

Poor conditions cut clothing life

Denis Begasse of Fanafel reports on a case where adverse laundry conditions caused a high quality felt to deteriorate after a very short time

A Fanafel technician was called to a laundry which was complaining that the clothing on the first roller of a two roll ironer was deteriorating rapidly after only 300 hours working.

The laundry also complained that the linen was still humid after ironing, indicating a very poor output.

The ironer in question was a 2 x 1,200mm diameter x 3,300mm, 9/10bar steam-heated design.

Fanafel was surprised by the complaints as it had supplied its superior quality felt 900 - 950g/m² (27 - 28oz/yd²) 100% polyester with breaking strength of 350kg/5cm and high air permeability of around 660litre/dm²/min under 20mm water gauge.

The technician's inspection revealed that this heavy-duty, high permeability felt had sections where fibre had been lost from the surface. There were also some holes and areas of chemical damage where it was easy to break the second layer by hand.

Low temperature

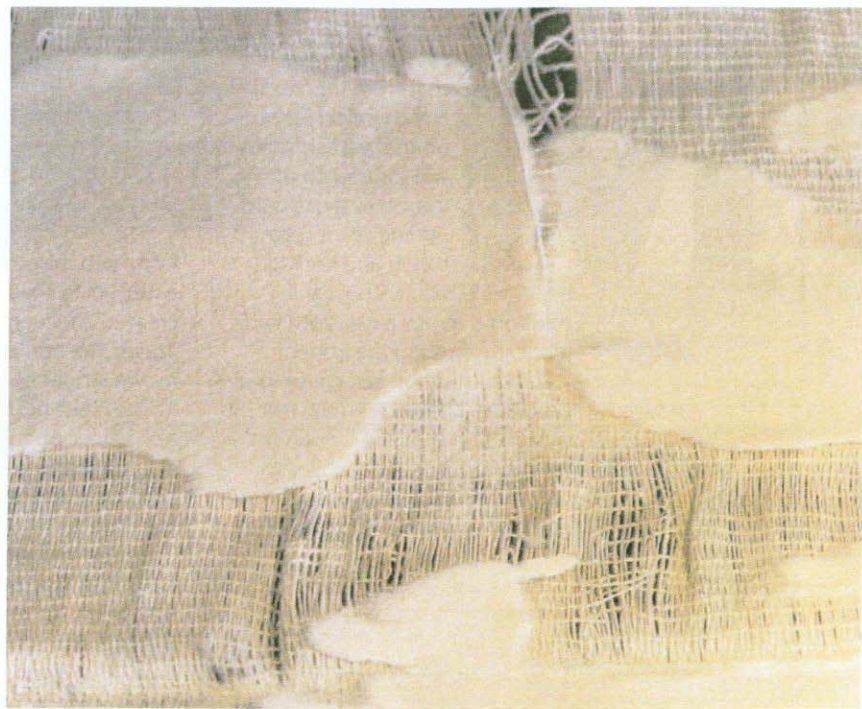
The technician also found that:

The contact temperature on the felt was only around 70C.

The bare cylinder had three tops of springs missing.

The regulating device of the suction fan was open to the maximum so that suction was cooling the bed, "closing" the chest, and creating a heavy strain on the surface of the felt (this explained the loss of fibre on the surface).

The linen was analysed and an alkaline residual pH of around 8.5 was detected. This explained why the polyester felt had deteriorated so



WORN AND TORN: A combination of factors had caused this high quality, high-permeability polyester felt to deteriorate to the extent that sections of fibre were missing from the surface, it had holes and suffered from chemical damage

early in its life as polyester fibres will weaken in an alkaline environment.

The missing spring heads were immediately repaired and a new needled felt with the same technical characteristics as mentioned above was installed.

The regulating device of the suction fan was closed to approximate 1/3 and after 2hours, the contact temperature on the felt went up to around 110C.

Meanwhile, the washing process was rechecked and the residual pH was stabilised at around 7.

After 1,000 hours of working life, the felt was still on the ironer and showing no sign of lost fibre on the surface, as both the excessive

abrasion and the chemical attack had been eliminated.

The launderer was more than happy as his ironer production almost doubled without downtime.

This case shows us clearly that the felt can not be automatically blamed for its apparent early destruction.

Rapid deterioration can be caused by incorrect working conditions and/or an untuned ironer.

This case shows us also that the padding is the weakest element of the ironing process.

A standard polyester will deteriorate more rapidly in adverse working conditions, than is the case with a Fanafel superior heavy-duty, high air-permeability felt. **LCN**