



THE **EXPERTS** IN INNOVATIVE  
FOOD PROCESSING MACHINERY

## TRUST IN LYCO'S 50 YEARS OF EXPERIENCE

50 of the Top 100 North American food companies that feed the world trust and rely on Lyco Food Processing Machinery.

Our innovations in the Heating/Cooling and Liquid-Solid Separation machinery have made us a global leader and an expert in the food processing industry.

Our extensive equipment offerings include:

- Blanchers/Cookers/Coolers
- Wastewater/Liquid-Solid Separation
- Peelers/Washers/Scrubbers
- Green Bean Equipment
- After Market Services

For more information visit: [www.LycoMfg.com](http://www.LycoMfg.com)

Lyco Manufacturing, Inc.  
115 Commercial Drive, P.O. Box 31  
Columbus, WI 53925

P: 920-623-4152

F: 920-623-3780

E: [sales@lycomfg.com](mailto:sales@lycomfg.com)

[www.LycoMfg.com](http://www.LycoMfg.com)



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## LYCO RUNS ON LEAN

BLANCHERS/COOKERS/COOLERS  
ROOT CROP PEELERS  
SNAP AND WAX BEAN PROCESSING  
WASTEWATER SCREENS



## INNOVATIVE MACHINERY DESIGNS

Lyco Manufacturing has more than 50 years of experience helping food processors with new innovative machinery designs to keep up with ever-evolving technologies. Lyco has a long-established reputation for making rugged high-quality machines.

### ROTARY DRUM BLANCHERS

#### LYCO INNOVATIONS:

- Cylinder size increased from 48 in. (121.92 cm) to 72 in. (182.88 cm) in diameter and 16 ft. (4.88 m) to 28 ft. (8.5344 m) in length
- No shaft cylinders that could fail
- Cylinder door added for sanitary access
- Steam injection improves efficiency
- Two-way, flip-top covers



60 in. (154.4 cm) Diameter x 8 ft. (2.44 m) Blancher

### COOKER-COOLERS

#### LYCO INNOVATIONS:

- Heating and cooling in one machine
- Mechanical product agitation
- Hydro-Flow® water agitation
- One clean-in-place (CIP) system for both zones
- Ability to be a cooker and cooler



60 in. (154.4 cm) Diameter x 8 ft. (2.44 m) / 4 ft. (1.22 m) Cooker-Cooler

### VAPOR-FLOW® STEAM BLANCHER

#### LYCO INNOVATIONS:

- The only rotary drum steam blancher
- Agitation ensures a uniform product
- One 16 ft. (4.88 m) rotary can replace a 100 ft. (30.48 m) long belt
- Efficiency achieves major steam savings
- Effective CIP System
- Flexible heating with water or steam
- De-flavors dry bean products



60 in. (154.4 cm) Diameter x 16 ft. (2.44 m) Vapor-Flow®

## CONTINUOUS DRY BEAN AND RICE HYDRATION



2 - 72 in. (182.88 cm) x 24 ft. (7.32 m) Blanchers

#### LYCO INNOVATIONS:

- The most rugged dry bean blanchers made
- Mechanical agitation
- 15,000 PPH capacity
- Eliminates under-cooking and over-cooking

## LYCO'S LABORATORY



### SIMULATORS

In the late 1980's, Lyco used their rotary drum designs to cool products that were packaged in flexible pouches. At that time, pouch cooling was all done on belts. At Lyco, we quickly learned that rotary drums cooled in half the time without damaging the container. In addition, there was also a surge in the dry bean industry moving from the soak/short blanch process to continuous blanching. Simulators were an innovative way to test recipes and times without firing up a complete production line.

Lyco tests thousands of different foods for heating and cooling in our Simulators. Being the experts in food processing machinery, we have gathered a library of process knowledge to help our customers achieve optimal results. Many of Lyco's customers rent Simulators to test the system in production and run product tests at their locations.

### PRESSURE COOKING

Lyco has put together a complete production line in our Lab for developing recipes for ourselves and our customers. We invite our customers to send us their raw products for testing out various parameters. They find that quality and recovery are increased, while cook times are reduced by 90%.





## CONTINUOUS PRESSURE COOKER

### BETTER QUALITY USING LESS ENERGY

Lyco Manufacturing spent ten years developing and perfecting our Pressure-Flow® Cooker to tremendously reduce dry bean and rice cooking times.

#### LYCO INNOVATIONS:

- A 50 in. (127 cm) x 13 ft. (3.96 m) unit replaces 2 – 24 ft. (7.32 m) blanchers
- Bean cook times reduced from 45 to 8 minutes
- Rice cook times reduced from 25 to 5-11 minutes
- Recovery of beans and rice increased and final quality improved
- Remarkable water and wastewater savings
- Dramatically improved cleaning with a Clean-Flow® internal operating system

#### SAVE ENERGY AND REDUCE WASTE:

- Significant potential income from recovered product
- Significant savings on DAF chemicals
- 30% or more savings on sludge removal and handling
- More solids removed increases lagoon life
- Reduce the load on city sewage systems



## LYCO PROCESS CONTROL SYSTEMS

### FULLY AUTOMATED CONTROL SYSTEMS

Final product quality is assured by dramatically reducing human error and improving process control.



#### LYCO INNOVATIONS:

- Touch screen HMI's
- Process documentation
- VFD's for control
- Allen-Bradley® PLC's
- Data logging
- Remote access
- Process displays
- Alarms with history
- Washdown sensors



## ROOT CROP PEELERS/WASHERS/SCRUBBERS

### LONGEVITY AND LOW MAINTENANCE

Lyco has installed over 350 root crop peelers/ washers/scrubbers in the past 40 years. Many of those machines are still running today. At Lyco, we build rugged, sanitary food machines with the fewest parts possible.



### THE WAR HORSE

#### LYCO INNOVATIONS:

- Rugged hydraulic motors support rolls at the infeed end
- Rolls have only one bearing at the discharge end
- Rolls have fewer drive components than other brush abrasives
- Rolls are made in reliable one-piece lengths



### BULL JUNIOR

#### LYCO INNOVATIONS:

- Powered by electric or hydraulic motors
- Motor/gearboxes support and drive the rolls at the infeed
- Sanitary designs meet all the current new regulations
- Cover and auger raise together for easy access cleaning
- Abrasive and brush rolls are easy to change when exposed

### THE RAGING BULL

#### LYCO INNOVATIONS:

- Strongest design and construction in the industry
- 400 to 900 RPM roll speeds easily handle the toughest jobs
- Cover and auger raise together for easier maintenance
- One Bull can replace several other models, with lower cost





## GREEN BEAN EQUIPMENT

### LOWER MAINTENANCE COSTS

Lyco Manufacturing makes the most technically-advanced, rugged snap bean equipment in the world. Our efficiency and throughput volume is unsurpassed.

### CLUSTER CUTTERS/SNIPPERS

#### LYCO INNOVATIONS:

- 4,000 -8,000 PPH
- Internal four bladed paddle wheel
- Round hole baffle interior
- More snipper knives

#### BENEFITS:

- Reduces the long drop and bruising in the cylinder
- Won't degrade like hex baffles which can destroy discs

### INTERMEDIATE SNIPPER

#### LYCO INNOVATIONS:

- 2,000 -3,000 PPH
- Higher capacity
- More snipper knives

#### BENEFITS:

- Reduces bruising and increases snipping efficiency
- Increased snipping efficiency

### MINI SNIPPER

#### LYCO INNOVATIONS:

- 1,000 PPH
- Straight slotted cylinder pockets
- Unbreakable knife holders

#### BENEFITS:

- Removes extraneous vegetable matter
- Eliminates breakage and down time

### UNSNIPPED BEAN REMOVER

#### LYCO INNOVATIONS:

- Gentle rotating knock-off paddle
- Whole or cut bean models
- Rugged vibratory conveyor design

#### BENEFITS:

- Cleaner than brush-designed paddles
- Unique cylinder designs to meet your need
- Lower maintenance



## WASTEWATER SCREENS

### RUGGED MACHINE DESIGNS WITH FEWER REPLACEMENT PARTS

Lyco offers the sturdiest, most rugged liquid-solid separation screens on the market. With over 700 Lyco rotary wastewater screens in use, we have never had a single spun cast stainless steel cylinder ring failure.

### DOUBLE DRUM SCREEN

#### LYCO INNOVATIONS:

- Primary & secondary screens in one cylinder
- Larger and smaller particles are separated
- Traveling single nozzle spray

#### BENEFITS:

- Two machines in one
- Improves smaller particle separation
- Eliminates blinding with very low water usage

### SANITARY ZERO MAINTENANCE

#### LYCO INNOVATIONS:

- Wedgewire screens
- No wheels or bearings
- Rugged design with sanitary construction

#### BENEFITS:

- Very low maintenance, easier to clean and maintain efficiency
- Eliminates daily lubrication and reduces labor

### STATIONARY SCREEN

#### LYCO INNOVATIONS:

- Screen tilts open
- Adjustable slope
- Rapid cleaning with sanitary design

#### BENEFITS:

- Easy access to the tank interior for cleaning
- More efficient separation for different products

### MICRO DRUM SCREEN

#### LYCO INNOVATIONS:

- .020 in. (.51 mm) is the average wastewater screen opening
- New .008 in. (.20 mm) micro drum design
- Single nozzle traveling CIP spray

#### BENEFITS:

- Fewer solids in waste protects the environment
- 30% more solids removed
- Keeps screen open and at peak efficiency

