

Technology Descriptions & Environmental Benefits

SOCIAL & ENVIRONMENTAL BENEFITS

THE PERFORMANCE THE PROPERTY OF THE PERFORMANCE THE PERFORMANC

CHEMICAL-FREE PERFORMANCE FEATURES

HEAT-MX's proprietary technology platforms provide many breakthrough performance features as well as environmental benefits without use of any chemical, which also allows the performance features to last until the end of the life-cycle of finished goods.

CRUELTY-FREE



HEAT-MX offers a wide range of technology options matching or even exceeding the performance of natural down feather material without using any animal-based-ingredient. This technical feature is incorporated in the award-winning nDown™, COMPACT MX, GLV-MX, LOFT MX, STRETCH MX and VEGAN DOWN MX product categories of HEAT-MX™.

ENERGY-SAVING



HEAT-MX[™] offers the largest energy saving technology in the global textile industry based on its proprietary patent-pending technology platform. It reduces the drying time of apparel, home textiles, sleeping bags, etc., in home laundry as much as 75%. Thanks to the benefits of this technology, it allows people to wash at home the items which are traditionally dry-cleaned. It not only benefits the hygiene of the goods people use on daily basis in the means of more frequently washing them, but also helps reduce the cost of maintenance and increase longevity of the products. This breakthrough technical feature is created without any chemical additive.

HOME WASH / NO DRY CLEAN



HEAT-MX™ technologies are engineered to allow all items containing HEAT-MX products to be washed at home without having to have them dry-cleaned, including the items filled with natural down feather. Such items as winter apparel, home textiles, sleeping bags, etc., with down-feather material as its thermal insulation material can benefit from this cutting-edge HEAT-MX™ Technology. The technical feature provides significant benefits such as improved hygiene by the means of more frequently washing them, cost reduction of maintenance, improved longevity, etc. While it is important to follow the wash instructions of the items consumers use, provided by the manufacturers and brands, this technology helps build a wide range of goods with significant environmental benefits as well. This technical feature uses no chemical treatment and is incorporated in all products HEAT-MX™ offers in the market.

Note-1: Information presented in this document are product-code dependant and may change without notice. Some of the technical features may not be applicable on some specific HEAT-MX products. Please contact your HEAT-MX $^{\text{TM}}$ sales representative for complete and updated information.



Technology Descriptions & Environmental Benefits

SUSTAINABLE TECHNOLOGIES



HEAT-MX[™] offers many important technical features in its products to benefit the environment, including HOME-WASH/NO-DRY-CLEANING, LARGEST EVERGY SAVING TECHNOLOGY IN THE GLOBAL TEXTILE INDUSTRY, CLEAN RECYCLING INITIATIVE™, CLEANLY-RECYCLED and CLEANLY-RECYCLABLE technologies. HEAT-MX's commitment for the environment has been recognized by ISPO TOP OF INNOVATION AWARDS.

Please ask your HEAT-MX™ sales representative for more details.

PERFORMANCE FEATURES

ABRASION RESISTANCE



HEAT-MX's unique product structure provides strong abrasion resistance which help withstand tough manufacturing processes and environments. Thanks to the innovative product structure, applied in iDown™, nDown™, GLV MX and COMPACT MX of the HEAT-MX product categories, the technical features engineered and incorporated in the products remain intact after even toughest manufacturing and handling processes in the textile industry.

DRI-CAVE™



Based on HEAT-MX's patent-pending technology, it removes moisture created by our own sweat efficiently to provide ultimate dry-comfort and is a very important technical feature for apparel, footwear, glove, etc., designed for a medium or high level of activities. Other items such as home textiles, sleeping bags, etc., can also benefit from this exceptional performance feature. This technical feature uses no chemical treatment and is incorporated in the award-winning nDown™, iDown™, COMPACT MX and GLV MX product categories of HEAT-MX™.

LRTD™ TECHNOLOGY



As the technology basis of all HEAT-MX™ products, this Long Range Thermal Dynamics (LRTD™) Technology offers most efficient ways of trapping and conserving body heat. Thanks to this innovative technology feature, goods made with HEAT-MX™ products offer superior and long-lasting warmth. Please ask your HEAT-MX™ sales representative for more details.

MOISTURE MANAGEMENT



Note-1: Information presented in this document are product-code dependant and may change without notice. Some of the technical features may not be applicable on some specific HEAT-MX products. Please contact your HEAT-MX[™] sales representative for complete and updated information.









Technology Descriptions & Environmental Benefits

HIGH-VOLUME



HEAT-MX offers the breakthrough technology feature of VOLUME INCREASE for the items filled with natural down-feather or synthetic loose fibers for a given weight of material used. This cutting-edge technology helps manufacturers and brands to use lower quantity of filling material for same or higher level of warmth for the benefits of reduced cost, environmental contributions, etc. This technical feature uses no chemical treatment and the award-winning iDown™ and nDown™ product categories benefit from this technology. Please ask your HEAT-MX™ sales representative for more details.

ODOR-RESISTANT



Based on HEAT-MX's proprietary and award-winning DRI-CAVE™ Technology platform, it provides a natural and effective way to remove moisture, which in turn creates a dry environment to resist growth of microorganisms. This important HEAT-MX™ technology feature does not use any chemical and is incorporated into several selected product categories of HEAT-MX™. Please ask your HEAT-MX™ sales representative for more details.

SWEAT-RESISTANT



It is very important to keep our body dry especially in high mobility applications such as sportswear, workwear, military / police uniforms, etc. HEAT-MX's innovative and award-winning DRI-CAVE™ Technology provides an effective way to remove sweat from our body. This important HEAT-MX™ technology feature does not use any chemical and is incorporated into several selected product categories of HEAT-MX™. Please ask your HEAT-MX™ sales representative for more details.

WARM EVEN IN WET WEATHER



Combined with various breakthrough innovations of HEAT-MX™, e.g., DRI-CAVE™, LRTD™, MOISTURE MANAGEMENT, etc., items made with HEAT-MX™ products are warm even in wet weather and this includes the items filled with natural down-feather material. In cold weather, people may feel particularly uncomfortable when there is too much moisture close to body. Various technologies of HEAT-MX™ incorporated in all of the product categories the company offers are designed and engineered to provide ultimate comfort regardless of the activity level or type of filling material used, e.g., natural down-feather. Please ask your HEAT-MX™ sales representative for more

WATER RESISTANCE



Despite of being the type of material with the lowest level of density in the textile industry, HEAT-MX's breakthrough innovations create a high level of water resistance selected products, namely nDown™, iDown™, GLV MX, COMPACT MX, etc. This technical feature is engineered with the proprietary non-woven fiber structure of the HEAT-MX™ products with no chemical treatment. This important technical feature allows brand and manufacturers construct the items designed to withstand light to moderate level of precipitations without heavy waterproof chemicals and it helps create significant improvements in various performance aspects while significantly benefiting the environment

Note-1: Information presented in this document are product-code dependant and may change without notice. Some of the technical features may not be applicable on some specific HEAT-MX products. Please contact your HEAT-MX $^{\text{TM}}$ sales representative for complete and updated information.

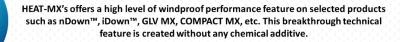


Technology Descriptions & Environmental Benefits

WATER REPELLENT

HEAT-MX provides the highest level of water repellency of its kind to help protect water penetration from outside towards body. This technical feature also contributes to the moisture management within its structure and help people feel comfortable even in wet environment. All HEAT-MX™ products benefit from this technology.

WINDPROOF



Note-1: Information presented in this document are product-code dependant and may change without notice. Some of the technical features may not be applicable on some specific HEAT-MX products. Please contact your HEAT-MX[™] sales representative for complete and updated information.





Technology Descriptions & Environmental Benefits

TEMPERATURE RATINGS

TEMPERATURE RATING – COLD



Under HEAT-MX's proprietary temperature rating program, goods made with various types of HEAT-MX™ products can offer the COLD rating covering 0°C ~ -20°C or 32°F ~ -5°F. HEAT-MX™ works with brands and manufacturers to help build finished goods for this particular temperature rating with appropriate product weight as well as other necessary performance features. Temperature ratings for lower temperature ranges are also available. Please ask your HEAT-MX™ sales representative for more details.

TEMPERATURE RATING – VERY COLD



Under HEAT-MX's proprietary temperature rating program, goods made with various types of HEAT-MX™ products can offer the COLD rating covering -20°C ~ -40°C or -5°F ~ -40°F. HEAT-MX™ works with brands and manufacturers to help build finished goods for this particular temperature rating with appropriate product weight as well as other necessary performance features. Temperature ratings for lower temperature ranges are also available. Please ask your HEAT-MX™ sales representative for more details.

TEMPERATURE RATING – EXTREME COLD



Under HEAT-MX's proprietary temperature rating program, goods made with various types of HEAT-MX'[™] products can offer the COLD rating covering -40°C ~ -60°C or -40°F ~ -75°F. HEAT-MX'[™] works with brands and manufacturers to help build finished goods for this particular temperature rating with appropriate product weight as well as other necessary performance features. Temperature ratings for lower temperature ranges are also available. Please ask your HEAT-MX[™] sales representative for more details.

TEMPERATURE RATING – EXPEDITION



Under HEAT-MX's proprietary temperature rating program, goods made with various types of HEAT-MX™ products can offer the COLD rating covering -60°C ~ -100°C or -75°F ~ -150°F. HEAT-MX™ works with brands and manufacturers to help build finished goods for this particular temperature rating with appropriate product weight as well as other necessary performance features. Temperature ratings for lower temperature ranges are also available. Please ask your HEAT-MX™ sales representative for more details.

Note-1 – Information presented in this document are product-code dependant and may change without notice. Some of the technical features may not be applicable on some specific HEAT-MX products. Please contact your HEAT-MX™ sales representative for complete and updated information.

Note-2: Some of the technical features presented in this document may be applicable for a particular type of applications. For example, a specific temperature rating may be dependent on application types, application methods, etc. Information presented in this document may change without notice. Please contact your HEAT-MX™ sales representative or info@heat-mx.com for more details.

DOCUMENT ID: SEB-GMX-1-2202-10

Replaces all previous documents issued under the same purpose