

CORSO®

THE MAGAZINE FOR ROLLER COVERINGS



TRADE WAR

**PING PONG WITH
THE GLOBAL ECONOMY**

THE INDUSTRY IN UPHEAVAL

**TEXTILE INDUSTRY
4.0**

DEAR READERS,

„America first“ is the campaign slogan of Donald Trump, who is taking the entire world economy onto black ice by escalating the trade war with China. Reason enough for us to dedicate the new edition of our CORSO® magazine to this trade war and its global repercussions. To shed more light on the political motivations and possible economic consequences for America, China, Europe and Germany, we interviewed the US and China expert at the Düsseldorf Chamber of Industry and Commerce in our „15 questions“ interview series and got interesting answers.

The fact that we are not closing our eyes to reality is evidenced not only by our report on the economic war, but also by our researching the not exactly positive economic situation in the textile and clothing industry, which certainly cannot be considered separately from it (the economic war). The sustained economic downturn is casting its shadow and the first industry giants, such as Esprit and Gerry Weber, are already experiencing initial consequences. Only those who change remain true to themselves. The industry has incredible potential for transformation, as our report on textile industry 4.0 demonstrates. Digitisation opens up a wide range of new opportunities. In this regard, customers are setting the course with their desire for new individual products. Companies require innovative business models to stay up to date.

We also want you to always stay „up to date“ and offer selected data, facts and news of the textile industry. Our articles on the latest textile innovations are particularly worth reading. For instance, did you know that your T-shirt soon will be able to alert the doctor if you are in danger?

With this new edition of CORSO® we extend our best wishes for interesting, informative and entertaining reading. If you have suggestions, criticism or suggestions for topics – contact us! We welcome your feedback and comments. Simply send an email to info@bobotex.de and enter into a dialogue with us. Our goal is to be the medium and voice for the entire industry, now and in the future, challenge us!

All the best,



OLIVER JUNG
MANAGING PARTNER



MICHAEL ECH
MANAGING PARTNER



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MACHINE EXPORTS

CRISIS IN CORE MARKETS

The German mechanical engineering industry is intermeshed with the international markets and this is precisely where the prevailing mood is currently one of crisis. China and the US, the two most important export countries outside the EU, are causing conflicts.

Both countries account for approximately

21.5

percent of all machine exports from Germany.

By mid-2018, Euro10.94 billion of machinery and equipment had been exported to China and 10.92 billion to the US. On the US side, punitive tariffs and the threat of extraterritorial application of law make free trade more difficult. On the other hand, on the China side, China's economy is affected by state interference. It will be interesting to see whether the EU can mediate?



TOP 100

FASHION INDUSTRY RANKINGS

Europe's largest fashion group is the Spanish Inditex Group, whose brands include Zara. Adidas is ranked 2nd and thus banished H&M to 3rd place. The top ten in the European fashion rankings generated total turnover of 12 billion, in other words 10 percent increase. Boom markets are primarily luxury, sportswear and fast fashion à la Zara.

For the German fashion companies, the Hamburg Otto Group again dominates the sector, followed by H&M and C&A. Double-digit growth was achieved first and foremost in the online retail sector, with Zealand, Amazon and Amos at the top, which was not surprising. In total, the 90 companies in the German ranking achieved growth of 2.4 percent or approximately 900 million.

JOB CUTS

AT GERRY WEBER AND ESPRIT

We have to make more profit with less turnover, says Johannes Ealing, the new boss at Gerry Weber. The group has been struggling in the red for some time now. In particular, the Gerry Weber umbrella brand is too outmoded for customers. In addition to job cuts, unprofitable stores will be closed. Also for Esprit – stormy weather ahead. So said the new CEO Anders Christiansen: „We agree that the Esprit brand stands for nothing. The brand has lost its energy“. Esprit has been losing money for years. Approximately 40 percent of employees worldwide must now go. In the future Esprit will respond more quickly to market trends. Gerry Weber is also working intensively on its repositioning. No wonder with an expected EBIT loss of 15.5 million.

TEXTILE INDUSTRY – ECONOMIC SITUATION

NO TURNAROUND FOR THE TIME BEING

According to the Association of the Clothing and Textile Industry, the economic situation in the sector will continue to deteriorate in 2019. A turnaround is not yet in sight. Clothing in particular, and above all the retail trade, had to post some heavy losses in the past year. The textile industry as a whole reported declining numbers, however to a lesser extent.

THE FORECAST:

The ifo index does not indicate that the situation will ease any-time soon. Quite the contrary, according to company estimates, clothing revenues will decline even more sharply than is forecast for the manufacturing sector, as the risks in foreign trade and increases in the prices of raw materials continue to persist.

Source: Association of the Clothing and Textile Industry



TEXTIL GOES DIGITAL

DIGITISATION IN MEDIUM-SIZED BUSINESSES

Digitisation has found its way into small and medium-sized textile businesses and it is advancing with giant strides. Thus the first symposium, „Textile goes digital: Digitisation in practice“ imparted authoritative digital know-how that enables companies to be prepared for new challenges along the textile value chain.

MORE INFO AT WWW.MITTELSTAND-DIGITAL.DE

FIGURES / DATA / FACTS

MILLIONS, BILLIONS AND FORECASTS

1.2

million T-shirts wants a Chinese company makes in the US every year with tailor robots, so called "Sewbots". These "Sewbots" are said to work faster and more precisely than human beings.

1.35

million tons of recyclable clothing generate by private households in Germany every year.

5.4

percent more exports went to the EU in the first half of 2018.

8.4

billion Euro China achieved with clothing exports to Germany in 2018. This made China the most important import country for the German clothing industry.

35

billion Euro the German textile industry generated a total turnover in 2018.

749.7

billion Euro was the 2018 total sum of German exports to the other 27 EU member states.



WITH HIS ANNOUNCEMENT TO IMPOSE PUNITIVE TARIFFS ON SOLAR CELLS AND SOLAR MODULES, AS WELL AS WASHING MACHINES, US PRESIDENT DONALD TRUMP TRIGGERED A TRADE WAR THAT WAS TO AFFECT THE GLOBAL ECONOMY AS A WHOLE IN THE SUBSEQUENT COURSE OF 2018. IN THIS REGARD THE FOCUS IS ON TRUMP'S ACCUSATION THAT CHINA PRACTICES UNFAIR TRADING METHODS AND THE DEMAND FOR EQUAL CONDITIONS FOR US COMPANIES IN CHINA. TRUMP WANTS TO STOP FORCED TECHNOLOGY TRANSFER FOR US COMPANIES AND CHINA'S THEFT OF INTELLECTUAL PROPERTY.

TRADE WAR

PING PONG WITH THE WORLD ECONOMY

US TRADE DEFICIT

However, the main trigger for the trade war is likely to be the enormous US trade deficit with China. The actual numbers: In 2017, the US exported goods worth \$130.4 billion to China. On the other hand, goods worth \$505.6 billion were delivered to the US from the People's Republic. Over the course of the trade war, the trade deficit steadily continued to increase and reached a record level of \$43.1 billion in October.

FORCED TECHNOLOGY TRANSFER

Another point of contention is the oft-criticized technology transfer that the People's Republic of China forcefully imposes on foreign companies. In order to operate on the Chinese market, foreign companies usually must transfer ownership and rights of use for their technologies to Chinese companies.

Although China is confronted with the accusation of protectionism, a gradual opening of the Chinese market can be observed. By the end of 2017, import duties on 200 products had already been reduced from 17.3 to 7.7 percent. In July 2018, when the trade war was already well underway, China cut the import tariffs of 1,500 consumer goods from 16 to 7 percent.



The White House is the seat of the American President. The cornerstone was laid on 13 October 1792.

“IF A COUNTRY (USA) LOSES MANY BILLIONS OF DOLLARS IN TRADE WITH VIRTUALLY EVERY COUNTRY IT DOES BUSINESS WITH, TRADE WARS ARE GOOD – AND EASY TO WIN.”

Donald Trump ©Twitter

PUNITIVE TARIFFS IN THE USA

On January 22, 2018, the U.S. government announced that it would introduce punitive tariffs of 30 percent on solar cells and solar panels and 20–50 percent on washing machines. On 8 March 2018, the US government announced that it would introduce worldwide import duties on steel and aluminium. These tariffs entered into force on 23 March. Import tariffs of 25 per cent were levied on steel and 10 per cent on aluminium. This is intended to protect steel and aluminium production in the USA. Mexico and Canada, as well as the EU Member States were temporarily excluded. However, since 1 June 2018, Mexico, Canada and the EU Member States have also had to pay punitive tariffs. However, the real opponent that should be affected in this regard is China. The People’s Republic has been able to increase its production capacity enormously in recent years and has flooded the world steel market with dumping prices. Thus within ten years Chinese steel production rose from 490 thousand tons in 2007 to 808 thousand tons.

CHINA’S RESPONSE

On April 2, 2018, China imposed punitive tariffs of approximately \$3 billion dollars on goods from the US. Customs duties for 128 products were increased by as much as 25 percent. The government of the People’s Republic, pugnaciously but with some openness to dialogue, admits that there have been and continue to be

imbalances in market access and equal rights for foreign investment.

RECIPROCAL PUNITIVE TARIFFS

In July of last year, D. Trump again imposed punitive tariffs of 25 percent on Chinese goods worth \$34 billion. Technology products that are subject to “Made in China 2025” were affected. In July 2018, the People’s Republic also imposed punitive tariffs of 25 percent on goods worth \$34 billion. The countermeasures mainly affected automobiles and agricultural products such as soy beans, seafood and pork. But that’s not all, in August the USA imposed additional punitive tariffs (25 percent) on metals, lubricants, chemicals and electronics products in the amount of \$16 billion against China. The People’s Republic is not amused.

Likewise in August 2018, punitive tariffs (25 percent) at a value of \$16 billion were assessed on US goods. Goods affected: Crude oil, diesel, coal, steel products and medical technology. Again the USA countered. On 24 September, the US government imposed special tariffs of \$200 billion (170.2 billion) on half of all imported goods from China. Initially, the new tariffs amounted to ten percent, starting in 2019 they have increased to 25 percent. In light of these new US tariffs, China suspends further talks with the US government and imposes tariffs on US products in the scope of \$60 billion.

EFFECTS OF THE TRADE WAR

The effects of the trade war impact all world trade. Economists warn: The trade war weakens the world economy, costs jobs and allows prices to rise – in the US, in China and in Europe. The production chains are so internationally interwoven that you cannot simply take production home as completely as Trump desires. Worldwide the stock exchanges are also under pressure. For the first time in two years, the Dow Jones fell below its 200-day moving average, dropping 420 pips after hopes that the trade conflict would ease are dashed. The DAX, the German share index, is repeatedly losing steam. Likewise share prices of the three major German automakers and share prices of German steelmakers, thyssenkrupp and Salzgitter, are also showing a downward trend.



SOLUTION IN SIGHT?

A few weeks ago, China’s Ministry of Finance announced that in the first quarter of 2019, among other things, it intended to delay punitive tariffs on American car models and vehicle parts. This was agreed by Trump and his Chinese counterpart Xi Jinping at the beginning of December. Overall result of the meeting: The next round of punitive tariffs that were scheduled for January should initially be frozen for 90 days, in order to find a solution to the conflict in the interim.

After the meeting Donald Trump spoke positively about a comprehensive solution via Twitter. Due to the trade war with the United States, the Chinese economy is growing slower than expected, Twittered Trump. The United States, on the other hand, is doing very well. “China wants to strike a big deal, a very comprehensive deal. It could happen, and pretty soon!” If the trade war were to end, Europe too would breathe a sigh of relief.

THE TRADE WAR CHRONOLOGY

- **22 JANUARY 2018**
US announces penalties of 30 percent on solar cells and solar panels and penalties of 20–50 percent on washing machines.
- **EARLY FEBRUARY 2018**
The tariffs and import quotas go into effect.
- **23 MARCH 2018**
US announces punitive tariffs of 25 percent on steel and 10 percent on aluminium imports.
- **2 APRIL 2018**
China imposes punitive tariffs on US goods in the amount of \$3 billion.
- **6 JULY 2018**
New US tariffs of 25 percent on Chinese goods. China responds with equally high punitive tariffs on US goods.
- **23 AUGUST 2018**
Additional tariffs of 25 percent are imposed on Chinese products. Beijing responds with punitive tariffs in the same scope. In addition, China now has to pay 25 percent duty on steel and 10 percent on aluminium.
- **24 SEPTEMBER 2018**
The US government imposes customs duties of \$200 billion on half of all Chinese goods. China imposes tariffs on U.S. products worth \$60 billion.
- **EARLY DECEMBER 2018**
G-20 summit in Argentina: As part of a ceasefire, Xi and Trump agree to not increase tariffs for 90 days.
- **7 JANUARY 2019**
America and China make a fresh attempt to end the trade war. The two-day talks in Beijing on 7 and 8 January are the first direct trade talks since commencement of the 90-day ceasefire.



Photo: Düsseldorf IHK

DR. GERHARD ESCHENBAUM

15 QUESTIONS

From your point of view, what does Trump want to achieve with his policy?

President Trump has always made the motto "America first" the guiding principle of his policy. With many of his measures he also keeps promises from his election campaign. In essence, he wants to strengthen the American economy through tax relief, deregulation and a partition relative to the outside world.

Is Trump's punitive tariff policy motivated by domestic policy?

On the one hand, yes, because it uses it as an instrument to safeguard or create jobs. However, with his tariff policy he is also aiming at defending America against allegedly "unfair" treatment and wants American trading partners to change their policy. In this respect, it goes beyond the effects on the employment situation in the US, it is also about the American position in international competition.

How is this evaluated in his own country (the US)?

In his measures, the President takes great care to implement his election promises. This is also appreciated by his voters. However, it remains to be seen whether the measures will have a sustainable effect.

Which forecast is more realistic from your point of view? Will the US win or will Trump get the short end of the stick?

The American President can point out that his approach has already resulted in new ground rules for trade with South Korea, to a reformulation of the NAFTA agreement with Mexico and Canada and to the first liberalisation measures in China. However: World trade is not – as the American administration sees it – a zero-sum game, in which the gain of one party is the loss of the other party, but rather world trade is always a question of bringing about improvements for both sides through negotiation. With unilateral measures or even a trade war, there are only losers.

DR. GERHARD ESCHENBAUM, ACTING MANAGING DIRECTOR AND HEAD OF THE FOREIGN TRADE DEPARTMENT OF THE DÜSSELDORF CHAMBER OF COMMERCE AND INDUSTRY, SPOKE WITH US AND ANSWERED OUR QUESTIONS CONCERNING THE INTERNATIONAL TRADE WAR FROM THE U.S. PERSPECTIVE AND THE CHINESE PERSPECTIVE. AS AN EXPERT ON INTERNATIONAL MARKETS AND INTERNATIONAL COOPERATION, HE IS OF THE OPINION THAT THERE CAN ONLY BE LOSERS IN AN INTERNATIONAL TRADE WAR.

How will China's punitive tariffs affect the US economy? The Chinese punitive tariffs are intended to put American suppliers in a worse position than Chinese suppliers. China delivers almost four times as many goods to the US than the US delivers to China. Many large US companies are dependent on industrial precursors and American consumers are dependent on consumer goods from China. If these items are now made more expensive through punitive tariffs, this will be accompanied by significant price increases for both US companies and consumers. What must also be feared is a slowing of growth in both countries. All sectors of the national economy will suffer as a result.

Where is the USA particularly vulnerable? In general, given the large imbalances in American-Chinese trade, the American consumer would very quickly feel a shortage and an increase in the price of Chinese goods. Last but not least, this includes information and communication technology products. However, bottlenecks can also arise with electronics components or rare earths with application areas in the IT industry or energy industry.

Are there also positive aspects of the trade war? The trade war has broken up many a deadlock, as can be seen from China's behaviour. And it was clear that the World Trade Organisation needed reforms.

How can the world trade order be bolstered? Between most of the world trading countries there is a common conviction that global world trade also requires a global legal framework. To this point, this has primarily been provided by the World Trade Organization (WTO). However, the World Trade Organisation needs urgent reforms. Such reforms include speeding up decision-making processes and simplifying rules of origin. There is also an urgent need to ensure that the dispute settlement mechanism cannot be unilaterally paralysed by a country like the US refusing to fill judicial vacancies.

How important is the "New Silk Road" project for trade with the EU? Beyond its logistical function, the "New Silk Road" is an infrastructure project par excellence, which however also serves to expand Chinese influence in the transit countries and neighbouring countries. As far as the logistical dimension of the project is concerned, rail transport has the advantage of saving time over competing maritime transport. However, this advantage is offset by higher costs. In this respect, transport is currently most interesting for goods with a high capital commitment and for seasonal goods.

Do Trump's tariffs also threaten Germany or German companies? At Euro 120 billion, the USA is our most important export market, and this market has grown dynamically in the last decade. Therefore, these punitive

tariffs are anything but indifferent to German exporters. Those companies that have production in the USA are better off. Customs tariffs mean an additional expense for those parties that are obligated to pay them, i.e. financial resources that are not available for other purposes. Thus tariffs tend to have a slowdown in growth as the consequence.

What does the trade conflict mean for the German steel industry and for the machine tool industry? The additional tariffs on steel products have caused major distortions on the world steel markets. Diversions of quantities originally destined for the USA and now entering the European market have direct effects on the prices that can be achieved. The impact on those companies that export to the USA crucially depends on whether or not the higher duty can be passed on in prices. This also applies to machine tools.

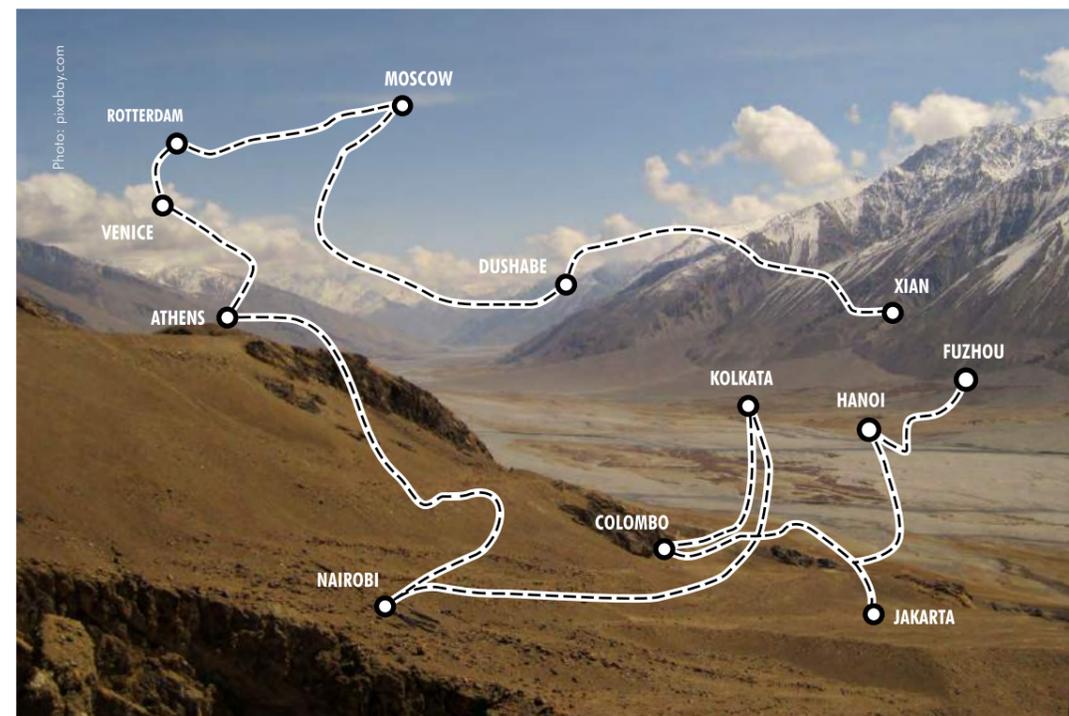


pressure, because sales of US government bonds make it more difficult for the USA to refinance its debts and also makes them more expensive. On the other hand, in this case the Chinese securities portfolios will also lose value. Use of this "lever" also has its downsides.

Where is the China's Achilles heel? Given China's much larger export volume, customs duties have a quantitatively much greater influence on their deliveries than, conversely, customs duties have on deliveries from the USA. Moreover, China is dependent on certain electronics components (processors), as recently demonstrated by the (temporary) delivery block by the US against the Chinese company ZTE, which would have resulted in a production standstill there. This shows: China is not yet independent in all areas of technology.

How do Europe and Germany view the Chinese trade policy? A more critical discussion of Chinese economic policy has also begun in Germany. The demand for a "level playing field" for exports and investments is now increasingly being raised. In addition, the Federal Ministry of Economics has lowered the testing threshold for Chinese investments in Germany. It should be noted that this is not about becoming more protectionist in Germany, but rather it is about securing non-discriminatory market access for German companies in China and due consideration of macroeconomic interests for foreign investments in Germany.

On the edge of the current route from China to Pakistan bitter poverty still prevails. Beijing promises that the new Silk Road will bring the economic miracle to the Pamir highlands.



How is the trade war affecting the Chinese economy? Uncertainty about the future boundary conditions for trade has also increased significantly in China. However, the political leadership is trying to ease tensions, as can be seen from the suspension of additional duties on automobiles for an initial period of three months.

Do you think it likely that China will "use the lever" and stop buying US government bonds? Because of the close interdependence, an escalation of the conflict is risky for both sides. On the one hand, China's role as the main creditor of the USA is indeed means of exerting

THE DÜSSELDORF IHK

THE CHAMBER OF COMMERCE
AND INDUSTRY IN NUMBERS

FOUNDATION	Location Düsseldorf 1831
MEMBER COMPANIES	85,150
AVERAGE CONTRIBUTION OF THE MEMBER COMPANIES	254 Euro
TOTAL REVENUES	24,515,605 Euro
AREA OF THE IHK DISTRICT	624 km²
ACTIVE TRAINING AND APPRENTICESHIP FACILITIES	3,024
NUMBER OF EMPLOYEES (FULL-TIME EQUIVALENTS)	139

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Industrie- und Handelskammer
zu Düsseldorf



NATURE SAYS

THANK YOU

THE FACT THAT THE TEXTILE INDUSTRY HAS INCREDIBLE INNOVATION POTENTIAL IS DEMONSTRATED BY LEADING COMPANIES THAT ARE COMMITTED TO INNOVATIVE SOLUTIONS FOR A WIDE RANGE OF APPLICATIONS. HIGH-TECH TEXTILES FOR THE AUTOMOTIVE INDUSTRY, AVIATION, THE TEXTILE INDUSTRY OR MEDICAL TECHNOLOGY – WE PRESENT FOUR MARKET LEADERS AND THEIR SOLUTIONS.

INNOVATION LEADERS

GREEN TEXTILES FOR THE AUTOMOTIVE INDUSTRY AUNDE GROUP

Founded in 1899, the company has specialised in the development and production of upholstery fabrics and technical textiles for the automotive industry since 1920. Today the AUNDE Group is one of the 100 largest automotive suppliers worldwide. Above all AUNDE scores above with “sustainable textiles” in the vehicle interior. This applies both to the production processes and to the products themselves, which also have special resistance to light, humidity, temperature and increased flame retardancy. AUNDE develops and produces yarns, technical textiles, leather and textile seat covers, technical springs, complete seats, moulded foam parts, interior

and composite components for the world’s leading automotive manufacturers.

LIGHTWEIGHT COMPONENTS FOR THE AVIATION INDUSTRY SAERTEX GMBH

The success story of this family business begins in 1982 with the idea of producing technical reinforcement materials as scrims instead of conventional textiles. SAERTEX now has 14 locations in ten countries on five continents. SAERTEX products enable customers to form textile, plastic-reinforced fabrics into various shapes as complex components. These components have key advantages over components made

of steel or aluminium: With the same strength they are significantly lighter and in addition they are more resistant to corrosion. The objective is to develop components that are even lighter using new materials and processes. This also offloads the environment by reducing emissions.

SUSTAINABLE FOR THE TEXTILE INDUSTRY SCHOELLER TEXTILE AG

Founded in 1868 as one of the first worsted spinning mills in Switzerland, today the company produces functional textiles for over 500 brands from 50 countries. High-tech textiles from Schoeller also meet the highest sustainability criteria. In 1994, Schoeller was the first manufacturer of activewear and leisurewear to be awarded the STANDARD 100 by OEKO-TEX®. A globally uniform, independent testing and certification system for textile raw materials, intermediate products and end products and quality seals for all types of textiles tested for harmful substances. Schoeller was also one of the founders of the globally established bluesign® system. This system reduces environmental impact along the textile supply chain and offers efficient solutions for chemical suppliers.

SPUN PRODUCTS FOR THE MEDICAL INDUSTRY SPINTEC ENGINEERING GMBH

Spintec Engineering develops conventional medical devices and innovative combination products with therapeutically effective factors. The company focuses on products for regeneration of bone tissue, corneal tissue and for chronic wounds. Spintec copied the natural spinning process of the spider and implemented it in a laboratory facility for the spinning of continuous filaments from silk proteins. Unlike conventional spinning processes, filament formation in the biomimetic spinning machine works in a manner that saves energy, with water, at room temperature and at normal pressure.



The product label STANDARD 100 by OEKO-TEX®.



TEN YEARS

ICG CONSULTING

ALSO WE SAY “THANK YOU”

For ten years, we have been advising on topics like digitization, e-ticketing, operations control systems and multi-mobility. We support our clients from tender to technical and organizational questions as well as marketing strategies.

More information is provided on our website www.icg.consulting

IMPORT EXPORT

TRADING PARTNER CHINA
LAW OF ATTRACTION

Last year, China purchased goods and services in Germany for approximately Euro 86.2 billion. These mainly included automobiles, machines and electrical technology for approximately Euro 21 billion, machines, apparatus, and mechanical equipment for Euro 18.6 billion and electrical engineering products for Euro 13.3 billion.

Even more than the Chinese buy in Germany, the Germans buy in China. Goods and services were purchased from the Middle Kingdom for a total of Euro 100.5 billion. These include electrical engineering products for a total of almost Euro 30 billion; machines, apparatus, mechanical equipment for over Euro 23 billion and clothing for Euro 8 billion.



THE GERMAN ECONOMY DEFIES THE TRADE CONFLICTS. MADE IN GERMANY CONTINUES TO BE VERY POPULAR – ESPECIALLY IN EUROPE. LAST YEAR, SEVEN EU STATES WERE AMONG GERMANY'S TEN MOST IMPORTANT TRADING PARTNERS BOTH IN IMPORTS AND EXPORTS.

ADVISOR ABRASION

TWITTER PRESIDENT

The trade war with China, isolation from Europe plus more debt in the US: Economists warn that Donald Trump is in the process of bringing together all the ingredients for a new global economic and financial crisis. German machinery exports are also affected. Daily new punitive tariffs, from the USA and from China, not only harm both major powers, but also the European economy in particular.

There is no need to remember the names of the US President's economic advisors, the advisors are replaced as quickly as the punitive tariffs are growing. If necessary, the president also tweets the news himself.

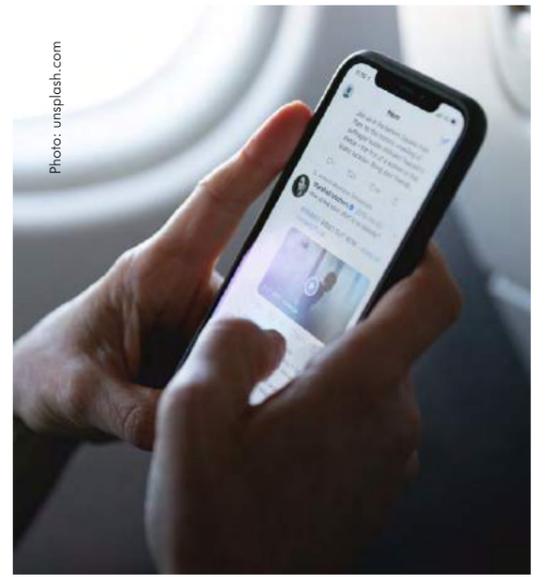


Photo: unsplash.com



Photo: unsplash.com

IN POLE POSITION

RECORD SURPLUS

German export strength has repeatedly angered US President Donald Trump. Currently the 2018 German trade balance surplus is likely to increase his respiratory rate. According to calculations of the ifo Institute, worldwide Germany is in pole position with a record surplus of \$ 299 billion. Japan is in second place with \$ 200 billion, the Netherlands is in third place with \$ 110 billion. China, in second place in 2017, is no longer among the top ten in 2018.

The German record result is primarily due to exports, thanks to the unbroken high demand from the EU and the US. The US, on the other hand, is likely to again post the world's largest current account deficit. Close to \$ 420 billion are expected around the White House.

TEXTILE INDUSTRY



AN INDUSTRY IN UPHEAVAL

DIGITIZATION WILL REALLY TURN THE TEXTILE INDUSTRY UPSIDE DOWN. SOLUTIONS FOR THE CHALLENGES AHEAD MUST BE FOUND, ESPECIALLY WHERE PRODUCTION IS INVOLVED.

The advantages of digitisation are obvious. Decentralized, IT-controlled manufacturing processes allow greater flexibility to develop new business models and manufacture innovative products. Optimisation potential in production and logistics can be better exploited, and this means that costs can also be sustainably reduced.

FROM MASS PRODUCTION TO SINGLE-PIECE PRODUCTION

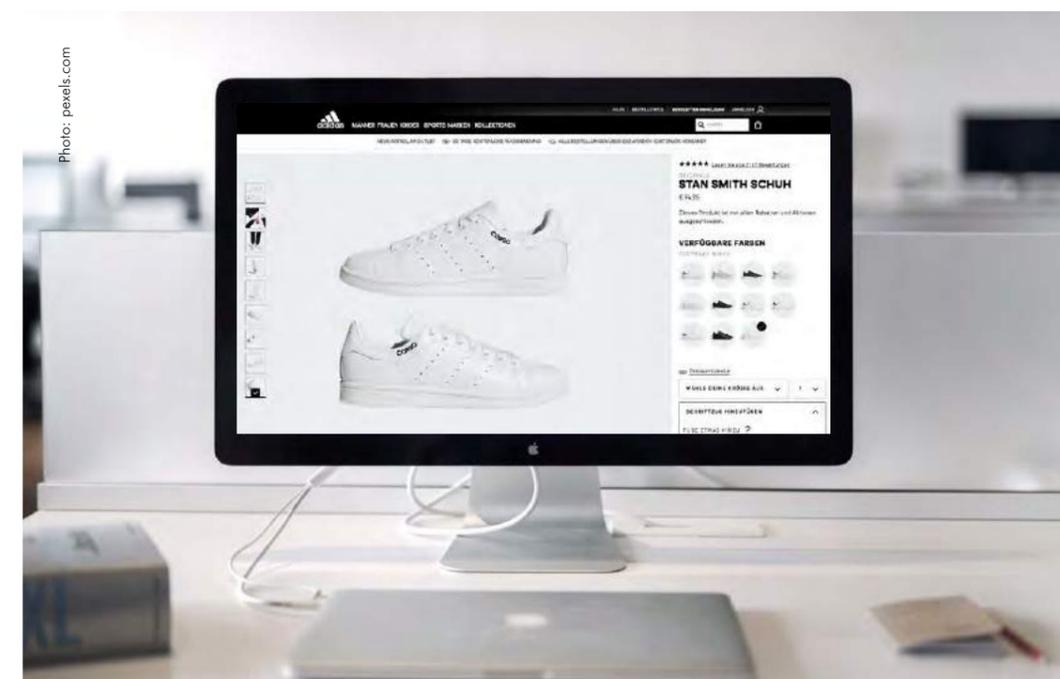
The new "Age of Industry 4.0" promises considerable cost savings through the intelligent networking of processes. Starting at a product volume of one. At the beginning of the 20th century, single-piece production was still the norm for textile and fashion production. Over the course of the 20th century single-piece production was replaced by mass production. Cost savings were achieved through mass production at the expense of individuality. Today, a turnaround for customers is on the horizon. Customers want individual offerings and flexible solutions. For com-

panies, this requires a reorientation in order to satisfy new customer needs. Some manufacturers are already pioneers in this field, such as sports brands Adidas and Nike. They offer their customers the possibility to configure their own individual shoes. Success proves that they are on the right track; many other manufacturers are already following suit with various me-too products.

BACK TO THE ROOTS?

For the last twenty years the main focus has been on reducing production costs by outsourcing to low-cost production countries, however the first companies are beginning to reconsider bringing production back into their own countries. There are several reasons for this. On the one hand for sustainability reasons, such as shorter delivery routes to reduce CO₂ emissions, and on the other hand for economic reasons. Delivery costs from the Far East have bottomed out and will remain constant or will even increase. Wage dumping has also reached an all-time low and is increasingly being denounced in public. If anything, wages will increase again in the near future, partly due to the increasing public demand for better working conditions. This is a welcome trend for the German economy.

Online platforms such as adidas.de offer their customers the opportunity to design their own personal shoe, including designing their own lettering, and give free reign to their creativity.



TRADE FAIRS

2019

BOBOTEX® – ROLLER COVERING MEETS THE MEDITERRANEAN

ARE TRADE FAIRS ACTUALLY STILL IN KEEPING WITH THE TIMES? FOR US AS ONE OF THE MARKET LEADERS, THIS QUESTION IS EASY TO ANSWER. YES, TRADE FAIRS OFFER US THE OPPORTUNITY TO MEET MANY OTHER MARKET LEADERS, GLOBAL PLAYERS AND DECISION-MAKERS FROM ALL OVER THE WORLD, TO START A DIRECT DIALOGUE AND TO PRESENT NEW DEVELOPMENTS IN THE SHORTEST TIME POSSIBLE. THEY ARE THE MEETING POINT FOR THE INDUSTRY AND CUSTOMERS.

However, at BOBOTEX® we are not only exhibitors, we are also observers. What new developments are there on the market, what innovations can be expected in the near future across all sectors, what is the competition experiencing? And last but not least, what is the mood of customers and partners?

All this information and feedback from the large number of trade fair discussions flows into our post-fair assessment and is a component of our corporate strategy. "The ability to respond flexibly to markets and customers is one of the performance characteristics of our company, says Oliver Jung, Managing Director of BOBOTEX®." Managing Director Michael Ech of BOBOTEX® adds: "Even in the digital age, personal contact is irreplaceable for us."

The Wuppertal entrepreneurs start planning their trade fair calendar for the following year at the beginning of a year, taking into account important strategic trade fairs, leading trade fairs of the industry, but also potential new markets. Trade fairs on all continents are included in the considerations and planning, BOBOTEX® is justifiably the catalyst for roll cover manufacturers.

In 2019, roller coverings from the Bergisches Land region will again be exhibited at a goodly number of national and international trade fairs. Over 90 exhibits per trade show shipment. One of the most important trade fairs this year is the ITMA Barcelona. Every four years, this leading trade fair for the textile industry takes place alternately in Barcelona and Milan. "The Textile Class

Reunion" has made a permanent decision in favour of these two metropolises. Also in 2019, Techtexsil, the leading trade fair for technical textiles and nonwovens will start in Frankfurt a.M. – with more than 1,500 exhibitors and 35,000 industry visitors.

The BOBOTEX® management team will be available for discussions at both trade fairs. We would be pleased to make an appointment now to meet with you in Frankfurt or Barcelona; simply send an email to

INFO@BOBOTEX.DE.

HERE YOU CAN MEET US

ICE EUROPE 2019, MUNICH (GERMANY)

March 12th – 14th 2019 | Hall 5, Stand 1854

TECHTEXTIL 2019, FRANKFURT (GERMANY)

May 14th – 17th 2019 | Hall 3.0, Stand A 42

ITMA 2019, BARCELONA (SPAIN)

June 20th – 26th 2019 | Hall 1, Stand B 108 + Hall 4, Stand A 201

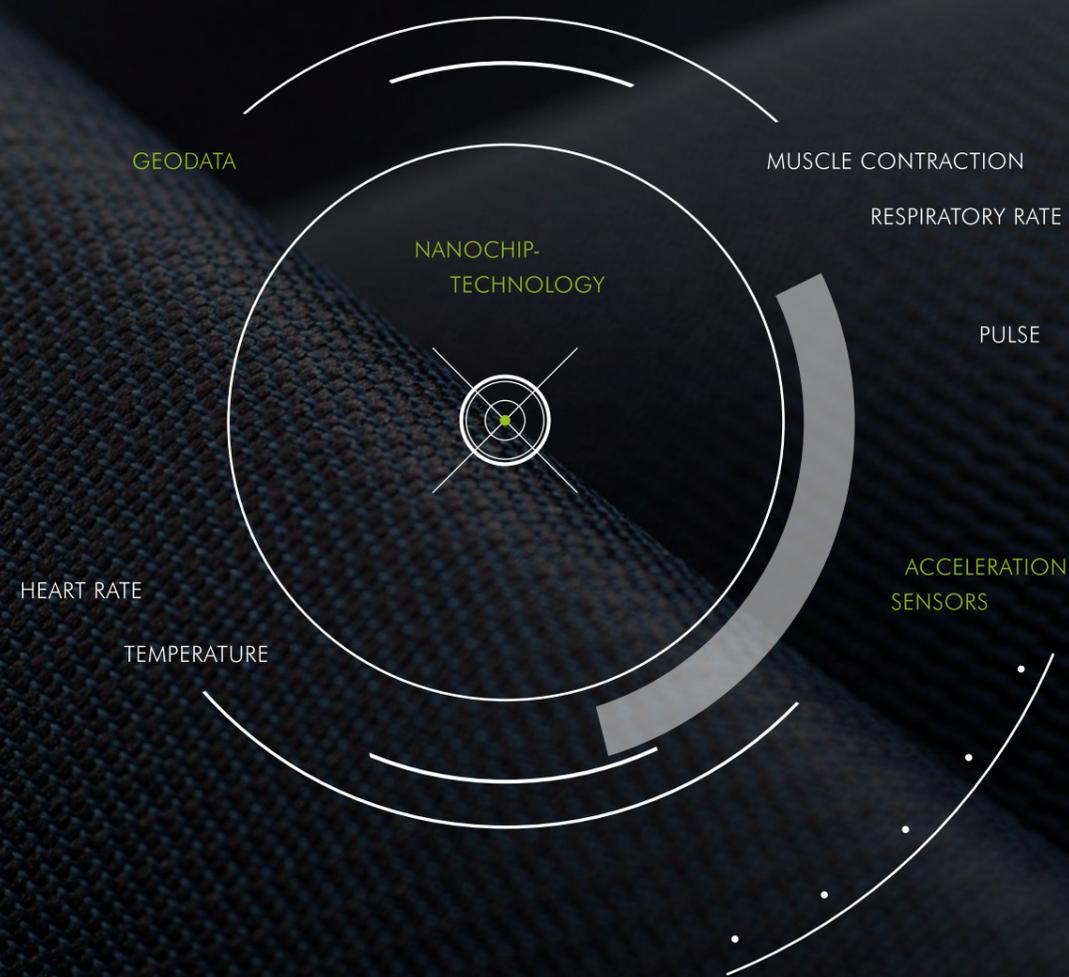


TRADE FAIR CONSULTATION
TRADE FAIR DESIGN
TRADE FAIR CONSTRUCTION

SEE YOU IN
DÜSSELDORF NÜRNBERG VIENNA PARIS
HANNOVER FRANKFURT BIRMINGHAM
BARCELONA ESSEN MUNICH COLOGNE
SEATTLE MADRID LONDON GENEVA...

VISION

MEETS REALITY



NEVER BEFORE HAS THE TEXTILE INDUSTRY PRODUCED SO MANY GROUNDBREAKING INNOVATIONS, THAN WE HAVE EXPERIENCED IN THE LAST TEN YEARS. IN PARTICULAR, THESE INNOVATION INCLUDE SO-CALLED "SMART TEXTILES", WHICH ARE DOMINATING IN MORE AND MORE APPLICATIONS. HOWEVER, ALSO IN THE AREAS OF SUSTAINABILITY AND CLIMATE PROTECTION, NEW INTELLIGENT SOLUTIONS ARE CONSTANTLY BEING DEVELOPED THAT CAN MAKE A DIFFERENCE.

SMART TEXTILES

STARS OF THE TEXTILE INDUSTRY

Intelligent fabrics that warn of diseases, transmit data and store energy. What sounds like a vision of the future is already to some extent the reality of today. For example, textiles can measure fever, generate energy and heat, or kill bacteria.

Perhaps they will soon be saving human life. T-shirts will soon be able to monitor human vital functions and alert a doctor. The areas of application are virtually unlimited. There are already fabrics that can store electricity. Thus textiles are becoming batteries and soon you may be able to plug your T-shirt into the charging cable.



TEXTILE RECYCLING

SUSTAINABLE UPHOLSTERY FABRICS

Climatex has developed an innovative technology for sustainable textiles. Even in the product design stage, the focus is on the factors recycling, the environment, health and energy. This results in materials that can be separated according to type and that are completely recyclable. Climatex upholstery fabrics, for example, enter the value chain again after their useful life.

Source: Lead Innovation Management

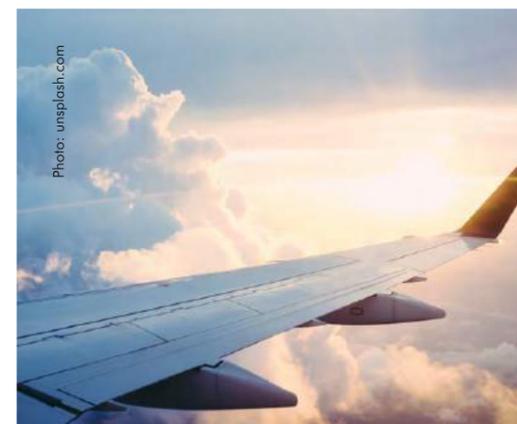


CO₂ REDUCING

ULTRALIGHT AIRCRAFT CARPETS

What do carpets have to do with the aviation CO₂ balance? It's quite simple, every kilogram of weight that an aircraft does not have to take into the air reduces kerosene consumption and thus CO₂ emissions. This also includes the weight of interior furnishings, such as aircraft carpets. Consequently the company Lantal Textiles AG has developed an ultra-light aircraft carpet that enables airlines to reduce their CO₂ emissions by approximately ten tonnes per aircraft per year.

Source: Lead Innovation Management



REVOLUTION 3D

THE NEW TECHNICAL POSSIBILITIES IN 3D-PRINTING AND 3D-SCANNING HAVE THE POTENTIAL TO REVOLUTIONIZE THE TEXTILE INDUSTRY. NEW CLOTHING MODELS AND SHOES CAN ALREADY BE INDIVIDUALLY PRODUCED VIA A 3D-PRINTER. MANY NEW POSSIBILITIES ARE ALSO OPENING UP FOR FUNCTIONAL TEXTILES.

3D PRINTING IN THE TEXTILE INDUSTRY

3D technology is changing the entire value chain in the clothing industry. Whether creation and design or preparation of prototypes and samples and extending to production and delivery. Previously, new products were designed using two-dimensional materials, from which one or more prototypes and sample collections were created at high cost. Only after this phase could mass production be started. This step can now be taken over by virtual 3D simulation.

Thanks to sophisticated software solutions, cuts, colours and patterns can be virtually tested on size avatars. Even drapery and movements can be represented realistically. With the assistance of 3D simulation, collection creation becomes faster, more accurate and also more cost-effective. Through elimination of time-consuming prototype production, there are no more idle times and wait times.

Variations and revisions can be inserted at any time. This makes processes more flexible, and trends can be adapted and implemented much faster. Online retailers, in particular, hope that the virtual fitting option will provide a solution for the problem of cost-intensive and environmentally harmful returns. Human body data are currently obtained through cost-intensive body-scan series measurements.

AUTOMATED 3D PRODUCTION PROCESS

Some manufacturers are already experimenting with automated 3D printing techniques, such as Boston-based sporting goods manufacturer New Balance, which introduced customized 3D printed spike plates for running shoes. Industry giant Adidas had already started series production of athletic shoes in the summer of 2018, some of which came from the 3D printer.



Sachsenröder

HIGHTECH-WERKSTOFFE AUS PFLANZENFASERN



SAVUTEC® / VULKANFIBER DIE EXTREME NATURFASER.

Grundstoff der Vulkanfiberprodukte sind Baumwollfasern. Sie gehören zu den nachwachsenden Rohstoffen. Aus den zu Rohpapier verarbeiteten Pflanzenfasern entsteht durch Pergamentierung die Vulkanfiber SAVUTEC®. Ein Material, das durch seine extreme Festigkeit und Vielseitigkeit begeistert.



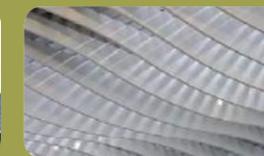
GESADUR® / DUROPLAST DER NATÜRLICHE KUNSTSTOFF

In GESADUR® stecken 50% Naturfasern, die Sachsenröder zu einem homogenen Kunststoff auf der Basis hochverdichteter Duroplaste verarbeitet. Im Aushärtungsprozess bildet sich eine äußerst stabile Struktur, die nicht mehr verformt werden kann. GESADUR® wird vorzugsweise zur Herstellung von Lauf- und Stützrollen in der Kabelverleiindustrie eingesetzt.

Durch die außergewöhnlichen und sehr vielseitigen Produkteigenschaften werden die Werkstoffe bereits in zahlreichen Branchen eingesetzt. Aber viele weitere Einsatzmöglichkeiten sind denkbar.



LEICHTBAU-
TECHNOLOGIEN



SCHALLSCHUTZ



VERBUND-
WERKSTOFFE



VERPACKUNGEN



MEDIZINTECHNIK

MEHR INFORMATIONEN UNTER
www.sachsenroeder.com

VIRTUAL INNOVATIONS

TRY IT ON ONCE AND SEND IT BACK

TEXTILE GIANTS, SUCH AS H & M, ZARA, MANGO, ADIDAS, NIKE AND OTHERS SET THE STANDARDS FOR THE FASHION INDUSTRY OF TOMORROW: STRONGER CUSTOMER FOCUS, GREATER FLEXIBILITY, MINIMAL INVENTORY AND SYNCHRONIZED SUPPLY CHAINS. HOW CAN THE REST OF THE INDUSTRY KEEP UP? WITH INNOVATIVE SOLUTIONS THAT CAN BE IMPLEMENTED COST-EFFICIENTLY.

The textile industry is plagued by various problems. One of these is overproduction, i.e. a large number of garments remain in the shops and are disposed of. In addition, there are long cycles. A retailer must order with approx. a ½ year lead time. The risk of sitting on the goods increases, for example if the summer is rainy. The

price explosion also plays a major role. While attention is paid to every cent in production, retail prices are rising by as much as six times.

The new customer behaviour could lead to a reduction of these problems, e.g. with apps to determine body measurements. For example, you can take a virtual measurement at a Japanese online shop and order tailor-made clothing directly. A Swiss start-up sells individually manufactured trousers made to measure. Body measurements are calculated with a self-developed app. A body model or an avatar is developed from just two photos and specification of gender and height.

In Germany too there is a lot of research in the area of online fitting. The Institute for Textile and Fibre Re-

search and the company Avaluti are funded by the Deutsche Bundesstiftung Umwelt with approximately 445,000 euros, with the objective of minimising returns through online fitting and thus offloading the environment. Individual products made to measure are also a solution for textile overproduction. The customer orders, so to speak, directly from the manufacturer, the industrial tailor at the end of the production chain. Only what is needed is produced, this reduces costs and is gentle on the environment. But before the industry is able to deliver tailor-made textiles on a large scale, major changes are still needed. Previously, the entire production has been geared to mass production and not to individually adapted single-pieces. The fashion industry with its innovative solutions can serve as an exciting practical example for the entire textile industry.



Photo: shutterstock.com

“EVERY 5TH GARMENT IS ORDERED ONLINE, AND THIS TREND IS RISING. 25 TO 50 PERCENT OF THESE GARMENTS WILL BE RETURNED AFTER THEY ARE TRIED ON.”

Michael Stöhr, Managing Director of Avaluti

HIGH TECH MATERIALS



THE FASCINATION OF TECHNICAL TEXTILES

TEXTILE HIGH-TECH FABRICS, ALSO KNOWN AS TECHNICAL TEXTILES, ARE NOT ONLY USED IN THE CONSTRUCTION AND AUTOMOTIVE INDUSTRIES, THEY ARE ALSO TESTED IN OUTER SPACE.

Astronaut Alexander Gerst trained daily for two hours in special functional underwear until his return from the ISS in December. In this regard he was to test whether the functional underwear can also cool effectively. The heat exchange on the body surface is altered by weightlessness, therefore heat accumulation occurs faster than it does on Earth. Researchers hope that the extraterrestrial experiment will provide insights for further development of high-tech textile materials. Can functional underwear cool and warm? Can high-tech materials be used under extreme climatic conditions?

Technical textiles, for example, could make everyday work in hot conditions more bearable, for example for people who work under extreme climatic conditions. High-tech materials are already being used today in many areas, in medicine, in the automotive sector and in industries where protective clothing is needed – for fire-fighters, steel workers or police officers, for instance. They are found in adhesive bandages, wound dressings that accelerate the healing process, implants that dilate blood vessels, and threads for sutures that can dissolve on their own.

No airplane, no car can do without technical textiles. Whether in seats, engines or load-bearing parts. Technical fibres also play an important role in the construc-

tion industry. For example, the 246-meter-high thysenkrupp test tower in Rottweil is encased in a glass fibre membrane that protects the concrete tube from wind and weather. It also repels dirt and reflects light. The world's longest textile concrete bridge in Albstadt on the Swabian Alb shows that textile materials reinforce concrete. With a length of 100 metres and a height of 16 metres, it connects two city districts. It is weatherproof and, unlike reinforced concrete, it is corrosion-resistant.

Technical textiles have long ceased to be a niche product and are now a growth engine for the textile industry. Technical textiles from Germany set the pace internationally, a fact that is also due to our research and development. There are 16 textile research institutes in Germany with an annual research budget of more than Euro 90 million. So it is not surprising that the pioneering innovations come from Germany.

Even today, special textiles enable rescue deployments without burns.



LIFE & STYLE

WHY IS THE DEMAND ON THE ADVERTISING MARKET INCREASING EVERY YEAR? ON THE ONE HAND IT IS A SENSIBLE WAY OF CUSTOMER RETENTION: PROMOTIONAL ITEMS CAN BE USED WITH WONDERFUL EFFECT AS A SIGN OF APPRECIATION, ON THE OTHER HAND AS A PRESENT AT TRADE FAIR STANDS. THIS CAN OFTEN BE SEEN VIA THE MANY FAIR VISITORS WHO MOVE THROUGH TRADE FAIR HALLS WITH COUNTLESS COLOURFUL BAGS. FROM SO-CALLED PROMOTIONAL ITEMS UP TO THE HIGHTECH ARTICLE – OUR PREVIOUS SELECTION ENJOYS LARGE POPULARITY, THANKS FOR THE NUMEROUS RESPONSES.



COUNTRY & ROCK 'N' ROLL

ONE CLICK FOR BEST SOUND

The main material of this BT/wireless speaker is rubber. It can be controlled at a distance of up to 10m from the end device. Additional functions: Change light function, USB/Micro USB/AUX connection and TF card reader, incl. USB charging cable and splash water protection.

STREMMER.NET

PORTABLE & COMFORTABLE

TRAVEL RELAXED

The special features of this Bluetooth headphone are its balanced sound and its sophisticated design. The soft polyurethane padding ensures high wear comfort. The stereo headset with integrated microphone and call acceptance button is easy to fold and fits in any piece of luggage.

MEINTRENDYHANDY.DE



FIT & REFRESHING

FASTER TO THE GOAL

Freshen up your Apple Watch with a brand-new, two-tone silicone bracelet. This durable bracelet is made of soft silicone and it does not impair your activities. Its wear-resistance guarantees a long service life.

MEINTRENDYHANDY.DE



ROBUST & AIRWORTHY

NOT ONLY SUITABLE FOR PILOTS

A pilot suitcase that keeps its promises. With lockable handle, space for large and small files as well as a main compartment and two secondary compartments. The dimensions of the trolley suitcase, 50 cm x 27 cm x 41 cm, and its weight of 2.65 kg are perfect for carry-on travelers. Thus it is the ideal companion on all business trips.

KOFFER-ARENA.DE

SOPHISTICATED & ORGANIZED

EVERYTHING IN ONE HAND

This document folder made of easy-to-clean PVC in DIN A4 format with nine pockets, additionally contains a pen holder and it has a high-quality zipper. All documents in one folder, well organized, in a sophisticated look.

STREMMER.NET



WHAT DO FASHION AND ORTHOPAEDICS HAVE IN COMMON?



US!

We produce elastic tapes, textiles for technical applications and knitted hosiery for orthopaedics. We offer our customers and partners solutions and individualized services. We accompany you from the initial idea to the finished product.

QUALITY | FLEXIBILITY | INNOVATION

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