

INNOVATION
TECHNOLOGY
SAFETY

VISION
PERFECTION
EXPERIENCE

TRANSPARENCY
DESIGN
SOLUTIONS

IDEAS
HIGHTECH
EFFICIENCY

RESEARCH
DEVELOPMENT
SERVICE


KASIGLAS[®]
Flying high with safety

Hightech from **KOD**



MARK POILLON

FOREWORD

Dear Enthusiasts,

The dream of flying is as old as humanity itself, and its fascination remains undiminished – and so it has for me. Since 2023, I have been fortunate enough to pursue my passion professionally and proudly contribute to the aviation industry as CEO of KRD Luftfahrttechnik GmbH.

Over the past three decades, KRD has accumulated extensive expertise in coating, shaping and assembly of transparent plastics. Our in-house research and development department allows us to develop advanced technical solutions tailored to our customers' unique requirements.

We thrive on challenges – where others give up, we only just begin! Innovation, technology, and safety are among our greatest strengths. Our guiding principle: reaching new heights with safety – protecting people and materials alike.

With this in mind, I hope you enjoy reading this brochure and look forward to welcoming you soon to the world of **KASIGLAS®**.

Yours sincerely,

MARK POILLON

CEO (Chief Executive Officer)
KRD Luftfahrttechnik GmbH



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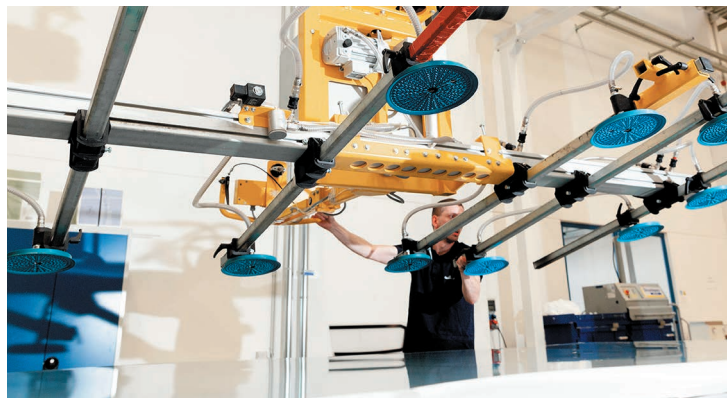
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KASIGLAS®

Clear safety

A versatile plastic material

KASIGLAS® represents cutting-edge glazing with completely new material properties. Our products are among the most innovative on the market. Thanks to our dedicated research department, proprietary coating development, and in-house production, we continuously advance our development process, bringing ever-new and improved hightech products to market.

KASIGLAS® stands for clear safety

offers bespoke solutions for protection and security across a wide range of applications, including aviation, vehicle windows, cabin glazing, semi-finished product manufacturing, and more.



Core Advantages of: KASIGLAS®

- Lighter than glass
- Exceptionally clear
- Shatterproof and splinter-resistant
- Impact-resistant
- Abrasion-resistant
- Cold- and warm-bendable



POLICE



FORESTRY



MUNICIPALITIES



AVIATION



THE KRD GROUP:

- Family-owned business in its second generation, led by Beate Korinna Brammer
- A medium-sized enterprise with approximately 300 employees
- Two locations: Geesthacht and Bardowick
- 25,000 sqm of production space
- Over 50 years of experience
- Annual revenue exceeding € 35 million
- Dedicated research and development department
- Proprietary coating development laboratory



INDUSTRY



CONSTRUCTION



KRD - Standort Bardowick



**INNOVATION
TECHNOLOGY
SAFETY**



**VISION
DEVELOPMENT
DESIGN**



**SERVICE
TRAINING
MAINTENANCE**

KRD group

KRD Sicherheitstechnik GmbH

When it comes to ensuring optimal protection for people at work (e.g., police, fire services, ambulance crews) or in everyday life, safety is non-negotiable. Thanks to our specialised glazing, our products and tailored solutions can make a crucial difference – and even save lives.

KRD Coatings GmbH

Our proprietary coating development laboratory focuses on creating innovative formulations, resulting in cutting-edge transparent plastic glazing. The outcomes are high-quality coatings with unique properties such as scratch and abrasion resistance and UV protection, offering the longest possible durability.

KRD Engineering & Service GmbH

KRD Engineering & Service GmbH develops products and services, providing everything needed for the maintenance, care, processing, and installation of **KASIGLAS®** products.



KRD Luftfahrttechnik GmbH

The KRD Luftfahrttechnik GmbH completes the portfolio of the KRD Group. This is where our accumulated expertise meets with materials for intelligent lightweight construction, which is both a necessity and a challenge in aerospace technology, particularly when it comes to high-quality transparency. Our credo is: „We find solutions where others give up!“

**SOLUTIONS
TRANSPARENCY
DESIGN**

KASIGLAS® Clear safety

- Complex shapings for helicopters
- Heatable glazing
- Switchable screens & windows
- Interior design
- Design freedom
- QM certification according to EN 9100:2018





Safely reaching new heights

Whether for sports aircraft such as gyrocopters, gliders or helicopters, **KASIGLAS®** delivers specialized products of the highest quality, tailored to any design requirements.

The KRD Luftfahrttechnik GmbH excels in complex shaping, including helicopter windows subjected to bird strike tests. For the production of complex-shaped cockpit windows made of polycarbonate for helicopters, the company received the **Airbus Innovation Award** in 2017.





Urban Air Mobility – Safeguarding the Future

Flying taxis offer a revolutionary solution for urban mobility, by bypassing traffic congestion and connecting cities more efficiently. These vertical take-off and landing (VTOL) aircraft rely on electric propulsion, low energy consumption, and sustainable materials.

KRD Luftfahrttechnik GmbH plays a crucial role in advancing this cutting-edge technology by providing innovative composite materials and customized solutions. Our focus on lightweight design, safety, and durability is indispensable for the next generation of aviation. With our hightech products, we make urban mobility secure and efficient.



**INNOVATION
TECHNOLOGY
SAFETY**



Ultra-light Aircraft – Efficiency Meets Innovation

Ultra-light aircraft embody modern aviation: lightweight, efficient, and versatile. Their low noise emissions and economical operation make them an environmentally friendly choice.

As a supplier of hightech solutions, such as intelligent composite materials and advanced coatings, KRD Luftfahrttechnik GmbH contributes to the development of this dynamic aviation segment.

**VISION
HIGHTECH
EFFICIENCY**





KASIGLAS® in the Air Comfort and Design for Aviation

KASIGLAS® offers highly functional glazing, custom-designed partitions, and innovative lamp covers for civil aviation. The supply of civil aviation with high-performance windows, custom built partitions, and innovative lamp covers is part of our standard portfolio.

We also excel at providing demanding special solutions, such as switchable windows for private jets. They not only create a private atmosphere but can also serve as projection surfaces or screens when needed.

In addition, we design interior elements like bar coverings and partitioning for aircraft cabins that combine functionality with elegant design. Even large-format seals and display solutions are manufactured with the highest precision and quality – always „Made in Germany“.



KASIGLAS® Clear safety

- Individually manufactured partitions
- Innovative lamp and camera covers
- Large-format mirrors with excellent optical quality
- Premium display and projection solutions
- Interior elements such as bar claddings and glazing systems



KASIGLAS® Research & Development

**PERFORMANCE
RESEARCH
QUALITY**

Through continuous research and development in our state-of-the-art laboratories, we are constantly enhancing the material properties and manufacturing techniques of **KASIGLAS®**. Years of research and close collaboration with the industry yield impressive results: Special windshields and job-shop coatings are developed into complexly shaped components made of polycarbonate. Our goal is to equip aviation with durable, secure, and high-performance solutions.

Collaborations with prestigious institutions:

Fraunhofer Institute, Technical University of Dresden, University of Stuttgart etc.



Material Properties:



Abrasion-resistant



Chemical-resistant



UV- and weather-resistant



Flexible and formable



Advanced shaping



KASIGLAS®
Clear safety

KRD – With Security for Sustainability

Sustainability is a key objective and a top priority, driven not only by efficiency considerations.

KASIGLAS® plastic panels are not only developed for extreme durability but also lead to weight reduction, which in turn decreases CO₂ emissions. Sustainability is also a focus in production: All sites are equipped with microfilters for exhaust air, enabling lower power consumption and compostability. Our aim is to develop innovative solutions that not only enhance safety but also reduce the ecological footprint.

KASIGLAS® Clear safety

- Microbial filters for exhaust air
- CO₂ savings in aviation and road traffic
- In-house recycling system
- Establishment of an energy-efficient washing facility
- Fleet with alternatively powered vehicles

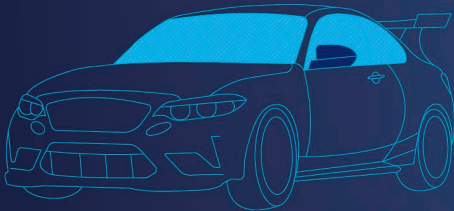
INTERNATIONALLY RENOWNED COMPANIES VALUE
KASIGLAS® PRODUCTS AND TRUST KRD KNOW-HOW.

FOR REASONS OF DISCRETION, WE DO NOT PROVIDE YOU WITH
ANY EXAMPLES OR COMPANY NAMES.

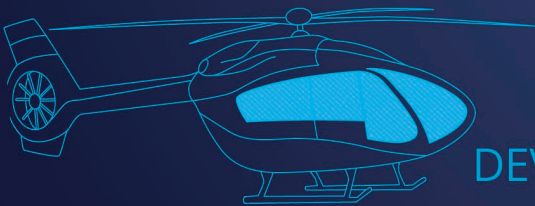


IN ACTON

VISION
PERFECTION
EXPERIENCE

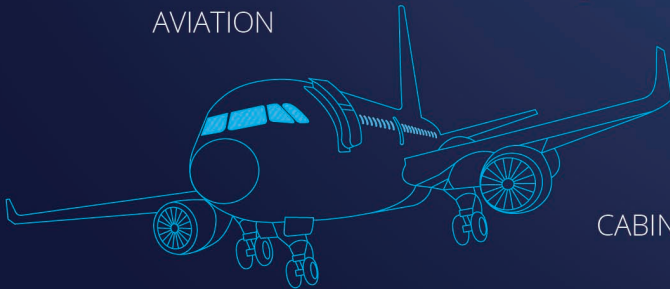


MOTORSPORTS



AVIATION

RESEARCH
DEVELOPMENT
SAFETY



MACHINE AND
CABIN CONSTRUCTION

FOREST

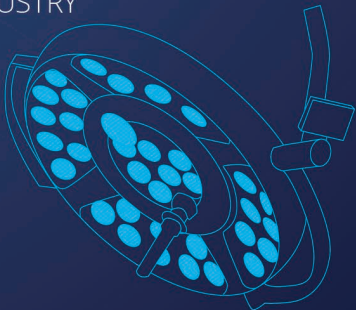


IDEAS
VARIETY
DESIGN

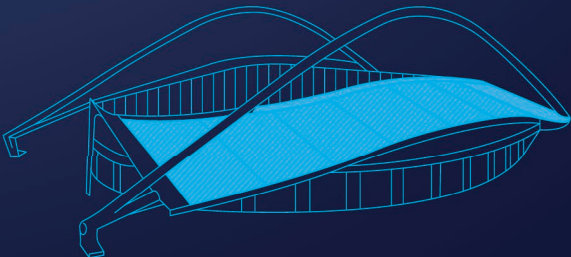


TECHNOLOGY
INDIVIDUALITY
SOLUTIONS

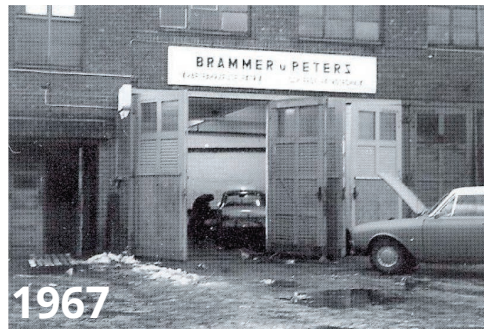
INDUSTRY



ARCHITECTURE



Milestones in the history of KRD



1967

The company's success story begins in a small garage in Hamburg as Gerd Brammer u. Rolf Peters – Fahrzeugelektrik/Schiffselektrotechnik.

The repair shop space is extended into the adjacent building. The company **KRD Handel & Service GmbH & Co. KG** is created. *KRD stands for Kraftfahrzeug Reparatur Dienst, meaning 'vehicle repair service'.*

KRD Sicherheitstechnik GmbH is founded Space of 800 m² for the production and further development of safety glazing made of plastic.

Inauguration of the new company site in Geesthacht. The building is constructed specifically with the company's needs in mind.

KRD Coatings GmbH is founded Transparent plastic is used to create innovative high-tech glazing with high-quality coatings and special properties such as scratch and abrasion resistance as well as UV protection.

KRD reaches another milestone with its delivery of the **first composite safety glazing** to the police.

Inauguration of the Bardowick site with space of 11,500 m² for cutting-edge technology and manufacturing equipment.

KRD Engineering & Service GmbH is founded, adding services and additional products to the company's portfolio.

2015: KRD paves the way for the approval of plastic windscreens in road traffic.

2017: The **world's first plastic windscreen is approved** in accordance with ECE R43.

KRD Luftfahrttechnik GmbH is founded, representing the Group's concentrated expertise in the area of materials for intelligent lightweight construction. KRD develops an innovative production process for 3D polycarbonate shaping. **Expansion of the Geesthacht site into an innovation centre for research and development, design and engineering.**

Since January 2021, **KASIGLAS®** has been an official partner of the **COREUM**, a unique European platform for innovations. It serves as an exceptional venue for meetings, training sessions and the exchange of ideas across the construction, trans-shipment and recycling industries.

The world belongs to the brave, Beate Korinna Brammer has been at the head of the KRD company for 30 years.

Awarded a contract with **Eve Air Mobility** (EVE100 by Embraer).

1967

A repair service for **Borgward models** is offered. Among others, the police force have their vehicles fitted with Moto Meter tachometers here.

1976

Wrecked police cars are often brought to the yard. **The idea of safety glazing is born.** KRD develops superstructures for small delivery vehicles.

1987

Add-on safety glazing: Gerd Brammer develops impact-resistant windowpanes. Contract with Renault. **1990s:** The company's first own coating system.

1994

Demand for safety glazing increases steadily, among other things for police cars. **1998:** First 1,000 m² extension. **2003:** A further 2,000 m² are added.

2004

KRD is Germany's only supplier of 3 × 7 m coated plastic sheets. The company supplies 4,750 cut-size pieces = 25,000 m² of **KASIGLAS®** for the roof of the **Olympic stadium in Athens**. KRD delivers noise barriers with a **self-cleaning coating** as far as to Japan.

2006

KRD offers **stress-free shaping** in production quality. A collaboration with John Deere begins. Overhaul of the **anti-static products** with improved product properties.

2014

KRD has the largest fully automated coating system in Germany. **2015:** KRD continues to develop its safety egress hatches.

2017

KRD begins to additionally specialise in the manufacture of complex **cockpit screens** made of PMMA for helicopters. KRD receives an **Airbus Innovation Award**.

2019

Additional functions for composite windowpanes are further developed, such as a smart heating system. In **2020**, the saw chain shot standard is adopted and KRD windowpanes pass all the tests.

2021

Completion of a **highly innovative production line with a clean room** at the Bardowick site. Display cabinets made of **NEEROGLAS®** produced for TAMARA COMOLLI. **Clear safety.**

2023

Podbike Frikar®: Development of the new 3D forming completed in 2022. The third generation is starting with **Mark Poillon**.

2024

Cooperation with **KYDEX** for interior solutions in the aviation industry.



MARK POILLON

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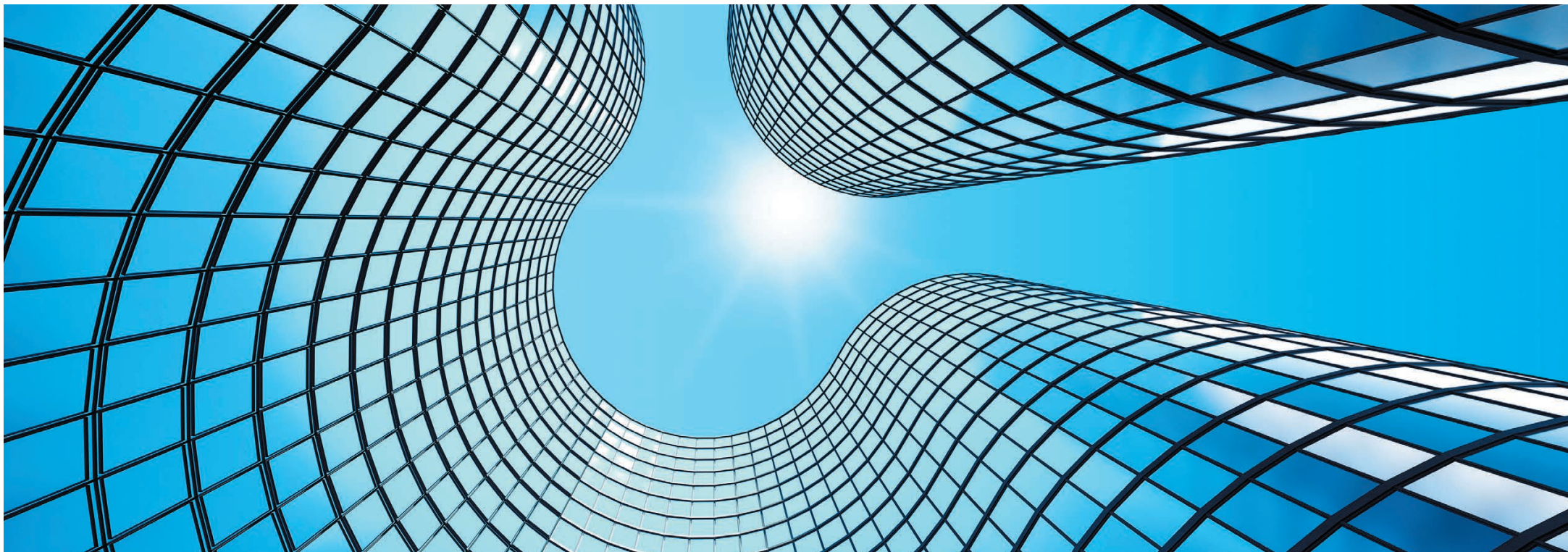


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KASIGLAS®
Flying high with safety

Hightech from 

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