

Rolling along smoothly

Hainsworth's Philip Fortin looks at the role of ironer clothing.

In theory, all finishing sections work towards the goal of producing high quality work, with high throughput and low costs. In practice, compromises may be made according to the laundry's priorities. However, in all cases the ironer must be correctly and appropriately clothed, and laundries should be aware of the options offered by specialist suppliers.

Clothing choice

Needlefelt comes in a wide variety of types, but can be broadly classified by fibre, strength, weight and width.

The two basic fibres used today are polyester and Nomex(R). While Nomex can cost three times as much as polyester, it is essential for high temperature machines and may also have advantages at lower temperatures as its stability and resistance to hydrolysis prolongs clothing life.

However, a polyester fibre with a higher than normal resistance to hydrolysis has been developed. This fibre is now used as standard in Hainsworth's extra-strength heavyweight needlefelt and helps to keep it working at maximum performance for longer.

The large-roll ironers, developed in recent years, place heavy demands on the felt. If it stretches, it will tear, twist or wind off the machines, so it should be able to resist such adverse conditions.

The padding gap, between the roller springing or base clothing and the bed, determines how many turns of which thickness are required to clothe the ironer correctly.

Felts are offered in weights from 400 - 900gsm. When clothing with Nomex, one weight lower is recommended due to the different density of the felt.

The felt should be wide enough to overlap the ironer roll by 10 or 15cm at each end, sealing the gap over the end flanges so that the suction system can draw air and moisture through the clothing to be vented away.

The fibre gauge and density of the felt should allow for quick removal of moisture. Where possible, using two turns of heavyweight felt, rather than three turns of lighter material may improve venting.

The clothing, supported by the springing, must offer even resilience right across

the ironer, so that it holds the flatwork firmly on the ironer beds, allowing for extra thickness at the seams and edges and for differing thicknesses of work.

Change needed

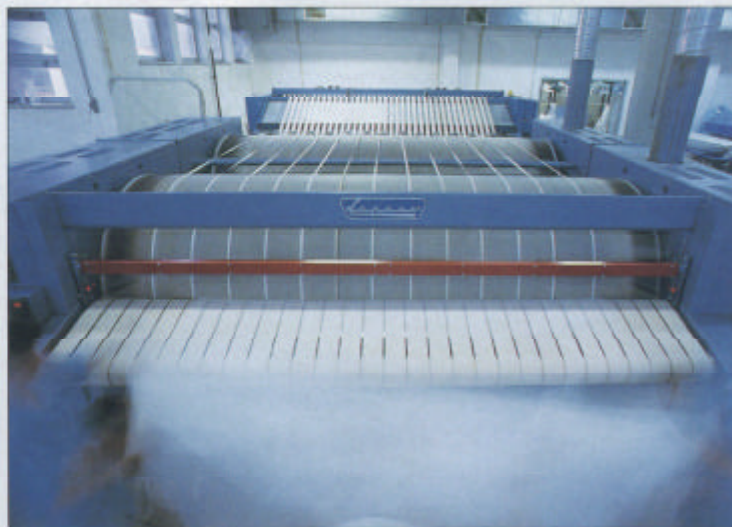
Clothing loses efficiency, increasing costs, long before it physically breaks up. As felt hydrolyses, it sheds dust which is drawn into the ducting, reducing the airflow. When the clothing loses resilience, a change is needed, and if the ironer has

base clothing this should also be checked.

When fitting clothing, the overlap must be trimmed back to an even number of turns as any extra will stretch the clothing, leading to uneven drying.

Correct ironer maintenance will help to ensure the maximum life from the clothing. This should include regular waxing (with the fans off), and checking the steam traps. When the ironer is idle for some time, the rolls should be lifted or the beds dropped. ■

Ironers must have correct clothing to work efficiently.



Making the right clothing choices

Modern ironers have particular clothing needs argues Denis Bergasse, Fanafel md.

Modern generation ironers need clothing that will withstand both the high speeds (up to 55m/min) and the higher degree of friction produced by rollers up to 1.6m diameter, and also higher steam pressures and operating temperatures.

A roll covered with continuous springs (either coiled-spring Springpress type or laminated finger type) taking two clothing turns should have an internal woven scrim of at least 200 - 220 gsm and use a high-tensile strength multifilament yarn to reduce the degree of stretching during use. A high denier fibre that gives a high permeability is another requirement as this allows steam to be sucked through the clothing quickly, keeping the felt dry in order to increase ironer output. Felt should also have dense needling to withstand the high pressures.

It should be remembered that needlefelt padding is the weakest component in the laundry process. Any change in the operation will have an immediate effect on the clothing, as will poor machine maintenance.

Clothing life can be reduced by mechanical factors; dirt on the bed, failure to reach the correct bed temperature, and the cold spots that result from internal condensation.

Clothing can also suffer from chemical faults in the laundry line; poor rinsing that gives the linen too high a residual PH or linen that is too wet when presented to the ironer. Faulty steam traps or exhaust vents will speed the rate of hydrolysis.

Finally, when estimating how long clothing should last laundries should measure clothing life not in time, but in the throughput of linen. Clothing on an ironer working at 45m/min cannot be expected to last as long as that on an ironer operating at 15-20m/min. ■