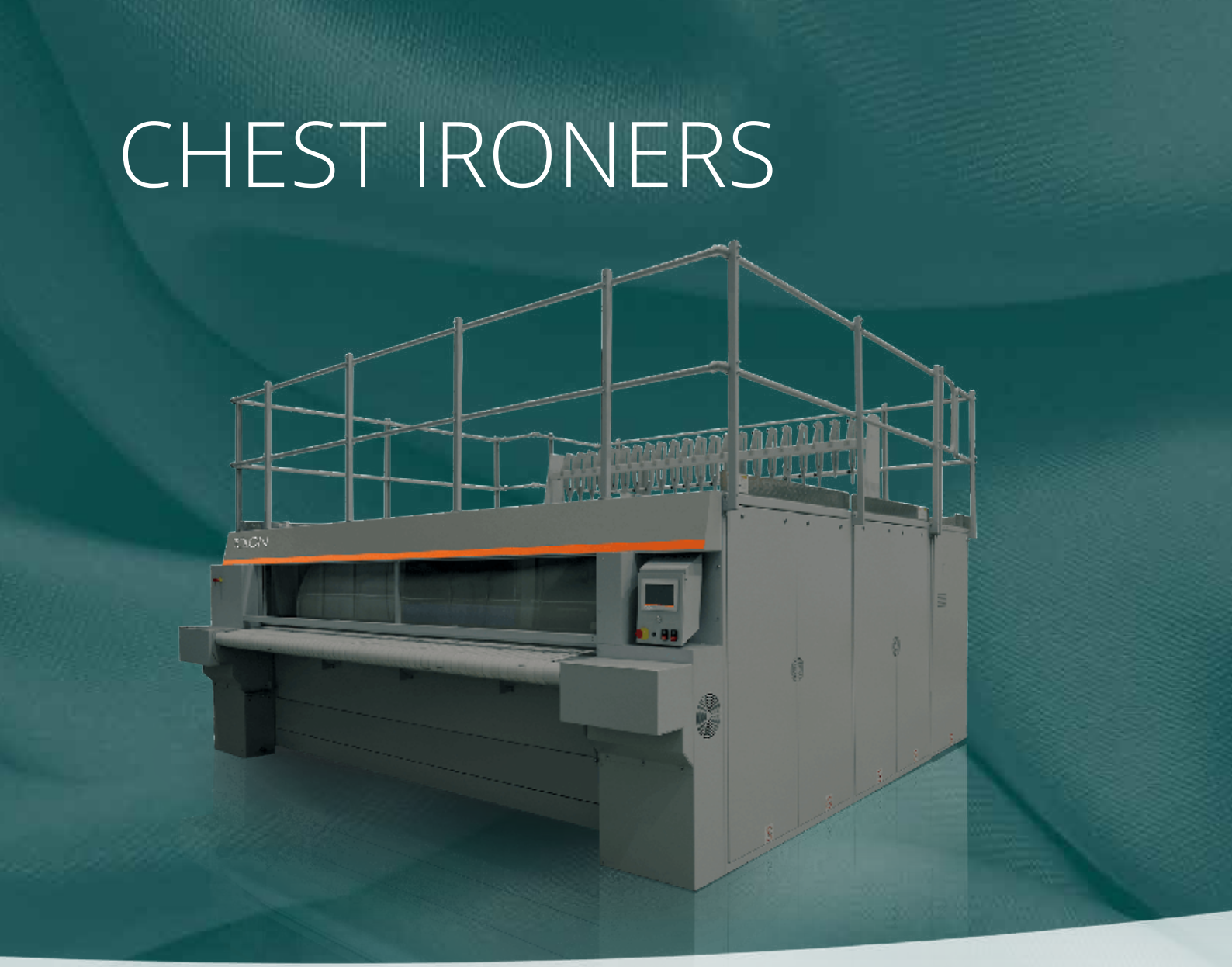
CHEST IRONERS



TI5

Flexible chest ironer for OPL laundries that require top finishing quality and excellent energy efficiency

TOLON

Hotels not only practical, compact and user-friendly solutions that can consistently meet the demands of their guests, they also need solutions that are user friendly, easy maintenance, that offer exceptional ROI. TOLON's TI5 is a flexchest ironer based on best-selling ironer technology, and has everything an OPL laundry needs to meet their goals and exceed their guests expectations. It is available in a steam model with highest level of evaporation capacity and a gas model with high energy efficiency and temperature control.

HIGHLIGHTS

· High finishing quality;
· Reduced energy consumption;
· Higher evaporation capacity;
· Small footprint yet high production capacity;
· Available in steam or gas models;
· Steam: Ideal solution for laundries with good steam capacity;
· Gas: Potential for mixed production;
· Working widths: 3000, 3300, and 3500 mm (118", 130" and 138").

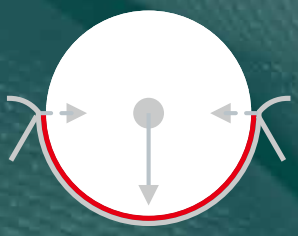
THE ADVANTAGES OF FLEXIBLE DESIGN

Flexible chest

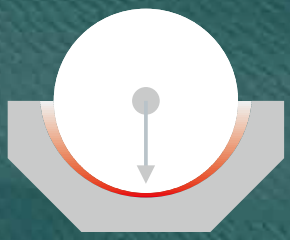
The flexible chest consists of two layers of sheet metal welded together in a matrix pattern by a laser. This sandwich plate is rolled to the roll diameter and blasted with high pressure, thus forming small channels between the welds. Gas chest is fully carbon steel, and steam chest uses a carbon steel inner plate welded to a stainless steel outer plate.

Optimal thermal conduction

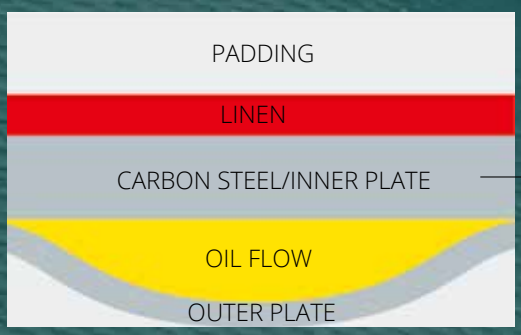
Carbon steel in the flexible chest has a thermal conduction which is four times higher than that of e.g. stainless steel, maintaining a higher and more even temperature on the surface and thus a more efficient heat transfer to the linen.



The vertical pressure of the roll on the flexible chest makes the sides of the chest press to the roll and results in a uniform pressure over the entire width of the chest.



A traditional fixed chest loses contact when the padding wears out and the roll diameter is reduced.



The flexible chest has optimum heat transfer.

Low friction

Carbon steel gives not only optimum thermal conduction, but also a low friction with wet linen, resulting in a nice finish. The low friction also reduces the wear of padding, ironing tapes and linen, as well as energy consumption.

Higher evaporation capacity

A traditional fixed chest loses contact as the padding wears out reducing the roll diameter, however a flexible chest adapts to the actual roll diameter. This maintains an optimal and stable contact angle, resulting in a higher evaporation capacity compared to that of a fixed chest.

Planetary gear

Planetary gear minimizes the counter torque and ensures that the roll will stay in its centered position during operation.welded to a stainless steel outer plate.

Exhaust control to reduce moisture in padding and prevent the roll from cooling down

The exhaust is ensured by a fan on each roll with a manually adjustable throttle valve which is connected to the main exhaust duct at the rear of the ironer.

Adjustable speed with adjustable V-belt pulleys

Adjustable v-belt pulleys make it possible to adjust the speed of each individual roll independently of each other, thus ensuring optimum finishing quality and longer lifetime of linen and padding.

Steam side

Manually adjust throttle valve for exhaust control.

Drive side

Planetary gear minimized counter torque and adjustable V-belt pulleys allow independent adjustment of the speed of each roll.

ENERGY EFFICIENT SELF-CONTAINED GAS HEATING CONCEPT TI5 GAS HEATED MODEL.

Direct heating

The heat energy for ironing comes from a gas-fired burner enabling a laundry to lift off steam capacity for other purposes, and to run or expand its flatwork operation without heavy external piping and boiler room.

Reduced energy waste during start up and cool down

Due to the relatively low weight of the flexible chest, it can be heated in a fraction of the time and with a fraction of the energy required to heat a traditional chest.

Optimum flow

The heat energy is transferred to the ironer chest by a thermal fluid oil. An expansion tank is connected to the heat exchanger and the chest to absorb the heated oil as it expands.

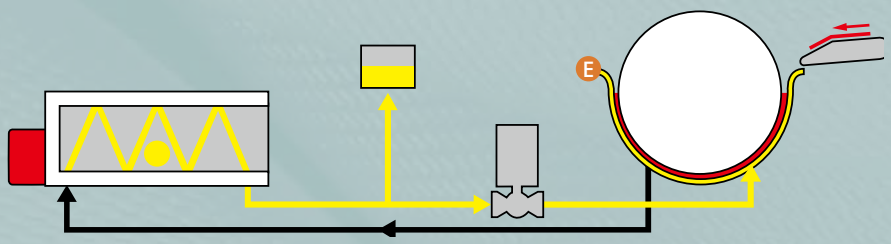
Optimum heat transfer

Transfer of heat via the oil medium allows for high efficiency – up to 40% higher than that of steam. The key to an optimum transfer of heat from the oil into the chest is a high oil velocity and a turbulent flow combined with the higher thermal conduction of the carbon steel flexible chest of carbon steel.

Minimal installation and set up with gas

By using a flexible chest designed for the use of oil as the heating medium and an integrated gas-fired burner and heat exchanger, the TI5G minimizes the installation and set-up time, The TI5G is simply to be set in place and hooked up to a gas supply.

Flow diagram of the TI5 Gas



A Burner
B Heat exchanger
C Expansion tank
D Pump
E Chest

OPTIMUM PRODUCTION AND FINISHING QUALITY

Steam flexible chest offers highest possible evaporation capacity

Uniform temperatures and highest possible evaporation capacity with the installed steam boiler capacity, which optimizes the heat transfer from steam to linen. The key to this optimum heat transfer is a turbulent steam flow combined with the carbon steel flexible chest.

Gas chest offers higher possible temperature

By using oil as the heating medium the TI5G Gas chest temperature can achieve temperatures of up to 230° C (446° F), 40° C (104° F) higher than that of steam, when operating at a pressure of 12 bar (174 psi).

Gas chest offers precise temperature control

The TI5G maintains a specified temperature by using an intelligent burner, modulating between different flame sizes depending on the required speed and evaporation capacity. This allows for high temperature stability allowing the ironing temperature to be set close to the maximum allowable temperature of the linen, increasing production.

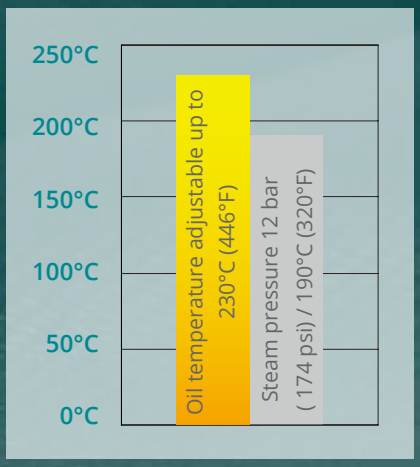
Gas chest allows fast and fully adjustable temperature

The lighter weight flexible chest allows for easy and rapid heating, and water in the linen cools down the chest, allowing chest temperature of the TI5 Gas to be adjustable by each linen category and allowing the potential for mixed production.

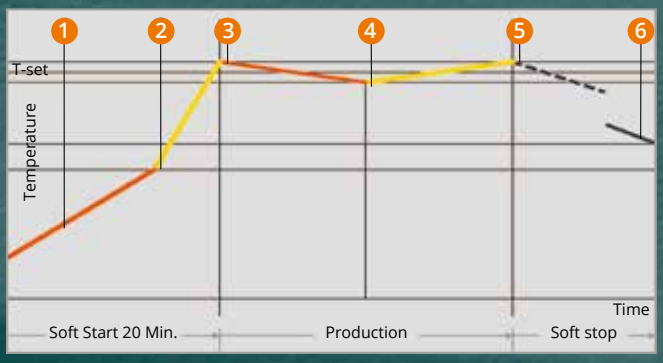
Increased lifespan and reduced oil change requirements

The TI5 Gas model is designed to ensure a soft start and stop. A low flame is used at the start of production to prevent hot spots and superheating of oil until viscosity of oil decreases. Also the oil pump continues to run for a period after production stops, preventing superheating of the oil.

Automatic temperature control



Oil vs steam



1. Low flame
2. Large flame
3. Low flame
4. Large flame
5. Production shut-off
6. Soft stop

FINISHING LINE PHILOSOPHY

TOLON's TI5 ironers are developed according to the "Finishing Line Philosophy" that claims that a finishing line should form one single system, as explained in the six steps below.

1 Easy to install

Each ironer is equipped with an integrated finishing line control, ensuring that both feeder and folder can be easily connected. The ironer serve as a distribution center for all energy supplies to the other equipment in the finishing lines.

2 Easy to operate

It is possible to control the entire finishing line from the control panel of the feeder. Any changes to the operating program of the feeder change the speed of the finishing line and the folding program automatically.

3 Easy to control

Both the main and the analog control panels can monitor the performance of the ironer. The control panels will give the following information and warnings:

- Burner status;
- Speed indication;
- The current (ampere) used by the drive motor (indication starts flashing when waxing is needed);
- Temperature of exhaust and flue gas;
- Oil level, oil pressure, and oil temperature;
- Ironing pressure;
- Warning light of cold chest;
- Warning light of low air pressure;
- Pump indication.

4 Easy to maintain

By using maintenance-free technologies such as e.g. V-belts, frequency inverter, etc., the only maintenance left is keeping the ironer clean and changing the oil of the gear boxes.

5 High availability

Being designed and built in a JENSEN factory, JENSEN always insists on the highest standards of design and components. The chest, rolls, motors and cylinders, are built by reputable suppliers in accordance with JENSEN's specifications and vetted by JENSEN's in house quality control lab, Q-Lab.

6 Operator´s safety

When one of the guards or emergency buttons in the finishing line is activated, all rolls are immediately raised and stopped. All machines in a finishing line are connected in the same emergency stop circuit, which means that in case of an emergency stop, the entire finishing line will stop.

INTERNATIONALLY BEST-SELLING TECHNOLOGY

The TI5 is designed and manufactured to the highest standards thanks to TOLON's partnership with the JENSEN-GROUP. JENSEN is one of the most experienced flatwork finishing suppliers and is the world's leading supplier of heavy-duty ironers. With JENSEN's added expertise, the TI5 offers exceptional finishing quality, top production speeds and low energy consumption – and it does so with reliable stability over many years and years.

TI5 finishing unit

The TI5 is available as a stand-alone finishing unit with a delivery table for manual folding, or it can also be connected to a full line flatwork finishing solution.

Fast top-quality feeding

- 3 different types of feeding tables;
- Standard width feeding table, 400 mm (16") with separate toothed belt drive and with variable speed;
- Optional extended inclined inlet table, width 600 mm (24") with shortened feeding height is ideal for smaller and larger linen offering ergonomic working conditions and excellent visual inspection of linen. It is especially suited for round table linen as it allows for careful guiding into ironer;
- Optional built-in manual feeder, incorporating a vacuum box which stretches the linen during the feeding process to ensure optimum feeding quality of large as well as small pieces.

TI5

Roll diameter: 800 or 1200 mm (32" or 47")
Number of rolls: 1, 2, 3 rollers
Working widths: 3000, 3300 and 3500 mm
(118", 130" and 138")
Heating: Gas or Steam
Steam pressure: 5,5 to 14 bar (80 - 203 psi)

Gas Steam

Feeding round table linen on extended feeding table

Small-piece feeding on extended feeding table