



marine glazing Brombach + Gess

IDEAS IN GLASS

marine glazing
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About Brombach + Gess

Over 35 years ago, Brombach + Gess was one of the first companies who introduced glass bonding in commercial shipbuilding. A new mounting solution was needed for new design requirements in order to receive a continuous glass facade. Here, for the first time, glass was included in the design on a larger scale.

Facade systems, which are common in onshore building, can only be used to a limited extent on ships, which are subject to movement and torsion during operation. Stress peaks, which lead to breakages and leaks over time, occur between the hull, facade systems and glass. As a result of these conditions, glass bonding suggested itself as a solution.

Today our construction expertise covers smaller inland waterway vessels, river cruise vessels and cruise ships for world wide cruise.

Steel and Metal components

With our own metal shop company we are able to offer steel and metal components for our products.

This allows us to respond flexibly to our customer wishes.

Why Brombach + Gess?

Our Skills - Your Benefit

- Product Developments for Future Ship Design
- Innovative solutions
- Comprehensive technical advice
- Constant product improvements
- Many years of experience
- High quality standards
- Cooperation with experienced glass suppliers and engineering offices
- Reliable management of complex projects
- Certified technicians „European adhesive bonders“





The gluing and installation process

The glass gluing technique enables integrating the glass panes into the construction on larger scale. The glasses are directly glued to the ship structure in order to create continuous glass facades and are embedded flush in the outer skin of the ship.



Glass gluing technology offers benefits

- The glass is glued directly to structure, means: freedom in design as no frames are required
- Tolerances in steel constructions can be offset through the application of adhesive in various thicknesses
- No stress peaks which overstrain the glass even under extreme distortions during ship operations thanks to the uniform positioning on the adhesive bed.
- The glass can be installed into prefabricated blocks during the construction phase before these are put together in the dry dock to form the ship.
- Cleaning is made much easier.

Glass Characteristics and Technical Consultation

Brombach + Gess supports in the technical consultation of glass and steel/metal components of your project. We help in choosing the right glass product according to technical glass values, like light-transmittance t_v (%), thermal properties U-value $[W/(m^2K)]$ and solar energy/solar factor g-value (%) and show the possibilities of glass colours.

Our glasses are proofed according to DIN ISO 614.



Architecture & Design

Continuous, frameless glass surfaces make elegant and transparent construction forms possible. For a ship, on which space is a valuable commodity, glass projects with a frameless design support the illusion of more space and an unbounded view of the panorama which is rolling by.

In design and architecture, this technology offers valuable possibilities such as

- Architectural freedom
- Modern design
- Innovative glass structures



GLUED GLASS FACADE



Experience and innovation for over 35 years

- innovative constructions
- individual designs
- exclusive solutions

We see the big picture - from sketch to installation

We offer you the opportunity to immerse yourself in the infinite expanses of glass design. We implement your individual designs and ideas. Our quality standards and many years of experience form the basis of our expertise.

We support you also in the supply of replacement window parts and also carry out large refit and refurbishment projects, taking into account the requirements of the customer and the criteria of the classifications.

During installation, we rely on our high quality standards and our qualified and „European Adhesive Bonder“ certified employees. Our long-standing partnership with Sika and adhesive tests ensure a durable bond.

We are your partner for new construction or refit projects

Support during approval process

As a specialist for glass bonding, we at Brombach + Gess accompany you throughout the entire process from project planning, structural analysis, approval, construction phase to acceptance.

In particular, our relationships with various approval institutions help to avoid unnecessary costs as well as delays in projects.

Best Glass Product & Solution

We deliver C-Class with Type Approval and glued A-Class glass with MED Approval. We are independant in the choice of glass supplier and products, therefore we can identify the best solution for your glazing project.

Special & curved glass

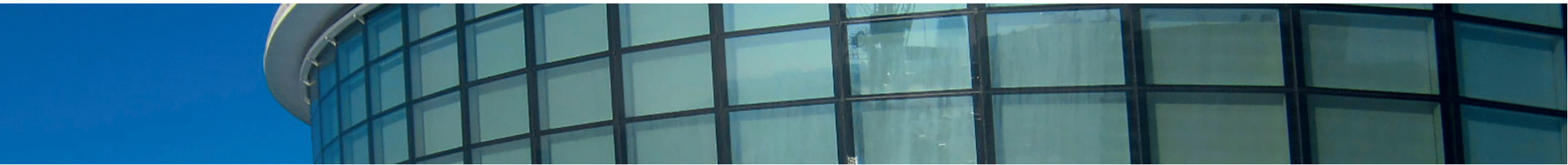
With our special glass solutions, we create a unique highlight for your project. In combination with our bonding technology, new architectural freedom in form and design can be realized.

Digital measuring

Using a high-precision and mobile measuring device, we can perform digital measurements on your yacht to obtain the shape for precision-fit glasses and for template production. The 2D and 3D measurements are extremely versatile and ensure fast and accurate results. At the same time, the measuring and processed measurement data can be used for quality control.



YACHT GLASS



Glued Glass Facade

- Architectural freedom of glass surfaces
- Technical advice on glass and glass values
- Consideration of sun-, light-, and heat protection and combinations

DUROmare laminated safety glass

- High pressure load with thinner glass buildup
- Explicit weight reduction possible
- Especially developed for maritime needs

Glass Sliding Windows & Doors

- Perfect integration into the facade
- No interruption of the overall view
- Frameless over the whole surface - maximum transparency

Solar Glazing / PV Glass

- focus on light transmission or energy gain
- almost any color, shape or thickness
- ensures a good indoor climate through thermal and acoustic insulation



Glass Sliding Roof

- Use public spaces in every weather condition
- Solar-filtered glass provides much light and insulates against the heat
- Available as steel or lightweight composite construction

Special Glass Constructions

- Extendible Glass Balcony
- Glass Dome

Glass Assortment

- Walkable Glass
- Curved Glass
- Dimmable Glass
- Switchable Glass
- Printed Glass
- Heated Glass

Windscreen, Railing, Balustrades

- Multifunctional System
- Flexible with supplementary equipment
- Available in lightweight aluminum or as steel construction



Skylights

- Efficient ventilation of roofed areas
- Natural lighting in roofed areas

Fire-Resistant Glazing PYRAMare FR3

- Narrow frame and unobtrusive design
- Maximum Transparency
- A60 MED Approval

Loggia-Cabin Window System

- New and innovative cabin category
- Infinite-feeling – Walking right out to the water's edge
- With touch of a button the living space becomes the „Loggia“

Detailed product information download center online



PRODUCTS



Cruise Ships

- **AIDA Cruises**
AIDAnova / AIDAstella
AIDamar / AIDAsol /
AIDAblu / AIDAbella /
AIDAluna / AIDAdiva
- **Celebrity Cruises**
Century / Solstice /
Equinox / Eclipse /
Silhouette / Reflection
- **Royal Caribbean Cruises**
Brilliance of the Seas
Radiance of the Seas
Serenade of the Seas
Jewel of the Seas
Quantum of the Seas
Anthem of the Seas
Ovation of the Seas
Spectrum of the Seas
Odyssey of the Seas
- **Dream Cruises**
Genting Dream
World Dream
- **Disney Cruises**
Disney Wish
Disney Treasure
- **Norwegian Cruise Line**
Superstar Vigo
Pride of America
NCL Spirit / Star /
Dawn / Jade / Gem /
Pearl / Jewel / Bliss /
Getaway / Breakaway
/ Escape / Encore
- **Saga Cruises**
Spirit of Discovery
Spirit of Adventure
- **TUI Cruises**
Mein Schiff 1
Mein Schiff 2
- **Hapag Lloyd**
Europa 2
- **P&O Cruises**
Arvia / Iona / Aurora /
Oriana
- **Silver Seas**
Silver Nova
- **Carnival**
Carnival Jubilee

River Cruise Ships

- **Viking River Cruises**
Fleet over 50 River cruise ships
Odin
Prestige
Njord
Idun
Freija
- **Crystal River Cruises**
Bach
Debussy
Mahler
Ravel



Expedition Cruise Ships

- **National Geographic**
Endurance /
Resolution
- **Havila Kystrusten**
Havila Capella
Havila Castor
- **Sunstone Ships**
Ocean Odyssey
Ocean Victory
Ocean Explorer
Sylvia Earle



Ferries and Inland Vessels

- Diverse River Cruise Vessels
Gräfin Cosel
August der Starke
Dresden
Katharina
Brunnen
Flüele
Turicum 1-3
Black Jack
Gilles



Yachts

- Variety of glass projects on yachts
- Panorama Yacht MS Saphir

