

Spinning Brazilian Cotton

Success Guide for Spinners

1. Stickiness Testing

- Test at least 10–20% of bales from each lot using stickiness tester or the oven tester to identify potential issues and enable timely troubleshooting.
- Set an acceptable stickiness threshold aligned with the mill's processing capabilities for the determined stickiness level.

2. Bale Management & Fiber Mixing

- Use bale management software and leverage HVI data to ensure homogenous fibre mixing at the laydown.
- Mix cotton from multiple lots, merchants, or regions to achieve better consistency.
- Adjust the mixing ratio of sticky cotton with non-sticky cotton lots based on stickiness test results.

3. Fiber Conditioning at Blow Room

- Use fiber conditioners for smooth processing at all spinning stages, irrespective of conventional, compact, open-end, or air-jet spinning.
- Install a spraying system at the blow room stage (mixing, bale openers and bale pluckers) to apply the conditioner automatically during operation.

4. Optimizing Blow Room & Card Settings

- Keep gentle opening in blow room to reduce the impact of variation in Short Fiber Content (SFC) and fiber strength.
- Operate at lower beater speeds in the blow room and cylinder & licker-in speeds in carding to reduce fiber rupture.
- Extract maximum trash at the blow room stage, followed by carding.
- Monitor key parameters such as neps/g and SFC(n) at intermediate stages – specifically at the blow room input/output and carding input/output to achieve an optimum balance of trash levels, waste, and neps.

5. Periodic Machine Cleaning

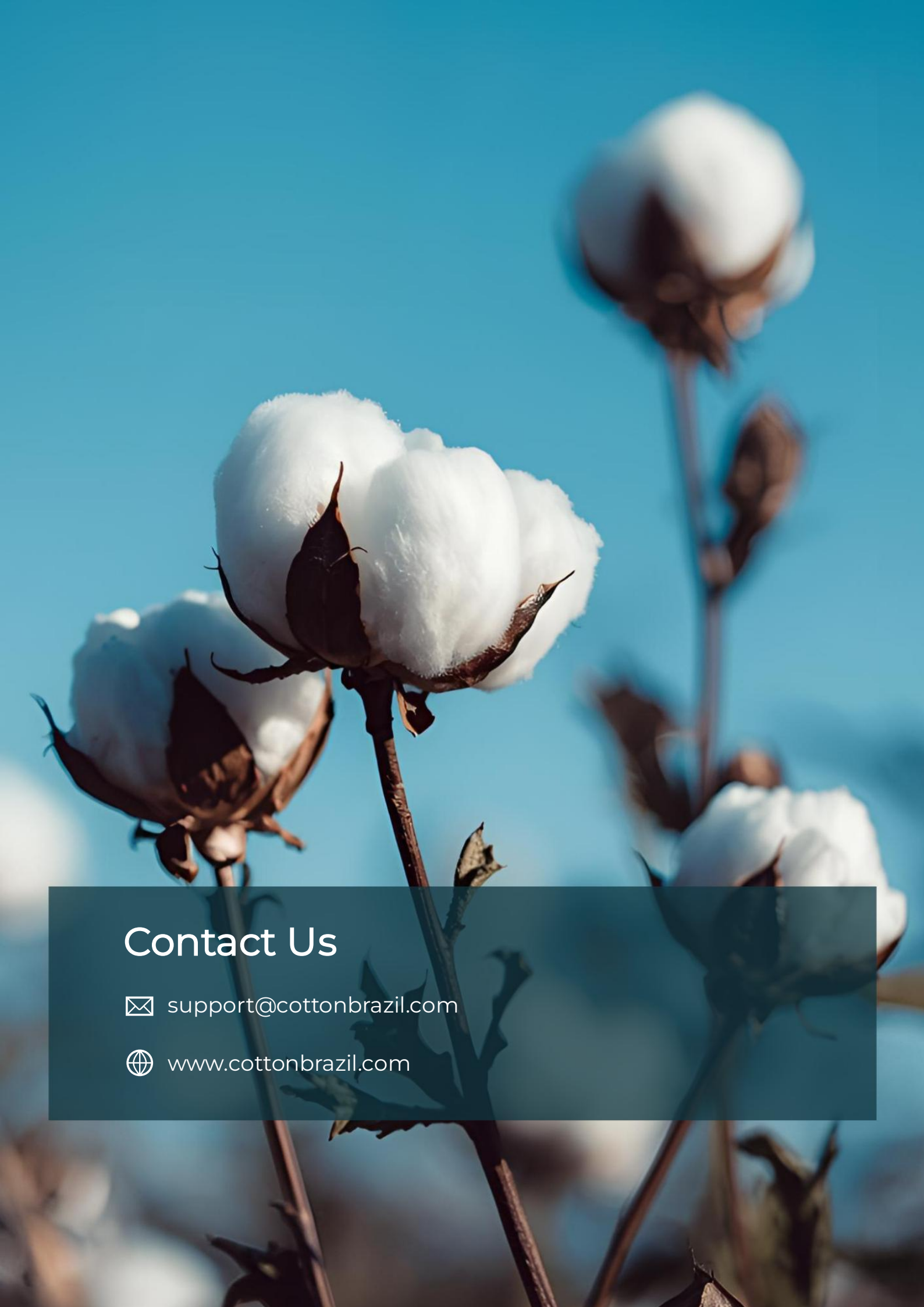
- Clean rotary flat cleaning brush in carding periodically to avoid clogging.
- Maintain adequate suction pressure in dust extraction piping
 - Trützschler carding lines: ~800 to 850 pascals
 - Rieter carding lines: ~1,000 to 1,100 pascals
- Clean the carding web-plate, trough, and coiler area every 8 hours with a dry cloth. Use water to clean, if stickiness is observed.
- Ensure enhanced cleaning of LDF filter rooms for both blow room and carding, as these often accumulate excessive trash and dust.
- Clean draw frame top rollers every 2-hours to maintain sliver quality.
- Clean the lap former draw-box drafting zone thoroughly at every creel change.
- Clean comber detaching rolls/draw box top rolls every 8 hours with water or a dry cloth.
- Clean ring frame drafting top rolls (front and back) daily on running machines with a dry cloth to remove fly and sticky deposits.
- Clean ring frame steel bottom rollers weekly with a brush or other suitable means to keep rolls clear of sticky deposits.
- Increase cleaning frequency across all stages to minimize fly accumulation.

6. Maintaining Optimal Spinning Conditions

- Maintain relative humidity and temperature as mentioned below:

Process stage	Relative Humidity	Temperature (°C)
Blow room	55±2%	34-35
Carding	50±2%	34-35
Preparation	45±2%	35-36
Ring frame	45±1%	36-37 (max 37.5)
Winding	50±2%	34-35

- For colder external conditions, use of heating lamps in draw frame, comber and speed frame is effective.

A close-up photograph of cotton plants with several white, fluffy cotton bolls. The bolls are attached to dark brown stems and leaves. The background is a clear, bright blue sky. The image is used as a background for a contact information overlay.

Contact Us

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