

g-relax pro

The Ideal Solution for Fabric Relaxation.

Looking for an innovative solution to relax fabric while saving on costs, time, and energy? Choose the G-Relax machine.

G-Relax is engineered to unwind fabric rolls, gently relax the material, and rewind it through a controlled roll-to-roll or Flat-Fold-to-Roll process.

During relaxation process, internal tension and stress within the fabric are released, allowing the fabric to return to its natural and stable state while restoring fiber balance and releasing mill-stage tension improving overall fabric behavior.

The system is especially suitable for woven, knitted, stretch, elastane blended, 2-way stretch, and 4-way stretch fabrics. By preparing the fabric in a relaxed and stabilized form, G-Relax ensures smoother handling, improved lay formation, and enhanced spreading stability.



Precision-Controlled Three-Stage Fabric Relaxation

STAGE 1: Lazy Loop System

Fabric is unwound into a photocell-controlled lazy loop.

- Eliminates rolling tension
- Restores natural fabric state
- Prevents stretch distortion

STAGE 2: Dual-Stage 45° Air Flotation

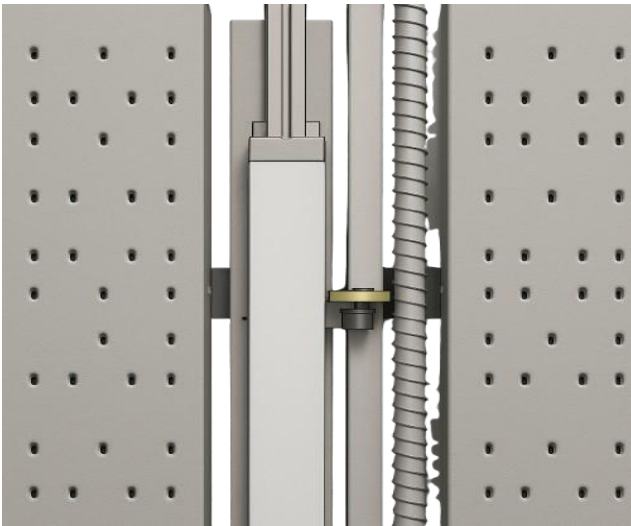
Fabric passes over an air-supported zone at 45° angle.

- Reduces friction
- Maintains smooth movement
- Ensures uniform width relaxation
- Supports delicate fabrics

STAGE 3: Sinusoidal Vibration Stage

Fabric moves through controlled vibration stage.

- Removes micro-tension
- Settles fabric layers
- Improves flatness
- Prepares fabric for accurate cutting

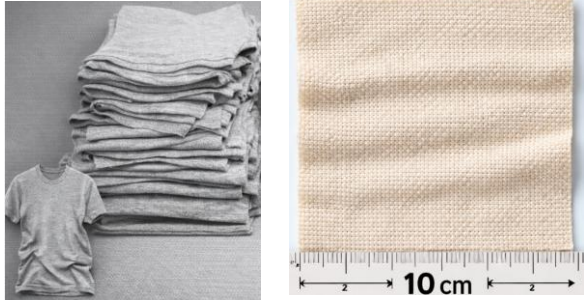
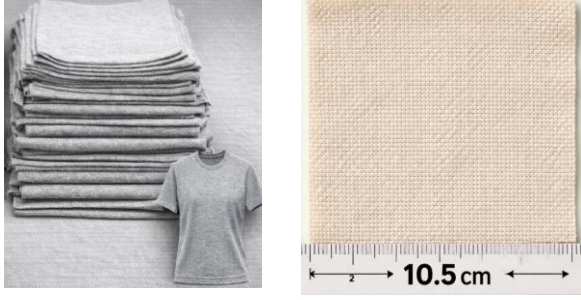


Dual-stage 45° air flotation



Industry Comparison section

Fabric Behavior: Without vs With G-RELAX PRO

WITHOUT RELAXATION	WITH G-RELAX
Fabric retains internal tension and stress	Fabric becomes relaxed and stabilized
Fabric shrinks after cutting	Dimensional stability maintained
Fabric distortion and stretch variation	Better fabric balance and consistency
Uneven spreading and lay formation	Smooth and uniform lay formation
High rejection rate	Reduced rejection & rework
Fabric wastage increases	Improved material utilization
Inconsistent garment quality	Better garment fit and final appearance
Example: 	Example: 

WHY CHOOSE G-RELAX

Operational Area	Performance Benefit	Result
Production Reliability	Consistent fabric processing across batches	Predictable output quality
Brand Reputation	Improved garment consistency	Stronger buyer confidence
Order Fulfillment	Stable cutting results	On-time delivery performance
Workforce Efficiency	Reduced manual adjustments	Better operator productivity
Process Standardization	Controlled and repeatable relaxation	Scalable manufacturing
Cost Management	Controlled material handling	Improved budget control
Investment Security	Durable industrial construction	Long service life & ROI stability
Competitive Edge	Advanced stabilization technology	Stronger market positioning

User-friendly interface with customizable settings

Equipped with an easy-to-operate HMI control panel for quick and simple setting adjustments.
Operators can customize parameters to suit different fabric types and production requirements.

G-Relax Pro is also available with PC-based control, providing enhanced monitoring, data management, and advanced operational flexibility.



One Side Edge Alignment

Accurate Edge Control with One-Side Alignment

Photoelectrical sensors continuously monitor the fabric edge to ensure precise tracking and controlled re-rolling.

The one-side edge alignment system maintains a consistent reference line, ensuring straight lay and improved cutting accuracy.

Measurement Systems

- 1. Provides real-time monitoring of total fabric roll length during processing. Ensures accurate production planning and eliminates material discrepancies.
- 2. The system is equipped with integrated measurement for length, width, and roll weight, enabling precise tracking and complete production control



Measuring Wheel



3 Emergency stop switches

Safety & Compliance

- 3 Emergency Stop Switches
- Heavy-duty stable frame construction
- Controlled airflow and vibration system
- Low noise operation (≤ 60 dB)
- Designed to meet industrial safety standards

Integrated Print & Labeling Option

Comes with a built-in print option to generate roll identification labels instantly.



Printer

Key Features

- User-Friendly Interface With Customizable Settings
- Full Forward & Reverse Fabric Movement
- Adjustable Speed And Airflow Control System
- Advanced Three-Stage Fabric Relaxation Technology
- One-Side Automatic Edge Alignment Control
- Roll-To-Roll And Flat-Fold To-Roll Processing Capability
- Tension-Free Fabric Unwinding Mechanism
- Integrated Label Printing System
- Uniform Air Distribution For Consistent Relaxation
- Heavy-Duty Structure For Continuous Industrial Operation

Technical Specifications

SPECIFICATION	G-RELAX PRO 180	G-RELAX PRO 220
Machine Model	#GRE-70-150-00	#GRE-86-150-00
Power Supply	230V±10V AC (single-phase), 50/60 Hz, 32 Amps	230V±10V AC (single-phase), 50/60 Hz, 32 Amps
Connected load	1.65 kW	1.65 kW
Dimensions (L x W x H in mm)	3310 x 2950 x 1360	3310 x 3350 x 1360
Weight	700 kg	720 kg
Load Capacity	150 kg max.	150 kg max.
Operating Temperature Range	25°C - 58°C	25°C - 58°C
Noise Level	≤60 dB	≤60 dB
Fabric spreading Width	Typically, up to 1800 mm	Typically, up to 2200 mm
Speed	Up to 16 meters per minute	Up to 16 meters per minute
Roll Diameter (mm)	Customizable, typically 450	Customizable, typically 450