

智能壓力衣

Smart Pressure Monitored Suit (SPMS) – Rebuild Body Contour

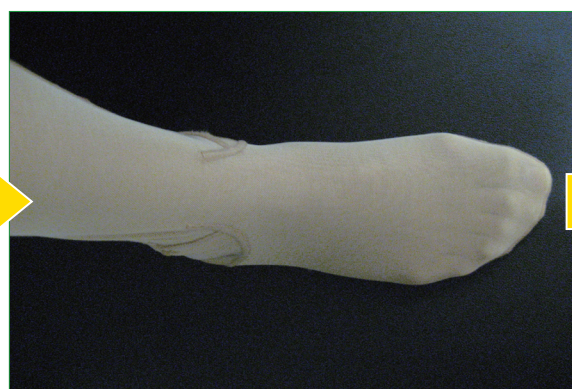
新科技研發的壓力治療彈性衣服

A newly designed elastic garment developed using advanced technology for providing pressure therapy

「智能壓力衣」(SPMS)是全亞洲首個將壓力治療應用於醫學的嶄新產品，已取得中國的專利權並正在申請美國專利。製作「智能壓力衣」的質料經科學測試證實在拉力、柔軟度、透氣度、舒適度及耐用度等方面均為最佳。患者的任何受傷部位，都可透過立體掃描儀和電腦化的繪製系統(YUKA)製成平面紙樣，再縫製成緊貼身體的「智能壓力衣」。它的壓力範圍亦可因應不同病情而調整。研究證實，「智能壓力衣」更能有效治療燒傷疤痕及靜脈曲張等問題。而它的美觀、舒適及耐用程度均備受讚賞。



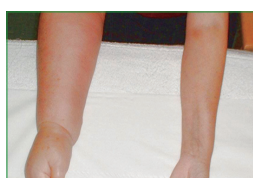
治療前
Before Treatment



治療中
With SPMS



治療後
After Treatment



淋巴水腫
Lymphoedema



靜脈曲張
Varicose vein



增生疤痕
Hypertrophic scar

The Smart Pressure Monitored Suit (SPMS) is the first innovative medically prescribed pressure therapy product designed in Asia. Patent has been awarded in the People's Republic of China and is being applied in the United States. The SPMS is fabricated using the best available fabric scientifically tested on its tension, softness, permeability, comfort and durability. By using the 3D scanner and the computerized pattern drafting system (YUKA), any injured body region of the patient can be transformed into 2D paper patterns, which will then be applied for tailor-making the tightly fitting SPMS for the patient. Its pressure range is monitored based on the medical prescriptions. Previous studies have proven its efficacy in treating burn scars and varicose veins (Li-Tsang et. al, 2009, Lai & Li-Tsang, 2009). It is comfortable to wear and cosmetically acceptable.

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專利編號及國家：PRC 200710308105.3 (中國)，專利申請編號及國家：12/341,499 (美國)

特色與優點

- 應用了立體掃描儀以精確量度身體尺寸
- 能配合不同病情，譬如燒傷後增生性疤痕、靜脈曲張、淋巴水腫等，容易地調校合適的壓力份量
- 選取的彈性物料經科學證明高度舒適、耐用，並且不會影響外觀
- 治療效果更顯著，更可縮短療程

應用

- 適用於不同病情：燒傷後增生疤痕、手術後的淋巴水腫、靜脈曲張及深層靜脈栓塞等
- 它具彈力的特性更可用於整形手術，譬如在乳房切除手術後重塑人體線條
- 應用於骨科病症例如關節痛和發炎，作保護用途（例如膝蓋、足踝、手肘、手腕、手指）。

獎項

第三十七屆瑞士日內瓦國際發明及創新技術與產品展覽 - 金獎
(2009年4月)

Patent No: PRC 200710308105.3 (China), Patent Application No: 12/341,499 (US)

Special Features and Advantages

- Accurate body measurement using 3D body scanner
- Pressure generated can be adjusted for different medical conditions such as hypertrophic scars, varicose vein, lymphoedema
- Fabric selected is scientifically tested for comfort, durability and cosmesis
- Time for therapeutic intervention can be shortened and clinical outcomes become more effective

Applications

- Application in different medical conditions including post burn hypertrophic scar, post surgery lymphoedema, varicose vein, deep vein thrombosis
- Its elastic property can be used to reshape body contour after plastic reconstructive surgery such as mastectomy
- Use in orthopaedic conditions (eg. Joint pain, inflammation) as protective support (eg. Knee, ankle, elbow, wrist and fingers)

Award

Gold Award - 37th International Exhibition of Inventions, New Techniques and Products, Geneva (April 2009)

