

TWO-ROLL  
DUAL FINISH  
FLATWORK  
IRONERS

# Imperial 232/224



Flagships  
of the  
Imperial  
Line

Dries and Irons  
Both Sides of Linen  
at High Speeds

**CHICAGO**<sup>®</sup>



# High Production and Flexibility

Imperial 232 and 224 two-sided ironing delivers the highest level of quality and production while using one-third less floor space than two-roll ironers of older design.

## High Performance Two-Roll Ironing

The purpose of a high production ironer is to dry and iron flatwork including sheets, pillowcases, table linen, and other flat items made from polyester/cotton, 100% cotton, or VISA® fabrics. This process includes removing moisture and wrinkles from washed and extracted flatwork in an efficient and dependable manner, while also giving items a high quality finish.

To perform these functions, these models utilize two vertically mounted steam (232 or 224) or gas heated rolls (232 only) for high production in one-third less floor space than side-by-side designs. Innovative two-sided ironing method applies heat and pressure from both sides of linen for more efficient moisture removal and a superior ironed finish on all types of linen. Extended length ironing contact with heated rolls means that ironing temperatures for linen with lower moisture retentions can often be reduced, resulting in additional energy savings and longer useful linen life. Chicago's exclusive Heat-Lock system, with enclosed canopy and exhaust blower, captures waste heat, while removing excess moisture and improving laundry room comfort. Model 232 offers one-third more heated ironing surface contact than the Model 224 for increased evaporative power and production speed.

## The Imperial's unique vertical roll configuration offers distinct advantages over traditional side-by-side layouts

Two ironing rolls use greater ironing contact per roll and the advantages of natural vertical heat convection for increased efficiency, more productive ironing temperatures, and higher dried linen output. Pneumatically controlled compression rolls are provided for greater moisture evaporation, optimum linen stretch, and superior finished linen.

## Maximum Finishing Efficiency from Two-Sided Ironing

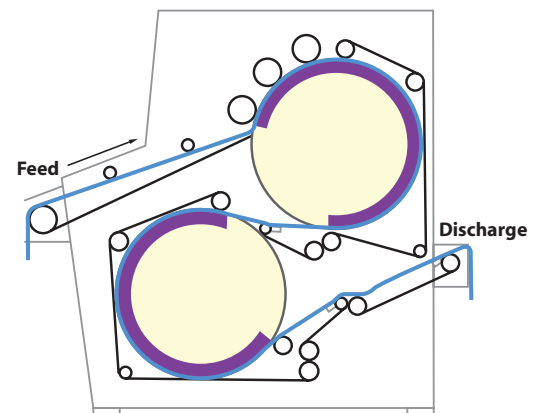
At high production speeds, removing moisture through each side of linen is more efficient than forcing all moisture out through one side only. The Imperial 232 and 224 remove moisture through each linen side as it is carried across the heated surfaces of the two ironing rolls. The fact that the entire surface area (front and back) of flatwork is dried and neatly pressed, rather than just one-half of the surface area (front only), means

moisture is evenly withdrawn from linen and linen temperature is balanced to produce an ironed item in the best possible condition for automatic folding. The result is a better looking finished product on the bed or tabletop.

Exclusive "inverted" linen path allows both sides of linen to be processed – another Chicago exclusive. This two-sided "dual finish" drying and ironing is the most effective way to remove moisture and produce a high quality ironed finish (See diagram below).

## Efficient Path of Linen

This diagram illustrates how linen is held in contact with heated ironing surfaces longer, while finishing both sides of linen and using less floor space. Because drying and ironing are performed in a vertical format, natural heat convection helps keep ironing surfaces hotter, while improving efficiency and operator comfort. Advanced linen transport design eliminates the need for guide tapes between rolls to reduce maintenance time and linen marks. Finished linen is delivered to rear for direct connection to automatic folder or manual handling.



Imperial 232 is designed with 2 – 32" diameter heated cylinders and three compression rolls.

Imperial 224 is designed with 2 – 24" diameter heated cylinders and two compression rolls.

## Convenience and Safety Features

The AC frequency inverter drive used on the Imperial series is the state-of-the-art solution for large unit drives. The controller's "soft start" program always electronically brings the unit up to speed gradually to reduce wear on the drive system. Braking is dynamic, using the motor itself. This produces smooth, prompt stops and



### Model 232

Speed range is 15 to 150 FPM  
(4.6 to 45.7 m/min)

### Model 224

Speed range is 20 to 120 FPM  
(6.0 to 36.6 m/min)

eliminates the need for a separate brake or complex hydraulic system. When an operator selects jog reverse, the unit automatically comes to a controlled stop before shifting to reverse. With all of these advanced features, drive motor horsepower is still only one-third of that required by comparable capacity ironers of older design.

Touch control variable speed drive allows operators to easily adjust the operating speed to match the type of linen being processed. Pneumatically controlled compression rolls are raised or lowered at the touch of a switch. All control circuits are 24 volts and are compatible with optional features such as auto adjust variable speed and the **Chicago Automatic Reject Processor** quality control system. Standard safety features provide complete protection with safety guards, end panels, stop buttons, and bilingual safety labels. A safety finger bar also provides protection across the full width of the ironer.

## Hi-Lyfe™ Extended Service Ribbons

Long-life ironing return ribbons are made from a unique combination of non-woven Nomex® and polyester material for high temperature usage. They feature the ideal combination of high air permeability, abrasion resistance and extended service life. This exclusive blend was developed after thousands of hours of field trials to establish their long life superiority over the generic Nomex® ironing ribbons traditionally used on heated cylinder ironers.

Chicago Imperial models are the only high production ironers that offer these premium textiles to enhance drying and finishing performance. This is another example of the advantages of Chicago's long record of field experience and innovation – giving the laundry operator the opportunity to process linen faster, longer, and to a higher quality standard than ever before.

## Wider Model

In addition to standard 120" (3050mm) width models, 136" (3455mm) usable width models are also available for processing extra wide items such as larger sheets or table linen.

## Standard Features

### Steam Heated Model 232 and 224

- Ironing rolls are ASME inspected and certified (required by local codes and insurance regulations) for use up to 150 PSI (10 bar) to allow higher ironing temperatures, increased drying power, and additional finished linen output. (Exact drying capacity is relative to pressure and quality of incoming steam from boiler.)
- Simple design produces constant and uniform heat.
- All internal piping, steam separator, and steam traps are furnished to assure a smooth and cost efficient installation.
- Heat-Lock canopy and blower entrapment system captures and circulates heat to reduce energy use, raise ironing temperature, and enhance operator comfort.
- Ideal for installations with existing steam boiler.

### Gas Heated Model 232

- Modular burner system enables operator to select temperatures for each heated roll to match fabric and production requirements.
- Chicago's well-known power production burner produces up to twice the BTU drying power of atmospheric burner systems used on generic ironers.
- Exclusive SUREFIRE two-stage electronic ignition with microprocessor-based diagnostics monitors ignition, burner, and temperature control to assure peak performance and simplify service.
- Eagle Eye™ electronic touchless temperature sensor and control is a patented Chicago feature that offers pinpoint temperature control without moving parts or mechanical devices,



such as flame rods or other ignition components within the heated roll. Control components are more accurate, reliable, and serviceable than ever before.

- Message screen displays digital speed, ironing status, and detailed diagnostic information concerning ignition, burner, and safety circuits such as high limit protection, stop buttons, and interlocks.
- High output burner system maintains proper ironing temperature, adjusts drying power to maximum demand when needed, and significantly reduces gas consumption when load factors are lower.
- Heat-Lock canopy and blower entrapment system captures and circulates heat to reduce energy use, raise ironing temperature, and enhance operator comfort.
- Solid state high limit safety controls ensure correct operation.

