



PORTFOLIO













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WELCOME TO LEDCON SYSTEMS!

On the following pages we provide an insight about the fields of application of LEDCON. Get an overview of what's possible together with us.

If required, we will be happy to present our complete range of services as a full service provider. What would be your benefits?

You will get everything out of one hand. This starts with the concrete evaluation of your idea and a necessary pilot study. Afterwards we will continue by choosing the perfect LED-Solution.

For our clients we can take care of the planning, design, development, project planning and customised design according to your wishes. We also take care of the necessary static calculations and needed certificates. A very important topic for us is the sourcing and development of the perfect LED components. This also includes the substructures and the installation of matching switch cabinets/control panels for the LED-Screens, controllers and everything around it.

As LED systems are designed to be used for many years, we will provide also customized solutions especially for your LED-Screen/project. A good serviced and maintained system is the key to have it running smoothly for years and far beyond warranty.

Additional to our standard service and maintenance package we guarantee 10 years availability for spare parts for every product from our catalogue. This guarantees a safe investment. With our own repair centre we are able to act fast and can repair nearly everything inhouse. Our service department is also there if you want your screen monitored 24/7 – we offer the mentioned service to any client.

A quick reaction time is our key to a very high planning safety and short installation period. Due to our standardized substructures and processes we are able to realise your concepts in a very short time. We offer several standardized solutions for example whole roadside screens and wall mounted screens with all necessary static calculations, drawings and permissions. This gives you the opportunity to add your design and idea to our existing and readymade structures and have it all done in a very short time.

On the basis of selected and completed projects on the following pages we will give you a wide variety of impressions, starting with the out-of-home area for maximum visibility.



The retail area fits in seamlessly in this category which offers you innovative possibilities for creative innovative clients to upgrade and support your business design.

Our projects in the sports area are countless. It does not matter if stadia or arena, from Bundesliga clubs to multifunctional Sports venues, we can impressively show that we know what we are doing.

Our portfolio also includes LED-Components dedicated for the rental sector for which we have established, designed and developed our successful brand LUXERA.

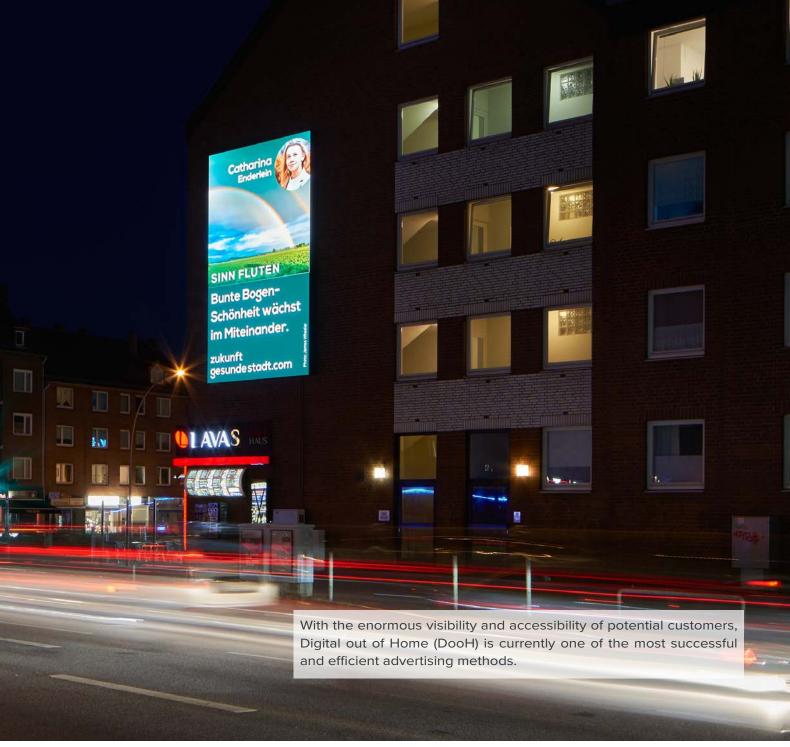
Please do not hesitate to contact us - we are looking forward to your project!



Udo Bloms



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OUT OF HOME

Road Side Displays | Facade Displays | Pylon

Digital out of Home (DooH) is the generic term for the digital and dynamical presentation of advertising or other contents on your screen to reach the wanted target group through your LED-Display at the wanted position.

This is done in public places such busy streets/junctions or in the city centre on facades, shopping centres, airports, train stations and in the retail, leisure or hospitality sector.







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ne of the most important advantages of DooH is to give the advertiser the opportunity to target and advertise on certain geographical spots to a specific group of viewers. For example, they can select geographically locations in order to display their advertising to a specific group of people. DooH gives you the possibility to advertise in real time. You can react to current events or adjust the time of day.

This allows content to be custom-made to the needs and interests of yours customers, which will significantly increase the effectiveness of the advertising in a positive way.

LEDCON has an excellent reputation for their Road Side Displays and Facade Displays in the field of DooH. The customer has a choice of numerous standardised concepts to choose from. If the requirements for design and technical feasibility are more individual then, concepts can be developed by LEDCON or on inter- disciplinary basis to achieve maximum success.

Sales, product, project management and site management work together closely to present the best possible solution to the client.

ROAD SIDE DISPLAYS



Road Side Displays are electronic display systems that are installed on roadsides or on buildings. We usually plan and calculate firstly with a free standing road side screen. Thanks to the enormously high perception, these screens are not only used as a classic digital advertising medium but also for the dissemination of traffic informations. That's why the screens usually are located at highly frequented junctions/roads..

Their enormous visibility is striking. Due to the LED technology used, they are highly visible during the day and also in darkness, which makes them an effective advertising option.

A key advantage is their flexibility. They can be quickly and easily updated to react to events in real time. Furthermore, its is possible to show the content/advertising, customized to the preferred groups by displaying timed advertising.

Freestanding roadside solutions are available as standardised one leg or double leg variants.



LED Standard Monofuß | Standort: Magdeburg

The experts from the LEDCON Sales Department will be happy to inform you about the possibilities for customised solutions. Of course project-related new constructions or adaptations to existing installations are what we do as well.



LED Premium Display One Leg Design | Location: Rheine

ROAD SIDE DISPLAYS

One Leg Displays



LED XXL One Leg Design | Location: Rothensee

different display sizes | various designs: e.g.: one- or double-leg design | one- ore double-sided | product used: Upix 6L



ROAD SIDE DISPLAYS

AdverTower

The task was clear:

The previously analogue operated pylon on the B9 in Koblenz (Germany) needed to be digitalised.

The proximity to the highly frequented B9 in Koblenz in combination with the imposing height had to be mastered.

After extensive planning, static calculations and sourcing of the perfect LEDCON product we were able to install our LED-Cabinets to the existing structure of the AdverTower. Within a few days we installed all of the 115sqm of the of Upix 20R to the AdverTower

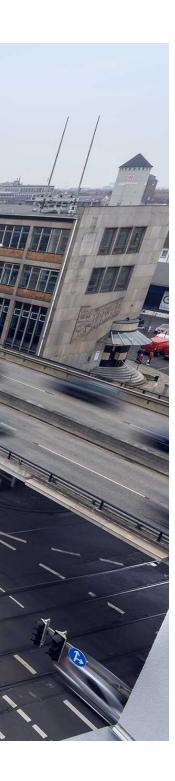








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very special form of the Road Side Displays are façade displays (wall mounted). An essential advantage of mounting them on to buildings is that very large screens can be realised. Technically there are almost no limits and Facade displays are likely to be found in highly frequented locations. These installations are usually designed for outdoor usage, but they can also be designed for indoor usage with a much better resolution.

Many years of experience in development, construction and installation of facade displays enables LEDCON to assess the technical feasibility at an early stage of the planning. We are also able to support you with static evaluations, in order to support and speed up the decision-making process







The facade display at Kurt-Schumacher Damm 1 in Osnabrück (Germany).

Strategically extremely well positioned, we achieved together with our client maximum visibility at the highly frequented junction on Osnabrück.



Kurt-Schumacher-Damm I Osnabrück

LEDCON was fully responsible for this project as a turnkey solution partner from project planning to commissioning of the LED display.

The time schedule is remarkable: After the order was placed, the individualised 3.84×5.12 metre screen was fully installed and put into operation, just three months later.

Thanks to our own stock of LED-Cabinets and Controllers in Germany, internal test runs and pre-assembly, the LED wall was installed as a plug and play solution shortly.

For the screen we used our solid UPix L-series with a pixel pitch of 6.67mm and with a total resolution of 576 x 768 pixels.



Hürth Park I Cologne

This visual large-scale display is the perfect medium when it comes to get the attention of visitors to share targeted information and to arouse emotions. Moving images with a personal message, service tips and relevant offers reached Hürth Park (Cologne Germany). Of course the 150 or so shops that can participate in the digital signage system also benefit from the direct link to their customers.

The 8 \times 5 metre LED display was installed in the atrium of the shopping centre. The final result was preceded by a year-long planning and preparation phase.







The installation of the screen also was impressive:

Two pre-assembled screen parts were lifted by a lorry-mounted crane, across the shopping centre into the atrium.

" I was very impressed: As soon as has been turned it was already dark and I was very impressed with the image quality. A razor-sharp, bright image in HD quality a huge statement."

Dieter Sawatzki

Managing Director Sawatzki | Mühlenbruch GmbH



Ankum



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With lots of love and an eye for detail there was nice event location with good gastronomic possibilities created.

The heart of the new place-to-be is the "Onkel Otto", which attracts visitors with an LED screen in the outdoor area of the building. It aattracts the restaurant area as well as at the tourist hotspot of the Artländ Cathedral.

LEDCON installed a 3.5 x 2.0 m LED display which can be used for advertising and public viewing.





Hamburg

Exemplary for the city centre of Hamburg (Gemany) are many facade displays.

A selection of cities in which LEDCON has installed façade screens:
Berlin, Dortmund, Düsseldorf, Munich and many more











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Location: Rheine



Location: Nordhorn



Location: Aachen



Location: Lübbecke



Location: Lingen



Location: Lübbecke



Location: Marburg



Location: Itzehoe



Location: Rheine







MORE DIGITALISATION AT THE POINT OF SALE •••







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he rapid development of LED technology and high-resolution indoor door cabinets has made them indispensable in the retail industry. Especially at the POS, the possibilities of advertising are almost unlimited. LED screens are perfect to show and present your product in static or interactive formats.

Promotions and campaigns can be played out in a targeted manner.

In addition to this approach LED-Cabinets in different sizes and shapes can become architectural and interior design elements.

Whether ordinary or as a transparent design: they transfer themed areas and departments in the desired moods and ensure positive purchasing decisions.

International integrators rely on LEDCON's know-how: from the individual productions to a successful rollout

LEDCON develops, implements and cares individually about every project.

RETAIL

Retailstore | Arnsberg

Behind the walls of a commercial building in Arnsberg(Germany) a multistorey fashion house had been created, to trigger emotions and needs to inspire customers with contemporary store design and a sophisticated visual concept.

For the perfect realisation of this marketing concept the customer chose LEDCON as a full-service partner for the development, design and installation of several high-resolution LED screens with a pixel pitch of 2.6 mm.

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DISPLAY01

Size: 200 x 350 cm Resolution: 768 x 1344 px Product: UFrame E 2.6

DISPLAY02

Size: 350 x 200 cm Resolution: 1344 x 768 px Product: UFrame E 2.6

DISPLAY03

Size: 500 x 300 cm Resolution: 1920 x 1152 px Product: UFrame E 2.6



In the fashion department in the basement of the store, customers can expect to see an impressive $5 \times 3 \text{ m LED}$ display positioned behind a window. The screen captures the view and together with the decorative elements that surround the screen it creates a world of experience.

With a FHD resolution and a pixel pitch of only 2.6 mm and the typical UFrame Ecolour brilliance the screen offers all the possibilities to create the desired mood in the world of brands.

Here too, we had the task to develop a very thin and smart looking substructure inc. customized side covers to create the suggested design from the client.

All the screens are controlled through integrated media player from their own marketing department.



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RETAIL

Teufel Flagship Store | Berlin





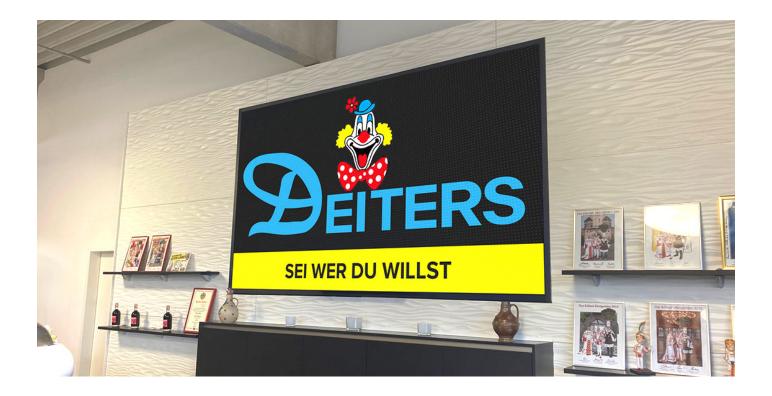
Installed was an LED display with the size of 2.00×2.50 metres and a resolution of 1152 \times 960 pixels.

The digital signage solution was seamlessly integrated into the Shop and is controlled with NovaStar LED-Controllers.

With a pixel pitch of 2.6 mm the content played is displayed brilliantly sharp and makes shopping an even more intense experience.







Now in its fourth generation Deiters offers costumes and accessories for every occasion.

In order to make the shopping experience even more exciting Deiters is relying on digitalisation in the "world's largest carnival department store" in Frechen.

Directly at the checkout area is a high-resolution LEDCON Screen which impresses with a brilliant colour spectrum and thanks to its pixel pitch of 1.9mm - with razor-sharp content.







O₂ LIVE CONCEPT STORE

Together with partner *umdasch The Store Makers* LEDCON has installed a mesh LED display in the *O2 Live Concept Store* in Berlin located in a prime location on the Kurfürstendamm (Germany). The display impresses with a total area of 19 sqm and a pixel pitch of 7.81 mm.

A special highlight is the radar sensor installed by Traxas Media which ensures that the content reacts to the flow of visitors with animations.













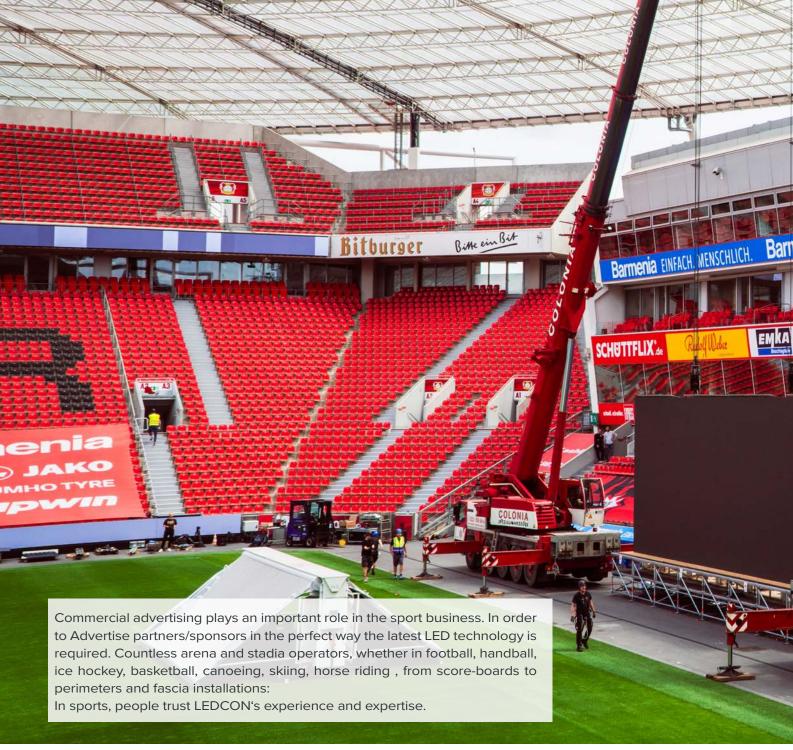








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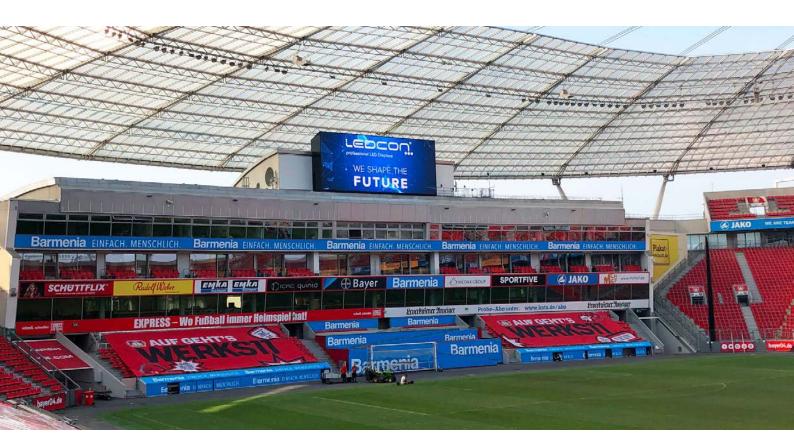


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SPORTS

BayArena | Leverkusen



With a view to the international competitions and perfect customized offers for advertising customers, Bayer 04 Leverkusen Fußball GmbH and the stadium operator TecArena+ decided to work with LEDCON as a full service provider to carry out the new installation of the relevant LED display technology within the period of two years.

The tender included two scoreboards, a fascia board (upper tier ribbon), 1st and second perimeter to be used as a powerpack.

The Tender also included the dismantling of the old equipment and a new structural adaptation for the new equipment.



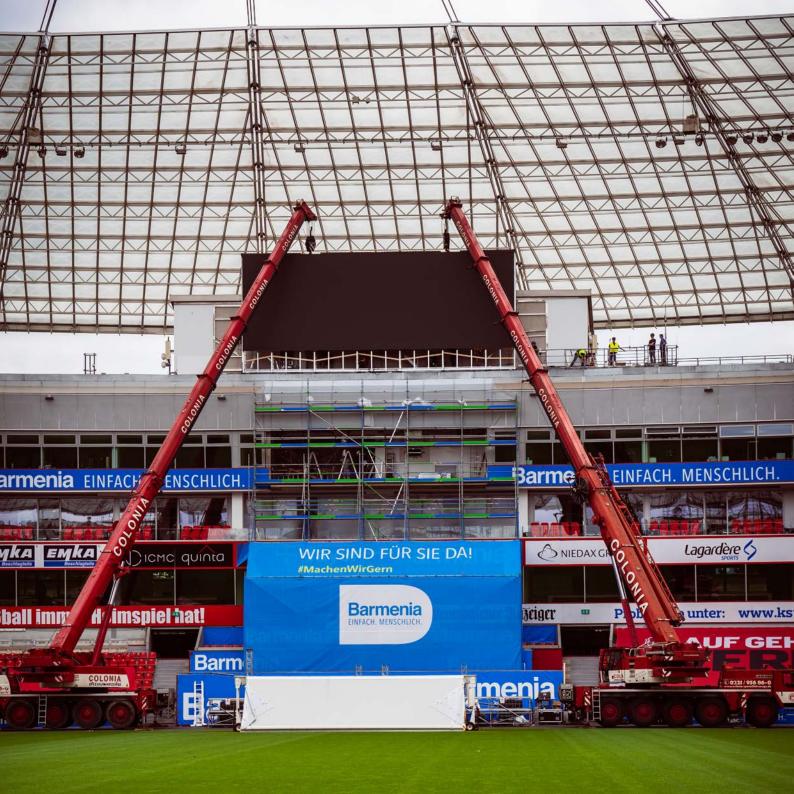


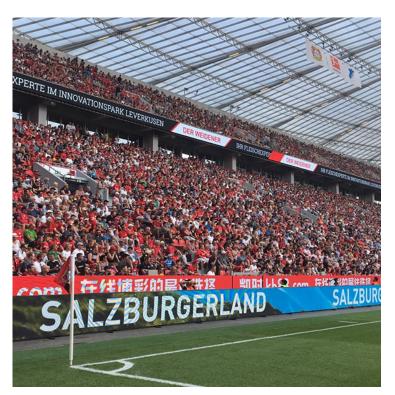




After the planning phase including a wind tunnel report everything was constructed and finally implemented on site. The two scoreboards installed have a surface area of 15.20×6.40 m each (almost 100 sqm per screen). The total screen area was increased by 50% with the new systems. The pixel pitch was reduced from 25 mm to 6.67 mm resulting in a remarkable total resolution of $2,280 \times 960$ pixels per screen.













Vonovia Ruhrstadion I Bochum



As a full service provider, LEDCON installed the major project at Vonovia Ruhrstadion in Bochum (Germany).

The club received two new scoreboards, two new perimeters as a "Powerpack" format, as well as a press conference screen with fine Pitch LED .







Part of the project was the dismantling of the old display boards before the new Upix III modules could be installed and put into operation. With now 6.67 mm instead of 20 mm pixel pitch the scoreboards which have grown to 8 \times 4.5 m the scoreboards offer more than 11 times the number of pixels with a total increase of 17%.

The old 4:3 format with 320 x 224 pixels has been replaced by a modern 16:9 format with with 1200 x 675 pixels each.

The use of state-of-the-art LED technology is also reflected in other factors despite the enlargement of the total area, the weight of the displays was reduced from 2.6 to 1.25 tonnes.

It is very pleasing to say that the average energy consumption has been halved.

Vonovia Ruhrstadion | Bochum

In addition at the same time installation and commissioning of the new LED perimeter started. The central position of the "power pack" achieved maximum visibility of the perimeter advertising in the stadium as well as during the television broadcasts.

A total of nearly 330 m of Unilumin's Usport X 10 in the first row and 102 m Unilumin LED Cabinets – both in 90 cm height - were installed in the second row.

"At the end of 2021 we have decided to replace the old systems which were installed in 2004.

LEDCON understood our requirements right from the start and quickly presented us a finished concept from the planning of the static calculations up to the implementation. Despite global delivery bottlenecks we are proud to have new LEDCON scoreboards ready for season 2022/23

Tom Uhlenbruch

Purchasing VfL | Bochum 1848

432 METRES LED-PERIMETER







The final work at VfL Bochum 1848 was rounded off by a free-standing press conference screen. The new screens serves as a new digital background for the press conferences. At impressive 4.80×1.35 m the VN 1.8 modules used, proved to be the right product.

Ideal for professional usage. This part of the project was completed in a record time of less than six weeks and gives the club the opportunity to show their partners and sponsor in 2560×720 pixels.







Allianz Arena I München



Around 200 sqm of LEDCON UPix 6 LED-Cabinets with 4K resolution have been attached to the corners of the Allianz Arena (Germany). This enormous big screens belong to the largest stadium displays in Europe! To ensure that the spectators behind each display no longer miss any information the rear sides of each screen were additionally equipped with each approx. 40sqm of LED-Videowall.



VELTINS-Arena | Gelsenkirchen

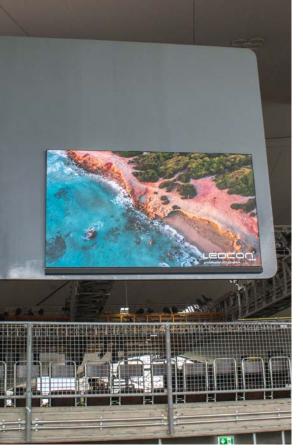


10.60 x 7.20 m per side, 30 tons in weight and equipped with LEDCON LED Cabinets - this is the video cube, which has been in official use at VELTINS-Arena (Schalke/Germany) since 2016. The total area of the cube is 305.28sqm - 76.32 sqm per side – each side consists of Upix x10 modules with a pixel pitch of 10 mm and a resolution of 1060 x 720 pixels.

The lightweight Upix Cabinets stand for reliability under the toughest operating conditions an excellent circuit design and low power consumption.

The substructure of the cube is made of aluminium. The screen area was doubled without increasing the weight.



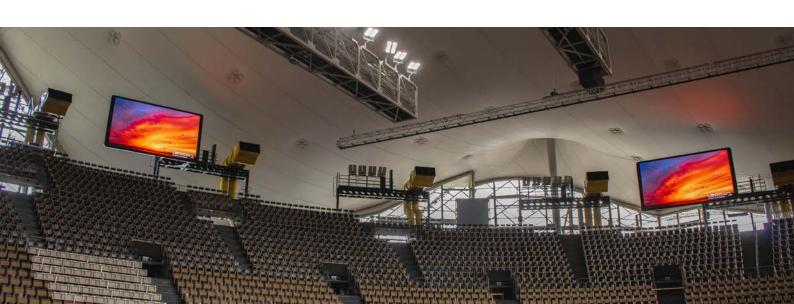


Olympiahalle | München

With a total of 190 sqm six LED screens with a size of $7.20 \times 4.05 \text{ m}$ each and a pixel pitch of only 3.1 mm per screen have been installed.

Additional to the big screens there are two smaller screens behind the seats at the east and west entrances with a pixel pitch of 2.6 mm. The challenges of this project in the Olympic Hall in Munich were the small installation depth the low overall weight of the LED displays as well as the protection of historical monuments. The six existing screens are located behind and above the last rows of the arena. This meant that accessibility and technical safety clearance had to be ascertained.

Another key point was the weight of the LED displays. The screens were not allowed to exceed a certain weight as the integration was to take place in already existing constructions.







EMSLAND ARENA

Stadion am Lotter Kreuz I Lotte

EmslandArenal Lingen







Sportfabrik Stadtwerke Offenbach

Yayla Arenal Krefeld

Sparkassenarena Versmold







ÖVB-Arena I Bremen

Stadion Biener Busch | Lingen

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Margon Arena I Dresden





ÖVB-Arena I Bremen



Olympiahalle | Munich



Skywheeler Dome I Frankfurt



Sachs-Stadion | Schweinfurt



CONCEPTS

Extraordinary projects: Robustness, brightness, long service life and modular design are advantages of modern LED screens. In combination with the knowledge and experience of LEDCON, many specific customer projects have already been realised and every single one had extremely individual requirements.

In the maritime sector LEDCON was able to equip entire fleets of cruise ships with saltwater resistant outdoor and indoor screens. Developments are carried out in close relation with our clients such as TÜV Rheinland. The results of the partnership with TÜV Rheinland is a ´Kl-controlled scanner unit on the basis of a LED tunnel.

Individual requirements can also be created through the existing architecture which in addition with technical know-how can create a more aesthetical view.





Water level indicator! Lippe Verband



TUI Mein Schiff



Water level indicator | Lippe Verband



Water level indicatorl Hamburg harbour



Microsoft | Munich

RENTAL



The current event industry its unimaginable without large-format LED systems. From regional events stadium concert, TV broadcast or corporate events: a large-scale or corporate event: large-scale image technology that can be set up and dismantled quickly is a must-have in the event industrie.

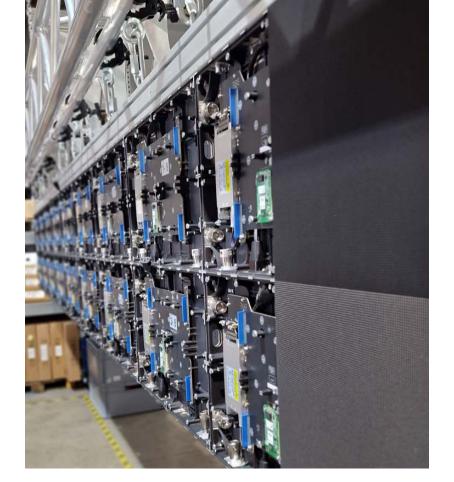
With LUXERA, LEDCON offers a robust and economically product. Rental Cabinets for indoor and outdoor usage.

With pixel pitches from 3.9 to 4.8 mm for outdoor events and 1.9 to 3.9 mm for indoor use.

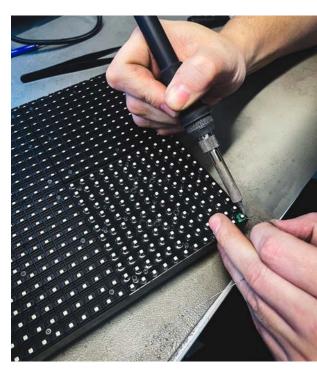
Statically tested hanging and stacking accessories are also stocked and available for your professional and successful production.







SERVICE



For decision-makers is next to project realisation, a safe investment a relevant factor.

In regards of this LEDCON can convince with a 10-year spare parts availability, individual service and and custo-mized maintenance concepts, monitoring tools and even a 24/7 support if needed. All necessary repair and maintenance work is carried out in our specialized workshops and in our own ESD laboratory with the most modern measuring and repair tools and only with original spare parts.





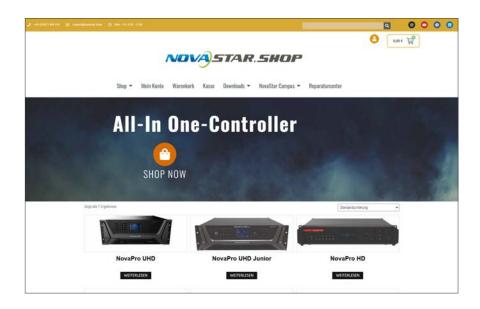
CONTROLLING

NovaStar









NovaStar and LEDCON have joined forces years ago. For the countless projects LEDCON used and uses only controllers from NovaStar.

As a European distributor and exclusive German distributor we will also take care of the sales and support for our national and international clients.

Through our webpage www.novastar.shop all current NovaStar products can be ordered and will be send our from our warehouse in Germany.

Our service and repair department is one of only a couple fully licensed NovaStar repair centres in the world.

We are able to provide report and repair for your Controllers fast and efficient. Of course, we only use original spare parts from NovaStar. Customer service is rounded off by the NovaStar Campus which was launched by LEDCON.

In our campus we offer different NovaStar trainings. You can choose between basic or advanced.



















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