

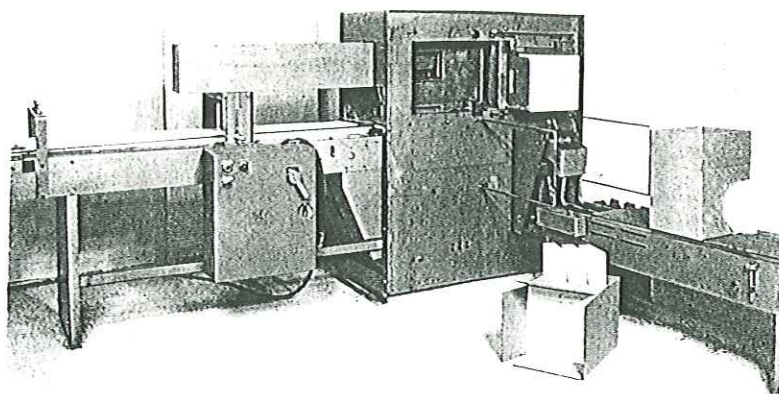
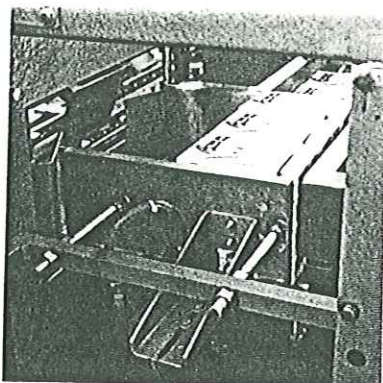
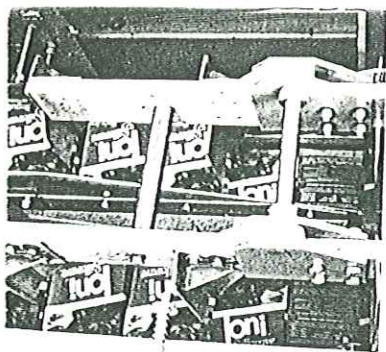
case packing

This is a basic guide to the types of case packers available today. When we know more about your product and what objectives you have set, we can recommend the packer model that will suit your application, and supply you with complete data and specifications.

RECEIVED JUL 7 1990



A-B-C PACKAGING MACHINE CORPORATION



Experience to Solve Your Problems

In 1955, the first A-B-C packing system was constructed to pack cartoned sugar. Today A-B-C systems are packing a wide variety of products, including such food items as fruit pies, sandwich cookies, breakfast cereals, pastas, margarines, juice in pure-pak cartons, candy bars; industrial items such as floor tiles, reams of paper, calculators, cans of oil, tubes of caulking, auto parts and accessories; personal care items such as cosmetics, bottled mouthwashes, toothpastes, shampoos and hair-colorings.

Standard models of A-B-C packers can handle any rigid or semi-rigid package. They can pack stable or unstable unit packages. They can pack products into cases in one layer or many layers. The same system may be changed to pack different sized products into the same size shipping case, or the same product into different sized shipping cases. There are limitless variations in packing patterns and case infeeds for special situations.

Let us use our years of experience in handling, orienting, conveying, accumulating and packing cartons to help you.

Reduction in Labor Requirements

A complete A-B-C system does these jobs automatically:

- Set up your shipping case for packing
- Convey, orient, position, assemble and load packages into the shipping case
- Seal and palletize the shipping case . . . in a continuous, high-

speed operation.

An operator-assisted case packing system requires only one full-time operator. An automatic system needs only one part-time attendant to load blanks into the case magazine.

When you add up the savings in labor reduction alone, an automatic case packing system makes sense.

Gentle Product Handling

Hand labor cannot duplicate the preciseness nor the gentleness of an A-B-C case packing system, which accumulates each load before sliding it neatly into the case. This is far superior to the hand-packing method in which piece by piece is wedged into the case, risking surface or interior damage to the product.

Increased Speeds

An automatic system will increase your packing speeds economically by allowing increased speed capability at far less expense than a hand packing system. There are a variety of ways to give you increased packing speeds, including forming progressive tiers, multi-lane infeeds, and loading at one or two stations. We design your packer to meet your speed requirements.

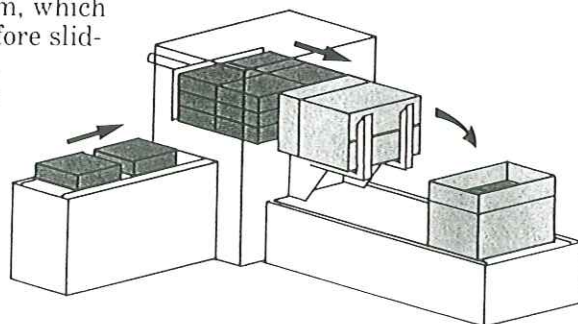
Your own packing system will depend upon several factors, including your package type and size, casing patterns, type of shipping case, speeds desired and available floor space. You must consider all

of these factors when specifying any case packing system. The engineers in the A-B-C packer group work with this basic information to make specific system recommendations.

We offer a range of operator-assisted systems and a range of automatic systems.

Operator-Assisted Systems

The key word for operator-assisted systems is economy.

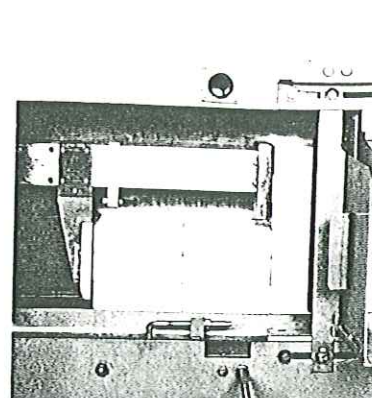
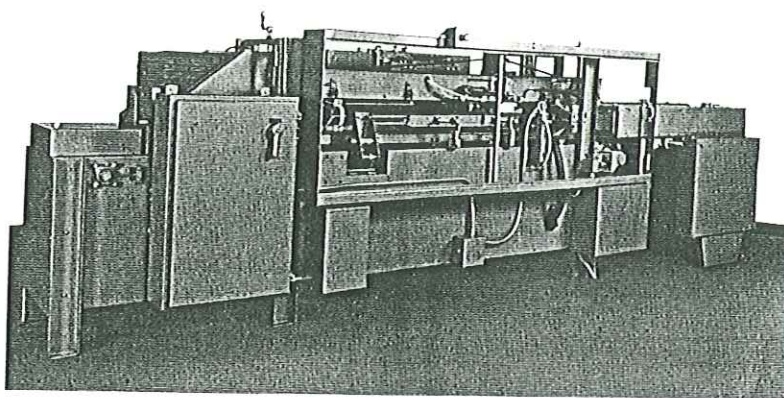
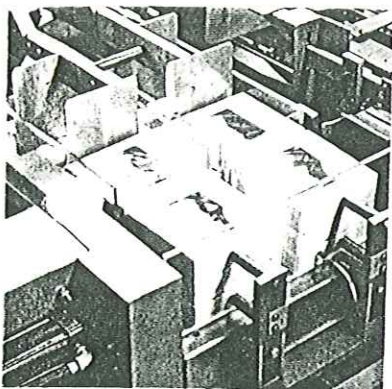


Economy in Labor

For the lowest initial investment, you can reduce your entire case packing crew to just one operator.

The operator opens the knock-down case and places it on the case packing funnel. The case packer holds the case in place as it is packed and lowers the filled case to the powered takeaway conveyor. All the operator must do is open cases and place them on the funnel. Our "no case — no pack" feature prevents a product load from being pushed onto the floor because of operator error.

After packing, the case is con-



veyed through a case sealer. The case conveyor is often arranged to allow the operator to hand palletize the packed and sealed cases.

Modest Floor Space Requirement

The approximate size of the packing unit is just 6 square feet. The infeed and takeaway conveyors will be set up to use the smallest amount of available space.

Operation and Construction:

1. The product is oriented by using upenders, turners, half drops, doublers, or a combination of these devices depending upon the product and the application.

2. The pack pattern is formed in the stainless accumulating chamber until a complete load is formed.

3. During this time, the operator opens a case (or accepts a case from an automatic case opener/bottom sealer) and places it onto the loading funnel. The "no case — no pack" feature keeps the product from being pushed onto the floor in case of operator error. An arm moves up to hold the case on the funnel during packing.

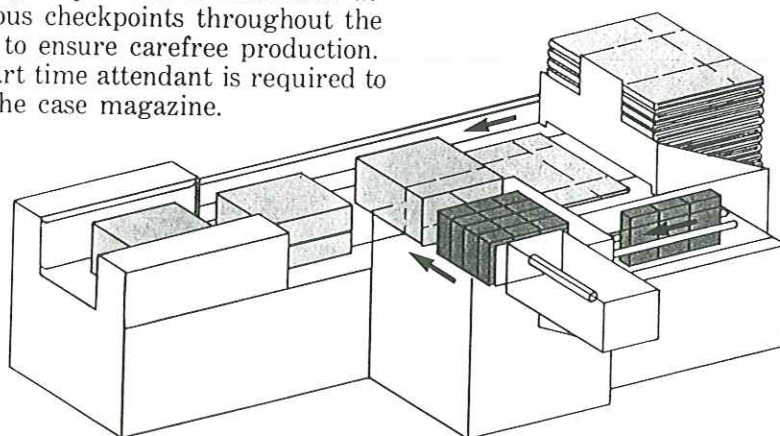
4. When the case load is accumulated, the plunger pushes the entire load into the case. The arm gently lowers the case to the powered takeaway conveyor leading to a case sealer.

Automatic Systems

The automatic machines perform all accumulating, packing and sealing functions at high speed.

Operator-Free Packing

These machines offer virtually operator-free production — for the highest speeds, efficiency and dollar savings. Operation is monitored at various checkpoints throughout the unit to ensure carefree production. A part time attendant is required to fill the case magazine.



Choose Your Sealing Method

You can seal your cases with hot melt, cold adhesive or tape. On adhesive sealers, a quick change cam controls the adhesive application. For a size change, simply pull off the cam and replace it with another pre-set cam.

Operation and Construction

1. The cases are stacked horizontally in the case magazine. They are stripped from the bottom of the stack by vacuum cups.

2. At the opening station, an opener arm lowers from above, gripping the case with vacuum cups. Another arm rises to grip the case (by vacuum cups) from below.

3. With the upper and lower cups engaged, the opener arm lifts to a vertical position, opening the case. The vacuum is maintained until the case is loaded. Before loading, a tucker closes the opposite inner flaps. This tucker remains in place until the case is loaded and moved to the gluing station.

4. Meanwhile, the packer section has accumulated a full product

load. The opened case in the loading station signals the packer loading ram.

5. The product is pushed smoothly into the case through the stainless funnel gates which open into the case. As the loading ram is returned, the funnel gates close. As the case travels to the compression section, a second tucker arm closes the minor flaps on the open end of the case.

6. The case moves through the sealing station and the case flaps are closed smoothly by cast flap folders.

7. The case enters the compression section which is power driven by its own motor and operates intermittently, advancing only as each case enters.



We offer over thirty different models to accommodate a variety of product types. Standard models can be modified by our engineering staff to exactly fit your specifications.

Aluminum Foil
Asphalt Tile
Aspirin
Automotive Parts, boxed
Bailing Twine, in rolls
Butter and Margarine
Candy
Cat and Dog Food
Caulking, tubes
Cereals
Chemicals
Cookies, boxed or
cellophane pack
Cosmetics
Crackers
Dairy Products
Dates
Detergents
Fruit Juice, in
pure-pak cartons
Garbage Bags
Handkerchiefs, in over-
wrapped trays
Modeling Clay
Mouthwash
Napkins
Oil, in cans

Pasta
Pharmaceutical Preparations
Photographic Film
and Paper, boxed
Pies, bakery and frozen
Prepared Dinners, boxed
Rice
Soap
Toothpaste
Vegetables, frozen

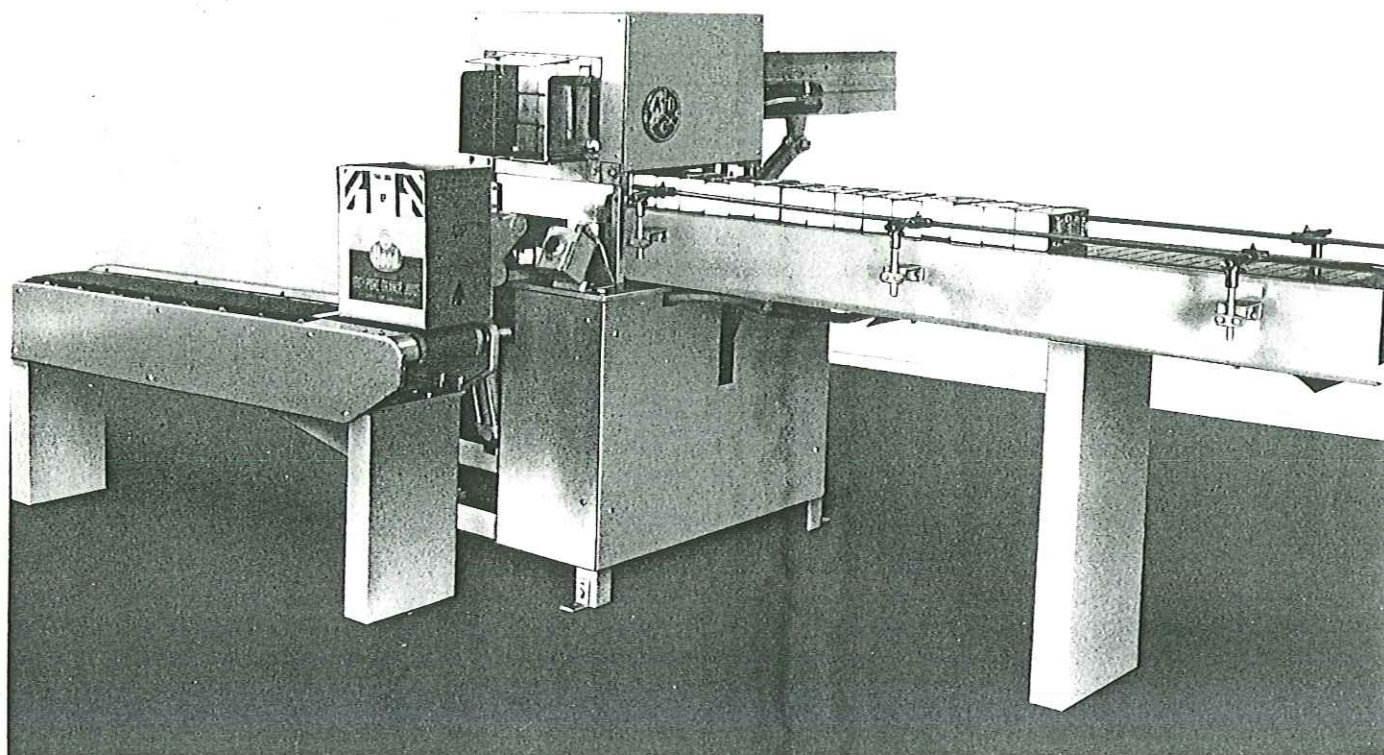
Case Erector/Sealers
Carton Packers
Case Sealers
Bottle Unpackers
Unscrambler/Single Filers
Uncasers
Wraparound Packers
Four Flap Openers
Bottle Packers
Divider Inserters
Pad Inserters
Palletizers
Depalletizers



A-B-C PACKAGING MACHINE CORPORATION

811 Live Oak St., Tarpon Springs, FL 34689 Phone 813/937-5144
FAX 813/938-1239

CASE PACKER SPECIFICATIONS



MODEL SP-15

for small cases

Operator Assisted — Allows inspection of product before packing.

All Steel Construction

Painted or stainless

Small Floor Space Requirement

No Case — No Load

This feature prevents a product load from being pushed onto the floor while the operator is palletizing packed and sealed cases.

Low Maintenance

Minimum number of moving parts

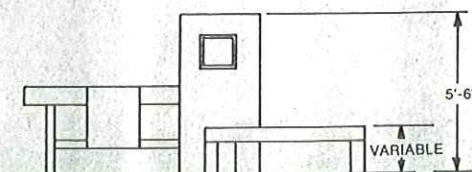
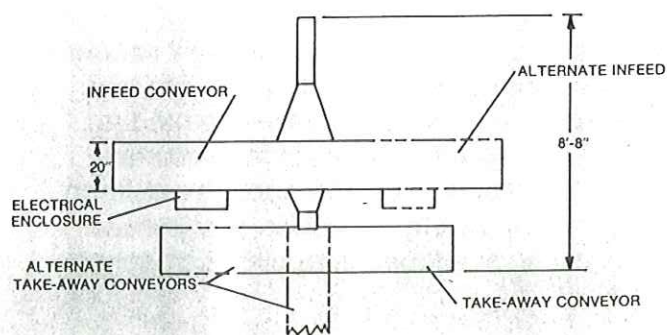
Sealed Bearings

Air filter reduces friction in air cylinders, prolonging cylinder life.

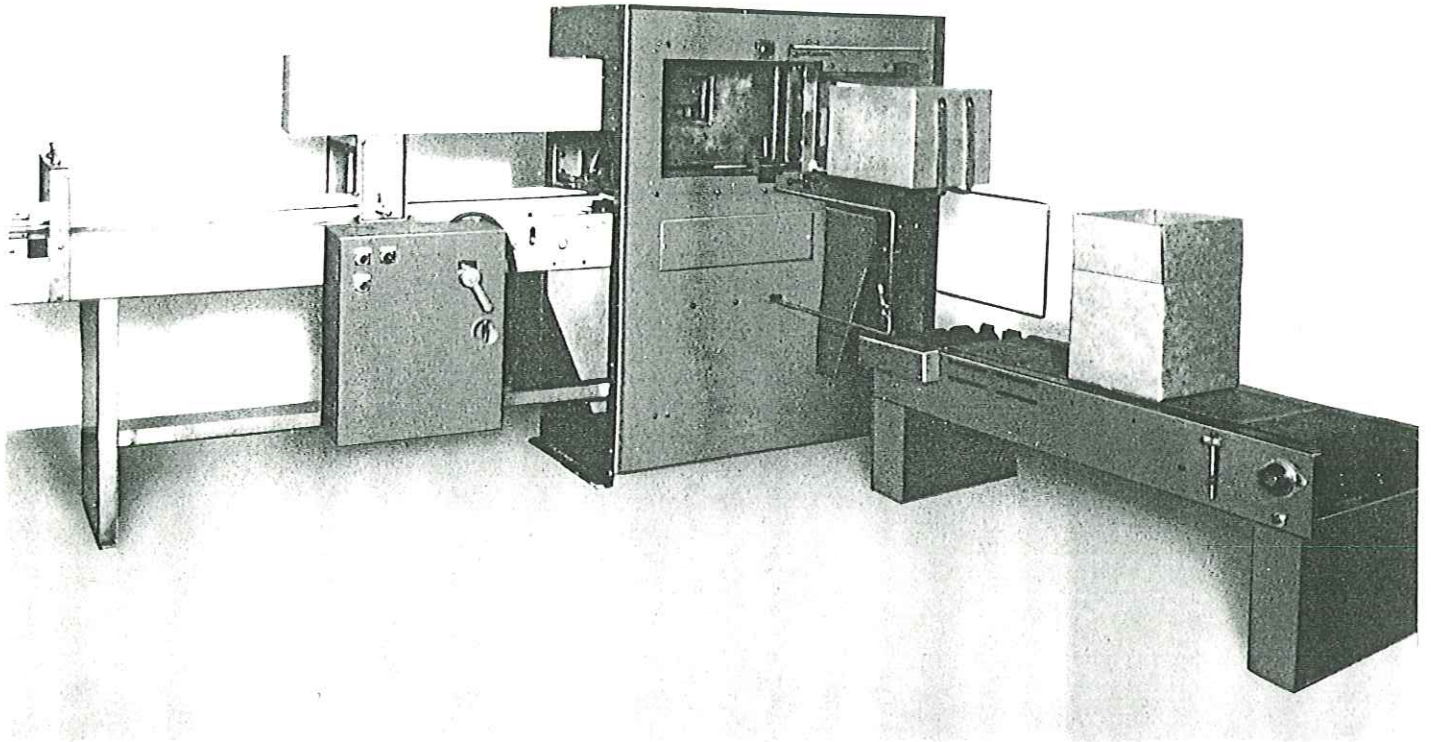
Power Takeaway Conveyor

Easy Changeover

Model SP-26 for larger cases



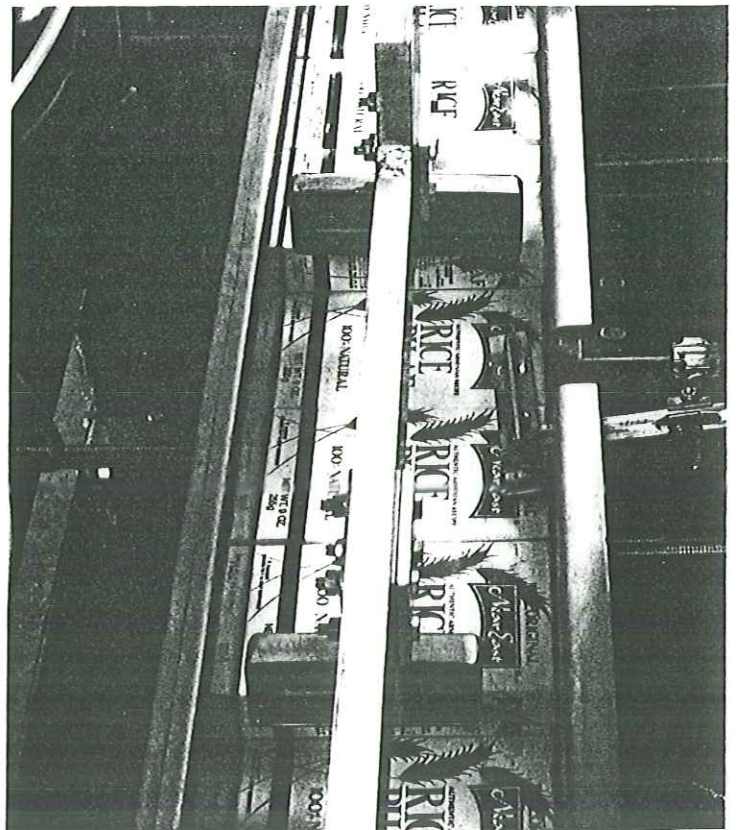
SPECIFICATIONS SUBJECT TO
CHANGE WITHOUT NOTICE



PROGRESSIVE PACKER

for increased carton/minute speeds

This packer is practical for high volume lines. It accumulates a load-and-a-half per stroke, reducing the time between loading cycles. This allows high packing volume without excessive machine speeds resulting in a longer operating life. This progressive design is also available on automatic packers.

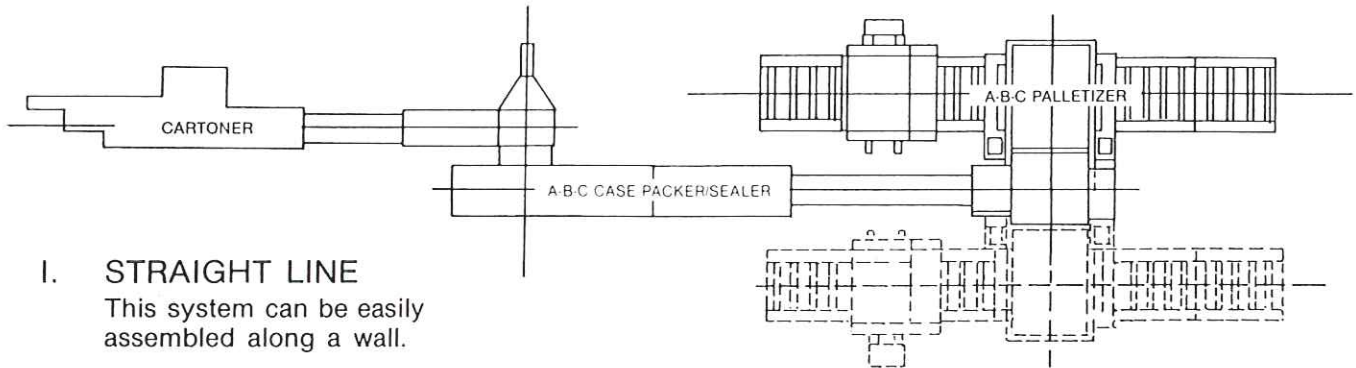


LINE LAYOUTS

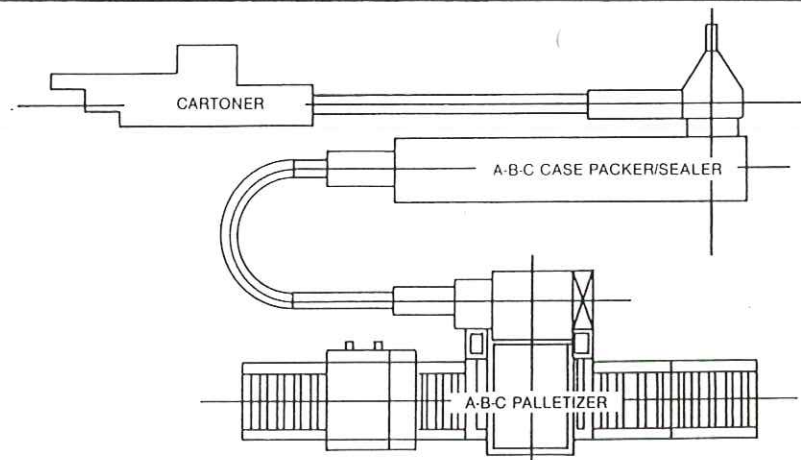
Your packing system will be arranged to accommodate your available floor space. The following drawings show common problems and their solutions. These are only a few ideas to give you an idea of the flexibility of an A-B-C case packing system. Either type of system, operator-assisted or completely automatic, may be laid out in the following methods.

I. STRAIGHT LINE

This system can be easily assembled along a wall.

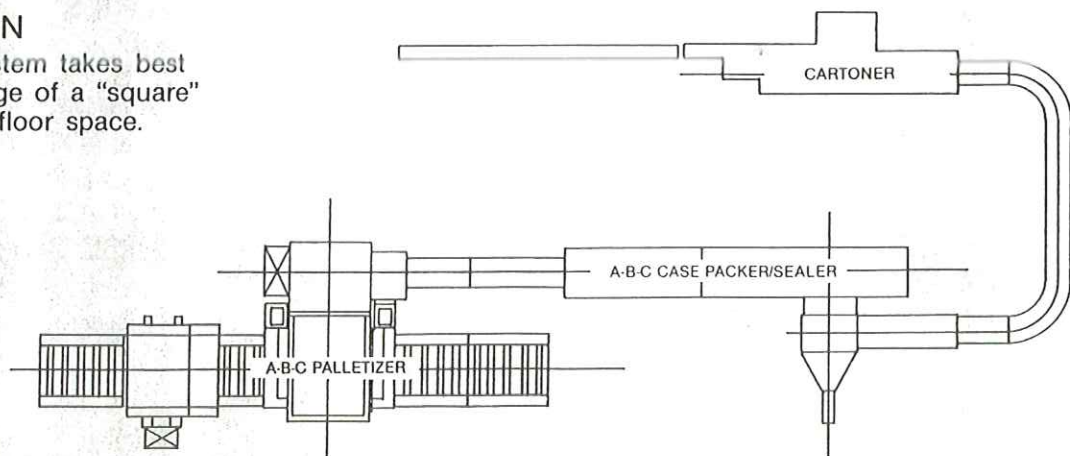


II. U-TURN



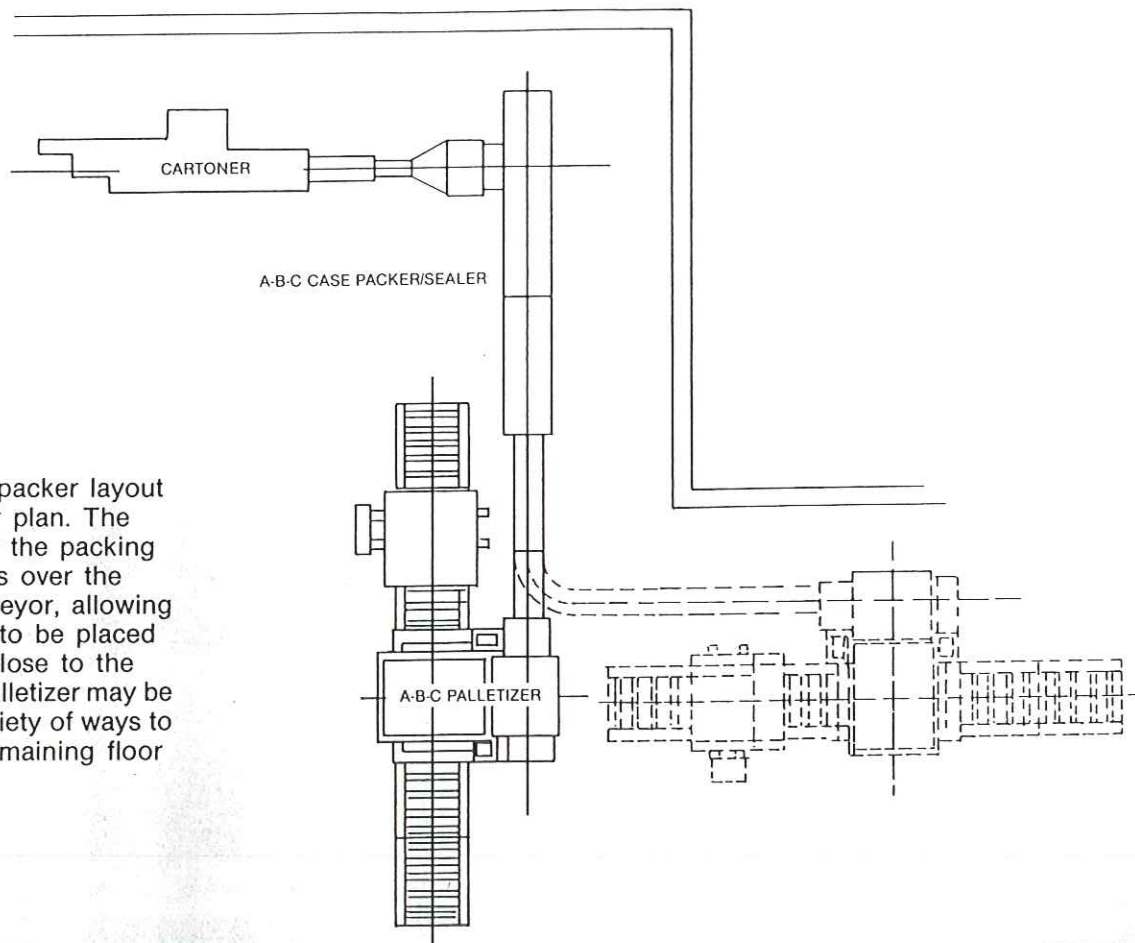
III. U-TURN

This system takes best advantage of a "square" shaped floor space.



IV. ZIG-ZAG

Notice the packer layout in this floor plan. The housing for the packing ram extends over the infeed conveyor, allowing the packer to be placed extremely close to the wall. The palletizer may be set up a variety of ways to fit in the remaining floor space.



Companies presently using A-B-C Packing Systems:

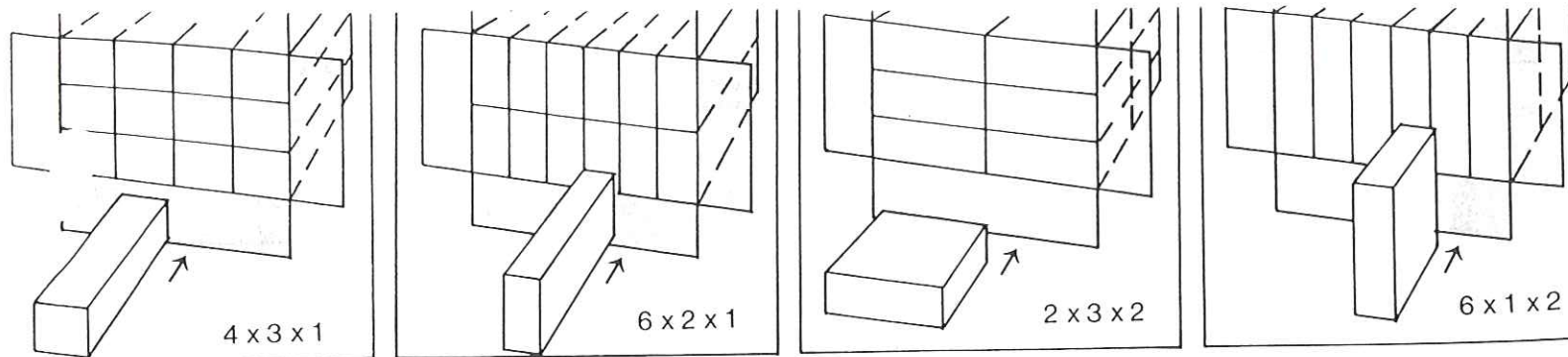
AMT CORPORATION
AMSTAR
ARMOUR & COMPANY
BEECHAM
BEIERSDORF, INC.
CARNATION COMPANY
CHAMPION PAPER
COCA-COLA
COLGATE-PALMOLIVE
CONTINENTAL CAN
COSMAIR
CRACKER JACK
DAP CORPORATION
DELCO
EASTMAN KODAK
FORD MOTOR COMPANY
GENERAL FOODS CORP
GILETTE

H.P. HOOD & SONS, INC.
HOFFMAN LA ROCHE
JACK'S COOKIES
NABISCO
NEAR EAST FOODS
PEPPERIDGE FARM
PFIZER
PUBLIX BAKERIES
QUAKER MAID
QUAKER OATS
QUAKER STATE FOODS
SHELL OIL COMPANY
TABLE TALK PASTRY
UNCLE BEN'S RICE
UNION CARBIDE CORP.
UNION OIL
U.S. BORAX
VICK CHEMICAL
WARNER-LAMBERT



A-B-C PACKAGING MACHINE CORPORATION

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Phone 813/937-5144 • Telex 5-2893



case packer specifications

Semi-Automatic Case Packer

For efficient operator-assisted case packing

Automatic Case Opener/Packer/Sealer

For high speed, automatic case packing

Carton Positioning Devices

For the most economical packing arrangement for your products

Accumulation Methods

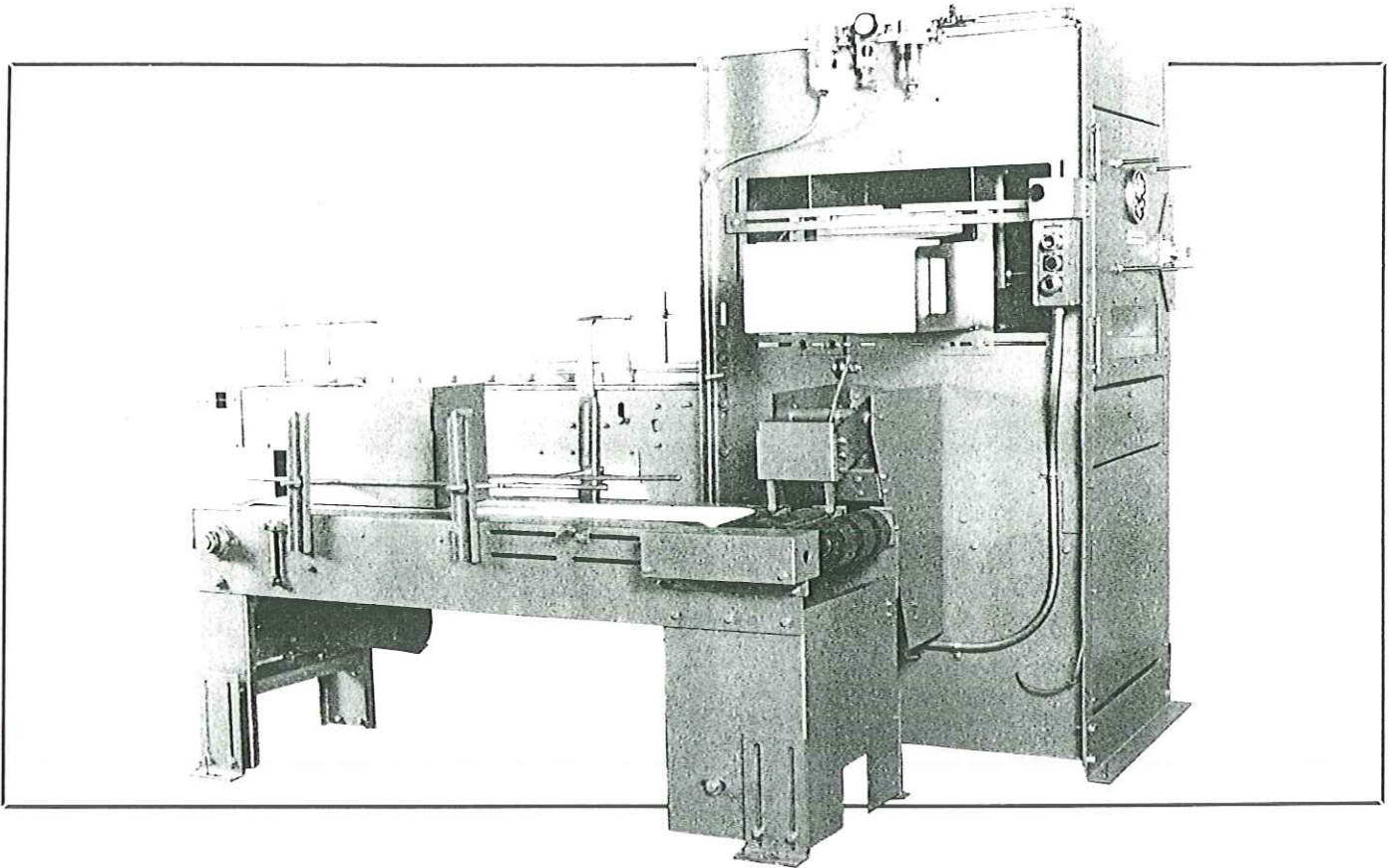
Many accumulation methods are available on A-B-C case packers

Machine Configurations

Adaptable to suit your floor plan

All the information in this brochure was current at time of printing, however, in the continuing effort to improve the quality and construction of A-B-C machines, we reserve the right to make changes without prior notice.

SEMI-AUTOMATIC CASE PACKERS



Operator assisted — to allow inspection of product before packing.

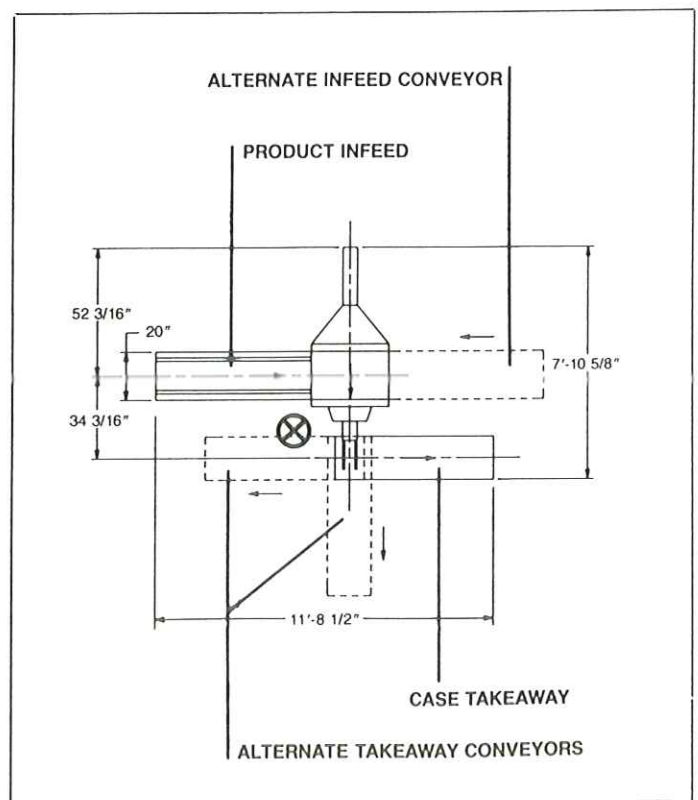
Easy to operate — These case packers give you superior flexibility in case packing, in simple machines that are easy to operate. The operator opens knock-down cases and places them on the loading funnel. The mechanical case packing arm holds the case during packing, then lowers the packed case to the takeaway conveyor.

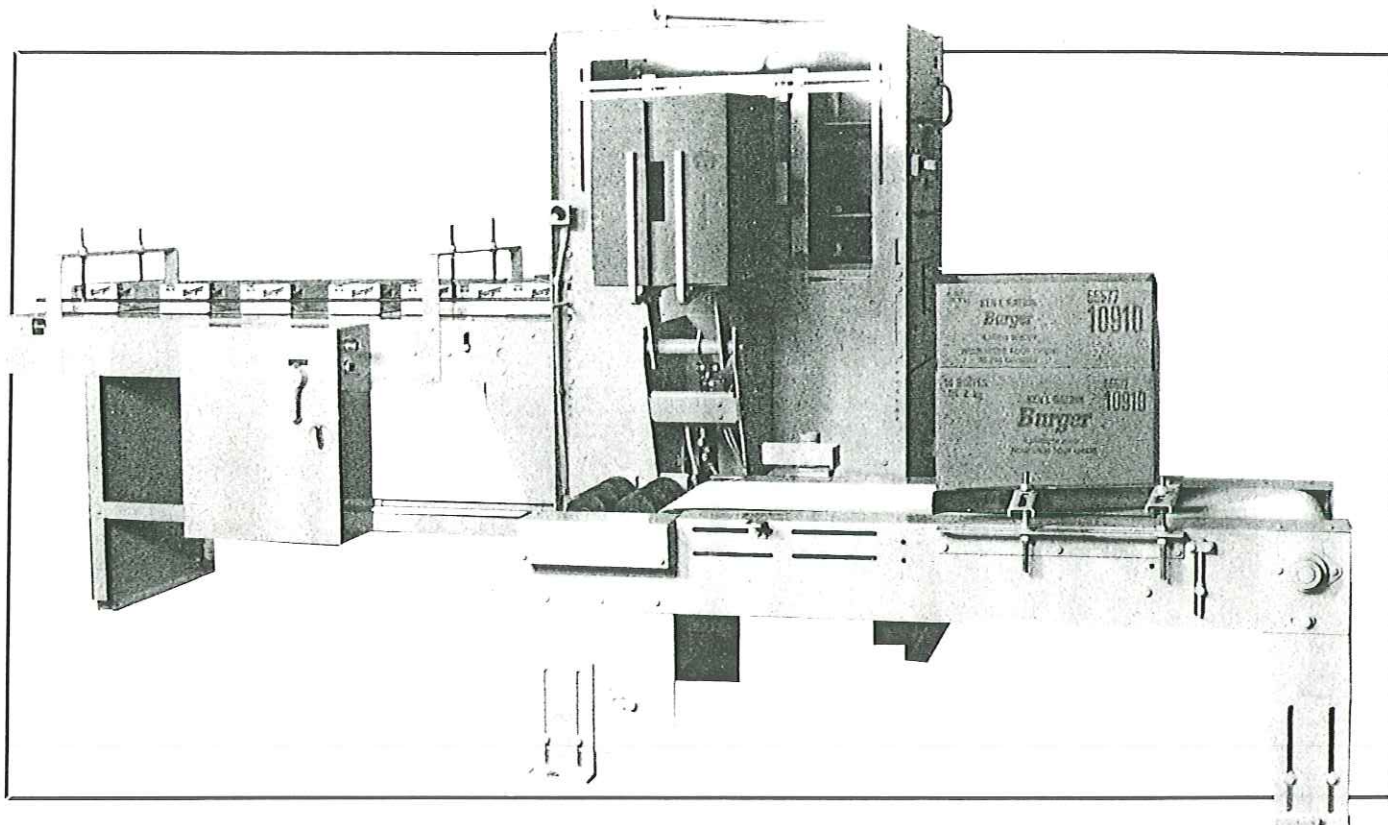
The system can be set-up to allow the operator to palletize packed cases after sealing, for an efficient, low-cost case packing system.

All Steel Construction — Painted or stainless. Stainless steel is used in all areas where your product contacts the machine, to promote a clean product environment.

Compact — Minimum floor space requirement

No Case — No Load — This feature insures the case presence before packing, to give you a no-fault operation.





Low Maintenance —

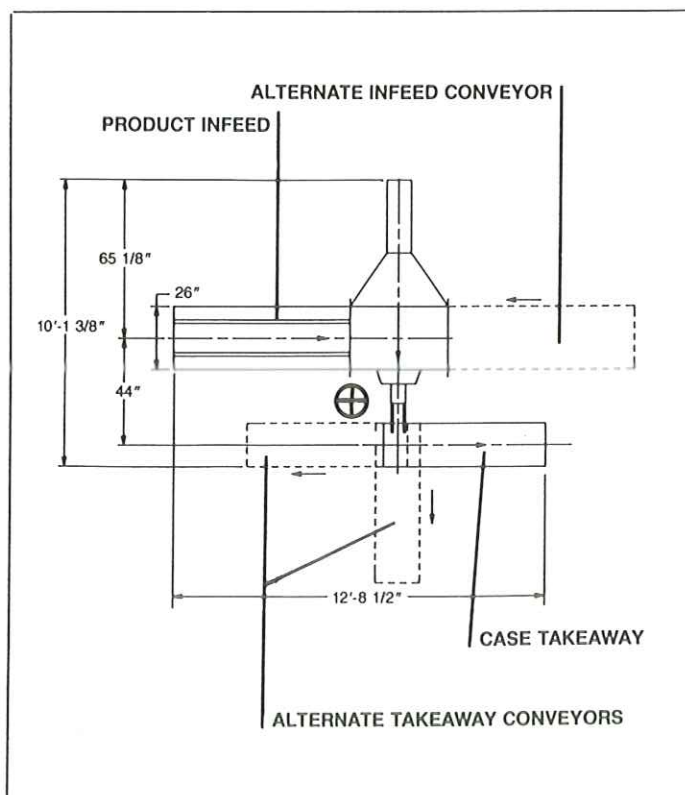
- Minimum number of moving parts: machine operates on three basic movements.
- Sealed Bearings: never need lubrication.
- Automatic water eliminator: prevents water accumulation and damage to components.
- Air filter/lubricator reduces friction in air cylinders and valves, prolonging component life.

Powered Infeed Conveyor — for smooth product feed.

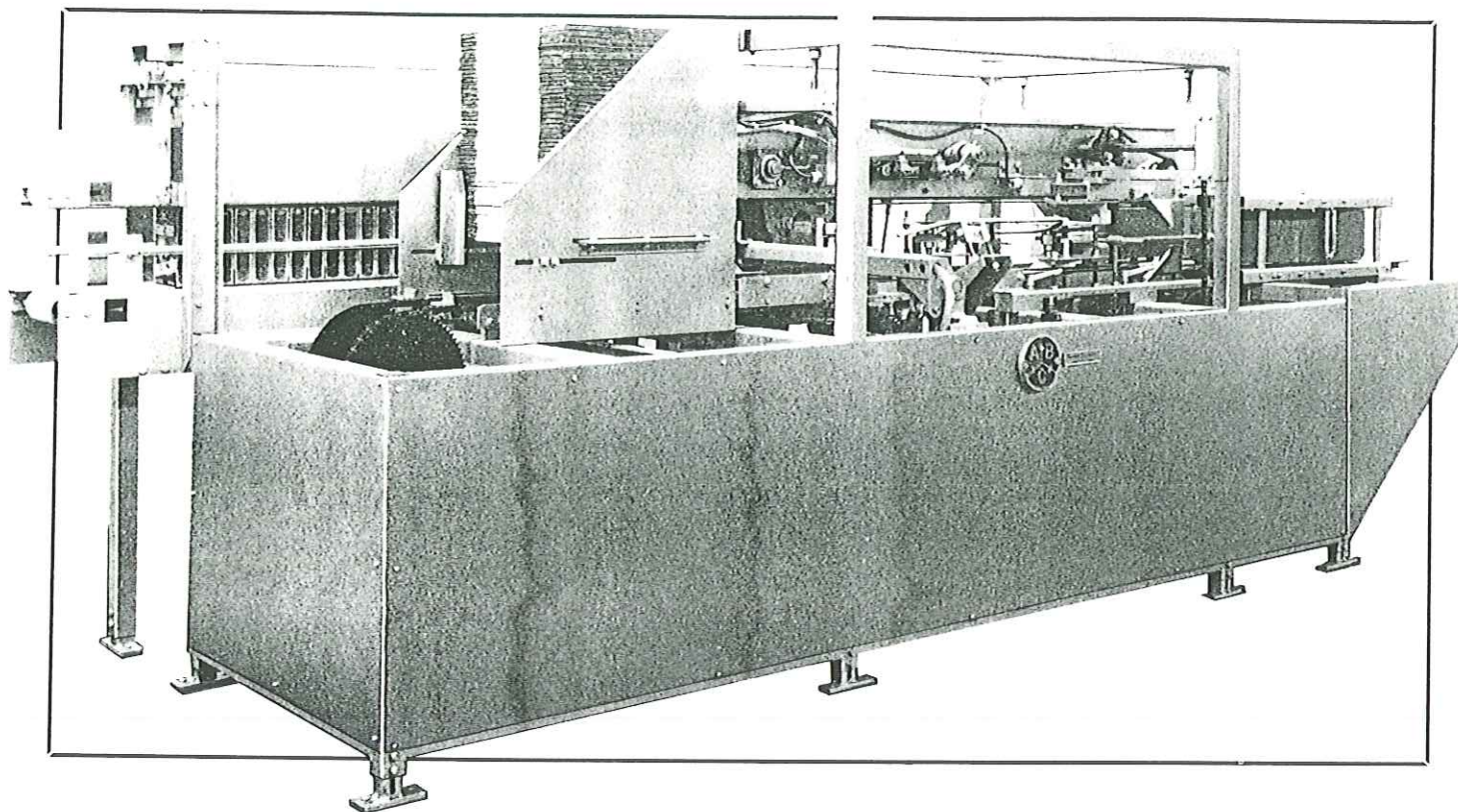
Power Takeaway Conveyor — can couple directly to a case sealer. No additional conveyor is required.

Easy Changeover — to handle a wide range of products.

Product Access Door — for quick access to accumulation chamber with air and electrical interlocks.



AUTOMATIC CASE OPENER/PACKER/SEALER



High Volume Packing and sealing — automatically

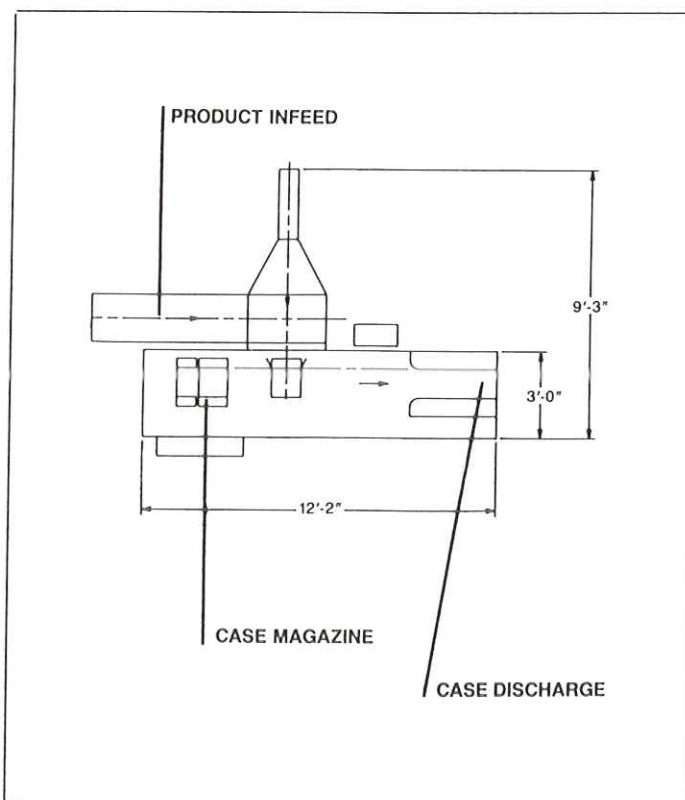
High Speed — Every function is performed automatically. A system of sensors monitor production at various points of operation.

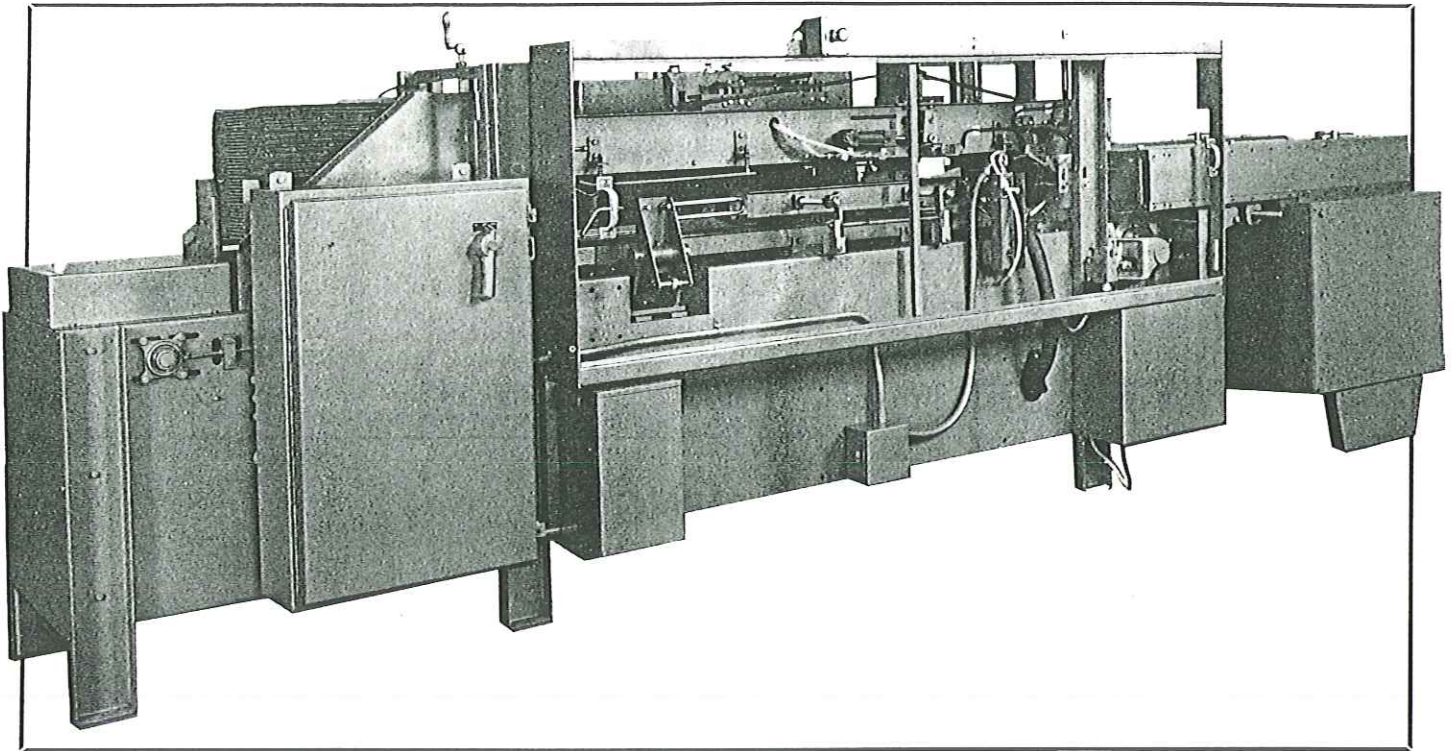
Automatic Shutdown Feature — monitors product input.

No Case — No Load Protection — monitors case presence.

Positive Infeed — Cases are fed from the bottom of the case stack by two gripper cups powered by a filtered, heavy-duty vacuum system. This assures uninterrupted operation even with warped or band-marked cases.

Smooth Product Loading — At the loading station, four stainless steel gates open from the accumulation chamber into the case. The product slides through these gates into the case, protected from any rough edges that might mar graphics or overwrap. This design also assures smooth packing into poorly made cases, which may be unsquare when opened.

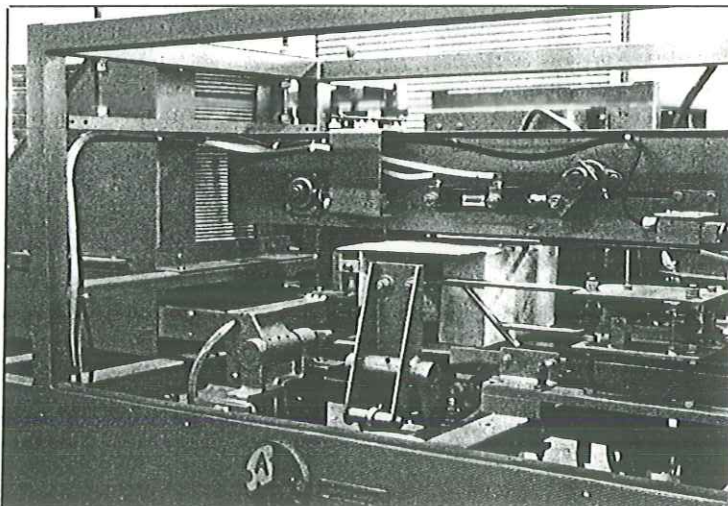




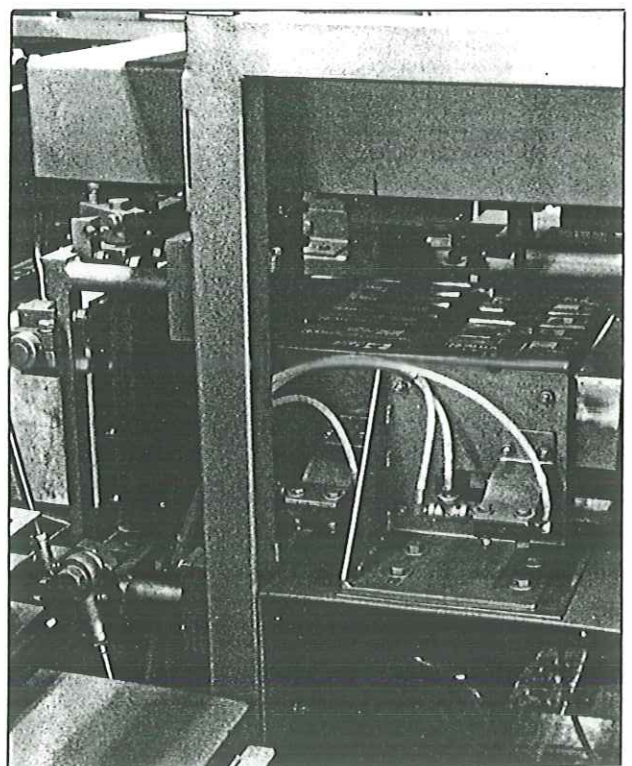
Clean, tubular frame — the machine frame is constructed of tubular steel, for a sleek, yet very functional design. The open design minimizes areas where dust could accumulate.

Top & Bottom flight lug drive chains — insure proper case travel through flap folding and sealing, for square cases.

Sealing methods — Hot melt, cold adhesive, tape.



Dual gripper cups assure positive case opening.



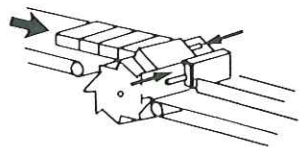
Stainless steel accumulation chamber and packing gates that open into the case assure smooth packing operation.

PACKER INFEED — CARTON POSITIONING

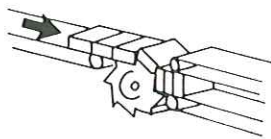
Your product may need to be put on it's side, uprighted, twisted or otherwise oriented to get the most economical packing arrangement. These orienters are simple, mechanical devices, and many of them need only line pressure to function.

*Line Pressure Required
Custom orienting available.

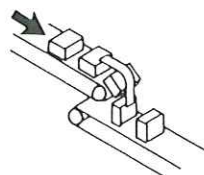
UPENDING



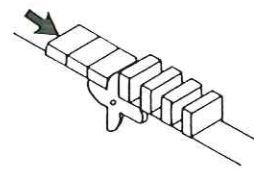
DOUBLER/UPENDER*



STARWHEEL*

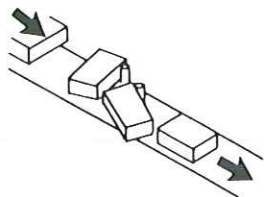


DROP POSITIONER

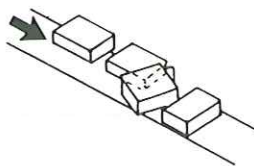


UPENDER*

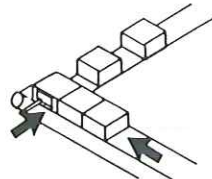
TURNING



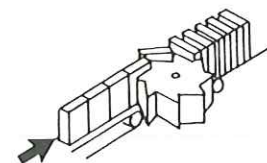
MULTIPLE PEGS



SINGLE PEG

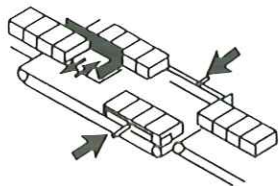


RIGHT ANGLE TURN*

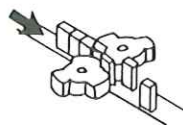


STARWHEEL*

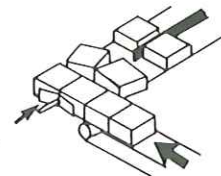
LINE DOUBLING



SHIFTING HEAD*

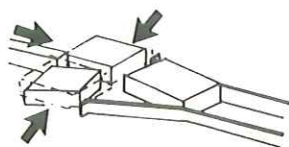


DOUBLING WHEELS*

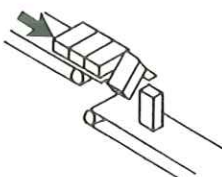


RIGHT ANGLE DOUBLER*

CONVERGING

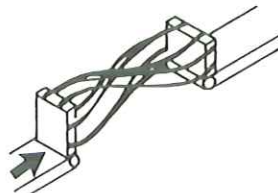


STANDARD CONVERGER*

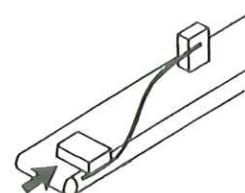


HALF DEAD PLATE*

TWISTING

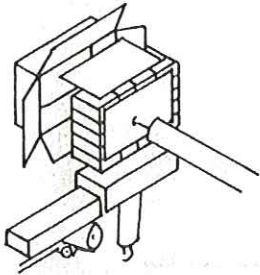


90 DEGREE TWISTER*

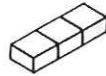


PUMP UP METHODS

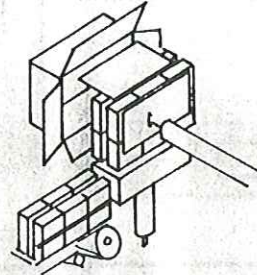
The standard pump-up methods are pictured here. The pump-up method of your packer will depend upon your product . . . its size, shape and configuration — and the speed of your line. We can design special machines for products or speeds outside the average range.



SINGLE STROKE Horizontal Infeed



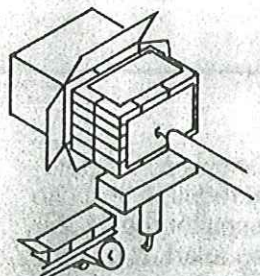
The product is accumulated a layer at a time and pumped up to form the complete load. The entire case is packed with one stroke of the loading device.



SINGLE STROKE Multiple layers



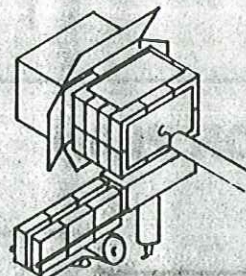
The product is accumulated two layers at a time by using a line doubler. A two layer case is packed with one stroke of the loading device.



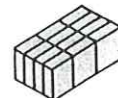
MULTI-STROKE Horizontal Infeed



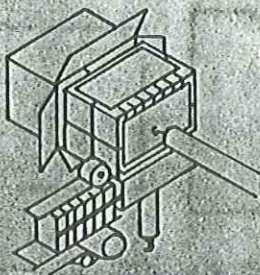
The product is accumulated a layer at a time. After each layer is accumulated it is loaded into the case.



MULTI-STROKE Vertical Infeed



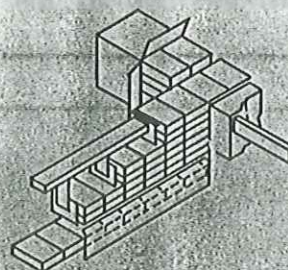
The product is accumulated a layer at a time. After each layer is accumulated it is loaded into the case.



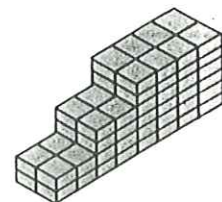
MULTI-STROKE Multiple layers



The product is accumulated two layers at a time by using a line doubler. As each double layer is accumulated it is loaded into the case.



MULTI-STROKE Progressive

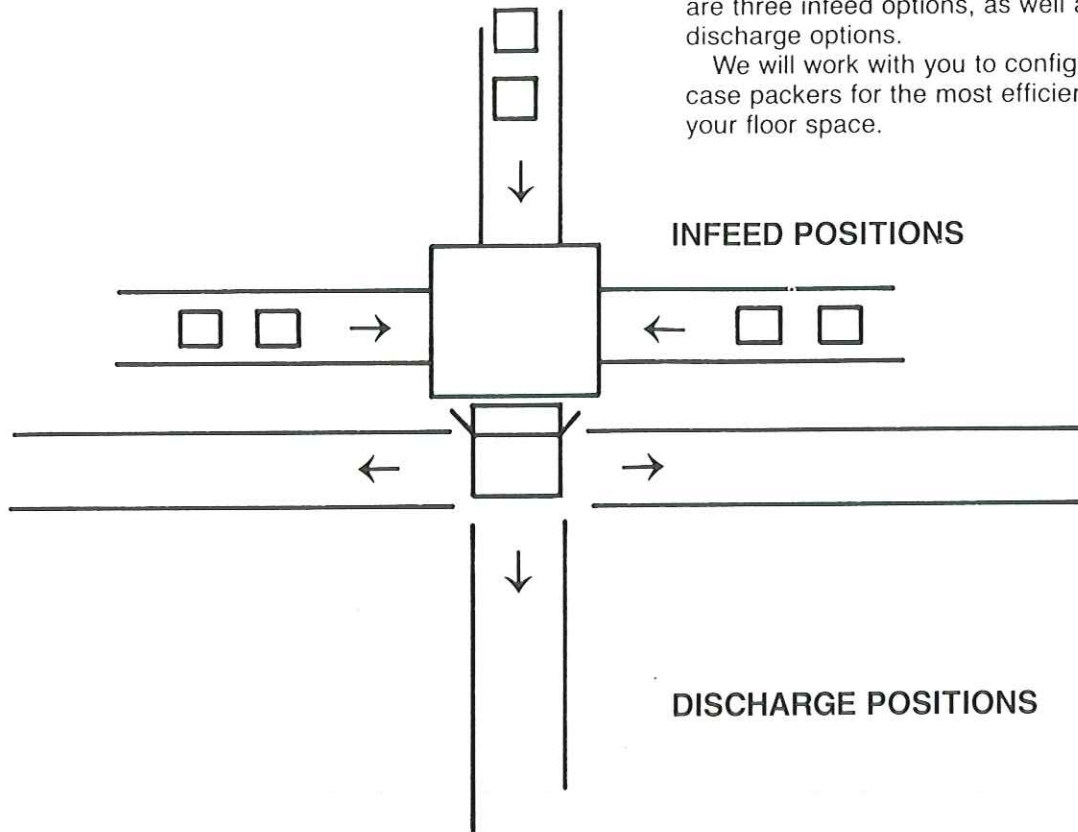


The product is accumulated in progressive stages using a specially designed pump-up device.

MACHINE CONFIGURATIONS

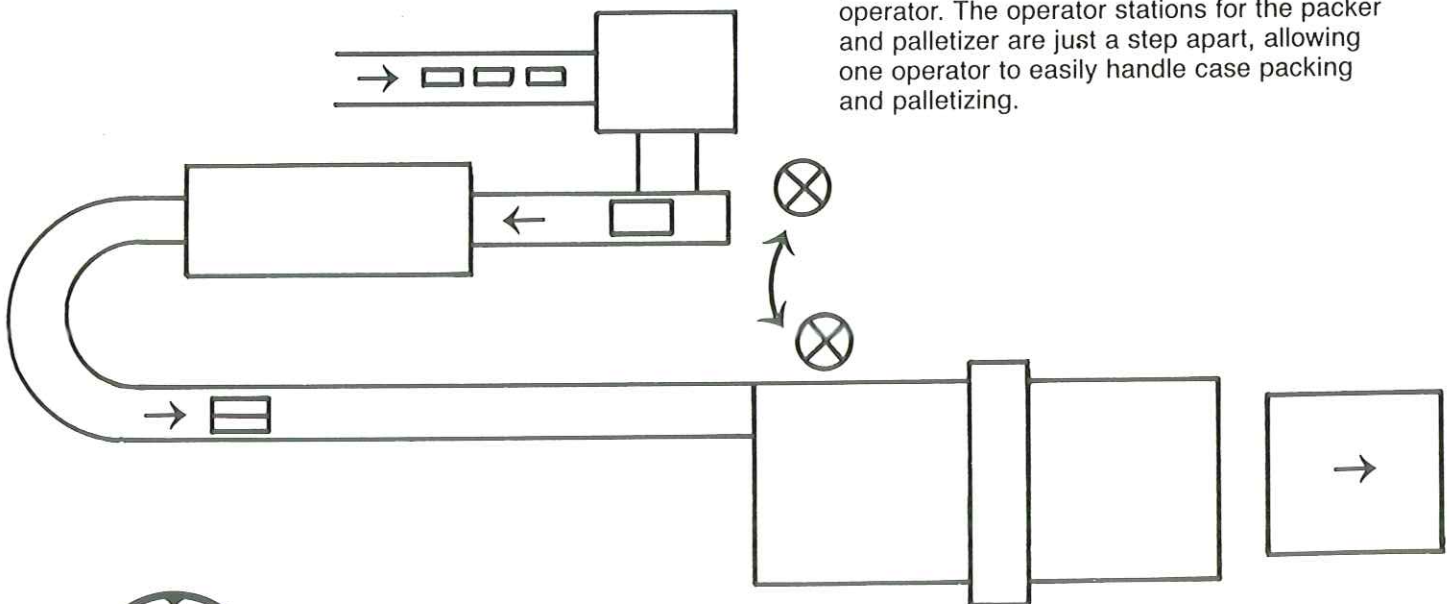
A-B-C case packers give you complete flexibility in planning a machine that will suit your production line. As shown, there are three infeed options, as well as three discharge options.

We will work with you to configure your case packers for the most efficient use of your floor space.



EXAMPLE — FLOOR PLAN

This efficient line layout shows a complete pack/seal/palletize line that requires only one operator. The operator stations for the packer and palletizer are just a step apart, allowing one operator to easily handle case packing and palletizing.



A-B-C PACKAGING MACHINE CORPORATION

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