



**WEAVING**



The consistent growth of the **Group** has been laying on its well-established philosophy which can be summarized by **4 pillars.**



### **Customer Care**

Understanding customer's needs and problems is the key to develop effective solutions. Any new product is the result of the experience gained while working close to over 2000 customers during last 40 years.



### **Intellectual Property**

All products, since LGL was established, have been designed and developed in our own R&D department which nowadays represents more than 10% of the total work force.



### **Efficiency & low environmental impact**

The commitment to sustainable management of resources embraces any step of the process, from design to production, and it's reflected also in the final product which delivers top performances along with high efficiency.

Since 2011 our products are "Green Certified".



### **Continuous innovation**

The path of innovation and updating of the corporate know-how, passes through technological assets in constant evolution, for the protection of which more than 200 international patents have been filed.



## Who we are

LGL is a family-owned group which has its roots in Bergamo province, within one of the most relevant textile industrial districts. The Group, which can account for over 1 million yarn feeders installed since its foundation, comprises 3 companies.

LGL Electronics, established in 1982, is specialized in the development and manufacturing of electronic yarn feeders for weaving and knitting machines.

Elsy, also established in 1982, develops and produces electronics for the textile industry.

LGL Hangzhou which was established in 2004 to expand brand presence in Far East markets through dedicated production, sales and customer service.





Manual Braking systems



Leaf brake for natural yarn



Manual rake for high tension

Weft accumulators with separate adjustable coils that can be used on all gripper and projectile weaving machines.

## ECOSMART

## ECOPROGRESS

Features	Automatic speed control	
	Weft reserve control 100% dust, light and smear-proof	
	Reversible Rotation Direction (S/Z)	
	Compatible with either traditional or Canbus looms	
	Automatic flywheel positioning upon yarn breakage	
	Pattern preview mode	
	Automatic loom stop	
	Exclusion of broken wefts	
Range of yarns	5 to 1400 Den	
Spool body diameter	110 mm	140 mm
Speed	up to 1400 m/min	up to 1600 m/min
Sensors	Optical or mechanical	
Pneumatic threading	Optional	
Braking systems	Manual, Brake, Tens, Srake, Tens-Brake	Manual, Brake, Tens, Srake, Tens-Attivo, Tens-Brake
Coil separation	0 to 2,5 mm adjustable	0 to 4 mm adjustable
Motor	Brushless	
Power consumption	20 W average	
	130 W Max.	
Acoustic pressure	< 70 dBA at max speed	
Power supply	140/300 VDC	

Certified



## Main accessories



Motorized oiling unit



Motorized waxing unit



Knot detector

Weft accumulator with separate adjustable coils that can be used on all gripper and projectile weaving machines. It is equipped with specific solutions aimed at weaving technical wefts such as polypropylene strap, jute and aggressive yarns, fibreglass, roving, monofilament yarns.

## TECNICO2



Features	Automatic speed control
	Weft reserve control 100% dust, light and smear-proof
	Reversible Rotation Direction (S/Z)
	Compatible with either traditional or Canbus looms
	10 mm internal yarn channel
	Drum designed to reduce yarn stress
	Adjustable responsiveness to suit different yarn being woven
	Automatic loom stop
Speed	Exclusion of broken wefts
Pneumatic threading	Up to 1900 m/min
Braking systems	Optional
Coil separation	Manual, Brake, Tens, Srake, Attivo
Motor	0 to 5 mm adjustable
Power supply	Three-phase asynchronous, maintenance-free
Acoustic pressure	140/300 VDC or 135 VAC three-phase
	< 70 dBA at max speed

### Multiple versions available

Each of those equipped with technical solution designed to deliver best weaving performance for each weft:

- Carbon fiber
- Polypropylene
- Fiberglass
- Jute
- Monofilament
- Kevlar
- Roving
- Steel wire

Weft pre-measuring winder for use on air-jet weaving machines.

## EVOLUTION



<b>Features</b>	Automatic speed control
	Reversible Rotation Direction (S/Z)
	Integrated Weft stop pin keyboard
	Automatic loom stop
	Exclusion of broken wefts
<b>Speed</b>	Up to 2000 m/min (3000 m/min with weft mixing)
<b>Pneumatic threading</b>	Optional
<b>Yarn range</b>	5 to 7000 Den
<b>Coil separation</b>	0 to 2,5 mm adjustable
<b>Motor</b>	Three-phase asynchronous, maintenance-free
<b>Power supply</b>	140/300 VDC or 90 VAC three-phase
<b>Acoustic pressure</b>	< 79,1 dBA at max speed

## Push-pull electronic weft brake

### Benefits

- Allows a better weft stretching into the loom
- Reduction of broken and "slack" wefts in the fabric
- Pull-Back function
- Prevents interference between weft yarns left streaming out of the nozzle after cutting back in and other weft yarns about to be inserted
- Can be installed afterwards



PUSH-PULL



### ATTIVO

Allow to set 9 different breaking zones over the loom shed. Minimize yarn stress due to tension picks. Reduce loom stops in the long run. Is suitable for fine, medium and coarse weft yarns.

**Available with**

- Tecnico2



### B-RAKE

All functions granted by ATTIVO. The presence of a rake allows management of higher tensions range.

**Available with**

- Tecnico2
- Ecosmart
- Ecoprogress



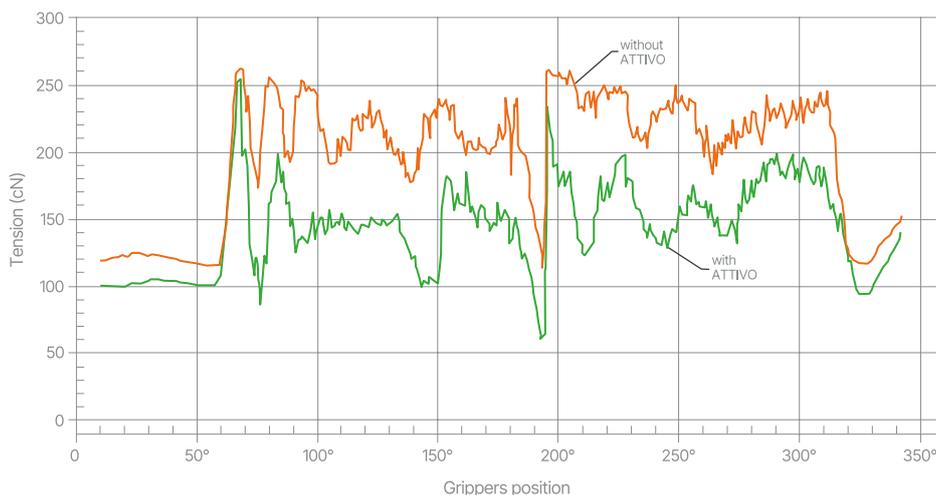
### TENS

Keeps the average tension consistent avoid fabric width changes. Reduce waste by keeping selvage constant. Lockable display avoids undesired parameters change. Save tension settings and upload them in future production runs of the same article.

**Available with**

- Tecnico2
- Ecosmart
- Ecoprogress

Tension with or without attivo





### S-RAKE

All functions granted by TENS. The presence of a rake allows management of higher tension range.

#### Available with

- Tecnico2
- Ecosmart
- Ecoprogress



### TENS B-RAKE

All function granted by B-RAKE. Manage average tension on a selected braking zone. Recommended solution for filters, anti-hail nets, screens, monofilament.

#### Available with

- Tecnico2
- Ecosmart
- Ecoprogress



### TENS ATTIVO

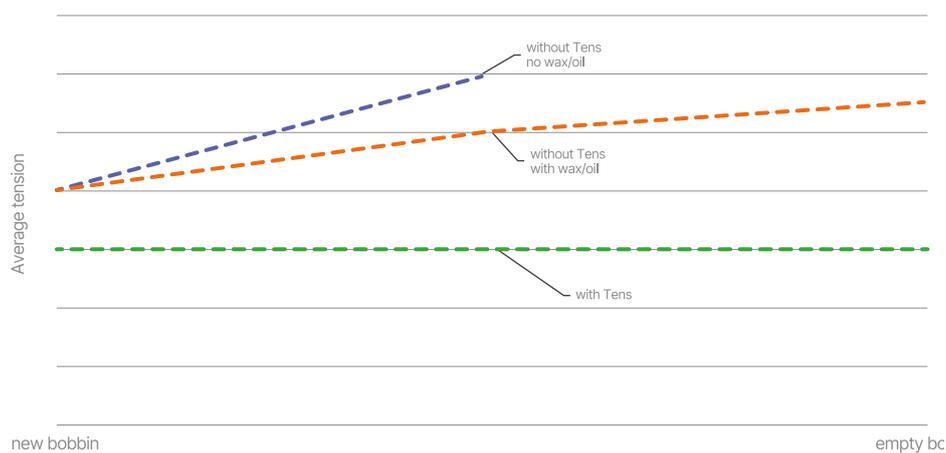
Integrates TENS and ATTIVO Functions in one product. ATTIVO grants the manipulation of the single tension curve through different percentages settings over up to 9 zones over the loom shed. TENS moves the ATTIVO support to keep the pre-set tension constante on the long run.

#### Available with

- Ecoprogress



Average tension change with or without tens



Suggested applications



Yarn	Weft feeder	Suggestions	Output equipment1 (Bristle Brush)	Output equipment2 (TWM)	Input braker
<b>DENIM</b>	EcoProgress and EcoSmart	2 colors: EcoProgress 4 colors (or more): EcoSmart	Chinese mane bristle brush + standard leaf brake	TWM LT10	Crocodile on the creel
<b>SHIRTING</b>	EcoSmart		Chinese mane bristle brush + standard leaf brake	TWM KI and/or TWM KR20	Crocodile on the creel
<b>CURTAINS</b>	EcoProgress and EcoSmart	Mixed equipment 3 EcoProgress 5 EcoSmart 2 EcoProgress 6 EcoSmart	Goat fur bristle brush + standard leaf brake  0,2 nylon bristle brush + standard leaf brake	TWM KR20 EcoSmart TWM PE40 EcoProgress	Crocodile on the creel
<b>UPHOLSTERY</b>	EcoProgress and EcoSmart	Mixed equipment 4 EcoProgress 2 EcoSmart 6 EcoProgress 2 EcoSmart	Chinese mane bristle brush + standard leaf brake	TWM LT10 or TWM KR20 EcoSmart TWM RR80 or TWM PE40 EcoProgress	Crocodile on the creel
<b>WOOL</b>	EcoSmart	Lubrication device suggested	Chinese mane bristle brush + standard leaf brake	TWM KR20 TWM KR40	Crocodile on the creel
<b>TERRY TOWELING</b>	EcoSmart		Chinese mane bristle brush + standard leaf brake	TWM LT10 TWM LT0S	Crocodile on the creel
<b>SILK</b>	EcoSmart	Lubrication device suggested	Goat fur bristle brush + standard leaf brake	TWM LT05 TWM KR20 or A15 metal brush	Crocodile on the creel



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