

Thermore – Thermal Insulation

How it began:

1972: Foundation of the later Thermore Spa by Lucio Siniscalchi in Milan, Italy. His vision: Let synthetic fibres work as thermal insulation material for apparel. In the beginning of the 70's this idea was revolutionary since only natural materials like wool and down had been used as insulation. As an employed General Manager for an Italian producer of pillows and quilted articles he did not have the freedom to realise his vision. This was the birth of Thermore Spa. From this point forward, polyester not only became common as thermal insulation material but helped create a complete new product category. As a consequence to the introduction of this synthetic thermal non-woven, nearly all padding manufacturers changed to using polyester.

In addition to use of synthetic fibres a special technology of "fixing" the surface was developed. This technology helped prevent fibre migration through the lining or face fabric. This technology is still considered unique and innovative.

Thermore's first customer was Colmar, an Italian company known for technical skiwear.

1980: Introduction of the „Special Reduction“ process: Paddings with an identical weight are produced in four different thicknesses. The thickness is reduced by 50% step by step, whereas the thermal capacity decreases only by 9%.

At the same time the brand name "Thermore" is registered worldwide.

1985: During the mid 80's the first version of T37 Dynamic is introduced. This product is the first padding with a dynamic temperature balance.

1986: The first sales office for North America opens in New York, N.Y.

1988: The first production facility in the USA becomes operational in Texas.

1990: Foundation of Thermore Far East Ltd., Kowloon, Hongkong.

1992: Patrizio Siniscalchi enters the company as the second generation. He involved in all aspects of the company, production, inventory control, accounting, administration and sales.

1997: Opening of a new factory in Bucharest, Romania.

since 2000:

Patrizio Siniscalchi is taking over more and more management tasks, which includes heading of the sales department. He organises several restructuring processes which become necessary to accompany a quickly growing company. This included the set-up or the re-organisation respectively of the distribution system in the USA and the Far East.

2006: In spring of this year Peter Mügge is taking over the responsibility for European sales and marketing. Lucio Siniscalchi is still involved in strategic decisions.

Thermore is supplying companies like Colmar, Fila, Chanel, Tommy Hilfiger, Marc O'Polo and L.L.Bean.

The profile:

THE COMPANY:

Thermore S.p.a., the specialist for padding in active and leisure wear, is part of Gruppo FI.SI (Fibre Sintetiche), which is as well the holding company of Thermore Far East Ltd, Thermore USA Inc. and Romania Thermal Insulation srl. Worldwide there about 100 people working for the group. A global distribution network with six international sales offices is providing close contact to customers on three continents. The locations are Milan (I), Hongkong (CHN), Sprockhoevel (D), Odense (DK), Olympia (Washington State, USA) und Cornelius (North Carolina, USA). A major part of the production is taking place in Thailand, but also in Italy, the USA and Romania.

As a consequence of the specialisation in apparel Thermore is one of the worldwide leading suppliers in this field. Until today the product portfolio is clearly focused on functional non-woven for sport and outdoor clothing and more recently for footwear. The brand name guarantees a high standard of quality and functionality which is secured by numerous patents. Thermore are annually spending a high five digit amount for maintaining them. At the same time - based on the know-how of many years of experience - new products which are in line with the market requirements are developed. There is a constant fine tuning on the three essential components for a padding: fibres, structure and finishing.

Licence agreements with garment brands guarantee the product quality and safeguard the flow of information to retailers and end-consumers. Therefore Thermore are supplying customised sew-in labels and hang-tags with extensive product information in English, French, Italian, German, Japanese and Russian. Thermore are member of the „Camera Nazionale della Moda Italiana“.

THE PRODUCT:

Thermore's thermal insulation materials are functional paddings. The majority of the products are made of polyester. But more recently sustainable raw materials like Tencel and Ingeo and also recycled polyester have been added. There are seven product categories available in max. four thicknesses (HL= High Loft, C = Compact, SC = Super Compact, UC = Ultra Compact) and eight different weights from 40 to 200 gr./m². Depending on the product category the weights of 40g, 60g, 80g, 100g, 115g, 150g, 170g and 200g can be supplied. Due to technical reasons not every product can be manufactured in each weight or thickness.

An essential strength and advantage of Thermore's thermal insulations is the prevention of fibre migration. A special combination of selected polyester fibres with different resins prevent fibres from migrating through the face or lining material which

would lead to visible surface fibres. As well the surface structure of the padding remains stable and the thermal efficiency is maintained.

Another key advantage of Thermore paddings is the high insulation value in a compacted profile. A perfect example can be found in the range of TMK. If this padding is reduced by 50 percent the warmth retention is only decreased by 9 percent. The reason is the patented SR process which “jolts” the surface with a special technology. A specific selection of polyester fibres and resins guarantee the superior softness of the paddings.

The perfected and highly specialised process technologies of Thermore guarantee a superior long lasting quality. The paddings are machine washable, can be tumbled and are dry cleanable – without losing their functionality.

PRODUCT CATEGORIES AND THEIR STATUS QUO:

Thermore are supplying optimum paddings for different end-uses like fashion, sport and shoes. Highly specialised niche products are adding to the core business.

Thermore T37 Dynamic:

The most technical product of the range: highly functional, strong turn-over and presently with the highest increase in volume. The special non-woven structure is reacting to the outer temperature. Micro spaces in the chemical structure, the so called “thermal gates”, are able to open and close. With decreasing outer temperatures the gates close and optimal warmth excess is achieved. With rising outer temperatures the gates open and release warmth. T37 is giving its optimal performance in a temperature range between minus ten and plus ten degrees Celsius. End-uses: active wear (ski and mountaineering), but more also leisure wear.

Thermore TMK:

The foundation of the Thermore product line – known for its versatility and design friendly nature. The patented SR (Special Reduction) process allows four different thicknesses per weight. For example: if the thickness of a common 100g padding is reduced by 50 percent its warmth retention will only decrease by nine percent. Even in a compacted profile, TMK is considered an equal to thicker, bulky paddings of the same weight. End-uses: Outdoor and leisure wear.

Thermore Ecodown:

The synthetic alternative to down. Ecodown has an exceptional down like, soft touch. Extremely fine denier (nearly micro) fibres are used. This padding is a functional, easy care and pro-allergenic alternative to fillings of animal products. The fine structure is a very effective insulator - even in low weights and thicknesses. This year a new, extremely voluminous and soft version has been introduced: Ecodown XL. All Ecodown articles from 2007 onwards will consist of 95% polyester and 5% renewable fibres (for example Ingeo). End-uses: sports wear and fashionable outdoor.

Thermore WR FR:

Introduced two years ago this version is extremely hardwearing. Tests have shown that even after 100 machine wash cycles the quality has not suffered. It can as well

be used for piece dyeing processes. End-uses: work wear, children's wear and high fashion.

Thermore Stretch:

The special fibre construction and a sophisticated use of resins provide this padding with astonishing elasticity. Nevertheless it is machine washable and dry cleanable. It can also be used for direct lamination to linings and face fabrics. End-use: functional outdoor.

Thermore Opera:

A niche product. The highly efficient insulation is laminated to a waterproof, windproof and breathable membrane. It is inserted between face fabric and lining. End-uses: Hunting wear, weather-proof clothing, knit shells.

Thermore Therma-scent:

Wellness meets function. A special anti-microbial treatment prevents bacteria from growing and thus from unpleasant odour. The garments stay fresh longer and need less washing. This non-woven is only available in a High Loft version at a weight of 115g. End-uses: hunting and active wear.

Thermore Sustainable:

A high-quality niche product which is, however, getting more and more interest mainly from outdoor brands. The padding consists of a blend of polyester with re-growing and sustainable raw materials like Tencel, Ingeo and organic cotton. The "Rinnova" range is made of virgin and recycled polyester. End-uses: Active wear, mainly outdoor.

The market for Thermore thermal insulations:

Padding is seen as an unrenounceable part of clothing- mainly for the winter seasons in the Northern hemisphere. Other thermal insulations like temperature balancing materials, PCMs (Phase Change Materials), fleece, down or fur are serving other markets segments or are in different price categories

The product advantages of Thermore:

- No fibre migration
- Washable and dry cleanable
- Unique portfolio of different added-values, weights and thicknesses
- Unique property of T37
- Customised woven labels
- Nearly identical products in Europe and Asia
- Fast and efficient handling – as well for the brands as for the manufacturers and vendors
- Excellent price/value ratio

The near future:

For the time being Thermore will be a specialised supplier to the garment industry. The recent trade shows have shown that this market segment still has huge potential for Thermore. Recent developments have focussed on shoe linings which have been introduced at the Italian trade show Linea Pelle. In the future, special paddings for sleeping bags will be developed as Thermore have excellent access to the outdoor market due to long-term relations with relevant brands. Industrial end-uses or home textiles are presently not foreseen.

The exhibitions:

Thermore are showing twice yearly on the most important international trade shows:

- Munich Fabric Start, Munich (D)
- Milano Unica, Milan (I)
- Texworld, Paris (F)
- Interstoff Rossija, Moscow (RUS)
- Intertextile Shanghai (CHI)
- Outdoor Retailer, Salt Lake City (USA)

The direct link to the company and products:

www.thermore.com