the most demanding fill accuracy requirements.
- **One man** can easily operate multiple machines from floor level.
- **Space Saving design** requires minimum floor space. NiMCO machines deliver more production in less operating area than comparable equipment.
- **Minimum Waste** results from cartons transferring only once enabling positive control of cartons at all times. Intermittent indexing assures precise mechanical timing. Controlled heat is directed only at appropriate carton seal areas providing leak proof seals. No Carton-No Fill sensors, heater shut-off and heater retractors are standard.
- **Sanitary** stainless steel exterior and C.I.P. cleanable fillers meet all local, state and federal sanitation requirements. All models comply with U.S.D.A. and 3-A standards.
- **Easily accessible** mechanical drive components.
- **Low noise levels.** All models are far below industry standards and within acceptable in-plant requirements.
- **Economically the most competitively priced** machines in the industry. With NO production royalties to pay, you get more value for your money.

Ask about our domestic Lease-Purchasing plans.
1. "DT" MINI SERIES  Model #5110E Illustrated
Dual production in the same floor space! Two (2) models available for small cross-section carton sizes with production capacities ranging from 6600 to 7500 CPH.

2. "L" SERIES  Model #770 Illustrated
Less than 45 sq. ft. of operating area. Four (4) models are available for 1/2 pint thru 1/2 gallon, 1/2 gallon thru gallon and metric liter sizes. Production capacities range from 900 to 3000 CPH.

"TL" SERIES (not shown)
Two independent operating lines mean that your production is not dependent upon one high speed unit. Any combination of right or left-handed "L" series models can be assembled for a Twin-Line operation. Four (4) models are available for 1/2 pint thru 1/2 gallon, 1/2 gallon thru gallon and metric liter sizes. Production capacities range from 1800 to 6000 CPH.

3. "T" SERIES  Model #550 Illustrated
Multiple container flexibility. Three (3) models are available for 1/2 pint thru 1/2 gallon. Fifteen (15) models are available for 1/2 pint thru quart, 1/2 gallon, gallon and metric liter sizes. Occupies less than 32 square feet of floor space. Production capacities range from 480 to 3600 CPH. Rotary accumulating table for manual casing or optional conveyor discharge systems to case automatically.

4. "DT" SERIES  Model #8100 Illustrated
Five (5) models are available for 1/2 pint thru quart, 1/2 gallon and metric liter sizes. Production capacities range from 3600 to 6000 CPH. Two different cartons can be run and two different products can be filled at the same time with an additional product tank.

CUSTOM Fitted Fillers, Carton Sizes & Configurations... All Easily Modified by NiMCO because of Advanced Machine Design & Flexibility.
Whether you fill food or non-food... liquid, viscous, semi-solid or free-flowing powder or granular products, they can be filled by weight, volume or count with custom-fitted filling devices for your special packaging requirements.

5. Model 210G
Specially fitted with Net Weighing Fillers for free flowing products.

6. Split Function Applications
Former and Sealer sections can be separated allowing for cartons to be bottom formed and top sealed in different plant areas, also permitting insertion of special complete filling systems for ultimate flexibility in special product applications.

7. Model 40
Manual bottom sealer for carton sizes from 4 oz. thru 64 oz. and metric liter sizes.

8. Model 60
Manual top sealer for carton sizes from 4 oz. thru imperial gallon and metric liter sizes.

9. Model 150
Semi-Automatic bottom sealer, top sealer, (liquid or dry filler optional), for dedicated carton cross-section from mini thru imperial gallon or metric liter sizes.

10. Pocket volumetric filler for bulk free-flowing dry powder or granular products.

11. Auger filler for free and non-free flowing products.


13. Piston Filler/Depositor for liquids to heavy paste materials, including viscous and semi-solid products.

ACCESSORIES:
- Imprinting code Dies: Electric Branding Coders; Wet or Dry Ink Coders;
- Rotary Accumulating Table; In-Line Plunger Accumulating Tables; Discharge Conveyors & Combiners;
- Casers, Stackers & Corrugated Case Packers; Check Weighers, Shrinkwrap & Steve Overwappers;
- Gallon Handle Applicators; Export Spare Parts Kits (in addition to X1 supplied); Electric Bottom Heater (standard on some models); for additional accessories, contact NiMCO.

All NiMCO Models are available with the optional see-through security enclosure and inter-locked sliding doors. A positive pressure, purified air filtration system can be added for controlled hygienic environment filling.

Due to engineering modifications... appearance and machine capabilities may change as we continue to improve our equipment. Machines are covered by issued and Pending Patents & Copyrights Worldwide.

MACHINES SHOWN WITHOUT GUARDS ARE FOR ILLUSTRATIVE PURPOSES ONLY. GUARDS SUPPLIED MUST BE IN PLACE BEFORE OPERATION.
4. Positive displacement volumetric piston fillers, for hot or cold liquids, with Micro-Fill dial allows for fine fill adjustment while machine is operating. Standard liquid valve is interchangeable with "Ultra-Fill" rotary valve for filling viscous products containing particulates. Bottom-up filler is available for hard to fill aerated product.

5. The carton top flaps are heated, closed and pressure sealed with water cooled compression sealing jaws for a superior top seal.

6. Filled and sealed cartons are discharged automatically from the machine and are ready for distribution.

3. Bottom flaps are heated, formed and pressure sealed by a water cooled sealing plate using a horizontal mandrel carousel with thermo sanitized mandrels. The entire forming process is conveniently visible from eye level revealing a clean and easy to maintain system.

2. Plastic coated paperboard carton blanks (sleeves) are easily loaded into the system from a waist high magazine. Flat blanks are opened, squared and placed onto water cooled forming mandrels.

1. Rugged 2 H.P. extra sturdy synchronized variable speed drive train mechanically powers the entire machine. Central manifold greasing assures proper lubrication of all moving parts. Gas bottom heater, self contained air compressor, precise super heater air flow control and regulator are standard. (Electric forced air heaters are optional on some models and standard on others.)

7. A single drive shaft links all operations. The heavy duty index drive with an overload clutch includes self lubricating filler chains for gentle movement. A self contained vacuum pump and radiant electric top heater with safety retractor is standard. (Electric forced air heaters are optional on some models and standard on others.)

ULTRA-SEAL™
U.S. PATENT #3,871,300
ULTRASONIC sealing method available for both bottom and top of cartons. Many advantages over conventional heat sealing processes for special applications.
OTHER U.S. & FOREIGN PATENTS PENDING

STAK-PAK™ Cartons
U.S. PATENT #4,012,967
TAK-FLAT™ Process
U.S. PATENT #4,923,112
"L" BOTTOM™
U.S. PATENT #4,601,425

Stackable flat-top from liquid-tight gable top by new process. Allows corrugated casing to be palletized for easier and economical handling.

Eliminates product penetration into raw paper edges in the base of carton.
The original wax coated gable-top carton was invented in 1934 by American Paper Bottle Company and was used exclusively for packaging fresh pasteurized milk. The wax coating on the carton was replaced by a heat sealable plastic lamination in 1961.

This easy to handle and convenient plastic-coated gable-top carton is available in a wide selection of laminate structures that include foil and other high barrier coatings. The raw edges inside the carton can be skived to remove the possibility of product being absorbed into the paperboard. Also, the natural opaque characteristic of paperboard coatings protect the flavor and nutritional content of the products from deterioration due to direct exposure to light.

Today, the gable-top paperboard carton is being used in many new applications outside the traditional dairy and juice industry which include: wines, frozen concentrates and mixes, hot filling of soups, biscuits, dry cereal, candy, pet food, detergents, pharmaceuticals, a variety of prepared foods, and other value added specialty products. Unformed cartons are stored flat which saves valuable warehouse space. The cartons are plastic coated and preprinted in colorful and attractive graphics which establish strong brand identification with enhanced shelf appeal. Other advantages include: Tamper evident design, built-in pour spout, cost effective, light weight, rigid, shatter-proof, easily disposable, environmentally acceptable, and they are made from trees - our only renewable resource. The perfect replacement for cans, glass or other bottles.

NiMCO understands all aspects of Paper Packaging Technology and holds carton patents and copyrights which are licensed for manufacture throughout the world. We are active in researching, developing, and promoting food and non-food packaging applications. Cartons are available in many standard sizes from 4 ounce (100ml) up to Imperial Gallon (5 Liter) in addition to special sizes on request. We build machines to handle non-conventional shapes and sizes for satisfying the needs of the sophisticated institutional, commercial and consumer markets.

Our main objective in the development of the Simple Machine is that it remains the Flexible Machine. Models are available for Pure-Pak, Tetra-Rex, Variopak and tapered conical containers with gable-top, slant-top or flat-top configurations including special opening features, straw holes or reclosable screw cap fitments.

If you are considering the Plastic-Coated Paperboard Carton, NiMCO can engineer the Simple Machine for you.
NiMCO equipment is in operation in over 50 countries throughout the world, wherever cartons are available. We are represented internationally by a well established and recognized network of Distributors, Representatives and Carton Licensees who sell and service NiMCO equipment. This network assures a rapid response to every customer's needs wherever and whenever they need it.

NiMCO has many installations in Argentina, Australia, Belize, Bolivia, Canada, Chile, Colombia, Cyprus, Denmark, Dominican Republic, Ecuador, El Salvador, England, Finland, France, Germany, Grand Caymans, Greece, Greenland, Guatemala, Guyana, Haiti, Honduras, Hong Kong, Iceland, Ireland, Italy, Jamaica, Japan, Jordan, Korea, Malaysia, Mexico, Morocco, Netherlands, Nicaragua, Nigeria, Panama, Philippines, Portugal, Puerto Rico, Qatar, S.Africa, Saudi Arabia, Scotland, Singapore, Spain, Surinam, Switzerland, Taiwan, Thailand, Trinidad, Turkey, Uruguay, U.S.S.R., Venezuela and throughout the U.S.A.

NiMCO's international headquarters and manufacturing facility is conveniently located in the Heart of America's Dairyland, the most pleasant part of rural northern Illinois. We are within one hour's drive of O'Hare International Airport and Chicago's shipping facilities. Visitors are most welcome.