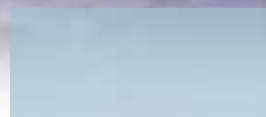
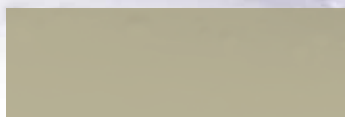


TRANSPARENT PLASTIC COMPONENTS



Transparent Plastic Components for Industry · Research · Design

Individually produced. Successful for you.





Experience the fascinating world of HECKER®

Dear Sir/Madam,

HECKER® was founded in 1920.

For almost 50 years, as HECKER®-Kunststofftechnik, we have been producing customized components in PLEXIGLAS®, MAKROLON® and other transparent plastics.

We and our customers are constantly finding renewed excitement in the HECKER® range. Our team here at HECKER® has been developed over decades and the level of training which they share puts us at the head of our industry. We too, in management, with a combined experience of over 60 years in the market, would like to support you in developing your products successfully and profitably.

Together with our team, we are highly motivated to work as your trusted partner to continuously increase your market success.

We look forward to welcoming you to our offices in Dortmund.
When would you like to visit us?

Manfred Primke Thomas Dörfer

With best wishes from Manfred Primke and Thomas Dörfer – Managing Directors



Supplier top-quality features – that pay off for you in increased profits

Clear cost savings

HECKER® manufactures your plastic components in a transparent design, either for increasing sales – or with special functions. HECKER® team members will gladly assist you through the early design phase because it is at this point that you can achieve the greatest cost savings through value analysis.

Highest level of expertise

HECKER® has offered professional training to our employees for nearly 50 years. Our qualified team of expert plastics processing technicians represents the largest quota in the sector. This means that we can guarantee the highest level of quality when it comes to the sophisticated production of transparent technical plastic parts in Europe.

Excellent precision manufacturing

At HECKER® production takes place

over a shop-floor of 3500 m² with top quality systems for material removal (including 5-axis CNC milling machines), part and whole forming technologies, polycarbonate cold bending and innovative and varied bonding and jointing technologies.

Stock of semi-finished products to guarantee supply

HECKER® has a comprehensive *Just in Time* stock of industrial PLEXIGLAS®, MAKROLON® and other transparent semi-finished products for optimum material availability, including customer-specific stocks.

High-performance partnership

Industry-leading businesses trust and benefit from the committed, long-term and fair partnership that they enjoy with HECKER® and our motto, which we live up to each day: *HECKER® – Aim to improve our customers' long-term competitiveness.*



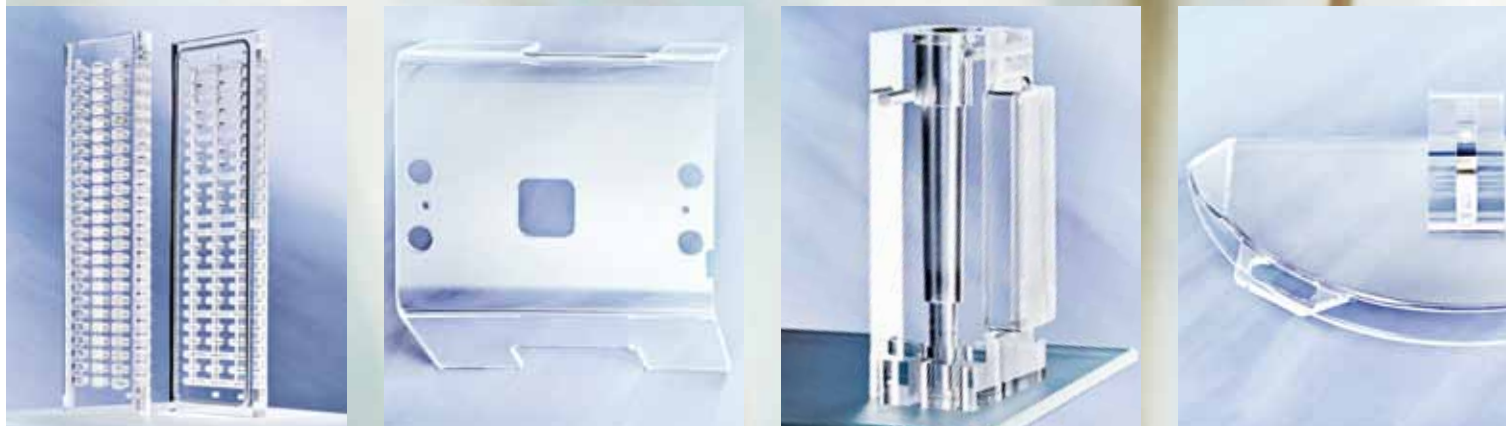
Transparent technical plastic parts and machine protection solutions

HECKER'S® core list of expertise for individual customized components in PLEXIGLAS® and MAKROLON®:

- | | |
|---------------------------|--------------------------|
| ■ Machinery manufacturing | ■ Electronics |
| ■ Equipment manufacturing | ■ Automotive engineering |
| ■ Plant engineering | ■ Lighting industry |
| ■ Medical technology | ■ Fluid technology |
| ■ Laboratory technology | ■ Research |
| ■ Analysis technology | ■ Universities |
| ■ Electrotechnology | ■ Science |



*Transparent, formed and bonded PLEXIGLAS®
protective cover in designs to boost your
sales with no reinforcing strips.*



Machine protection design in transparent PLEXIGLAS®

Deliver a concrete benefit for your customers: transparent protective safety shields and covers create process reliability and enable easier control and fault finding during production. They reinforce your ergonomic design and create added value which can be offset in the purchase price of your machines.

With HECKER® your machine safety has noticeably clean visual forms with narrow tolerances. And at HECKER® we have special semi-finished plastic products for you to choose from for special features such as increased impact resistance, abrasion resistance or antistatic properties.



*Transparency highlights: first-class
PLEXIGLAS® machine design. Sales-increasing,
high-quality formed and bonded protective
covers for the worldwide market.*





Transparent protective machine covers:
gull-wing doors opening on three sides
in frameless MAKROLON® cold formed,
12 mm polycarbonate sheets.

Machine protection solutions in
transparent MAKROLON®

Transparent protective covers for your machines make a first impression that underlines your innovative nature. Doors and covers made from MAKROLON® provide optimum transparency on all sides, yet at the same time are robust, making machine operation and monitoring easier.

Unmistakable design and lower costs do not have to be mutually exclusive in many cases. For example, by using MAKROLON® you can do away with circumferential sheet profiles. This is possible thanks to the HECKER® cold forming process. It creates

self-supporting, distortion-free cover elements of up to 12 mm thickness and 3000 mm in length, as the following examples show.

Recipes for reduced bubble bonds developed here at HECKER® complete our range of expertise for machine protection using MAKROLON®.

We keep special semi-finished plastic products in stock for you to choose from if you have other requirements when it comes to optical characteristics, impact resistance, abrasion resistance or antistatic properties.



Machine protection: frameless
gull-wing doors and tunnel exit in 12 mm
MAKROLON® polycarbonate sheets,
cold formed with no deformation.



Machine covers with frameless
gull-wing doors in 12 mm MAKROLON®
cold formed polycarbonate sheets.

Transparent components for medical and laboratory technology, analysis, environmental and fluid technologies

High-quality transparent design is the way to go for functional industrial parts. It provides visual and process controls and meets other demands such as optical characteristics, hygiene, corporate design, miniaturisation and ergonomics.

HECKER® has been by your side for nearly 50 years, advising on your design ideas as our industrial customers. This means we have a great wealth of experience which product developers appreciate and benefit from.

The production team here at HECKER® is recognised as having

a great deal of expertise in their field and has earned HECKER® our position at the top of our industry in Europe for the production of transparent industrial components. Our partners include a great number of market and industry leaders who trust and rely on these products. Our many top products include the HECKER® PLEXIGLAS® manifolds based on the patented PLEXIGLAS® rolling technology.

Amongst our wide range of transparent plastics, PLEXIGLAS®, MAKROLON® and VIVAK® PETG are worthy of particular mention.



Transparent, round freeze-drying chamber in Ø 300 mm tubing with sealed bonded upper cover in 40 mm PLEXIGLAS®.



Transparent 50 mm solid PLEXIGLAS® door with sealing band enables visual monitoring and control of the machine whilst the production process is running.





Transparent functional and simulation models

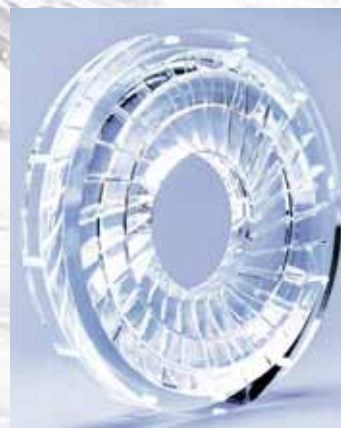
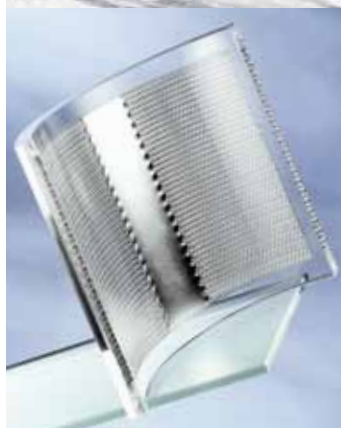
In industry, universities and research institutes PLEXIGLAS® models are the preferred choice for investigating the behaviour of liquids and bulk materials. HECKER® is a strong partner in this market and produces models with remarkable precision, meeting very high optical requirements. We train

our own expert craftsmen and have an outstanding range of machinery and equipment for 5 axis simultaneous CNC milling machines for dimensions of up to 3050 x 2050 x 700 mm, putting HECKER® in a prime position for the production of precision models of all kinds:

- Simulation models for research, teaching and science
- Flow models for large-scale plant construction and product development
- Exhibition models, demonstration models, prototypes for trade shows and exhibitions



Transparent model for simulation trials with liquids in 50 mm solid PLEXIGLAS® block, bubble-free bonding and precision 5 axis milling, dimensions approx. 1200 x 1000 x 700 mm.





The “Munksjö Bridge” in southern Sweden, with ten brilliantly transparent PLEXIGLAS® individual tubes at the top of each mast (external Ø 711 mm, length 2900 mm, 10 mm wall thickness). The PLEXIGLAS® tubes are manufactured to tight tolerances and were used as the crowning visual highlight to finish each pylon. They are illuminated with an ever-changing-color light show.

Formed and bonded
PLEXIGLAS® individual tubing and hoppers

Optically outstanding forming and the cleanest possible craftsman bonding to industrial standards are premium grade of professional processing of PLEXIGLAS®. Here is an example of the

kind of precision requirements which we fulfil: the production of industrial PLEXIGLAS® hoppers in plant construction for powdered bulk goods.



Industrial PLEXIGLAS® hopper with hand formed and bonded sidewalls and CNC processed bonded flanges, tight tolerances. Dimensions approx. 550 x 250 x 300 mm.



Custom PLEXIGLAS® double hopper with the tightest tolerance specifications, with hand formed and bonded sidewalls and CNC processed bonded flanges. Dimensions approx. 700 x 280 x 300 mm.



HECKER® – Successfully committed, for you



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Active around the world – at home in Dortmund

With our origins in the year 1920, we are a part of the Dortmund-based HECKER® Group which these days is formed of three independent companies working in plastics technology, glass technology and glass ceramics, each very successful in their own markets.

We are passionate about HECKER® and about Dortmund. They say that Dortmund folk are down-to-earth and loyal, open to new things and new ideas. They're famous for their straightforward manner when there is something to be said. And if a Dortmunders gives you his word then you can rely on it – now as always.

True Dortmunders love their city and love their football team, BVB 09. And just like the team, Dortmunders know how to *fight*. As proof of this, over a period of more than three decades we have successfully achieved the structural transformation of our home town. The old free and Hanseatic city has developed from an industrial centre for steel, coal and beer into today's successful service industry centre for insurance and retail businesses, as well as into a centre of technology for logistics, information technology and microsystems.

At HECKER® we embody these *Dortmunder* characteristics; amongst ourselves but also when dealing with our customers and network partners with whom we generally have a trusting and performance-orientated relationship spanning decades. We know what we have to offer one another and that we can only be successful together if *we live and let live*. As Dortmunders we enjoy both having business associates and partners like these all over the world and working with commitment for one another.

We look forward to welcoming you to our offices in Dortmund.
When would you like to visit us?

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Testimonial



“Our business relationship with HECKER® as the manufacturer of PLEXIGLAS® began many decades ago and remains characterised by mutual trust and respect. I should also point out that we have a collaborative partnership with the people we deal with, most especially HECKER'S® managing directors Manfred Primke and Thomas Dörfer.

HECKER®-Kunststofftechnik has a really comprehensive knowledge of and expertise in everything to do with processing PLEXIGLAS®. This means that HECKER® is always reliably able to meet our demanding requirements, particularly in the field of “technical industrial products” – this is our unanimous opinion at Acrylic Polymers (Evonik Röhm GmbH, Darmstadt).”

Michael Träxler – Head of Acrylic Polymers at Evonik Industries



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PLEXIGLAS® is a registered trademark of Evonik Röhm GmbH
MAKROLON® and VIVAK® are registered trademarks of Bayer MaterialScience GmbH

HECKER® – The Movie

