

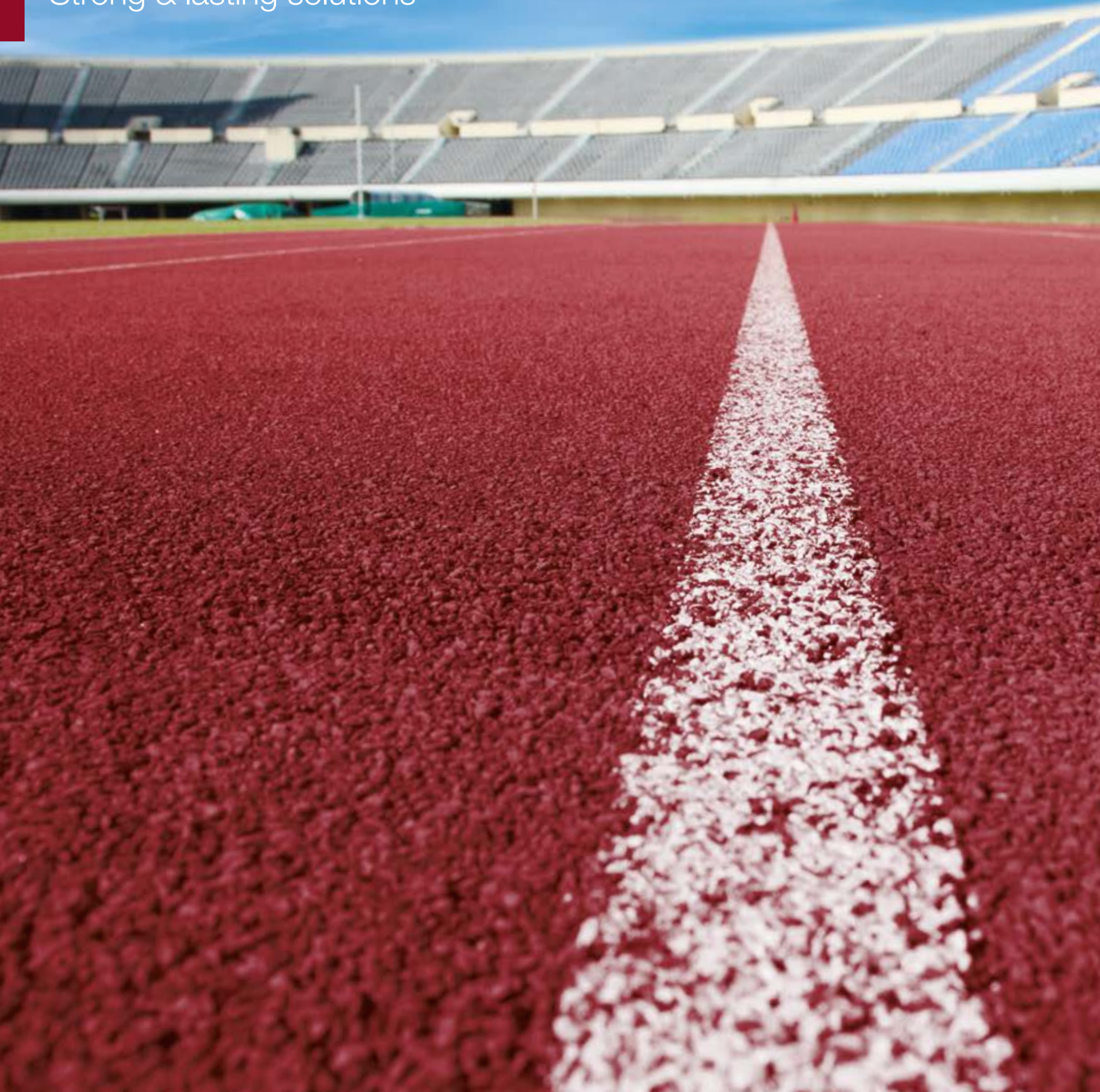
HUNTSMAN

Enriching lives through innovation

Polyurethanes

POLYRESYST™ *adhesive systems*

Strong & lasting solutions



Advanced adhesive systems

Tailored to be able to meet your requirements

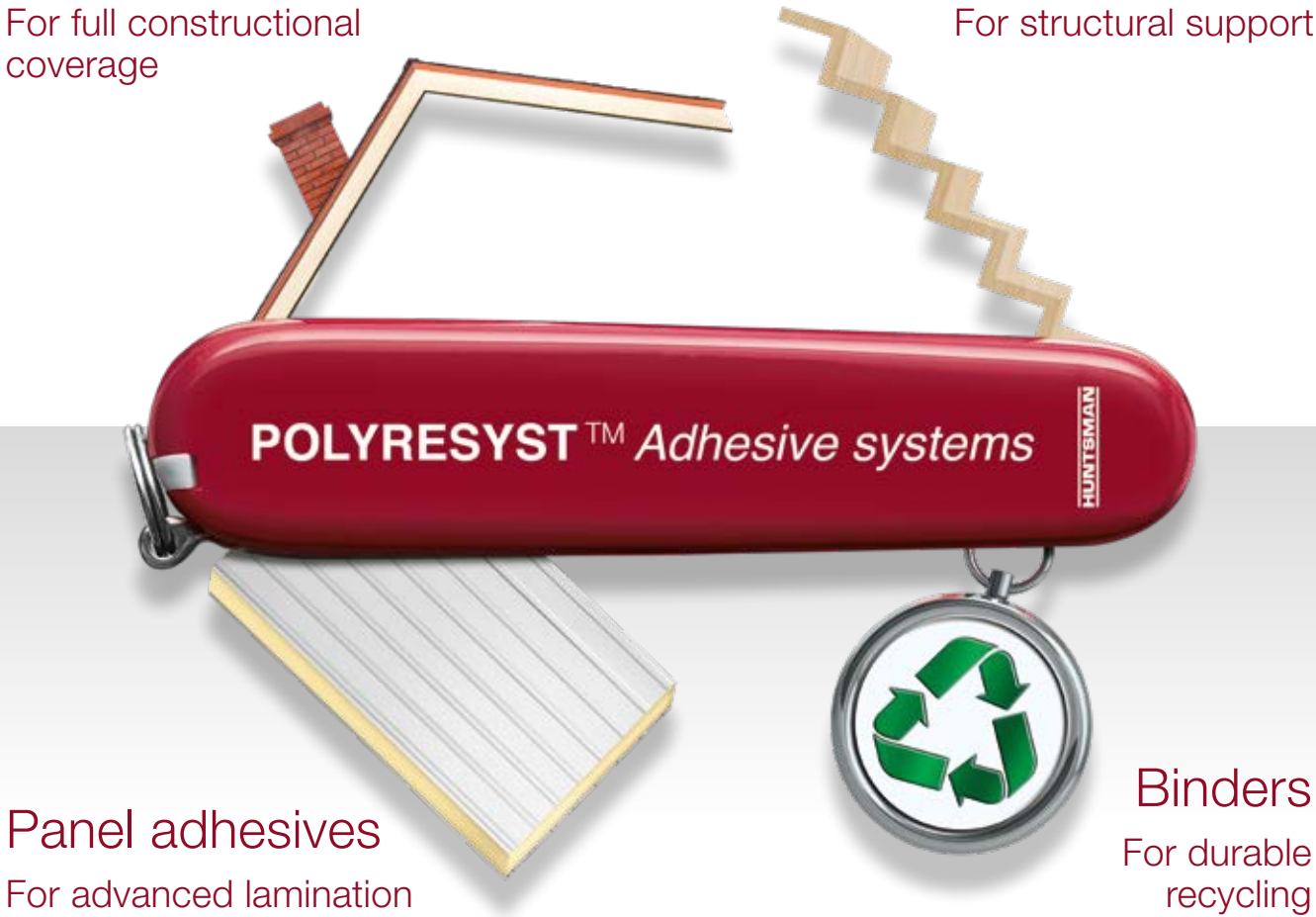
Huntsman offers a complete range of high-performance POLYRESYST™ polyurethane adhesives for multiple applications. From indoor to outdoor, from floor to roof, you can always count on us to offer a strong and lasting solution, which is able to meet your requirements. Our comprehensive line includes:

Roof adhesives

For full constructional coverage

Wood adhesives

For structural support



Panel adhesives

For advanced lamination

Binders

For durable recycling

Panel adhesives

For advanced lamination



To meet the needs of panel laminators worldwide, Huntsman has developed a full solution range of one- and two-component polyurethane adhesives that are suitable for use on continuous, discontinuous and double-belt panel laminators. The comprehensive portfolio includes A2 filled fire rated systems for dispensing and wiper application, as well as unfilled systems for various application methods (wiper, dispensing and spray).

Enabling production efficiency and output at different speeds, Huntsman's panel laminating adhesives are suitable for bonding steel, aluminum or foil-stressed skin materials to polyurethane or polystyrene foam, mineral wool and other insulating cores. They offer robust adhesion with excellent sealing properties, and enable laminated panels to absorb the stresses of structural weight while providing excellent thermal adaptability. This makes them well suited for the construction of machine halls, cold storage units, mobile homes, warehouses and other buildings.

Specifically designed for Discontinuous Panel Laminating, the range includes adhesives with good flexibility to overcome expansions due to temperature changes and a longer product life at elevated temperature which is ideal for the manufacturing of industrial oven mineral wool panels. Additionally, with less panel joints, it also offers the possibility of longer panels and both cheaper and faster production.

Wood adhesives

For structural support

Thanks to a growing demand for sustainable, ecological products, the use of wood in engineering, Do It Yourself, furniture and construction applications is intensifying. Because wood assemblies require strong, yet flexible bonds, Huntsman has developed a family of polyurethane adhesives that are well suited for wood or derived timber gluing.

They can be used for furniture and interior structures, paneling, doors, windows, stairs, and also add value in niche industries such as the marine sector, in jetty, decking and boat building projects.

Apart from a strong bonding of wood, PU based adhesives offer many other technical and engineering advantages as well, such as superior ageing properties, good and deep wetting and adaptable curing speeds, that can be finetuned to suit fast and slow cure assembly techniques. Additionally, their uniform penetration properties enable a large bonding interface, while their excellent reactivity with water, which naturally occurs in wood, creates strong crosslinks that add to overall adhesive strength.

Roof adhesives

For full constructional coverage

Designed for optimal construction time efficiency, Huntsman's new range of ready to use polyurethane adhesives offers full package solutions, it includes the chemicals and the dispenser gun with static mixer needed for application.

Compared to mechanical fixing, Huntsman adhesive systems enable thicker insulation and faster installation, without any noise, while scoring better results in terms of thermal energy efficiency. Furthermore, they are low VOC, low emissions, fire resistant (Euroclass E / B2 fire class) and compared to one-component solutions, they also offer better reaction profile control, without any need for humidity.

The Huntsman roof adhesives range comprises two standard performance systems (fast and slow) and two bio-based systems (fast and slow). They are low rise foaming, low VOC, low emissions, bond to uneven surfaces and offer robust performance at any application temperature ranging from -7° to +30° C. All products of the range have a minimum of 12 months shelf life and offer excellent adhesion of PIR (mineral face – glass fiber) / AI craft / PS / MW onto wood / steel deck / concrete / vapour barriers (bitumen, PS sheets).

Binders

For durable recycling

As an alternative to TDI based binders, Huntsman offers a MDI based binders portfolio that can easily be used for many recycling applications.

By grinding waste material (rubber, cork, flexibe foam, PU) and rebonding the granules with PU based adhesive, it is now possible to create whole new value added products out of previously discarded resources. For instance products that dampen noise and vibration or products that offer improved comfort, slip resistance or shock absorption, depending of their intended use.

With properties ranging from soft to semi rigid to hard, these binders offer durable solutions for a variety of applications, from running tracks to garden tiles.



Striving for sustainability

We are dedicated to the development of sustainable solutions that can support the industry’s environmental ambitions.

As signatory to the United Nations Global Compact (UNGC) - the world’s largest voluntary corporate citizenship initiative - our work is guided by the UN’s 17 Sustainable Development Goals. All 17 UN Sustainable Development Goals are important to our business - with three of particular relevance to our work in the coating and adhesive sectors.



- Low VOC and low emissions
- Solvent free



- Fit-to-purpose
- Production efficiency
- Fast installation



- Durability of performance
- Enables intensifying the use of sustainable wood resources
- Enables recycling of discarded resources



Enriching lives through innovation

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POLYRESYST™ adhesive systems:

Contact a Huntsman representative or
visit our website at

www.huntsman.com/polyresystadhesives

About Huntsman:

Huntsman Corporation is a publicly traded global manufacturer and marketer of differentiated and specialty chemicals with 2017 revenues of approximately \$8 billion. Our chemical products number in the thousands and are sold worldwide to manufacturers serving a broad and diverse range of consumer and industrial end markets. We operate more than 75 manufacturing, R&D and operations facilities in approximately 30 countries and employ approximately 10,000 associates within our four distinct business divisions. For more information about Huntsman, please visit the company's website at **www.huntsman.com**.

Huntsman Polyurethanes warrants only that its products meet the specifications agreed with the buyer. Typical properties, where stated, are to be considered as representative of current production and should not be treated as specifications.

While all the information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NO GUARANTY, WARRANTY OR REPRESENTATION IS MADE, INTENDED OR IMPLIED AS TO THE CORRECTNESS OR SUFFICIENCY OF ANY INFORMATION OR RECOMMENDATION OR AS TO THE MERCHANTABILITY, SUITABILITY OR FITNESS OF ANY PRODUCTS FOR ANY PARTICULAR USE OR PURPOSE.

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Products may be toxic and require special precautions in handling. The user should obtain Safety Data Sheets from Huntsman Polyurethanes and Huntsman Performance Products containing detailed information on toxicity, together with proper shipping, handling and storage procedures, and should comply with all applicable safety and environmental standards.

Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent on the manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.

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