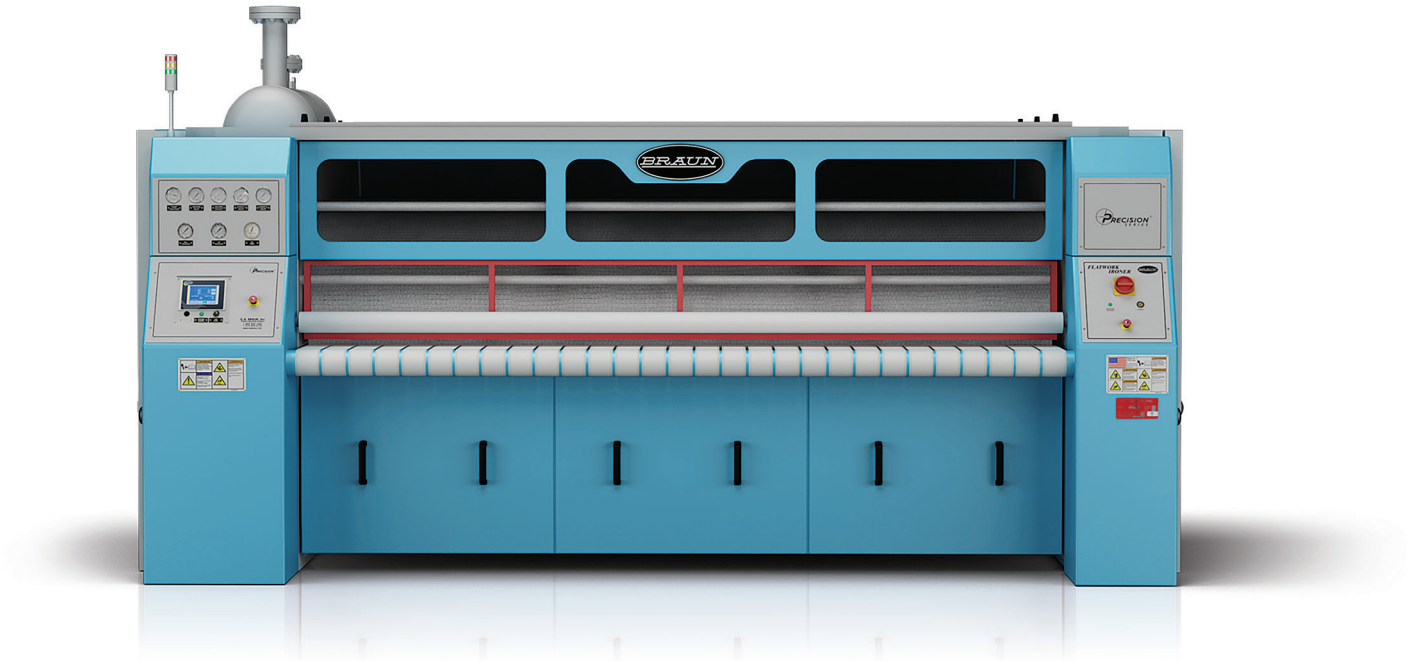
INTRODUCING THE GREEN GENERATION

Science stands the test of time.®

IRONER SOLUTIONS



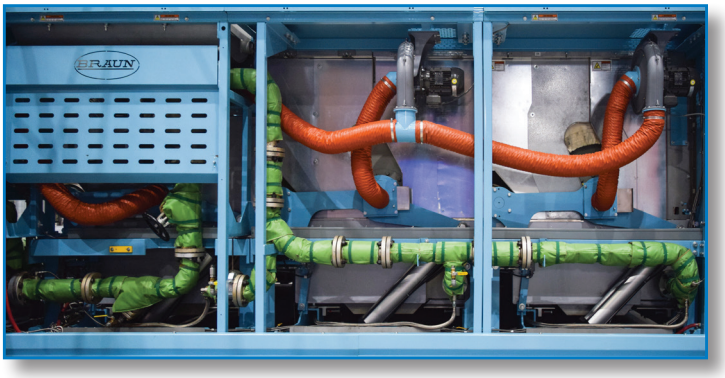
PRECISION SERIES

THERMAL IRONERS–SELF CONTAINED:

- Available in one or two 48" roll configurations in 120" or 130" working widths
- These machines eliminate the need for a separate boiler
- Equipped with a Fulton 3-pass design heater featuring a nested concentric helical wound coil for improved flow.
- The servo modulating Riello Burner provides precise heater control
- Braun's expansion tank shield is standard on self-contained ironers.
- PLC touch screen controls, simple operator intuitive interface

Burner Performance Data:

- Two-roll SC ironer burner has a 1.6M BTU burner output capability
- Operating with a chest temp of 365°F, the burner output under a production load of 120 ft. per minute is 66% or 1.05m BTUs



Three roll self-contained ironer shown

PRECISION SERIES

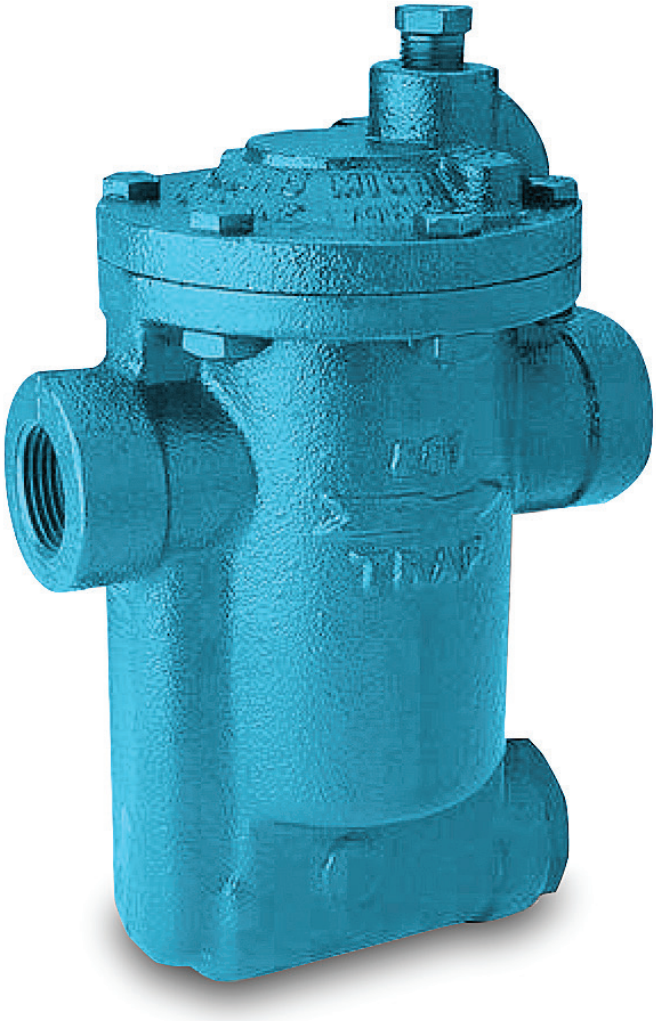
STEAM IRONERS:

- The Braun steam ironer is available in a variety of configurations and can be ordered in 120" or 130" working widths, 32" or 48" diameter rolls and includes up to four rolls
- Fully insulated canopies with a R-5.7 insulation rating resulting in a 53% increase in canopy effectiveness as compared to non-insulated.
- Insulated side heat shields
- PLC touch screen controls; simple operator intuitive interface
- Poly-chain, single motor inverter drive
- Torsion bar roll suspension
- Modular design for system expansion
- Moveable guide ribbon tensioner
- Exceptional maintenance access and serviceability

STEAM TRAP DIFFERENCE:

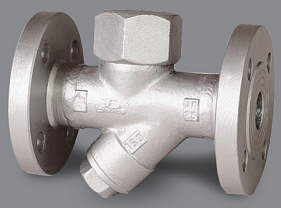
With any steam ironer effective removal of condensation is the objective of the traps. Time tested inverted bucket trap design has proven its ability to operate in low/high quality steam environments where dirt/debris can present issues with disk type traps. Inverted bucket trap without doubt is the most reliable trap available providing efficient drainage of condensation.

Simple is better, a bucket trap is designed to work either fully closed or fully open. This 100% open action creates a rapid purge of condensation sweeping out any accumulation dirt/debris suspended in the condensation. This includes any larger particles that might have settled at the bottom of the trap from system shut down cooling. With a free-floating mechanism and no friction or wear points this means consistent runtime operations, reduced labor and lower operating cost.



Competitors:

Thermodynamic (TD) traps work on the difference in dynamic response to velocity change in flow of compressible and incompressible fluids. As steam enters, static pressure above the disk forces the disk against the valve seat. The static pressure over a large area overcomes the high inlet pressure of the steam. As the steam starts to condense, the pressure against the disk lessens and the trap cycles. This essentially makes a TD trap a "time cycle" device: it will open even if there is only steam present. This can cause premature wear. If non-condensable gas is trapped on top of the disc, it can cause the trap to be locked shut.

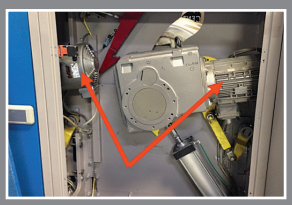


THE DRIVE DIFFERENCE:

- The poly-chain drive uses a toothed belt with Dupont Kevlar fibers and an elastomeric polyurethane compound, which ensures high reliability and low maintenance
- Low cost of ownership based on the design and simplistic drive train
- All rolls run at equal speed (direct controllable speed) vs. competitor's progressive speed differential. Progressive speed differential stretches and distorts goods, leaves ironer tape and ribbon markings and causes excess slippage

Competitors:

- Multi-motor design requiring separate electronics to operate each roll
- Each drive requires a separate motor and inverter to operate
- Speed synchronization can be challenging

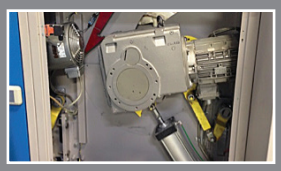


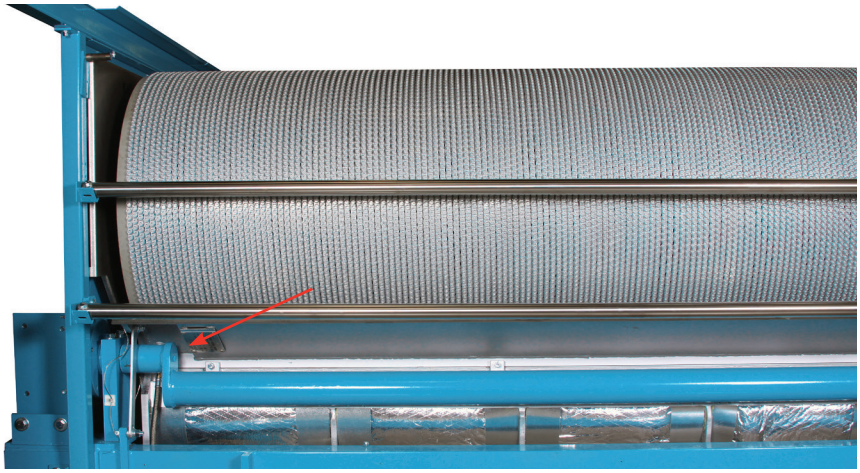
INSULATED SIDE SHIELDS:

- Insulated side shields maintain the heat within the ironer box, not on the drive components
- The increased ironing box temperature compensates for the Heat removed from the ironing cavity by the vacuum fans
- 11.8% guard skin temperature reduction (direct indication of thermal efficiency gain)

Competitors:

Solid-side panel design eliminates any side access for chest maintenance



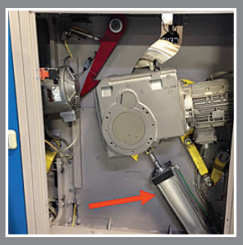


ROLL SUSPENSION DIFFERENCE:

- Torsion bar suspension (assures uniform side-to-side pressure)
- This assures uniform drying and travel of flatwork through the ironer with a minimum of padding wear

Competitors:

Difficult to control side-to-side roll pressure due to cylinder wear and inconsistent plant air pressure demand

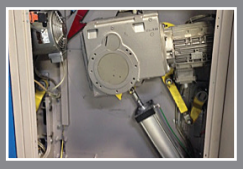


SIDE PANEL ACCESS:

- Side panels can easily be lifted, removed and slid to access internal components for maintenance
- Insulated shields are easily removable for access eliminating the need to have an operator enter the chest
- Eliminates the need to stand on top of the side panels during roll padding, spring press and chest cleaning

Competitors:

Solid side-panel design eliminates any side access for chest maintenance.



IRONER CANOPY DIFFERENCE

- The ironer canopy improves ironer performance by helping to retain heat within the ironer minimizing temperature loss and providing for a more temperate workplace
- Easy to remove stack and slide
- The canopy also prevents foreign objects from falling between the rollers and damaging the ironer chest and padding
- Truly insulated sectionalized canopy carrying an R-Value of R-5.7 provides a 53% increase in canopy effectiveness as compared to non-insulated

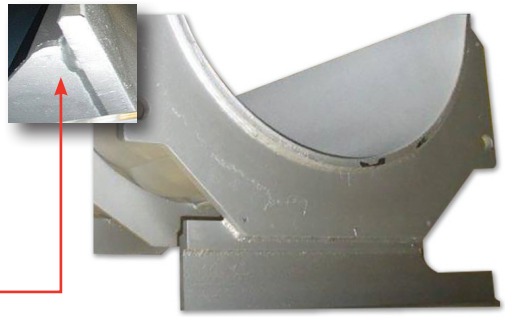
Competitors:

- Poly-carbonate non-insulated canopy with minimal R-Value, resulting in heat loss
- Non-sliding lift-off design

CHEST DIFFERENCES

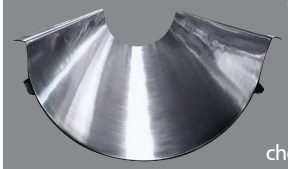
Rigid Wall Chest

Braun's rigid wall chest is a thick wall polished steel chest tested to 425 psi hydrostatically and ASME stamped and certified. If a piece of metal should go through the ironer and gouge the chest, it can be repaired.

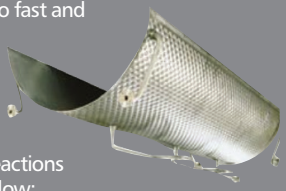


Competitors:

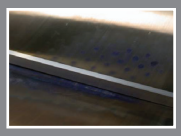
Flex Chest is a heated single-layer chest surrounding padded rolls. A hydraulic cylinder and lever system applies pressure on the ends of the flexible chest to wrap the chest around the rolls to apply a uniform ironing pressure against the rolls over the entire face of the chest. Each flexible single-layer chest is heated through a plurality of parallel steam tubes affixed to the back of the chest at spaced intervals. The concern with the chest design is the thickness (2-3 millimeters).
If a piece f metal should go through the ironer and gouge the chest the chest must be replaced.



Flex Chest Wrapping Effect: Regardless of their molecular structure, thinner metals are more likely to lose their original shape than thicker metals. In general, this can be due to fast and continuous temperature changes and/or chloride stress corrosion cracking. Both reactions are explained below:



- As a matter of physics, metal will expand and contract as the temperature changes. Quick variations of temperature create metal fatigue. Because thin metals are weaker and thus more likely to fatigue, they are also less likely to return to their original shape. Injecting live steam at a minimum of 325°F into a thin chest ironer will eventually result in metal fatigue.
- Stainless steels may be susceptible to chloride stress corrosion cracking (CSCC). The standard 304/304L and 316/316L grades are most susceptible. We know of several plants that needed to replace their thin flexible chest due to corrosion cracking, which resulted in steam leaks; another incident that would have a negative impact on production and finishing quality.



Conclusion: When using a thin chest in a steam ironer, failure is unpredictable but very likely.

www.gabraun.com

ISO 9001 CERTIFIED

G.A. Braun, Inc.
79 General Irwin Boulevard
N. Syracuse, NY 13212

Mail to:
P.O. Box 3029
Syracuse, NY 13220-3029

Phone
1-800-432-7286

Fax
(315) 475-4130

Parts Help Desk
1-800-432-7286 X 1

Service Help Desk
1-800-432-7286 X 2

11/18