

Sputtering System to Create Captivating Metallic Textiles

營造金屬效果的磁控濺射捲繞鍍覆系統

Metallising is regarded as a redesign and finishing process which is able to improve functionalities and add decorative value to products. The sputtering coating technology provides great potential for the development of innovative textile products.

The developed magnetron sputtering system for roll-to-roll processing is a new system for large-size functional and decorative textiles production. It produces sophisticated metallic effects with stencil pattern designs in an environmentally friendly approach.

金屬加工方法是一種改善面料功能，改變產品外觀的設計和後整理的過程，濺射鍍覆工藝系統擴闊了生產嶄新紡織品的發展潛能。

新研發的磁控濺射捲繞鍍覆系統是用於生產大型寬幅紡織面料的新型生產設備，用環保的方法，透過新型模板裝置為紡織品設計複雜的金屬圖案。



Application 應用

The magnetron sputtering system can treat fabrics with woven and non-woven structures. The stencil-plate film is a key element of the system on which the device runs simultaneously with the fabric to create patterns.

Tests on the fabric produced by the sputtering system were carried out in accordance with international specifications. The results show that it is up to industry standards and suitable for industrial applications such as metallic coatings for luxurious furnishings, fashions and accessories.

The whole process is an environmentally-friendly production which changes the properties and appearance of textiles in non-aqueous conditions without discharging any polluted water and injurant.

磁控濺射捲繞鍍覆系統可以處理多種結構類型的機織布或無紡布，圖案製備裝置是系統的重要部件，與面料同步運轉時生產出連續花紋圖案。

捲繞鍍覆系統所生產的紡織品符合國際評估標準的測試，產品符合紡織生產要求，適合設計製作高檔服裝的金屬面料。

磁控濺射捲繞鍍覆系統在無水條件下進行，整個生產過程綠色無污染，不排放任何污水和有害物質。

Industry Benefits 業界效益

After the coated treatment, the fabric will have added functions such as water repellence, anti-static, anti-bacteria, UV shielding, radiation protection, electromagnetic wave shielding and good permeability. Comparing with current laminated metallic fabrics available in the market, handling and texture of the coated materials treated by the sputtering system are greatly improved.

Regarding design concerns, the coated textiles will have metallic shades with their appearances in terms of lights, shadows and colours changing in different environments. It is suitable for the production of high-end fashion items and accessories by adding value to the products.

The production of the sputtering system can provide a more cost efficient solution than the application of existing metallic coating techniques, providing a significant market potential and numerous business opportunities.

經磁控濺射捲繞鍍覆系統處理的布料可添加防水、防靜電、抗菌、防UV、防輻射和抗電磁波等功能。鍍覆後的面料透氣性、柔軟度和肌理結構都顯現出理想的效果。

在設計方面，經鍍覆的金屬光和顏色呈現出多樣的變化，可應用於生產高檔服裝和配飾，增加紡織品的附加值。

與現有的金屬塗層工藝相比，通過捲繞鍍覆系統生產的紡織品的性價大比幅提高，為業界開拓重要的市場，帶來新商機。

Licensing Details 獲取專利

A non-exclusive license covers right to manufacture the sputtering system for large-size functional and decorative textiles production.

非獨家專利授權許可成為製造大型寬幅紡織面料的磁控濺射捲繞鍍覆系統生產商。

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