



Fundamentals of Linen Quality

Practical advice on washroom practices, ironer maintenance

By Ty Acton

As a former coach repeatedly tried to instill in me, and everyone else forced to listen, “It’s the fundamentals guys,” blocking, tackling, throwing and catching! Over the years, I’ve come to believe that’s also true when it comes to producing quality linen.

As the industry continues to evolve, producing quality linen still hinges on fundamentals. Clean linen, proper moisture retention, clean ironer chest and properly padded rolls. OK, there’s a little more to it than that, so let’s get into some details.

Wash and feed

Everything we do in the washroom has a direct impact on the flatwork department. Without a clean wash, quality linen isn’t possible. The pH should be at or near neutral, somewhere between 6 and 7. A pH that’s too high can cause wrinkling and discolor white linen, giving it a scorched look. A pH of 5 or lower can cause linen to roll, creating jams and an increased number of go backs, which hinders production.

Avoid using excessive chemicals in your wash formula. Although a load may test out with a neutral pH, it may contain excessive chemicals that can and will be deposited on the ironer chest. Over time, this will prevent the smooth flow of linen, causing it to wrinkle.

As laundries come under increased pressure to cut costs, they’re using less water. If all of the soil isn’t removed from the linen due to reduced water use, the leftover soil will end up on the ironer chest. Reduced water usage in the rinse phase can also increase the risk of bleach carry over. Bleach left in the linen after the final rinse will be activated in the ironer, causing the linen to yellow. It will also diminish fabric life.

After the linen is clean with a neutral pH and is free of excessive chemicals, the moisture retention must be at the proper percentage. Linen that’s too dry will have a difficult time entering the first roll. It may end up with an unpressed, rough dry finish because the wrinkles are set, preventing the ironer from doing its job. Linen that’s too wet may also have a difficult time entering the first roll. It’s also probable that high moisture retention will cause linen to exit the ironer damp, causing it to have to be run back through the ironer. Slowing the ironer down to dry excessively damp linen will put a drag on production.

The old adage, garbage in, garbage out couldn’t be truer than in the flatwork department. Whether it’s properly trained feed personnel, or a quality, well-adjusted automated feeder, it all starts here. Properly fed linen is essential to ultimately achieving excellent finish quality.

Ironer upkeep

Once linen is properly fed into the ironer, there are several other factors to consider. The ironer chest must be clean and properly

lubricated. A dirty chest can transfer dirt to the linen and create go-backs due to wrinkling.

As a rule, the ironer should be lubricated sparingly but often, running a wax cloth through the ironer every two hours. A wax cloth with a barrier flap is preferred so as not to allow wax to become imbedded in the padding. Wax should only be added to the wax pocket when the cloth is limp when cold. If the cloth is stiff, it doesn't need additional wax added.



For quality results, it's important that finishing speeds increase from start to finish. That means the pace should increase 5%-10% from the feeder to the ironer and into the folder.

Another key component to quality is chest-to-roll contact. The purpose of the padded roll is to fill the well of the chest to its maximum. Spring height and the proper padding will ensure proper roll size. The correct roll pressure setting will also ensure that roll size is maintained throughout the life of the pad. Adding additional roll pressure prematurely will decrease roll circumference, causing a loss in drying capacity and reducing press quality. A lack of chest-to-roll contact can also cause a rough dry finish, giving the linen the appearance of not being pressed. According to the University of Krefeld in Germany, a loss of padding thickness of only 1.5 millimeters of roll diameter can reduce the capacity of the ironer by 28%.

If roll size is reduced shortly after the installation of new padding, and roll pressure isn't added, it's a good idea to check spring height. Do this to ensure that roll springs don't need replacing.

Proper chest temperatures are also important in producing quality linen. A cool ironer chest can cause soil to transfer more easily to the linen because of excessive drag. It can also cause accordion wrinkles, and in some cases cause linen to jam. This creates down time in the flatwork department. Chest temperatures should be checked periodically to make sure you're getting adequate and consistent heat to the chest. On steam-heated ironers, occasionally check traps to make sure condensation is being removed from the chest.

It's important to monitor linear speed from time to time. Each roll should turn slightly faster than the roll before it. Improper linear

speeds can cause wrinkling, if linen is being pushed out faster than the next roll can accept it. Excessively graduated roll speeds can cause static, excessive tape breakage, and in extreme cases torn linen. On small-roll ironers, this is accomplished by adjusting tension screws so each roll is slightly larger as you move toward the back of the ironer. A larger roll turns faster, so by graduating roll size, you ensure proper linen travel. On most large-roll ironers each roll is adjustable. Consult equipment owner's manuals to get the



Ironers should receive periodic lubrication by running a wax cloth through the ironer every two hours. A wax cloth with a barrier flap is better because it won't let wax become embedded in the padding.

proper speed differentials, and make adjustments as needed.

The purpose of the vacuum system is to keep the springs and padding dry. If a vacuum motor isn't running, or duct work is clogged, it will cause padding to fail prematurely due to hydrolysis. Moisture sitting in the roll will eventually bleed back through the holes in the roll. This causes spotting on the pad, and eventually, the linen. If moisture is allowed to sit in the roll too long, springs will eventually rust and need to be replaced.

Lastly, make sure there's a constant increase in speed from start to finish. From the feeder, to the ironer and into the folder, equipment speeds should increase 5%-10%.

Detailed follow-through

Following the fundamental steps outlined above, and paying close attention to detail is critical. These steps, if implemented, will enable you to achieve outstanding linen quality. Your customers will love you for it! TR



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