

NOVEMBER 2020

# HORN NEWS

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**HORN**  
GLASS INDUSTRIES  
*innovation*  
ENGINEERED IN GERMANY

Serial No.:

**HORN**  
GLASS INDUSTRIES

DEAR READERS,

**For all of us this year was an unprecedented one. The COVID-19 pandemic hit us as well as society as a whole. As an international company, we were all the more restricted by the severely restricted travel options and the various regulations in the individual countries.**



I would like to take this opportunity to express my great respect, appreciation and thanks to our management team and the entire HORN team. In a very short time, the right measures were initiated and implemented in the various areas in order to guarantee both a safe workplace and the usual safe work processes. Thus, the promised delivery and engineering obligations towards our customers could be met at all times.

It was far more difficult to do the diverse work assignments on site at our customers worldwide. Our experts had to endure numerous quarantine days both on arrival on site and after return. Today we can say that we were able to meet every manpower assignment requested by our customers.

As we can see today, our customers in the glass industry are more or less affected by the effects of the COVID-19 crisis and its economic effects. In essential areas, such as packaging glass in particular,

we do not notice any restrictions on requirements, but a somewhat cautious approach to new projects due to the various handicaps. Depending on the country and region, this area is sometimes even classified as "systemically important". One can almost speak of a boom in medical packaging products.

Accordingly, we can be satisfied with our workload today. Nevertheless, we face the developments in the next one to two years with concern. Due to COVID-19, but also due to political and economic developments, the glass industry will probably not remain unaffected in many areas.

However, HORN has pushed ahead with its goals and plans. In strict pursuit of our vision of becoming the "leading supplier of sustainable glass melting technology", we want to take up today's demands of glass manufacturers and align our organisation accordingly.

We can already offer sophisticated and well elaborated furnace designs for the flexible and maximum use of regenerative electrical energy. In addition, we are currently working with partners from research to verify in detail industrial processes for the use of environmentally friendly energies.

On the basis of additional personnel capacities by experts in the special glass area and an intensive commitment in this, we have – as evidenced by references – expanded our product portfolio with innovative melting systems for e.g. Borosilicate glass.

In our second business area, turn-key glass plant technology, we have also reacted to the vacancy in the float glass annealing lehrs on the market and today we offer in-house manufactured roller annealing lehrs of the highest quality.

Another new subsidiary based in São Paulo, the HORN Glass Brazil Ltda., now also belongs to HORN. The new location in South America enables HORN to serve the South American market even faster and more comprehensively.

All of this is supported by our HORN team, which has had around 400 employees worldwide in recent years. For the grown workforce, an innovative new office building was built at the headquarters of HORN Glass Industries AG in Plössberg and they already moved into the new building in September 2020. Ergonomically designed workplaces with the latest technical equipment are now available to our employees in all areas.

As you can see, we have revised the design of both the HORN News and our HORN homepage and the brochures. We want to offer you an attractive and informative platform on all the latest news and innovations from the global HORN Group.

My special thanks go to our customers for the trust they have placed in us and the partnership-based cooperation in the midst of the pandemic. In the same way, I would like to thank our team here at the site and at our subsidiaries for their great personal commitment and dedicated work. We look forward to the time in which we can meet you again here in Plössberg or anywhere in the world and wish you all the best until then and stay healthy.

We hope that you have made it through this turbulent time safely and, above all, healthy and that you will continue to stay safe in the future.

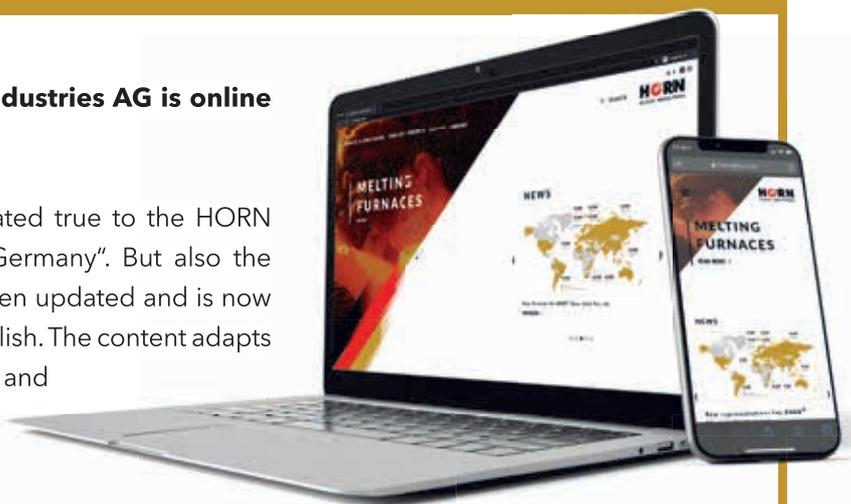


Yours, Stephan Meindl

## NEW HOMEPAGE AT [WWW.HORNGLASS.COM](http://WWW.HORNGLASS.COM)

**Since September HORN Glass Industries AG is online with a newly edited website.**

The simple, stylish design was created true to the HORN motto „Innovation engineered in Germany“. But also the complete content of the site has been updated and is now available in German as well as in English. The content adapts responsively to the size of the screen and is therefore easy to read and find on mobile devices.



## A PARTNER IN DIFFICULT TIMES: FROM START TO FINISH, FROM HOT TO COLD



**When looking for a reliable partner in the float glass industry, investors will find what they are looking for at HORN. The innovative furnace manufacturer is not only active worldwide for its furnaces, but also offers its customers comprehensive service and technology from the so-called hot to the cold end in float glass production.**

The company was able to demonstrate this ability again in a year plagued by a pandemic. Despite the resulting difficulties, the German engineering company was able to build a brand new 300 t/d float glass plant for the manufacturer Azerbaijan Float Glass Co. in Sumgait, Azerbaijan.

The core of the task was the project management across the entire technological line, from the batch plant to the packaging and the finished goods store. Here, all of HORN's knowledge and experience from

previous projects could be used to ensure a process that was timed and complied with the technological specifications. Highly qualified experts managed the planning phase, monitored the construction site work and are available to the customer for production support even after commissioning. In close cooperation with both the customer and the various suppliers, it was now possible to put the float line into operation in November 2020.

As a manufacturer of float glass equipment for the hot end, HORN additionally supplied the melting tank, tin bath, roller annealing lehr, cooling water supply, protective gas mixing station and the associated automation of the system. All these technologies were planned and manufactured at the headquarters in Germany - according to the motto: Innovation engineered in Germany.

## HORN CARRIES OUT FURNACE REBUILD FOR SIVESA

**Container glass manufacturer CROWN Sivesa is based in Orizaba, Veracruz and is among the prominent container glass manufacturers in Mexico.**



HORN received the order for a rebuild of Crown Sivesa's Furnace A at the end of 2018 after already having commissioned a high-quality 360 t/d recuperative furnace B in spring 2018 for Crown Sivesa in Orizaba and a 450 t/d end fired furnace in late 2017 for Crown Vichisa in Chihuahua, Mexico. The latest Furnace A project in Mexico included the repair of a 260 t/d recuperative furnace with two production lines for container glass with a melting area of 109 m<sup>2</sup> at container glassmaker Crown Sílices de Veracruz (Sivesa) in its Orizaba plant. The furnace is designed in appliance with the most advanced technology and a maximum melting output of 290 t/d to produce either 290 t/d flint or amber glass or 280 t/d green glass.

The HORN design guarantees an optimum of glass pull rate in respect of energy consumption, glass quality and stable conditions. For the heat recovery two combined type recuperators (consisting of tube bundle & double shell) were installed. HORN's scope of supply included the entire refractory material and equipment, two steel recuperators, peripheral equipment as well as the heat-up and commissioning of the furnace.

HORN's recuperative heated furnace is characterised by the preheating of the combustion air through recuperators. These are normally made of steel and may be double shell and/or tube bundle type recuperators. Specially developed air casing burners are used in this type of furnace to ensure an equal distribution of the combustion air around the burner lances.

Even though the construction works had to be stopped in March due to the outbreak of the Coronavirus, the HORN experts were able to continue with the heat-up and commissioning in mid July. Thanks to the excellent cooperation with Sivesa, the new 260 t/d recuperative furnace was successfully put into operation in August 2020. Even during a global pandemic, the HORN experts make sure to offer its customers excellent support and a helping hand at any time.

## NEW FURNACE FOR HIGH-TECH GLASS FACTORY RITZENHOFF AG

Over the years, the family-run company RITZENHOFF AG has evolved from a glass-making workshop to one of Germany's best-known high-tech glass factories. The heart of RITZENHOFF AG still beats where the company's history began more than 100 years ago - in Marsberg in Germany's Sauerland region. As far back as the 18th century, wood from the dense local forests was used in the first glassworks to fire the melting furnaces that turned quartz sand into glass. In the meantime, the supplier of high-quality drinking glasses offers everything from the development and production to the decoration of glass products from a single source. In the modern plant, up to 50 million glasses are produced annually on four production lines. Through many investments in recent years,

the site has developed into a high-tech glass factory. HORN Glass Industries has now carried out a part of these investments with the repair of the glass melting furnace 1.

The 30 t/d end fired furnace for crystal glass was modified together with the two production lines and partly equipped with furnace equipment by HORN. HORN also supplied the heating equipment as well as state-of-the-art measuring and safety technology. The order comprised the complete services from furnace drain to demolition and tempering, which were carried out by HORN experts and external service providers.

The new furnace was finally named „Jana“ on 20 February 2020.



## WIEGAND-GLAS RELIES ON TECHNOLOGY FROM HORN GLASS INDUSTRIES



On-site meeting concerning the new construction of furnace 2 at the Schleusingen plant

Wiegand-Glas is one of the top 3 container glass manufacturers in Germany and produces in its four plants in Steinbach am Wald (Bavaria), Ernstthal, Großbreitenbach and Schleusingen (Thuringia) more than eight million glass containers for the beverage and food industry every day. The successful family-owned company, now in the 4th generation, relies on both tradition and modern technology. The company now receives the latter from HORN Glass Industries AG.

This year in April HORN received the order for the repair of furnace 1 for the plant in Steinbach am Wald, which is an 82.8 m<sup>2</sup> end fired furnace. In the future the plant will produce 270 tonnes of green glass bottles per day. The existing furnace will be redesigned by HORN for this purpose, partly equipped with new heating and safety equipment and will receive a new barrier boosting and two new batch chargers.

A further order has now been placed with HORN in July. The furnace manufacturer will build the new furnace 2 - a 430 t/d end fired furnace - at the Schleusingen plant. The scope of supply of the furnace and the three forehearth includes the planning work, the completely new furnace equipment and the erection of the plant. Shortly after placing the order, the first on-site meeting with Wiegand-Glas concerning the new furnace took place.

The third order from Wiegand-Glas, the general repair of furnace A in Großbreitenbach, was commissioned by HORN in November. We will report about it in detail in the next HORN News.

## PIRAMAL GLASS OPERATES NEW 145 T/D COSMETICS & PERFUMERY GLASS MELTING FURNACE FROM HORN

**Piramal Glass Limited (formerly known as Gujarat Glass Pvt Ltd) is a global specialist located in India to design, produce and decorate of premium glass packaging for pharma, cosmetics, perfumery, skin-care, food, and beverage industry. Piramal Glass is one of the largest players in the Asian premium glass-packaging segment.**

The company has four manufacturing facilities: one in the USA, one in Sri Lanka, and two in India (Kosamba and Jambusar) with an overall capacity of 1465 tonnes per day (t/d). The Kosamba facility has six furnaces. Piramal Glass produces there USP Type I, II and III glass bottles / vials for the pharmaceutical industry, Type III glass bottles for cosmetics & perfumery industry and also feeder-coloured bottles in various shades. The Kosamba plant contains also a dedicated facility for Type I borosilicate glass for

moulded pharmaceutical glass packaging and a dedicated facility for premium cosmetics & perfumery glass bottles.

In May 2018 HORN Glass Industries AG received the order from Piramal Glass to redesign their existing 100 t/d furnace for the premium cosmetics & perfumery bottles. The order comprised design drawings and some equipment (combustion, boosting and reversing system) for the furnace with 8 forehearth lines in total.

HORN supplied the end fired furnace designed with appliance of the most advanced technology to save energy, reduce emission values and extend furnace life. The furnace is designed with a melting area of 82.8 m<sup>2</sup> to produce up to 145 t/d in total.

HORN had been awarded the supervision of the whole furnace repair works. However, due to the COVID-19 pandemic, the supervision and commissioning was done by Piramal alone with remote assistance of HORN experts. The new 145 t/d furnace was put successfully in operation in June 2020.



## REBUILD OF 25 T/D ALL ELECTRIC FURNACE FOR NACHTMANN GMBH SUCCESSFULLY COMPLETED

Glass factory F. X. Nachtmann has been producing hand- and machine-made goblets and gift articles since 1834. The company, which now has over 1200 employees and a turnover of around 80 million euros in 2018, offers the finest crystal glass from Bavaria, with all kinds of drinking glasses, vases, plates and much more being part of the extravagant range.

In October 2019 HORN received the order for the new construction of furnace 2 for the plant in Weiden, an all electric furnace with seven production lines, which produces up to 25 t/d of tableware. The melting furnace represents a special feature, as the heating is carried out electrically by means of tin oxide electrodes as well as by means of an oxygen gas mixture. The distributor and the forehearth were previously electrically heated and have now been converted to the pure HORN CORA® gas mixture heating.

HORN's scope of supply included the planning of the refractory scope of the distributor and forehearths and the refractory structure of the melting furnace, distributor and forehearths. Furthermore, the new steel superstructure bracing and accessible platforms were planned, manufactured and erected. For the distributor as well as forehearths the HORN gas-air-mixture heating system CORA®



was planned, manufactured and installed as well as a new combustion air supply. Furthermore, the whole plant was equipped with a new measuring and control station and, to simplify the control, the SCADA process control system developed by HORN including hardware and software was integrated.

The entire construction and commissioning was supervised and managed by HORN. Thus, the glass flow could take place on schedule on 24 August 2020. Thanks to the good cooperation with Nachtmann the entire project was realised within the specified time schedule.

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## NEW TECHNOLOGY CENTRE TC2 COMPLETED



**A future-oriented company like HORN Glass Industries must keep its eyes open for innovative developments in a working world characterised by rapid change and dynamics. One part of the future strategy was the realisation of a new innovative office building, whose furnishing was to be modern, future-oriented and barrier-free.**

The extension of the new building wing at the headquarters of HORN Glass Industries AG in Plössberg has now been completed. The new technology centre TC2 covers a total of 1200 m<sup>2</sup> and offers 60 employees a new professional home. The former open-plan offices gave way to smaller office units, equipped for only 2-3 people. This not only promotes a more productive and inspiring, but especially in times of Corona, also a working atmosphere in which one can feel safe thanks to easy compliance with the minimum distance regulations. The employees of the Supply Engineering, IT, Sales Department and Project Management are now united under the roof of the new technology centre.

Great importance was attached to modern technology in the building during the planning phase, as

the electrical installations of the innovative systems were also intended to greatly increase the comfort of the HORN employees. Many different components, whether lighting, heating, blinds, locking and alarm systems, can now be controlled digitally. The system is not cooled by an air conditioning system, but by activating the components, i. e. pre-installed pipes with cold water cool the rooms without draughts or noise. The integrated ventilation system ensures a pleasant room climate by means of constant but unobtrusive air circulation.

The ground floor of the new office building was also designed barrier-free to ensure easy access for all customers, partners and future HORN employees. A lot of glass was used inside and outside, how could it be otherwise. On the one hand, this provides pleasant, natural light in accordance with the environmentally conscious company policy, and on the other hand makes the already spacious offices look even more inviting. Subsequent modifications within the building are also possible without any problems.

## WHAT DO YOU DO AT HORN?

### THOMAS BRUISCHÜTZ

**QUALIFICATION:** Technical engineer

**WITH HORN SINCE:** August 1996

**AREA OF RESPONSIBILITY:**

Head of Furnace Design  
since 1999



### HOW DID IT COME ABOUT THAT YOU JOINED HORN?

I had been working in the glass industry since 1984, more or less.

A production worker once told me: If you like working with glass, it never lets you go. The material glass was fascinating for me.

After graduating as a technician, I successfully applied for a job at company HORN, as a leading supplier of glass melting plants.

### WHAT ARE YOUR RESPONSIBILITIES AT HORN?

At the HORN company I am responsible with 20 employees for the elaboration of the layouts as well as the refractory drawings down to the last detail. We are also responsible for the inspections of the pre-assembled materials for the furnace at the supplier. I am also responsible as a trainer for our prospective draughtsmen and I am also active in the examination board of the Chamber of Commerce and Industry.

### WHICH OF YOUR ACTIVITIES DO YOU LIKE BEST?

To work out solutions for the multitude of different tasks in the department together, in order to then complete the product into a whole in cooperation with the specialist departments.

The worldwide communication and exchange of experience with our customers, which also includes worldwide travel activities.

### WHAT IS NEW OR WHICH INNOVATION WILL BE IN THE FUTURE?

Energy efficiency or the reduction of pollutants (NOx) are always a topic for us, so we are constantly working on new developments/improvements in these sectors.

In the area of CAD systems, it will probably be possible in the medium term to represent complex plants completely in intelligent 3D models.

NEW REPRESENTATIVES FOR HORN GLASS INDIA PVT. LTD.

**CONTACT**  
**HORN GLASS INDIA PVT. LTD.**  
 202, Mukta Apt.,  
 Military Road  
 Marol Village,  
 Andheri (East)  
 Mumbai - 400059  
 (Maharashtra) INDIA

● Representation  
 ■ Countries in which HORN® is active

**HORN Glass Industries AG offers customer proximity and short response time on the global market. This can be guaranteed by subsidiary companies in China, Malaysia, India, Croatia, Ukraine, Brazil and the Czech Republic which add value to the global customers.**

HORN Glass India Pvt. Ltd. was incorporated in the year 2008 as the subsidiary of HORN Glass Industries AG (Germany) to cater the requirements of customers in India and abroad. HORN India has a team of electricians, instruments engineers, heating-up technicians, refractory / mechanical & utility draughtsmen who can offer turn-key site supervision & commissioning services. The team comprises 15 employees in total.

**FROM NOW ON, THERE ARE TWO NEW REPRESENTATIVES FOR HORN GLASS INDIA PVT. LTD.:**



**Hr. K. Surendran**  
**Director**  
**(Administration)**

He is looking after overall team management & administration.

furnace@hornglas.com  
 Phone: +919820577623



**Hr. Sasi Kumar Battaram**  
**Director (Technical)**

He is looking after overall electrical, utility project management in India as well as overseas.



## THE "HORN WORLD" IS GETTING BIGGER

With a new subsidiary in Brazil, the German glass plant manufacturer HORN Glass Industries AG is expanding its local availability in South America. The new subsidiary HORN Glass Brazil Ltda. with office in São Paulo expands the HORN Group and is now the contact for the glass industry throughout South America.

The new company is managed by an experienced specialist in the glass industry, Mr. Thiago Metti. He was able to represent the company in his previous job. Thanks to his many years of experience, he is the ideal contact for the glass industry throughout South America for all matters relating to glass melting furnaces and glass production plants.

The Brazilian subsidiary is supported by specialists from Germany, which means that the glass industry can enjoy the usual high quality. But in addition, thanks to the new location in South America, the parent company from Germany can serve the glass industry even more effectively in sales, project management and services.

### THE HORN WORLD

Currently, HORN Glass Industries AG has subsidiaries in

- Germany
- Czech Republic
- Croatia
- Ukraine
- India
- China
- Malaysia
- Brazil



### LOCATION & CONTACT

The new subsidiary is located in São Paulo and represented by Mr. Thiago Metti.

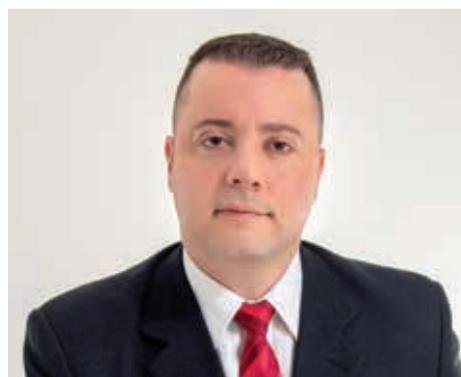
**HORN**  
GLASS BRAZIL Ltda.

### HORN GLASS BRAZIL LTDA.

Av. Anita Franchini, 853 - Apto 83  
Santa Terezinha / São Bernardo do Campo  
São Paulo / Brazil  
CEP: 09780-050

thiago.metti@hornglass.com.br

Mobile: +55 11 9 8916-6580





## HORN GLASS INDUSTRIES WELCOMES SIX NEW APPRENTICES



**First row from left to right:** Sabine Götz (Human Resources), Lukas Zintl (Metalworker), Leonard Witzl (Electronic Technician), Christian Stalla (Electronic Technician), Ben Thoma (Electronic Technician).

**Second row from left to right:** Sebastian Pfeil (Metalworker), Stephan Meindl (President & CEO), Rainer Sommer (Business Unit Director Manufacturing), Marius Gerber (Draughtsman).

**On 1<sup>st</sup> September, the future specialists were warmly welcomed on the first working day of their new stage of life by the President & CEO of HORN Glass Industries AG, Stephan Meindl, together with the Human Resources Department, Business Unit Director Manufacturing and youth and trainee representatives. They wished the new apprentices a lot of fun and success for their professional future. „Here you can create a sound basis for yourselves, in a profession of the future at a future-oriented company“, emphasised Meindl.**

Six trainees will be joining the workforce of HORN Glass Industries AG this year. In detail, two metalworkers, one draughtsman and three electronic technicians started in Plössberg on 1<sup>st</sup> September 2020. HORN currently has a total of 33 apprentices, the President & CEO informed. The apprentices thus make up a proud proportion of the workforce.

HORN Glass Industries AG creates the framework conditions for a successful start to professional life and qualified training by means of intensive training in its various specialist departments as well as an open ear and competent support from colleagues and superiors. During their training, the apprentices get to know the different departments or accompany their colleagues on construction sites and thus get to know the entire company.

## OBITUARY

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### MR HELMUT HORN SEN.



**Helmut Horn sen.** deceased on 20 June 2020 at the age of 90. The trained glassworks technician successfully completed a 3-year apprenticeship from 1945-1947 at the AUGUST HORN company, which was founded in 1884. Helmut Horn took over the AUG HORN SÖHNE OHG company from his father Otto Horn, who deceased in 1958. He returned it to a retail company under the name AUG. HORN SÖHNE, owner H. Horn. Helmut Horn forged plans and expanded the previous service company into a production company. In 1972 the company was renamed AUG. HORN SÖHNE, Inh. H. Horn KG and his wife Elisabeth Horn joined as limited partner.

Helmut Horn sen. managed the HORN company together with his wife Elisabeth for many years. With untiring personal commitment, great foresight and determination, he has driven the development of the company forward. In the newly established company, HORN Glass Industries AG, he continued to provide consulting services for many years with his great expertise.

In recognition and dignity, we will always keep an honourable memory of him.

**HORN Glass Industries AG**

### MR WILHELM SOUKUP



With deep sorrow we remember our employee

#### **Mr Wilhelm Soukup**

who deceased completely unexpected on 12 August 2020.

We have lost a valued employee committed to the company for many years, who was popular with all colleagues and customers because of his always friendly nature.

Full of respect and gratitude, we consider his far too early decease as a loss beyond words.

We will always commemorate Mr Soukup.

**HORN Glass Industries AG**



## NEW ORDERS

CUSTOMER	COUNTRY	FURNACE	PRODUCT
Salavatsteklo	Russia	Cold Repair Melting Furnace & Tin Bath	Float
BBC Glass - PT Cullet Prima	Indonesia	120 t/d End Fired Furnace	Container
Wiegand-Glas	Germany	270 t/d End Fired Furnace	Container
JSC Grodno Glassworks Elizovo Branch	Republic of Belarus	180 t/d End Fired Furnace	Container
GCA Gürallar Cam Ambalaj (Gürallar Glass Packaging)	Turkey	400 t/d End Fired Furnace	Container
Wiegand-Glas	Germany	430 t/d End Fired Furnace	Container
DEDE Bottle Factory	Ethiopia	120 t/d End Fired Furnace	Container
Gerresheimer Neutral Glass	India	Cross Fired Furnace	High Quality Borosilicate Glass
Stoelzle Oberglas GmbH	Austria	270 t/d End Fired Furnace	Container

## IMPRINT

**HORN GLASS INDUSTRIES AG**

Bergstraße 2 | D-95703 Plössberg

Phone: +49 9636 / 9204 - 0

Mail: info@hornglas.de

**CONCEPTION, DESIGN, TYPESETTING:**

C3 marketing agentur GmbH

Bahnhofstraße 3

95643 Tirschenreuth