

EN 2019

BASIS FOR BUSINESS

MESSE DÜSSELDORF GROUP

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Special Supplement A+A



Werner M. Dornscheidt
Chairman of the Board of Messe Düsseldorf GmbH

*Fair*ANTWORTUNG *

Shaper of the future, growth enabler, development promoter. This is how we see our role as a company of national and international standing. Because we are aware of the effects of our entrepreneurial actions. And sense the impact they have – in our exhibition halls, in Düsseldorf and around the world. Responsibility is an important part of our corporate strategy, but it means far more to us than that. It's a commitment we live by – to the environment, to society, to the global economy – and to our customers.

5,000 tonnes. This is how much CO₂ we save annually through our endeavours to conserve resources – corresponding to the annual per capita consumption of our entire workforce at the Düsseldorf site. We want our presence to have a positive impact.

Our participation in the SAVE FOOD Initiative, which aims to counteract food waste through new technologies and partnerships, is just one such example of our efforts in this regard. And our national and international trade fairs, which – as platforms for innovative products – open up completely new perspectives for the future. Take the **K**, for example: the fact that plastic can not only be used as packaging for a snack, but can also save lives as a biodegradable polymer implant, gives an insight into the potential of our global portfolio Plastics & Rubber. See for yourself: in our commentary section or with your own eyes at the **K** 2019!

* Fairness + responsibility

» **How?** Do we imagine the future. Do we want to live. Do we want to be. Every day. Here and now. Throughout the growth markets of the world. How? Do we create innovations. Do we promote industries. Do we envisage digital change. For ourselves. For our employees. And our customers. How? Do we understand our influence. Do we think big. Do we handle the small stuff. For society. For the environment. And our mutual success. By giving **fair answers. Today.** To the important questions of tomorrow.



How many answers equal responsibility? 50. This is the number of our trade fairs, 23 of which are number 1 in their sector. But also: 45. Strong brands, spread across five areas of expertise. And: over 300,000. The square metres used by around 30,000 exhibitors from all over the world, where they inspire more than 1.5 million visitors with their innovations, expertise and vision for the future.

But it all comes down to: 3. Our pillars of economic sustainability – which are also the basis of our business development plan. With four global portfolios, we are expanding into the world's most important growth regions. In particular: Asia, North and South America. Our international commitment is good news – and not only for global markets. The world's foremost trade fair in Düsseldorf also benefits as a global brand platform. And is proud to offer Service 4.0. The digital transformation of the trade fair is a work in progress. In the future, our exhibition halls will dazzle with their multifunctionality: by 2030, we will have converted our home base into one of the most modern exhibition and event locations on the planet. And we can't say fairer than that!

» www.messe-duesseldorf.com

WAVELENGTH

Plastic waste that doesn't end up in the sea, but in the circular economy. And from there, perhaps it even lands at our feet – as a sole for sports shoes, manufactured with 3D printing. It can be stylish, too: smart glass façades that drastically reduce energy consumption.

The outlook is good at the K, drupa and glasstec – a trio of events with immense international appeal. Just like the solutions they present. You can almost see ideas turning into reality, prototypes becoming ready for series production, and the future emerging before our very eyes – no longer beyond our grasp, but available here and now. At small specialist fairs and world leading trade fairs alike. We set positive trends – the impact of which can be felt all the way from Düsseldorf/Stockum, round the globe and back again!

THE WORLD OF OUR BRANDS IN DÜSSELDORF

FAIR VALUES

45 epicentres of innovation, 23 of which are the number 1 in their industry – and all of which are strong brands that drive markets with ideas, perspectives and opportunities.

» www.messe-duesseldorf.com/tradefairs

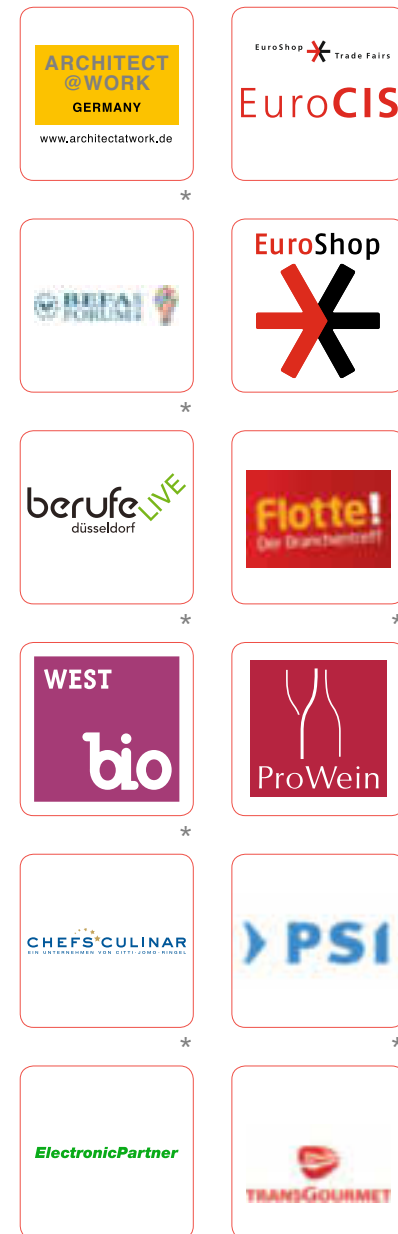
01

MACHINE TOOLS, PLANT AND EQUIPMENT



02

RETAIL, TRADE AND SERVICES



03

HEALTH AND MEDICINE



04

FASHION, LIFESTYLE AND BEAUTY



05

LEISURE



4RUNNER.

To be a trailblazer. That's what we want – through our four global portfolios, with which we have secured our position in all the most important industrial regions. Our strategy for sustainable growth: optimised networking – with the world's best.

Take the **K**: the world's leading trade fair in the plastics and rubber industry has been taking place in Düsseldorf since 1952; today, it's the global number 1 business platform for the entire industry. With our global portfolio Plastics & Rubber, we set positive trends in important growth markets. We open the gateway to your international success, and step through, with you, confidently: with "Global Gate", we take you to the most relevant economic centres, thanks to our own trade fair platforms and strategic alliances with leading trade fairs for plastics and rubber worldwide.

GLOBAL PORTFOLIOS

› PROCESSING & PACKAGING

interpack
DÜSSELDORF

components
DÜSSELDORF

food processing & packaging exposium
NAIROBI/KENIA

indopack
JAKARTA/INDONESIA

pacprocess India/food pex India/Indiapack
MUMBAI, NEW DELHI/INDIA

process expo
CHICAGO/USA

SAVE FOOD
DÜSSELDORF

swop/components
SHANGHAI/CHINA

upakovka
MOSCOW/RUSSIA

› HEALTH & MEDICAL TECHNOLOGIES

MEDICA
DÜSSELDORF

COMPAMED
DÜSSELDORF

MEDICAL FAIR ASIA
SINGAPORE

MEDICAL FAIR CHINA
SUZHOU/CHINA

MEDICAL FAIR INDIA
MUMBAI, NEW DELHI/INDIA

MEDICAL FAIR THAILAND
BANGKOK/THAILAND

MEDICAL MANUFACTURING ASIA
SINGAPORE

MEDITECH
BOGOTÁ/COLOMBIA

REHACARE INTERNATIONAL DÜSSELDORF

INTEGRATION
MOSCOW/RUSSIA

STRATEGIC CO-OPERATIONS:

HOSPITALAR
SÃO PAULO/BRAZIL

ZDRAVOOKHRANENIYE
MOSCOW/RUSSIA

› PLASTICS & RUBBER

K
DÜSSELDORF

Arabplast
DUBAI/UNITED ARAB EMIRATES

Chinaplas
GUANGZHOU, SHANGHAI/CHINA

INDOPLAS
JAKARTA/INDONESIA

interplastica
MOSCOW/RUSSIA

interplastica KAZAN
KAZAN/TATARSTAN

plast alger
ALGIER/ALGERIEN

Plastics & Rubber Vietnam
HANOI, HO CHI MINH CITY/VIETNAM

PLASTINDIA
NEW DELHI/INDIA

T-PLAS
BANGKOK/THAILAND

› METALS & FLOW TECHNOLOGIES

GIFA
DÜSSELDORF

FLOW-CONTROL EXCHANGE
MUMBAI, NEW DELHI/INDIA

indometal
JAKARTA/INDONESIA

ITPS
International Thermprocess Summit
DÜSSELDORF

ITPS Americas
CHICAGO/USA

Litmash Russia
MOSCOW/RUSSIA

Metallurgy India
MUMBAI/INDIA

Metallurgy Russia
MOSCOW/RUSSIA

METEC
DÜSSELDORF

NEFTEGAZ
MOSCOW/RUSSIA

NEWCAST
DÜSSELDORF

PUMP SUMMIT AMERICAS
HOUSTON/USA

THERMPROCESS
DÜSSELDORF

»

Tube
DÜSSELDORF

Tube CHINA
SHANGHAI/CHINA

Tube India
MUMBAI/INDIA

Tube & Pipe Producers and Suppliers Pavilion at FABTECH
CHICAGO/USA

Tube Russia
MOSCOW/RUSSIA

Tube Southeast ASIA
BANGKOK/THAILAND

TUBOTECH
SÃO PAULO/BRAZIL

VALVE WORLD EXPO
DÜSSELDORF

VALVE WORLD EXPO AMERICAS
HOUSTON/USA

VALVE WORLD EXPO ASIA
SHANGHAI/CHINA

wire
DÜSSELDORF

wire CHINA
SHANGHAI/CHINA

wire India
MUMBAI/INDIA

wire Russia
MOSCOW/RUSSIA

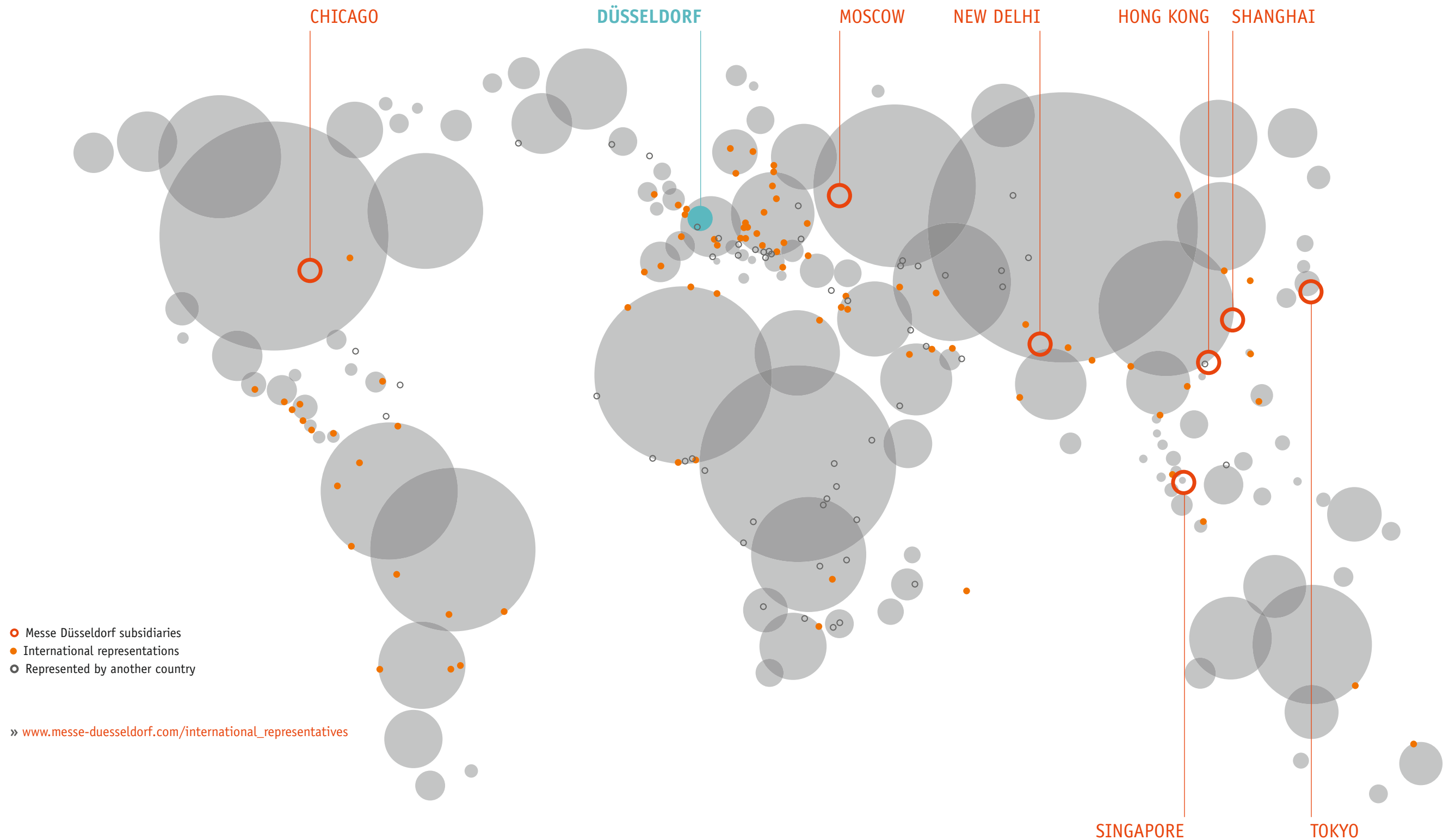
wire South America
SÃO PAULO/BRAZIL

wire Southeast ASIA
BANGKOK/THAILAND

OUR GLOBAL NETWORK

FAMILY BUSINESS.

We're at home everywhere. In 140 countries, with 8 subsidiaries and 76 partners. With expertise in markets, sensitivity to place and culture, and a passion for progress. We're here for everyone!





CAN'T GET ENOUGH: SPORT

Supporting a team, cheering them on: sport unites. It plays an important role in our society – and rightly so. To promote good health. Impart values. Facilitate integration. We get involved and make a difference!

For example, as an official supporter of the Grand Départ of the Tour de France, or host of the 2017 World Table Tennis Championships. Or at the live presentation of the adidas collection for the 2018 Olympic and Paralympic Games in Pyeongchang, modelled by top athletes from Germany. And as the organiser of the German House on behalf of German Sport Marketing since the 2000 Olympic Games in Sydney, as well as the 2010 Paralympic Games in Vancouver. We will be honoured to be there again in Beijing 2022 and Paris 2024, when the Olympic and Paralympic Family come together in the German House. This has not gone unnoticed by the world's media, who have reported on our commitment to sport. And this, in turn, has a positive effect on the international position of our business location on the Rhine. What can we say – Düsseldorf is a city of sport and likes to play in the premier league!

EYE CONTACT OVER VIRTUAL CONTACT.

Dating apps can be useful in the search for a partner nowadays. But what about finding business contacts at a trade fair? A simple “OK” can lead to a promising match and before you know it, the ideal partner is at your side. Fast – and real.

SERVICE 4.0

- › Interactive hall plan
- › Digital booking and visitor registration
- › Stand organisation
- › Matchmaking app
- › iBeacons
- › Data driven marketing

Our new matchmaking tool is just one example of how digitisation can complement our analogue service portfolio and enhance your visit to the trade fair.

SMART SERVICES

Cloud computing, the Internet of Things, robotics – at Messe Düsseldorf, we are a showroom for digital change. How do you read the mind of a machine to improve human-robot interaction? We show you at Medica. The A+A also focuses on cooperation between man and machine when it comes to occupational health and safety. And to make sure that humans stay ahead of robots, at least in terms of appearance, Beauty promises beauty at the click of a mouse.



Our role: to provide orientation. Create transparency. Inspire confidence. By reducing the complexity of new market and trade developments through intelligent networking of our digital and analogue service offerings. Because that remains our greatest strength: to offer a platform for professional networking. And to make everything as enjoyable as possible for you: with service that revolves around your needs and enhances your trade fair experience in practical ways. In the future, of course, we could validate your ticket using facial recognition, while you admire the magnificent new South Entrance on your way in. We do take personal data and privacy very seriously, however. Because we also have a responsible attitude to service. Both online and off. From the big picture to the smallest detail.

»



THE PILLARS OF OUR SERVICE OFFERING

- › Stand construction
- › Engineering
- › Infrastructure
- › Catering
- › Marketing
- › Communication

THE RIGHT SERVICE FOR EACH AND EVERY CUSTOMER

- › Exhibitor services
- › Visitor services
- › Services for partner/guest event organisers
- › Services for conference organisers
- › Press services

ANY TIME!

One of our favourite phrases – and we really mean it. Because if you return home after a positive trade fair experience, that tells us all we need to know: we got it right. For example, how we prepared the trade fair and organised the stands. Full service from the hall ceiling to the floor covering. Barrier-free access to the exhibition grounds and the halls. Tasty snacks to keep you going. Even a hairdressers just round the corner.

These are the ways we meet your every need on our 304,817 m² grounds. Not only that, but before and after your visit to the fair: with our strong alliance of analogue and digital services. And with the help of our professional and dedicated team.

» www.messe-duesseldorf.com/sabc_gb



**FOR YOU.
WHATEVER YOU REQUIRE.
TAKE YOUR PICK:**

» messe-duesseldorf.com/guestshows

OUR RÉSUMÉ

- 1**
SKILL AND EXPERIENCE IN
ORGANISING TRADE FAIRS
- 2**
FULL SERVICE IN
ALL SECTORS AND FIELDS
- 3**
IDEAL GROUNDS AND
HALL INFRASTRUCTURE
- 4**
SHORT-DISTANCE TRAFFIC
INFRASTRUCTURE
- 5**
MODERN
CONVENTION SPACES
- 6**
COSMOPOLITAN
URBAN ENVIRONMENT
- 7**
AT THE HEART
OF A STRONG ECONOMIC AREA

Airport – Fair 5 km
Fair – Old Town Centre 5 km

ENVIRONMENTALLY FRIENDLY – FRIENDLY ENVIRONMENT.

It's nice and green here. From the banks of the Rhine, through spacious parks to the Fleher Wäldchen, a small forest area. Plenty of diversity, too: for example, the “Japanese capital on the Rhine” has been home to around 6,500 Japanese citizens for more than 50 years. And over 700,000 visitors and exhibitors from 180 places around the world, who come to us in Düsseldorf every year.

And feel at home here. Whether in the old town centre, on the Kö or at the Media Harbour. At one of over 300 start-ups, which are an important factor for innovative strength in and around the state capital. At one of the almost 4,000 creative agencies that inspire markets all over the world from here. Or at one of the 5,000 branches and subsidiaries of foreign companies that are based in Germany's largest business hub. All pervaded by a sense of great interconnectedness: the feeling of being at the heart of things; the thrill of almost unlimited possibilities. No wonder: you can be almost anywhere in just 10 minutes. And get right up close to the action: feel the pulse of the metropolis, sense the future and experience the joie de vivre of the Rhine region. In short: live close, feel free.

In fact, this is the new slogan that the metropolis on the Rhine is using on its flag. Justifiably so: „Live close Feel free” stands for the unique urban atmosphere of a city in which you always feel connected – with the world and with those around you. The citizens of the city agree – everyone was asked for their opinion in the city's rebranding campaign. Düsseldorf – a unique brand in a class of its own!

» www.messe-duesseldorf.com/arrival



**DISTANCE BY AIR
FROM DÜSSELDORF**

London	561 km
Stockholm	1,368 km
Rome	1,483 km
Moscow	2,374 km
Sydney	16,700 km

**DÜSSELDORF
INTERNATIONAL AIRPORT**

- › Germany's third largest airport
- › More than 22 million air travellers per year
- › 200 non-stop connections

**RIGHT AT THE HEART
OF THE ACTION**

- › 2 long distance train stations
- › 10 minutes to the trade fair grounds
- › 1,300 taxis, 151 taxi stands
- › 230 hotels with 26,331 beds
- › In the old town centre alone: 300 pubs, bars and restaurants

HOW DO YOU MEASURE RESPONSIBILITY?

FUTURE *Building*
Neue Messe Süd

FÜR DIE AUGEN
ARCHITEKTONISCHES HIGHLIGHT
MIT REPRÄSENTATIVER WIRKUNG

FÜR IHRE IDEEN
DIE NEUE
MULTIFUNKTIONALE HALLE



THAT'S A HEAD-SCRATCHER.

In euros? Square metres? Kilowatt hours? Well, here we have invested in multi-functionality, meeting your requirements and creating an energy efficient exhibition site. 15,337 – the amount of extra space we have created with our new Hall 1 and lavish South Entrance, to give free rein to your visions of the future. And 476,000, which we save on electricity thanks to our strategic energy management system and staff suggestions for reducing energy consumption.

Or in scenarios? Ideas? A simple “wow”? When you see everything close up: in our 18 exhibition halls, where the world’s brightest minds present the most sustainable developments for our planet. Or from a distance: when you first catch a glimpse of the glass frontage of our new foyer. Translucent fibreglass fabric, optimum use of daylight – and when the sun goes down: stunning LED lighting effects.

Our new multifunctional Hall 1 also meets the latest standards for energy and resource efficiency – from the lighting, heating and ventilation concept to demand-dependent control of the pressurised air level. Seriously sustainable. Like the impression we hope to make on you!

HALL 1 (PREVIOUSLY 1+2)

Surface area	12,025 m ²
Length/width/height	158.34 m/77.4 m/20 m
Ceiling height	15 m, no pillars
Gates	6 gates, 5.5 m/6.0 m (width/height)
1 gate	5.5 m/6.8 m (width/height)
Hall floor	Distributed weight 10 t/m ² , single load 50 t/m ² , distributed across 1.2 x 1.2 m
Suspended loads	In 3 x 3 m/270 kg grid,
single loads	up to 3,500 kg

EVENT FACILITIES

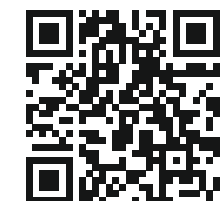
Hall for up to 10,000 people
6 conference rooms with 200 m ² for 198 people
Transition to CCD on the 1st floor

SOUTH GATE: FOYER + AWNING

Foyer area	2,112 m ²
Length/width/height	82 m/40 m/20 m
Awning area	7,800 m ²
Awning material	Transparent fibreglass fabric with LED lighting

OTHER FACILITIES

Underground car park entrance (300 parking spaces)
160 above-ground parking spaces
Bus stops/taxi stands
Directly connected to the trade fair grounds



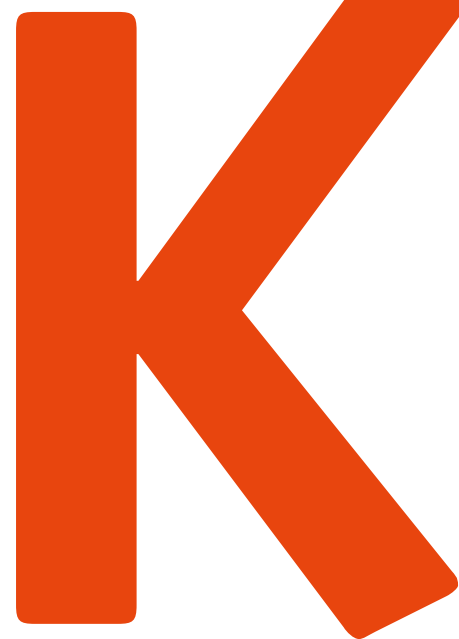
» www.messe-duesseldorf.com/construction



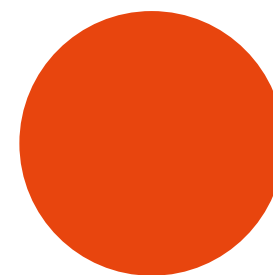
- › **K**
DÜSSELDORF
- › **Arabplast**
DUBAI/
UNITED ARAB EMIRATES
- › **Chinaplas**
GUANGZHOU, SHANGHAI/CHINA
- › **INDOPLAS**
JAKARTA/INDONESIA
- › **interplastica**
MOSCOW/RUSSIA
- › **interplastica KAZAN**
KAZAN/TATARSTAN
- › **plast alger**
ALGIERS/ALGERIA
- › **Plastics & Rubber Vietnam**
HANOI, HO CHI MINH CITY/
VIETNAM
- › **PLASTINDIA**
NEW DELHI/INDIA
- › **T-PLAS**
BANGKOK/THAILAND

HELLO K

HELLO WORLD



ALWAYS ON THE BALL



10,000 dollars – a fortune! In 1860, Michael Phelan promised this huge sum of money to anyone who could develop an alternative to traditional billiard balls made of ivory.

The Irish-American professional billiard player and operator of numerous billiard parlours was looking for a billiard ball with optimal rolling characteristics, because the balls made from elephants' tusks were far from perfect. The behaviour of the balls was often unpredictable, because as a natural raw material, ivory is subject to differences in density. What's more, the expensive balls were quickly worn down. As a result, they had to be frequently re-polished, which in turn changed the diameter and size of the balls.

John Wesley Hyatt, a printer by trade, pocketed the prize money. He experimented with various materials, including celluloid, which had been invented a few years earlier by the British inventor Alexander Parkes. This new material could be used in a solid, malleable or fluid state but was not very stable. Hyatt added other substances, experimented with different temperatures and finally made the decisive step forward: the first plastic was invented! Good for Michael Phelan's billiard business; a breakthrough in the history of materials. However, at the time, this was not yet clear to most people.

Even a hundred years later, in the aftermath of the Second World War, many people still turned up their noses at the mention of plastics. The not-so-new materials were regarded as substitutes without special value, and were only deployed when it was necessary to use traditional materials sparingly.

THE BALL STARTS TO ROLL

These were hard times for the burgeoning German plastics industry. How do you convey the benefits of polymer materials to businesses and consumers? A trade fair would be the ideal platform, thought companies and associations, and in 1952, together with NOWEA – today's Messe Düsseldorf GmbH – they created a brand-new format. The theme of the first trade fair was "Wunder der Kunststoffe" (Wonder of Plastics). 270 companies, all from the young Federal Republic of Germany, presented the latest pioneering products from the chemical industry on 14,000 square metres of net exhibition space – above all, colourful consumer goods, things that should make everyday life more pleasant and convenient, such as gossamer nylon stockings, or "washable toilet bags". This concept drew in the masses. The premiere of what would later become the K-Düsseldorf attracted 165,000 visitors.

»





In the early years, the trade fair was a showcase of German industry. Laymen and trade visitors alike were able to witness the true versatility of this material from which John Wesley Hyatt had formed the perfect billiard ball a century earlier.

In 1963 there was a further shift, as the plastics industry became increasingly specialised. Here, standard polymers; there, high-tech plastics for special applications in medicine or electronics, in the automotive industry or in the aerospace industry. As a result, the K-Düsseldorf became more and more of an international trade fair for experts from the plastics and rubber industries as well as for the end-user industries.

A WHOLE NEW BALL GAME

Today, more than 65 years after its foundation, the trade fair is the undisputed leader in its sector – a true beacon. It is the most important international innovation platform and meeting place not only for the entire plastics and rubber sector, but also for representatives from the end-user industries, such as those from the automotive and packaging industries, electrical engineering, electronics and medical technology as well as the construction and aerospace industries. A marketplace like this one, which enables a direct dialogue between supplier and buyer, is more important than ever, as products, systems and processes are becoming ever more complex and require explanation.

The industry is also becoming increasingly international – as are the visitors to the trade fair. The K 2016 attracted more than 230,000 experts from over 160 nations. Only every third visitor came from Germany. More than 40 per cent of the visitors travelled from abroad, most of them from Asia.

STAYING AHEAD OF THE GAME

Every three years, professional visitors to the K in Düsseldorf have the opportunity to gather information on the latest applications for plastics and rubber and, more importantly, to recognise future trends. No other trade fair worldwide provides so much impetus. And the potential applications of the material once ridiculed as a cheap replacement are far from being fully explored – an astonishing trajectory for a material whose inventor was only in search of a perfect billiard ball.



K 2019

More than 3,000 exhibitors from all continents are expected to attend the next K in Düsseldorf from 16 to 23 October. They will be displaying raw and auxiliary materials, semi-finished products, technical parts and reinforced plastic products as well as machinery and equipment for the plastics and rubber industries.

» www.k-online.com



ALGERIA IN TRANSITION

FAMILY FIRST

Peter Steinbeck, Managing Partner of Windmüller & Hölscher Maschinenfabrik KG, on risks and opportunities in Algeria and why in this country you should never turn down an invitation to a wedding.



ALGERIA, THE LARGEST COUNTRY IN AFRICA, IS GOING THROUGH A PERIOD OF MAJOR TRANSITION. HOW DO YOU ASSESS THE SITUATION?

Algeria is the gateway to the Maghreb region and thus an important market. The economy of the country is growing, although it has slowed down somewhat recently. The population has also been growing for a long time and is very young – under the age of 25 on average. Despite some risk factors, such as rising inflation, we view the political and economic situation as stable. W&H has been represented in Algeria for decades.

IN WHICH SECTORS ARE PLASTIC PRODUCTS ON THE RISE AND HOW IS PLASTICS PROCESSING DEVELOPING IN THE REGION?

The government is investing a lot of money into improving the country's infrastructure and creating more housing. Thus the building sector, in particular, is booming in Algeria. The state is also investing heavily in the food industry to make the country less dependent on imports. But there's a long way to go, because out of 30 million hectares of arable land, only five million are being farmed. There are more and more small families in Algeria. The food industry and retailers are adapting and offering increasingly smaller packaging sizes. This, in turn, is increasing the need for machinery to produce flexible packaging, both for consumer products such as food and for industrial applications such as construction materials and agricultural products. W&H sells machines from all its divisions in the region – from extrusion, to printing, to processing. And only new machines are deployed, as German skills in the field of mechanical engineering are highly regarded in Algeria.

WHAT CULTURAL PECULIARITIES NEED TO BE TAKEN INTO CONSIDERATION BY COMPANIES THAT WANT TO DO BUSINESS IN THE REGION?

If you want to gain a foothold in Algeria, you have to take your time. It is important to establish long-term relationships – even if there is no immediate sale to be made. Short-term, quick business transactions have little chance of success. However, if you have the patience to get to know the locals, you are treated very warmly, almost as part of the family. It is not uncommon to be invited to a private celebration such as a wedding. Processes are



often less straightforward and structured than we are used to in German business culture. When visiting clients, you socialise with the family first before turning to business. W&H benefits from the fact that it has worked in the region for many years. As a partner, we have proven to our clients that we are there to support them over the long term.

ALGERIA IS CONSIDERED AN INTERESTING PRODUCTION LOCATION FOR MANY INDUSTRIES.

In addition, the private sector is gaining in importance. Algeria is regarded as an interesting production location for many industries. For example, the automotive and pharmaceutical industries are currently investing in new production locations in Algeria.

As in any region, there are risk factors that need to be monitored. As a result of the weak dinar, consumer prices are currently rising in Algeria. The training and further education of skilled workers will also be a challenge in the coming years. However, opportunities are also opening up. For example, W&H offers hands-on training in its in-house academy, so that everyone working on the machines can use them to their full potential as quickly as possible.

WHICH ROLE DOES PLAST & PRINTPACK ALGER PLAY IN YOUR BUSINESS ACTIVITIES IN THE REGION?

W&H has been represented at trade fairs such as plast & printpack alger for years. We have observed that trade fairs in Algeria are gaining in importance every year. This is where the entire North African market is represented. Personal relationships are indispensable in this region for a business relationship based on trust. A central trade fair like plast & printpack alger is a good platform for making new contacts and cultivating existing connections. Participation in the trade fair shows a serious and long-term interest in the market and its key players.



Peter Steinbeck
Managing Partner, Windmüller & Hölscher Maschinenfabrik KG

PLAST & PRINTPACK ALGER

Algeria is one of Africa's four largest economies, along with South Africa, Nigeria and Egypt. Many well-known automotive manufacturers have decided to build factories in Algeria – a significant development for the plastics industry. And with plast alger in conjunction with printpack alger, we are further opening up the market for the sector.

★ WE'RE ALREADY

HERE

James Bond was here too – more than 20 years ago. In his attempt to stop a menacing media mogul from starting a war between England and China, in the 007 film *Tomorrow Never Dies*, Bond was left with no other option but to board the stealth ship of the villain in Halong Bay. Together with his companion Wai-Lin he succeeded in his mission, of course with plenty of stunts and high-octane drama. And along with the action, moviegoers got an impression of how beautiful it is here in the north of Vietnam. Especially the bay, which according to legend was created by a dragon millions of years ago, featuring more than 3,000 small islands and rock formations rising up to 200 metres out of the water. The Bond movie sparked off a travel boom to Vietnam in 1997: tens of thousands of tourists wanted to experience the spectacular location in person.





The landscape stretching along the Mekong is a tourist magnet because of its rich variety: beautiful beaches, green mountains, historic sites, adventurous jungles, bustling cities – there's so much to see along 1,700 kilometres from the north on the border with China to the Mekong Delta in the south.

LICENCE TO GROW

Business people are fascinated by the rapid growth in this region that for centuries was part of the Chinese Empire: in no other country in Southeast Asia is the economy growing faster, not even in China. This fact is also driving up demand for plastics and rubber. Saigon and Hanoi are very different cities today than they were 20 years ago. This is immediately evident from the traffic: instead of the thousands of mopeds that used to clog the roads, there are now thousands of cars, as more and more people can afford one.

There are nearly 100 million mostly young Vietnamese, who all want to work, consume and participate in the prosperity of their country. Industries are developing at a rapid pace, especially in the consumer goods sector. As a result, the import trade with international machine manufacturers is growing: the latest technologies are needed to compete on the world market with competitive products. For example, in the north of Vietnam, where more and more high-tech companies are settling – creating the need for state-of-the-art injection-moulding machines. And not to forget, Vietnam is still an agricultural country. Agriculture accounts for about one fifth of the country's gross domestic product and employs two-thirds of the population. What hardly anyone knows: no other country in the world except Brazil exports more natural rubber and coffee than Vietnam.

ONLY THE WORLD IS ENOUGH

And tomorrow? Will the Vietnamese economy continue to grow? Investments are unlikely to stop, as the hunger for consumer goods is far from satisfied, creating ideal prospects for export-oriented companies. When it comes to making contacts, Messe Düsseldorf can help. For example, with Plastics & Rubber Vietnam, the leading industry trade fair, which takes place every year alternately in Hanoi and Ho Chi Minh City. The fair is a good place to get into conversation – perhaps with an anecdote about James Bond and Wai-Lin.

**DO YOU
REQUIRE A
LITTLE BIT
MORE?**





HIGH, HIGHER, HANOI

Tradition and modernity: in 2010, the capital city celebrated its **1,000th** anniversary. A metropolis in a state of flux; a megacity in a frenzy of growth. Roads, railroads, skyscrapers – everything is growing. From L to XXL. The streets are getting more and more congested: **5.2 million** mopeds, **500,000** cars, and more and more residents are switching from two wheels to four. And there are quite a few of them: **7.3 million** people live in Greater Hanoi. And every one of them is a user of packaging and a potential producer of plastic waste. The growing amount of waste is also increasing the need for recycling plants in Hanoi – and openness to modern waste disposal technologies: the first waste-to-energy plant is in trial operation. This will increase waste utilisation to **2.5 million** tonnes per year by 2028, creating a **no. 1** opportunity for foreign technologies and engineering services!

BOOM TOWN HO CHI MINH CITY

Industrial city? And how! Transportation hub? Absolutely! Cultural centre? That too! Ho Chi Minh City is the powerhouse of Vietnam. Here in the south of the country, life has picked up speed since it opened up its economy in the 1980s. **8.6 million** people live in the city, which until 1976 was called Saigon. And there is no end to the stream of immigrants. The city, whose old name is still used, acts like a magnet. Everyone wants to participate in its ascent to a global city. The economy is booming. Powered by the Ho Chi Minh City region, Vietnam's gross domestic product increased by **6.8 per cent** in 2017 – far exceeding the expectations of experts. Foreign investors want to get in on the action and are investing their money in projects in the south of the country in particular. In 2017, they invested around **6.5 billion** dollars in the Ho Chi Minh City region. The economic development is incredible, surpassing even China in terms of speed!



DOING MORE FOR THE OCEAN

AT A RATE OF
99%
OF POST-CONSUMER WASTE,
GERMANY
HAS THE BEST RECORD OF
RECYCLING AND REUSE –
40% IS RECYCLED.

AND IN THE REST OF
EUROPE?
THERE'S STILL ROOM
FOR IMPROVEMENT:

REUSE	73%
RECYCLING	31%

WORLDWIDE THE GARBAGE MOUNTAIN
CONTINUES TO GROW –
IN THE OCEAN:
ONLY 5 COUNTRIES ARE RESPONSIBLE FOR
OF ALL FLOATING PLASTIC WASTE. **50%**

INTERNATIONAL
ACTION REQUIRED: **100%!**

PLASTIC IS SIMPLY

EVERYWHERE. *It accompanies us throughout the day,
especially in the form of packaging material.*

*Because it is so practical, convenient and hygienic. Because it is an ef-
fective way of protecting food and making it last longer. Because it is
so multifaceted. And because it provides a good surface on which to
convey information.*

And what happens then? Once plastic has done its job – as a transport container, keeping food fresh, as a marketing tool? It's thrown in the bin. Which is good if it's the right bin. The yellow bin. Then you can be sure that the waste will enter the circular economy and be reused. A bottle is turned into another bottle – or into a blanket or a park bench. Packaging is being designed to be more and more recyclable. And anything that can't be recycled replaces oil and gas as a fuel. In Germany, waste management already works pretty well, but even here there is room for improvement. And without a doubt, more needs to be done in the rest of Europe. But at least things are moving in the right direction: the quotas for recycling and reuse are rising.

AND IF NOT? TIP IT IN THE OCEAN?

The problem has not yet been solved worldwide. More and more plastic waste is ending up in the ocean. And around half of the waste comes from just five countries – China, Indonesia, Vietnam, Thailand and the Philippines. Countermeasures have been initiated, but it will take time for them to work, such as better waste management. Consumers can also do more to avoid the amount of waste ending up in the ocean, by putting packaging waste where it belongs or not using packaging in the first place. For example, when buying grapes: put them in your own container! Maybe it's also made of plastic – but it can be used again and again.

LEADER OF THE PACK

Garbage can only be disposed of with good ideas: ideas for avoiding plastic altogether, for recycling, and for upcycling. With strategies to make even better use of plastics. To make it more versatile, and even more biodegradable and by getting people to think about plastic waste and being on their backs. The K is working on this with an international orientation, in forums, and in the special show at the trade fair. It is working for better production processes and new product developments. With a pioneering spirit, visionary ideas – and the very best intentions!

REUSABLE



THE REINCARNATION OF THE PLASTIC BOTTLE

Your new car is second-hand. That's nothing to feel bad about. After all, in the

outer shell of any car, almost all black plastic parts have had a past life. Ground-up bumpers are combined with the plastic shavings of bottle caps or the housings of old starter batteries and turned into new wheel arches. Just one example that shows recycling is a natural part of the economic cycle nowadays – including in the automotive industry.

Reusing things is all well and good, but does it even have to be plastic? This is an equation with many variables – and a clear answer. Raw materials for plastics are carbonaceous sources such as crude oil or natural gas. However, the production of plastics accounts for only about four to six per cent of the world's consumption of oil and natural gas. More than four-fifths are used for heating, traffic and energy, and therefore burned.

Plastics save resources like no other material. In vehicle design, for example, it makes cars much lighter than steel – and reduces their fuel consumption. Or in the energy-efficient renovation of buildings: modern insulation and windows made of plastic ensure that apartments can be kept warm with less heating oil or gas. Or in the packaging of food, where functional films keep food fresh for longer, helping to prevent food waste.

A thought experiment: What would a world without plastics look like? For example, if waste pipes were still made of stoneware or cast iron? If all plastic packaging were replaced by other traditional materials? In that case, scientists have calculated, the packaging would weigh four times as much. The volume of waste would double. Greenhouse emissions would be twice as high and energy consumption would increase by 1.5 times.

And at the end of the life cycle of a plastic product? It is reused, and not only by carmakers. And thus the circuit is closed. More than half of all packaging in Germany is recycled or reused – the highest percentage in Europe. But even here, more is possible.

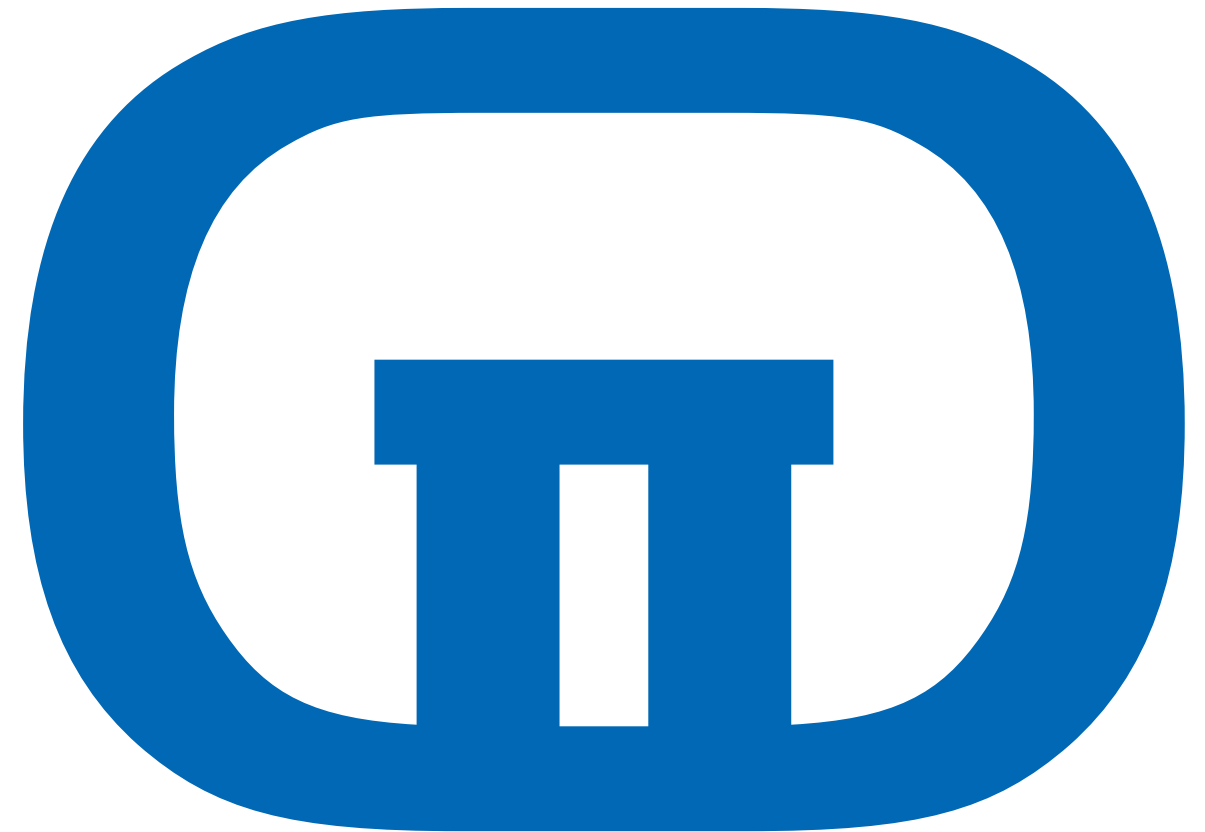
ONE WORLD ONE GATE GLOBAL GATE

Gateway to the markets of the world.

Platform for entry into growth regions.

This is Global Gate, Messe Düsseldorf's international trade-fair portfolio for the plastics and rubber industries. Ten events – ten trump cards for globally operating companies.

Global Gate – a gateway to the whole world. With a service that is all about achieving trade-fair success for exhibitors and visitors.



- › **Arabplast** DUBAI/UNITED ARAB EMIRATES
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- › **INDOPLAS** JAKARTA/INDONESIA
- › **interplastica** MOSCOW/RUSSIA
- › **interplastica KAZAN** KAZAN/TATARSTAN
- › **plast alger** ALGIERS/ALGERIA
- › **Plastics & Rubber Vietnam** HANOI, HO CHI MINH CITY/VIETNAM
- › **PLASTINDIA** NEW DELHI/INDIA
- › **T-PLAS** BANGKOK/THAILAND

» www.k-globalgate.com



HEART BEAT

40 million times. That's how often a healthy heart beats every year. Sometimes fast, sometimes slow, sometimes up to your ears. And sometimes, unfortunately, completely out of sync. Then science can help: with artificial chambers or valves. These are, of course, biocompatible, flexible, but at the same time dimensionally stable and tear-resistant. With surfaces that prevent the formation of blood clots. Made of plastic!



THE ART OF SURVIVAL

Experts from the Swiss Federal Institute of Technology (ETH) in Zurich have developed a plastic heart that, like no other artificial heart before it, comes close to the real thing in terms of size, shape and function. The lives of toddlers with a congenital life-threatening respiratory disease could also be saved using biodegradable polymeric materials: by scientists from the US who make implants using 3D printing. J-shaped carbon spring prostheses, on which unilateral and bilateral amputee sprinters now run as fast as non-handicapped sprinters, can improve quality of life.

THE MATERIAL OF THE FUTURE

Plastics in medicine have a long tradition. It all started with contact lenses. Back in 1936 in the USA, William Feinbloom produced the first vision aids made of polymethyl methacrylate, a plastic that was later marketed under the brand name Plexiglas.

Today, plastics are universally used as substitutes and implants. Not only in ophthalmology and dentistry, but increasingly also in surgery: in the form of auxiliary and working tools such as cannulas, disposable syringes, gloves, dialysis membranes and infusion bags. Drugs are also administered in plastic capsules. This makes the active ingredient longer lasting and prevents it from becoming contaminated. In the body, the capsules dissolve in a precisely defined period of time and release the active ingredients of the drug into the body.

And tomorrow? Plastics are becoming more and more important, not least because of the increasing life expectancy of people in industrialised countries. This increases the need for and importance of implants and regenerative medicine – more artificial hips, knee joints, teeth. More intramolecular lenses and heart-valve prostheses, more dialysers. In all these cases, plastics are needed. And not any old plastics, but specific, biocompatible, physiologically harmless varieties.

MOVEMENT AID OR TECHNO DOPING?

When the American Van Phillips made a breakthrough in 1984 with the invention of the sprint prosthesis for amputee athletes, he probably did not expect that it would lead to a top athlete being excluded from the European Championships 30 years later.

In 2014, Markus Rehm won the German Championships for non-disabled athletes with an incredible 8.24-metre jump – a distance that would have qualified him for the European Athletics Championships held in Zurich in the same year. That is, if it hadn't blown up into a big controversy – namely about whether his state-of-the-art carbon prosthesis turned his handicap into a competitive advantage. In contrast to human muscles, it was argued, the mechanical spring does not tire. In fact, on the contrary, it acts as a buffer, giving the athlete extra energy – a clear exclusion criterion for the German Athletics Federation. At least Rehm was allowed to keep his title as the world champion in long jump and could continue to compete with non-disabled athletes – with a separate rating. Because whether the prosthesis actually gives the athlete an advantage has not been clarified to this day.

WHERE PLASTICS CAN REPLACE BODY PARTS

- › EYE LENSES made from acrylic were first implanted in patients in 1949.
- › NOSE AND EAR IMPLANTS are usually made of plastics such as acrylic or silicone in different combinations and degrees of hardness.
- › DENTAL FILLINGS made of plastic replaced amalgam fillings years ago.
- › SHOULDER PROSTHESES are available in different variations. Every year, more than 25,000 artificial joints are implanted in Germany.
- › HEART VALVES made of pyrolytically deposited carbon have an extremely smooth surface, reducing the risk of thrombosis.
- › VASCULAR PROSTHESES are often made of plastics such as polyethylene terephthalate (PET) or polytetrafluoroethylene (PTFE).
- › LEG PROSTHESES made of composite systems between plastics and carbon fibres help athletes achieve peak performance.
- › ARTIFICIAL DISCS are designed to reproduce the mobility of a natural disc. That's why they have a polyethylene core.
- › HIP JOINT PROSTHESES are often a combination of two materials: the head and socket are made of metal, the socket insert is made of plastic.
- › KNEE PROSTHESES are usually made of metal; the sliding components are made of special plastics such as polyethylene.



THE **K** FROM A TO Z

WE LOOK
FORWARD TO
HEARING
FROM YOU

APPLICATIONS BUSINESS

of polymers are the subject of the K 2019 special show.
Like every year, in 2019 the K offers an ideal forum for doing business.

CIRCULAR ECONOMY

one of the biggest topics of the K 2019.

EXHIBITORS'

expertise in terms of product, process and system solutions leads to investment decisions for over 80% of visitors.

DIGITALISATION

is one of the core topics of the K 2019.

FUTURE OPPORTUNITIES GATEWAY

In addition to the K 2019, the trade-fair portfolio "Global Gate" at Messe Düsseldorf is a gateway to the world's plastics and rubber markets.

HELP

is always at hand with the visitor information system D-VIS, with an interactive hall plan and information on all exhibitors and products.

INTERNATIONAL JOURNALISTS

from many countries accompany the trade fair, from trade journals to daily news
of the plastics and rubber industries takes place every three years in Düsseldorf.

K, THE LEADING TRADE FAIR, THE MEDICAL TECHNOLOGY

THE took place for the
first time in 1952.

is becoming an ever more important user of plastic products. They help to heal illnesses, save lives and alleviate symptoms.

NETWORKING

ONLINE

services are a great help at the K 2019, when buying tickets, for example.

PLATFORM, THE

for making and maintaining contacts, in short for entrepreneurial success – that's the K.

QUALITY, THE

of the Messe Düsseldorf building will be completed in time for the K 2019. Welcome to a new multifunctional hall with conference rooms and a glass entrance area!

RENOVATION, THE TRADE-FAIR EXHIBITORS

The theme of this year's special show is "Plastics shape the future".

USES

VISITORS

Thousands of uses for plastics are on display at the K 2019.

WONDER OF PLASTICS ZEITGEIST

In 2019, two-thirds of visitors will probably come from outside of Germany again.

This was the title of the first plastics trade fair in Düsseldorf in 1952.

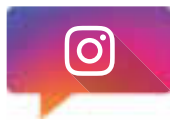
The K 2019 will be touching on all the latest trends and issues in the plastics industry.

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