armacell®

MAKING A **DIFFERENCE**
AROUND THE **WORLD**.

WELCOME TO ARMACELL – A COMPANY TRULY MAKING A DIFFERENCE AROUND THE WORLD.

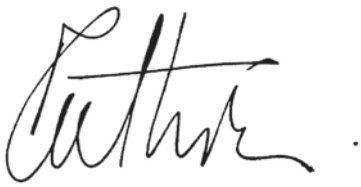
Whether it's our high performance systems helping conserve energy and reduce CO_2 emissions or our unique applications for oil and gas, wind energy, transportation, hospitals, schools and many others, Armacell products are making a difference around the world. Our primary focus is to create innovative solutions for complex challenges and improve the performance for all targeted equipment applications. In doing so, we help protect and improve the environment where our products are being used.

This brochure is intended to provide you with a view into our exciting company, what we value, how we manage, our customer focused strategy and the importance of the communities where we have employees all over the world. We are proud of our more than 150 years of tradition and our company's German roots in Muenster/Westphalia. We have successfully managed to develop from a small division of Armstrong World Industries to a global leader with 2,400 employees in 15 countries on 4 continents. This success we owe to our highly engaged, talented people around the world – each of whom makes a difference in our company every day.

Our passion is to develop new high-tech products and complex systems that help meet the growing energy demands of our fast-changing world; both more safely and more energy efficiently.

No matter where the challenges may be, we are all responsible for conserving energy and using it wisely. And by using energy more wisely, You Can Make A Difference, too.

Yours sincerely



Patrick Mathieu
CEO Armacell

BUILDING: NON-RESIDENTIAL

EMPIRE STATE BUILDING
NEW YORK CITY, NY (USA)

When the Empire State Building underwent an extensive renovation to achieve LEED Gold® certification in 2011, the building was carefully scrutinised to identify energy-saving potential in all areas. The **AP Armaflex Duct Liner** installed on the air ducts many years ago was then and is now the best choice and did not have to be substituted. The fibre-free insulation will continue to provide high energy efficiency, indoor air quality (IAQ) protection and noise attenuation.

OUR COMPANY HISTORY IS CHARACTERISED BY **CONTINUOUS GROWTH.**

FACTS AND FIGURES

2,400

EMPLOYEES
worldwide

22 production facilities in
15 countries on 4 continents

CENTRAL DEVELOPMENT CENTRE
Armacell runs a testing department and fire laboratory (2,000 m²) at the regional headquarters in Muenster (Europe), employing around 36 employees in R&D.

REGIONAL HEADQUARTERS
Mebane, NC (USA), Singapore (Asia Pacific/India), Muenster (Europe)

PATENTS
Armacell holds 202 active patents (pertaining to 62 patent families and protecting 13 product groups and products), with 176 patents received in the period 2010 to 2013.

UNIQUE APPLICATION-ORIENTED PRODUCT TESTS
At the Muenster plant alone, over 2,800 fire tests, some 950 thermal conductivity tests and almost 1,100 tests to assess the water vapour diffusion resistance are performed on our products every year.

UNIQUE GLOBAL POSITION

resulting from a diverse set of high-performance materials in a broad range of markets:
COMMERCIAL CONSTRUCTION | RESIDENTIAL CONSTRUCTION | LIGHT INDUSTRY | INDUSTRIAL ENERGY | OIL & GAS | SPORTS & LEISURE | AUTOMOTIVE | TRANSPORT | OTHER

ARMACELL MILESTONES

The history of Armacell has its origin in the year 1860 – the year Armacell's former parent company, Armstrong Cork, was founded. Since 2000, our company's history has been characterised by continuous growth as a result of our success-oriented business strategy. This positive trend we owe to an unrivalled range of innovative products, the opportunity to expand into new markets and the daily awareness of our social and environmental responsibility.

In cooperation with our qualified and motivated employees, we expand our company's success by positively responding to the growing need for energy conservation all over the world.

1954

Revolutionary: The highly flexible Armaflex is introduced in America and later on in Europe.

1979

Service oriented: Armaflex training courses provide valuable application tips.

1989

Environmentally conscious: The first in our industry to comply with the Montreal Protocol for CFCs.

2000

The insulation division of Armstrong Insulation Products (AIP) became Armacell, an independent company, as a result of a management buyout.

2001

Recognising the ever-growing importance of the Asian marketplace, the company purchased a major insulation company in Thailand.

2003

Armacell opened its second production plant in China to supply its flagship-brand Armaflex products to the Chinese, Korean and Japanese markets.

2004

Armacell successfully tapped into new opportunities for manufacturing elastomerics and foam plastics for a wide variety of applications (acquisition of three foam producers in the USA).

2005

Innovator: As a leader in the field of PET technology, Armacell was the first manufacturer to succeed in foaming high-quality, bottle-grade PET on an industrial scale and qualifying PET foams for the composite industry.

Partner: With the Armaflex System Warranty, certified installation firms benefit from an extended warranty.

2006

Armacell opens a new major production facility in India for the production of tubes, sheets and acoustical products.

2009

Energy efficient: 140 times more energy is saved through the use of Armaflex products than is needed for its production (first LCA study of the industry).

2011

Always a step ahead: Armaflex products obtain the first flexible insulation CE mark for Europe.

2014

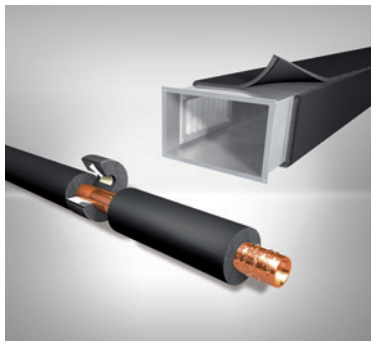
A joint venture formed in 2008 with Zamil Industries (Saudi Arabia) is now fully owned by Armacell, strenghening our presence in this high-growth market.

2015

To strengthen our position in Turkey, Armacell acquires OneFlex (Das Yalıtım Sanayi ve Ticaret Anonim Şirketi) – a leading Turkish insulation materials manufacturer.

Armacell acquires the business of Industrial Thermo Polymers Limited (ITP), a leading Canadian manufacturer of extruded polyethylene insulation products. The combination creates a leading manufacturer of polyethylene insulation foams on the North American continent.

BUILDING: NON-RESIDENTIAL



OLYMPIC STADIUM "BIRD'S NEST"
BEIJING (CHINA)

Armacell won the contract to provide the insulation for the air-conditioning system. The elastomeric insulation material **Armaflex** achieved by far the highest score for its technical properties.

OUR SUCCESS IS BASED ON OUR **MISSION, VISION** AND **VALUES**.

MISSION AND VISION

We owe our success to our highly engaged and talented employees, who work according to a clear mission, a convincing vision and practized values. These values form the foundation for the professional behaviour of each individual employee and for employees' relationships to Armacell's business partners. Armacell's customers benefit from the high quality of Armacell products. Working with Armacell employees who are committed and take accountability for their work, our customers experience first hand how we are making a difference around the world.

MISSION – WHY WE EXIST

As inventors of flexible elastomeric foams for insulation, we focus on developing safe, innovative thermal, acoustic and mechanical solutions and systems that create value for our customers in a sustainable way.

VISION – WHAT WE WANT TO BE

To be the global leader for flexible technical foams by providing value through continual product and system innovations in order to improve thermal, acoustic and mechanical efficiency in all targeted applications.

STRATEGY – HOW WE COMPETE

We grow our market by providing our customers with valuable solutions that offer reliable and certified performance backed by high-calibre people for targeted applications.

Certified performance means specified product properties which are confirmed by an independent testing institute. **Applications** include, for example, plumbing and HVAC-R solutions, solar equipment, components of industrial installations and others. **Valuable** stands for a price based on innovative value propositions that offer the best quality/cost ratio and durability to the market. **High-calibre people** are dedicated, passionate and competent individuals who operate with integrity and strive to be the best.

VALUES – WHAT WE BELIEVE

Customer experience
We create a positive customer-focused culture. Customers value the Armacell experience and continuous business relationship.

Commitment
We are committed to developing and motivating our people, nurturing their talents and developing new skills. We will build strong teams to support our company's performance. The safety of our employees is the company's first commitment.

Empowerment and accountability
We give our employees operational responsibility and expect them to develop and perform to the best of their talents. The basis for interaction between employees is mutual respect and trust.

Integrity
Our employees must be aware of and comply with rules and regulations, regardless of where in the world they are working. Integrity goes deeper than that. It is about doing the right things in the right way, as individuals and as a company. Ethical and responsible behaviour is fundamental to the way we do business. Armacell is a company that can be trusted.

Sustainability
We are focused on sustainable, profitable growth through the development and manufacturing of our products to ensure a positive impact on our community. We contribute to sustainable growth by creating innovations in thermal and acoustical efficiency.

OUR DIVERSE SET OF **PRODUCTS AND MARKETS** MAKES A DIFFERENCE.

AIDA
MEYER WERFT, PAPENBURG (GERMANY)

Over the years, the Meyer Werft has built 37 luxury liners for discerning customers from all over the world. When it comes to the insulation of chilled water and refrigeration pipes, the shipyard only trusts in products from Armacell: **AF/Armaflex and Armafix AF** pipe hangers reliably prevent condensation and energy loss.

AN IMPRESSIVE PRODUCT PORTFOLIO

We operate in two main businesses – Advanced Insulation and Engineered Foams. Advanced Insulation offers flexible insulation products used in commercial and residential buildings as well as industrial applications and the oil & gas industry. Engineered Foams are used in a broad range of end-markets such as wind energy, automotive and transportation.

Armacell's solutions provide superior long-term thermal efficiency at a low marginal cost (compared to the total project cost) and are deployed in many high-end facilities, including the Empire State Building, the International Space Station and the 35-trillion-cubic-feet Gorgon natural gas project in Western Australia.

In further projects all over the world, Armacell is the first choice when it comes to high performance equipment. As a dynamic and flexible company, Armacell guarantees the continuous improvements of its product solutions – based on our customers' needs.

Armacell is a world leader in flexible insulation foams for the equipment insulation market and also a leading provider of engineered foams. The company is the inventor of Armaflex – the reference brand in the rubber-based insulation market. Since its foundation in 2000 as the successor company to Armstrong World Industries' insulation products division, Armacell has been expanding constantly into new markets, leading to continuous economic growth.

79 % ADVANCED INSULATION*
Elastomeric (EL) Foams; Polyethylene (PE) Foams

Insulation Solutions
Covering Systems
Industrial Solutions
Thermal Insulation Solutions
Acoustic Insulation Solutions
Mechanical Protection

21 % ENGINEERED FOAMS*
Elastomeric (EL) Foams; Cross-linked Polyolefin (XPO); Polyethylene Terephthalate (PET) Foams

PET Core Foams
Component Foams

* this percentage refers to sales generated in 2013

INDUSTRIAL

Armaflex, ArmaSound, Arma-Chek
Advanced Insulation

MANUFACTURING FACILITY FORD INDIA PVT. LTD.

SANDAN VILLAGE, AHMEDABAD DIST., GUJARAT (INDIA)

The need for a one-stop complete solution provider for thermal and acoustic insulation made Armacell the number one choice for Ford's new state-of-the-art manufacturing facility in India.

OIL & GAS

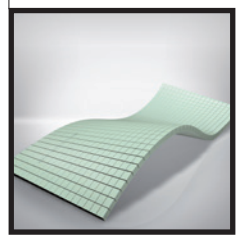
ArmaSound Industrial Systems
Advanced Insulation

IVG CAVERNS (EUROPE'S LARGEST CAVERN STORAGE FACILITIES)

ETZEL (GERMANY)

ArmaSound Industrial Systems not only protect the plant against energy losses, but also minimise the risk of corrosion under the insulation (CUI) and noise pollution at the site. In comparison to traditional insulation constructions, the Armacell solution meets noise-control requirements with reduced insulation thicknesses and weight. Furthermore, the fibre-free systems can be installed simply and quickly and offer advantages during maintenance work.

MULTI-INDUSTRY: CONSTRUCTION



ArmaFORM PET
Engineered Foams

JEDDAH & KING ABDULLAH ECONOMIC CITY RAILWAY STATIONS

SAUDI ARABIA

The lightweight properties of PET used in the roof panels require less supporting structure, facilitate and speed up handling during assembly and reduce installation and transportation costs.

MULTI-INDUSTRY: AUTOMOTIVE

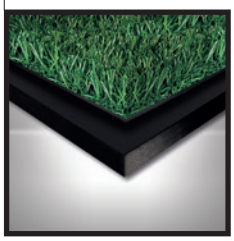
Ensolite
Engineered Foams

TOYOTA

USA

Armacell is a reliable partner for the automotive industry, delivering to Toyota fabricators domestically produced gaskets and seals, meeting the specifications for high-end automobiles and offering short lead times.

MULTI-INDUSTRY: SPORT & LEISURE



ArmaSport Turf Underlayment
Engineered Foams

USA FIELD HOCKEY NATIONAL TRAINING CENTER

VIRGINIA BEACH, VIRGINIA (USA)

ArmaSport turf underlayment provides consistent shock absorption from goal to goal. Unlike fields that depend on infill material, ArmaSport pad installations provide protection across 100 % of the field, with no loss or migration of the cushioning material to the edges.

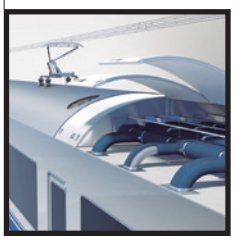
BUILDING: NON-RESIDENTIAL

Armaflex Ultima
Advanced Insulation

SKANDION CLINIC
UPPSALA (SWEDEN)

Armaflex Ultima is the only flexible insulation material to achieve fire class B_L-s1, d0 in the European fire test. The insulation material releases only a minimal amount of smoke in a fire and thus makes an important contribution to the safety of people in buildings.

MULTI-INDUSTRY: TRANSPORT



Armaflex Rail
Engineered Foams

MOSCOW AIRPORT TRAINS
STADLER RAIL, ALTENRHEIN (SWITZERLAND)

Swiss rail-vehicle builder Stadler Rail is currently building double-decker trains for the Russian railway operator Aeroexpress, which will travel between Moscow city centre and the three international airports in 2015. Armaflex Rail SD is presently the only insulation material to be installed on the air-conditioning ducts in these trains. In the event of fire, the new elastomeric insulation material displays extremely low smoke emits. It is currently the only elastomeric insulation material to achieve the previously unattained Hazard Level 2 and is also GOST approved.

WE HAVE A **GLOBAL PRESENCE** THAT MAKES A DIFFERENCE.

MULTI-INDUSTRY: SCIENCE

SOUTH POLE

Due to the great difference between day and night-time temperatures, condensation formed on a seismograph operated by NORSAR, the Norwegian seismological institute in the Antarctic. Thanks to **Armaflex Ultima**, the condensation processes have been stopped and the seismograph now provides reliable data of ground motions from Antarctica for international research.

GLOBAL PRESENCE

Armacell is a global business and is continuously expanding into new markets. Today, Armacell manufactures products in 22 plants in 14 countries on four continents. With production facilities in China, Thailiand, India, Brazil, Saudi Arabia and now Turkey and Canada, Armacell has opened up new geographical emerging markets – proactively addressing the sustainable energy revolution worldwide.

Our global presence and a diversified product range are key differenciating factors that set us apart from smaller competitors.

In markets where Armacell does not have its own factories, sales offices and distributors complete a broad sales network that is unique in the industry. This sales footprint with a local presence, in addition to our company's global manufacturing, supports Armacell's market leadership.

In each country where Armacell is located, we employ talented people who are keenly aware of national and international standards for their products to address different local requirements. We always consider our corporate values, which apply internationally, to best satisfy our customers' needs.

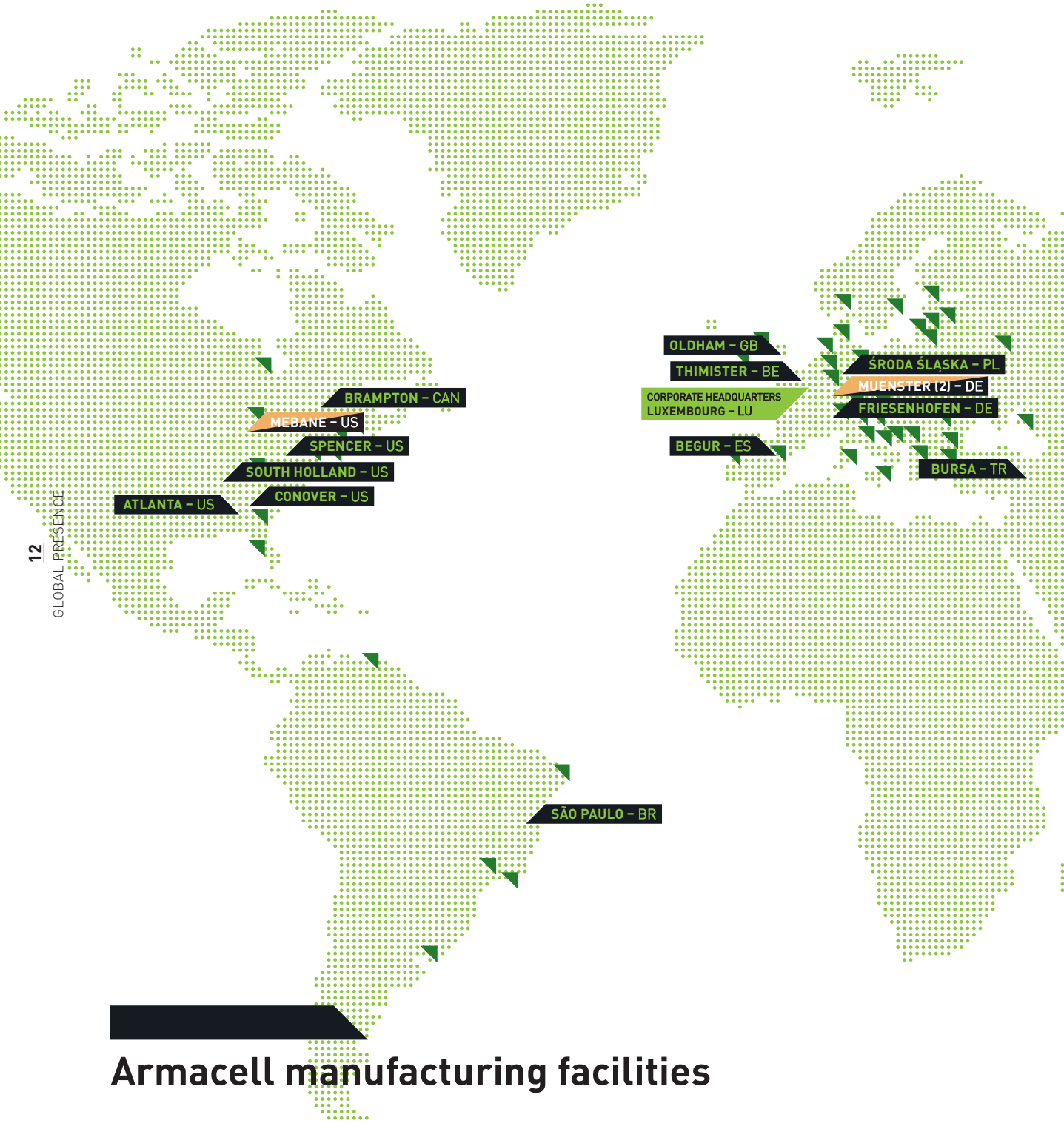
Armacell has developed innovative products that revolutionised the global market and are characterised by many fascinating projects.

3 MASTER BATCH FACILITIES IN KEY REGIONS

20 EXPANSION PLANTS AND 3 CONVERSION PLANTS IN 14 COUNTRIES

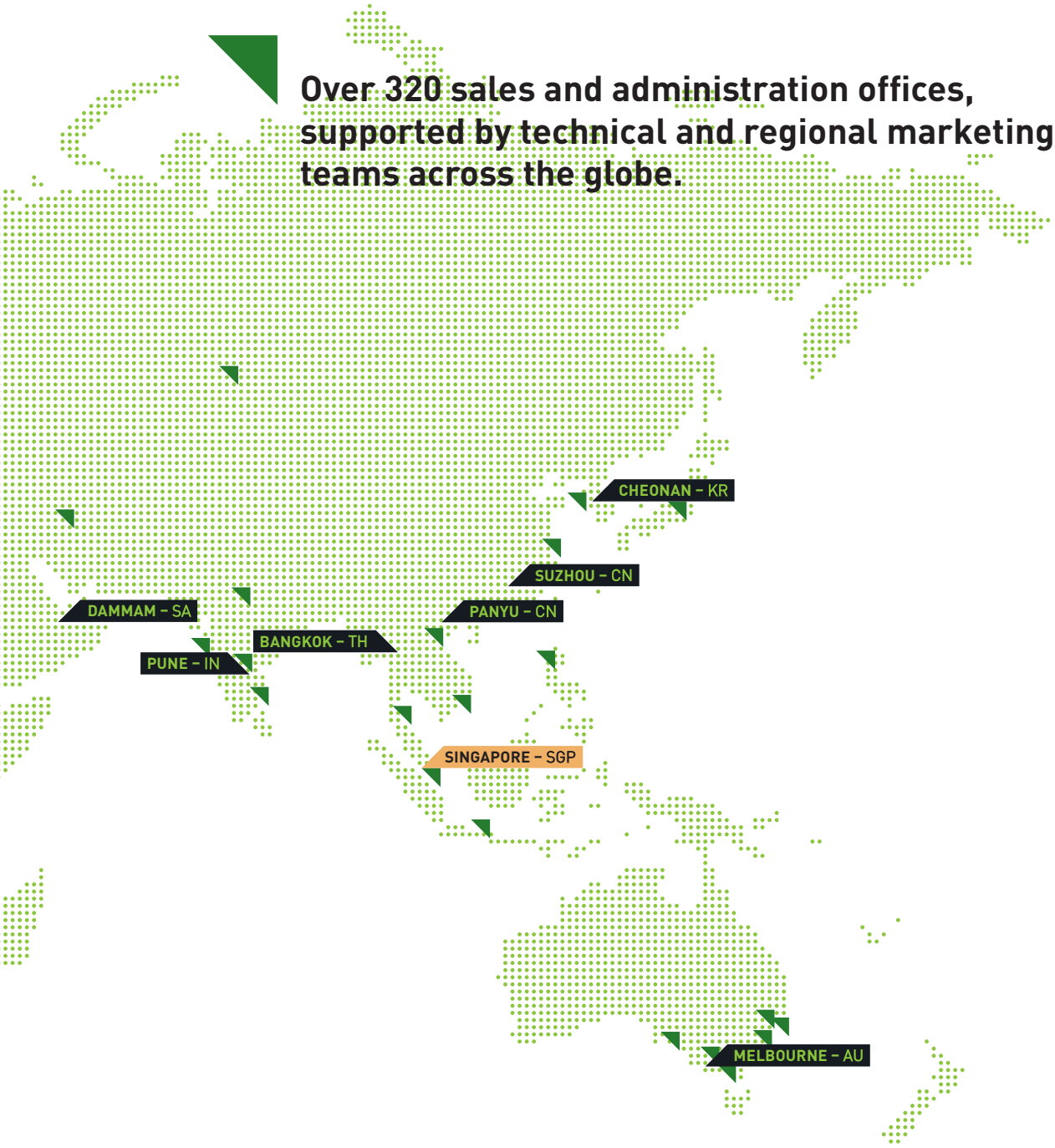
SERVING 88 COUNTRIES GLOBALLY

ARMACELL'S GLOBAL BRANCHES



Armacell manufacturing facilities

Over 320 sales and administration offices, supported by technical and regional marketing teams across the globe.



Armacell regional headquarters

(Americas, EMEA, Asia Pacific/India)

WE LEAD THE WAY FOR **TECHNICAL INSULATION** IN A WORLD OF ENERGY NEEDS.

DEUTSCHE WELLE TV STUDIO
BONN (GERMANY)

Ventilation ducts supply the TV studio with fresh air. However, they can also carry unwanted noise within the building. Compared to traditional products, **ArmaSound RD** achieves the desired sound absorption with lower insulation thicknesses. In addition, the acoustic foam has good sound barrier properties and also reduces the transmission of structure-borne noise.

INDUSTRIAL: MEDIA

TECHNICAL LEADERSHIP MAKES A DIFFERENCE

Insulation is an international growth market driven by global megatrends such as a rising need for energy and urbanisation. Advanced insulation products are used in new construction and refurbishment projects in all key markets and have grown over recent years – primarily due to the increasing substitution of other insulation materials. All over the world, Armacell has set quality standards for flexible technical insulation, which ensure energy conservation and energy efficiency.

Insulation is a key element to increase energy efficiency in industrial, commercial and residential infrastructure, and it is the most economical form of CO_2 reduction. Our Armaflex insulation materials for mechanical equipment in buildings and industry have proven themselves millions of times all over the world. A specific life cycle assessment (LCA) demonstrated that Armaflex saves 140 times more energy and 150 times more greenhouse gases, making Armacell a global leader in energy efficiency.

From an economic point of view, new programs to increase energy efficiency are creating an energy revolution. Using energy efficient technologies like optimal insulation materials can save valuable resources. Our company provides a wide range of product solutions – from pre-insulated solar pipes to special cryogenic insulation systems for LNG technology. Armacell's solutions offer superior long-term thermal efficiency at a low marginal cost.

As an energy-saving sector, the insulation industry is spearheading the energy revolution. To draw attention to the enormous potential for energy and CO_2 savings and to bring about changes in the industry, Armacell founded the EiiF (European Industrial Insulation Foundation) with other leading insulation manufacturers and insulators.

Newer building and energy codes now often require high-quality and more extensive insulation. They increasingly demand more efficient insulation materials which also meet stricter fireproofing and emission regulations.

The world is changing: Revised fire standards for materials used in the construction industry create opportunities for using elastomeric foams instead of other materials. Health policies and indoor air quality concerns have led to the greater required use of dust- and mould-free materials, especially in hospitals, schools, universities and data centres. The impact of noise on health and comfort is becoming a growing issue, and higher levels of acoustic protection are becoming a standard around the world.

HIGH-TECH PRODUCTS MAKING A DIFFERENCE

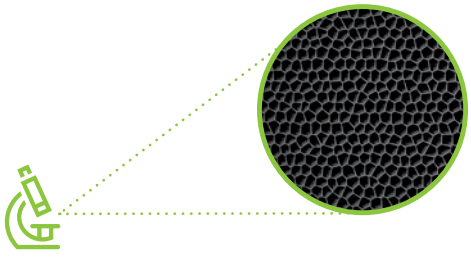
Armacell insulation materials have a unique position in the market. They have excellent technical properties, and the highly flexible, lightweight materials are much easier and faster to install than mineral fibres, cellular glass or phenolic resin foams.

CLOSED-CELL STRUCTURE

In cold applications, Armaflex insulation materials offer unrivalled benefits. If the line temperature is lower than the ambient temperature, condensation can occur on the cold surface. Only closed-cell materials effectively prevent moisture from penetrating the insulation material and thus provide plants with long-term corrosion protection. Unlike open-cell materials such as mineral wool, Armaflex has a completely closed-cell material structure. The vapour barrier is not concentrated on a thin foil, but built up – cell by cell – throughout the entire insulation thickness. A separate vapour barrier is therefore not required, and even if local damage occurs to the material or covering, any penetrating moisture cannot spread throughout the insulation.

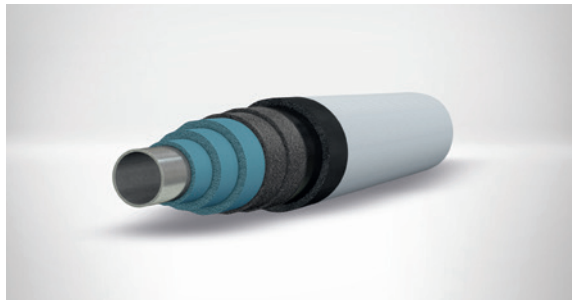
Wet insulation can damage buildings and disrupt industrial processes, with maintenance work and downtime incurring huge costs. According to a study carried out by the US company ExxonMobil Chemical, **40 to 60 % of the maintenance carried out on pipework in the petrochemical industry is due to corrosion under insulation (CUI)**. This is mainly the result of moisture penetrating the insulation without being noticed.

THE CELL STRUCTURE OF ARMAFLEX GREATLY MAGNIFIED



RESISTANCE TO WATER

Just as a wet coat cannot protect the body against the cold in winter, wet insulation materials cannot prevent heat losses. The insulation effect of a material is greatly reduced by moisture. **When selecting insulation materials, it is essential to bear in mind that over the service life, energy losses can increase dramatically as a result of moisture penetration.** With every vol.-% of moisture content, the thermal conductivity increases and the insulation effect deteriorates. The results are not only higher energy losses, but also a drop in the surface temperature. If this falls below the dew-point temperature, condensation occurs. Only if the thermal conductivity of the insulation material does not increase significantly as a result of moisture penetration it is possible to guarantee that the surface temperature will remain above the dew-point even after many years of operation.



Armaflex Cryogenic Systems
First flexible insulation systems for the low-temperature (-180 °C), significant cost savings during installation.

THERMAL CONDUCTIVITY

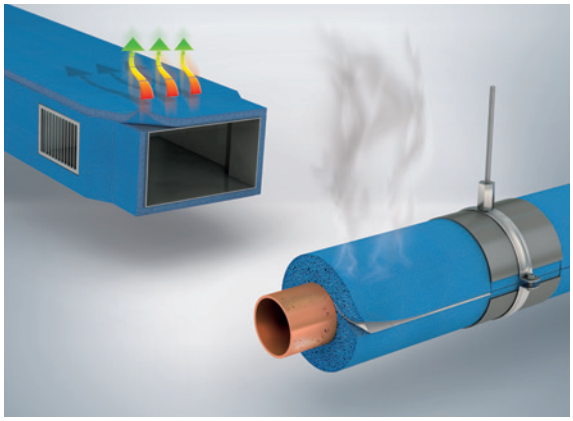
The thermal conductivity value indicates the insulation capacity of a product – and thus its energy-saving performance. The lower the value, the higher the insulation capacity. **Armacell has continuously improved the thermal conductivity of its products and today offers premium elastomeric insulation materials with a thermal conductivity of $\lambda_{0\,°C} \leq 0.033$ W/ (m·K).**

But only the combination of high resistance to water vapour diffusion and low thermal conductivity protects installations against energy losses in the long term.

FIRE BEHAVIOUR

Because safety has the highest priority, fire behaviour is of prime importance when selecting building materials. By taking a completely new approach, the company has solved the conflict of objectives between combustibility and smoke development. The new Armaflex Ultima is the first flexible insulation material to achieve fire class B_L-s1, d0. **Compared to a standard elastomeric product, Armaflex Ultima exhibits 10 times less smoke development.** In the event of fire, it is vital that those trapped find escape routes quickly – which is only possible with low smoke development.

Legislators in many European countries have recognised that smoke poses a much higher hazard potential than the fire itself and have tightened the requirements regarding the smoke development of construction products in their building regulations.



Armaflex Ultima
First flexible technical insulation with extremely low smoke density (Euroclass B_L-s1, d0)

ACOUSTIC PROPERTIES

Noise impact on health and comfort is becoming an increasing issue, and higher levels of acoustic protection are becoming a standard around the world. Armaflex has very good structure-borne sound insulation properties. Depending on the insulation thickness, the transmission of structure-borne sound can be reduced by up to 30 dB (A) compared to an uninsulated pipe. The material also provides relatively good airborne noise absorption in the mid-frequency range. However, traditional elastomeric insulation materials cannot adequately meet high acoustic requirements.

To greatly improve the acoustic insulation properties of elastomeric insulation materials for certain areas of application, it was necessary to change the structure of the material. **After intensive research, Armacell, in cooperation with the University of Bradford (UK), was able to develop the product ArmaSound RD. The material has high noise absorption properties across the entire frequency range relevant for building acoustics.** The open-cell acoustic foam achieves the required sound damping with comparatively thin insulation layers. Armaflex insulation and an Arma-Chek covering the material not only provide the desired noise control, but ArmaSound Industrial Systems also protect the installations against condensation and moisture penetration.

ArmaSound Industrial Systems
First thermal-acoustic insulation system for refrigeration. Reliable protection against corrosion under insulation.

OUR UNIQUE SERVICE MAKES A DIFFERENCE

TRAININGS AND SEMINARS

Because it is essential that the insulation is reliable, Armacell attaches great importance to the professional installation of its products. We began offering training courses with valuable application advice back in the late 1970s. In 2013, Armacell trained some 1,800 insulators in the correct installation of its products in Europe alone. We offer practical seminars worldwide to schools, insulation contractors, specifiers, engineers as well as installers with special emphasis laid on environmental aspects. In many countries, we also offer the Armaflex System Warranty, a concept which is unique in this industry: certified installation firms receive an extended warranty.

Practical training at the application center in Muenster (Europe)

APPLICATION ORIENTED PRODUCT TESTS

Only standard-compliant fire behaviour, low thermal conductivity and high resistance to water vapour transmission protect systems against condensation and energy losses in the long term. We achieve this by continuously monitoring our products – internally and externally. This internal and external supervision ensures that the properties which determine the quality of our products are achieved. The majority of Armacell's products are FM and UL certified, and many have IMO certification. In Europe, we were the first manufacturer in our industry to place CE-marked products on the market and achieve the best possible classification for elastomeric products.

At the Muenster plant alone, over 2,800 fire tests, some 950 thermal conductivity tests and almost 1,100 tests to assess the water vapour diffusion resistance are performed on our products every year.

PATENTS

Armacell has set quality standards for flexible technical insulation throughout the world, and almost all significant innovations in the field of flexible technical insulation materials were introduced by Armacell. The company holds 202 active patents (pertaining to 62 patent families and protecting 13 product groups and products), with 176 patents received in the period 2010 to 2013.

PIONEERING INNOVATIONS FROM THE INVENTOR OF FLEXIBLE TECHNICAL INSULATION

1954 Revolutionary: Highly flexible Armaflex is invented in the USA

1957 Full of potential: Armaflex sheets are added to the range

1970 Versatile: Armaflex is used to insulate refrigeration, air conditioning, plumbing and heating systems and industrial installations

1978 Specific: Previously supplied as one product, the material is diversified with AF/Armaflex and the B1 product FC/Armaflex

1980 Energy-saving: SH/Armaflex, an insulation foam specially developed for heating and plumbing applications

1993 System solution: The Armaflex pipe support ensures a reliable insulation system even in the sensitive area of the pipe bracket

1994 Tough: The Arma-Chek flexible covering system for extreme conditions in the oil and gas industry.

Even faster and simpler: Self-adhesive Armaflex tubes make the installation process even easier, especially in retrofit applications

1996 Groundbreaking: NH/Armaflex, the first halogen-free, elastomeric-based pipe insulation; HT/Armaflex, temperature-resistant up to 150 °C

2000 2-in-1 – No. 1: Arma-Chek D and S, flexible pre-covered insulation systems, allow significant savings in the installation process

2001 2-in-1 – No. 2: Armaflex Solar, pre-insulated pipe system for thermal solar applications, later as a twin pipe system with patented join-split technology

2002 2-in-1 – No. 3: Armaflex SPLIT, pre-insulated pipes for connecting the internal and external components of split and multi-split air conditioners

2003 Seaworthy: Arma-Chek R, extremely robust, rubber-based covering system minimises the risk of corrosion under insulation (CUI)

2004 Silencing: ArmaSound, new acoustic insulation materials with excellent noise absorption properties across a broad frequency range

Micro-cell structure: A much finer cell structure is achieved, further improving the technical properties of AF/Armaflex

2005 Forward-looking: ArmaSound Industrial Systems, thermal-acoustic insulation and flexible covering in one system, minimize the risk of corrosion

2008 Award-winning: Armaflex Protect, the highly flexible system for sealing pipe penetrations, wins the ISO Award

2009 Highly comfortable: AP Coilflex, extremely pliable elastomeric foam for lining air ducts

2010 Mould resistance: Built in Microban® antimicrobial product protection inhibits the growth of mould and mildew in the insulation*

Ice-cold: Armaflex Cryogenic Systems remain flexible even at temperatures down to -200 °C

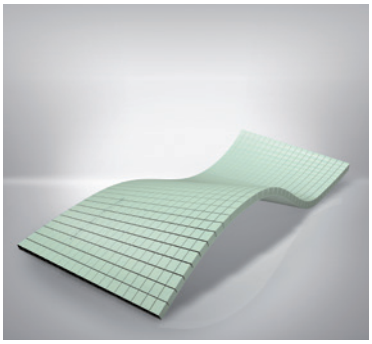
2012 Maximum safety: Armaflex Ultima with extremely low smoke density (B_L-s1, d0) for greater safety in a fire

Armaflex Rail SD, the first flexible, closed-cell insulation material with integrated fire protection for railway vehicles (Hazard Level 2)

2013 System accessories: Armaflex SF990 adhesive, solvent-free adhesive for installing elastomeric insulation materials in compliance with the stricter standards of green building schemes

2014 Comfortable: ArmaComfort, noise-control products for enhanced living comfort

MULTI INDUSTRY: WIND ENERGY



WIND BLADE INDUSTRY

More than 20,000 rotor blades worldwide have been built using **ArmaFORM PET** core foams. Key to the success is the superior properties of **ArmaFORM PET** against the previously dominating core materials of Balsa wood, SAN and PVCl. These properties include, but are not limited to: higher temperature resistance, better fatigue characteristics, limited density variation and recyclability.

OUR SENSITIVITY TO OUR **GLOBAL RESPONSIBILITY** MAKES A DIFFERENCE.

RESPONSIBILITY

In all areas of the business, Armacell is committed to its corporate responsibility towards its employees, the environment and the communities the company operates in. To demonstrate our company's commitment, we have been a supporting member of the UN Global Compact since 2006.

EMPLOYEES

As an employer whose focus is the well-being of its employees, Armacell drives a range of additional activities for motivating and for fostering the development of the company's main asset, its people. We commit ourselves to supporting their talents and skills by offering various opportunities for further education as part of our corporate responsibility. Therefore, we take the requests of our people seriously and do our best to create a positive working atmosphere. In return, we expect our employees to perform to the best of their talents, as well as represent an attitude of mutual respect, reliability and trust. In an effort to strengthen these values, we established a Code of Conduct in 2011, which applies to every employee worldwide. Furthermore, we present awards to recognise the work of an individual or a working team.

Armacell Achievement Award ceremony, China

AWARDS

Our philosophy is to encourage and support each of our employees, as well as a strong team approach as the basis for strong company performance. To recognise the engagement of our employees, we launched the **A.R.M.A. Way Award System,** for example. Established in 2013, the aim is to further support our philosophy of managing our activities as an organisation in the A.R.M.A. Way. Overall, the award is presented to winning teams in four categories.

THE A.R.M.A. WAY

APPRECIATE OUR CUSTOMERS
RAISE OUR EFFICIENCY
MANAGE OUR CASH
ACT TO EMPOWER OUR EMPLOYEES

CORPORATE VALUES

ENVIRONMENT

A commitment to protect our environment has been an integral part of Armacell's business strategy and a key promise behind our corporate philosophy since our foundation. Our business activities worldwide comply with the applicable environmental laws and regulations, in addition to the requirements of our environmental permits. As a global leader in energy efficiency, we are focused on sustainable, profitable growth through the development and manufacturing of our products to ensure a positive impact on our community and to protect both people and the environment by contributing to energy conservation. To demonstrate this, our company was the first manufacturer of flexible technical insulation materials to carry out an eco-balance analysis – the life cycle assessment.

Illuminating fact: With Armacell's yearly production of elastomeric insulation materials, as much energy can be saved as the 200,000 households in the city of Las Vegas use every year.

FURTHER IMPORTANT ENVIRONMENTAL ACTIVITIES

In addition to its eco-balance analysis, Armacell established some further achievements to reinforce its environmental commitment.

- The company introduced an environmental management system at the company headquarters in Muenster in 1995.
- Armacell commissions the Centre for Sustainable Building (Zentrum für umweltbewusstes Bauen) at the University of Kassel, Germany, to carry out a scientific study on the potential for energy savings by insulating heating and hot-water pipes with Armaflex (CO_2-Study) in 2001.
- Armacell receives the Ethics in Business Award for its exceptional commitment to the environment and social issues in 2005.
- An innovative exhaust air combustion system is installed in 2007 at the company headquarters in Muenster, Armacell's largest production plant worldwide. With this, the largest environmental investment in the history of the company, measurable air pollutants are reduced by approximately 90 %.
- Since 2006, Armacell has been consciously supporting the UN initiative Global Compact.
- Armacell is a founding member of the EuroACE (europäische Allianz zur Energieeffizienz im Gebäudebereich) which advances the legislative proposals for energy efficiency in the building area and was founded in 1997 by the European Commission.

THE GLOBAL COMPACT
WE SUPPORT

COMMUNITY

Our employees make a difference: as a succesful company with a global footprint, we see it as our responsibility to support local citizenship projects, such as child fostering in Sri Lanka, Habitat for Humanity in the US, maintenance of community gardens, regular donations in kind for schools, hospitals, sports clubs and facilities for the handicapped and cooperations with non-profit organisations. Armacell emphasises the social dimension of sustainability among its management and employees with these projects – projects that help the local communities in which Armacell operates.

COMMUNITY PROJECTS

Armacell supports a variety of community projects. One of these is the sponsorship of ten orphans/half-orphans, five girls and five boys, who lost their parents following the tsunami in 2005 in Navithanveli, Sri Lanka. Armacell pays for their education and regular medical examinations. The financial support was realised by donations from employees and the company itself. In France, the company supports the European Leukodystrophies Association (ELA) by starting the campaign "Shoes on to beat the disease". Every employee counts his/her steps during the working day, and at the end of each day, Armacell converts all steps into money and donates it to the project. In Pune (India) Armacell organised a blood donation camp with the help of a local hospital in February 2014.

In São Paulo, over the past ten years, Armacell Brazil has donated thousands of toys to children from the Armacell neighbourhood, creating a nice tradition. In Panyu, China, the company organises activities among Armacell colleagues to visit elderly people in Panyu Shilou Rest Home (on every International Women's Day, March 8).

In addition to these projects, Armacell also works together with non-profit operations. In Mebane, NC (USA). Armacell LLC partners with a non-profit community rehabilitation organisation, OE Enterprises, in the fabrication of insulation covers for irregularly shaped components. The organisation offers individualised services to adults with disabilities or socio-economic disadvantages, providing vocational training and job placement and in turn helping them gain independence.

Additionally, Armacell LLC has a unique partnership with the HEARTS program – a non-profit organisation targeting children from all over the world undergoing bone marrow transplant at Duke University Children's Hospital.

OE Enterprises provides job placements to adults with disabilities or socio-economic disadvantages by partnering with Armcaell LLC (USA)

Armacell employees supporting ELA, the European Leukodystrophies Association (France)

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Editor
Armacell International S.A.
WestSide Village
89B, rue Pafebruch
L-8308 Capellen
www.armacell.com

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