

Surprising and Admirable Aspects of the Suminoe Textile Group's Technologies and Products

With a history of more than 130 years, the Suminoe Textile Group offers wide-ranging products and technologies. While producing products that meet customer needs and that are friendly to the environment, the Group has achieved a wide variety of little-known but outstanding achievements.



Interior Fittings

Replacing PVC backing with the ECOS® backing can reduce CO₂ emissions equivalent to the amount of CO₂ absorbed by about **410,000** Japanese cedar trees, per year

A forest of 410,000 Japanese cedar trees covers an area roughly **75** times as large as Tokyo Dome



ECOS® (LX Series)

[Explanation]

[Yearly CO₂ absorption amount by ECOS®]
Using LX Series ECOS® backing instead of PVC backing can increase CO₂ absorption by the amount absorbed by approximately 410,000 Japanese cedar trees per year. A forest of 410,000 Japanese cedar trees covers an area roughly 75 times the size of Tokyo Dome (which covers 4.7 hectares). This figure is calculated by dividing the greenhouse gas (GHG) emissions generated during production of the LX series by the amount of CO₂ absorption by Japanese cedar trees.

Suminoe Techno Co., Ltd.

Recycling about **19** PET bottles per one kg of スミトロン® (SUMITRON)



Recycled yarns スミトロン®(SUMITRON) continuous fiber made from recycled PET bottles

[Explanation]

[Recycling about 19 PET bottles per one kg of スミトロン® (SUMITRON)]
We produce スミトロン® (SUMITRON) by mixing chips recycled from used PET bottles and pure polyester chips, in a 50:50 ratio. Since 26 grams of recycled chips are generated from one PET bottle (500 ml), we recycle about 19 PET bottles (500 ml) when we produce 1 kg of スミトロン® (SUMITRON). We therefore contribute to reducing the environmental impact and amount of waste, through recycling PET bottles into fibers that are used as raw materials to produce carpets and curtains.

Interior Fittings

Recycling approximately **12%** of carpet tiles discarded per year



New carpet tiles (ECOS® ID-4100)

[Explanation]

[Recycling 12% of carpet tiles discarded per year]
Waste carpet tiles are recycled by specialized companies, so as to be reused as part of raw materials for the production of new carpet tiles. This is the reason why this series of products is referred to as recycled carpet tiles produced under the "closed-loop recycling" system. So, what percentage of carpet tiles (including those of other companies) discarded in Japan do we recycle? Our recycling percentage is estimated at approximately 12%, according to the calculation based on the amount of recycled powder* used in producing new carpet tiles, and the size of Japan's carpet tile renewal market (which is assumed to be equivalent to the amount of waste carpet tiles).

*Recycled powder: Recycled polyvinyl chloride compound, which is a synthetic resin material extracted with high efficiency from used carpet tiles.

Functional Materials

Producing non-woven fabrics containing more than **90%** recycled PET



Raw cotton

Electric carpet

[Explanation]

[Producing non-woven fabrics containing more than 90% recycled PET]
Suzhou Suminoe Textiles Co., Ltd. (SSO, China) produces the main unit (heater) of hot carpets and its primary component, i.e., non-woven fabrics. SSO uses recycled polyethylene terephthalate (PET) as a raw material for non-woven fabrics. The usage ratio of the recycled material is more than 90%. The company works on the manufacturing of environmentally friendly products.

Traffic Facilities

Suminoe products account for **65%** of seat covering materials used for railway cars in Japan

We also offer such a cute interior material!



Keio Railway

Tango Textile Co., Ltd.

Embedding an average of **4,200** pile yarns into the woven base fabric, measuring 30.3cm per side



Tango Textile Co., Ltd. produces a handwoven carpet known as "Tango Dantsu," on which patterns are expressed by embedding pile yarns in the base fabric while the fabric squeezed with a tool called a "hook gun." Handwoven dantsu carpets have a long history, said to date back to the era of the Yamatai kingdom.

Reliable Quality

[Small anecdote about Suminoe]

Looms in the Nara Factory of Suminoe Textile Co., Ltd. are named after mountains and rivers mainly in Japan. Among names of these looms are Ena, Goryu, Banri, Ontake, Usu, Senri, Akaishi, Takami, Naeba, Koya, Tempo, Choko, Gassan, and Hachibuse. It is said that since the Factory had many employees coming from rural areas of Japan when it was first established, these looms were given the names of mountains and rivers in their home districts to help employees feel an affinity for them.



Display board hanging from the ceiling of the factory, listing the names of the looms



You may find Suminoe product when traveling anywhere throughout Japan! Whenever you take a private or business trip by train, you may find yourself sitting on seat coverings made by Suminoe Textile.

Ishikawa Factory of Owari Seisen Co., Ltd.

About **7.9%** meters of cloth is checked per minute

At the Ishikawa Factory of Owari Seisen Co., Ltd., inspectors visually check finished products to ensure that they have no flaws or stains, before shipping. All these inspectors have passed a certifying certification. It is possible to identify who has inspected each shipped product. The figure on the left has been calculated by dividing the average length of fabric checked by one inspecting machine per day by the number of working hours.



Technical Center of Suminoe Textile Co., Ltd.

Our Company's deodorant testing method was adopted for **ISO 17299-5**



ISO international conference

A common testing method that is used as an **international standard**

A deodorant testing method for textile products, which Suminoe Textile had developed and proposed, was adopted for the ISO 17299-5 international standard. Consequently, it has gained international recognition, becoming a globally common testing method.

[What is ISO 17299-5] A testing method comprising five parts for determining the deodorant property of textile products.

[Advantages of ISO 17299-5] Able to evaluate textile products using mixed odors, as in the case of an indoor environment.

- Requires only one testing, without needing measurements of each odor component.
- Able to check changes in deodorant property when multiple odor components overlap.