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THE MAGAZINE FOR ROLLER COVERINGS



DEAR READERS,

We are pleased to present you with the second issue of our magazine, CORSO. The positive reactions to the first issue have encouraged us to go a step further. For instance, we have extended the scope of the magazine, in addition we want to provide even more space for our idea of offering with CORSO a communication platform for the entire industry. Consequently, in this issue you will also find contributions and advertising from other companies and institutions.

In the first editorial meeting for this issue we asked ourselves the questions, what topics are currently moving the industry and what information or discussion can we contribute in these areas? In this process we identified the topic of (foreign) trade fairs. It's clear to everyone in the industry that the national market offers little growth potential. In many cases the lucrative growth markets are overseas. However, for medium-size enterprises like us foreign trade fairs are at times a special challenge. We would be pleased if the interview with Messe Frankfurt and some examples from our own trade fair experience can provide you with good information and thought-provoking impulses.

Moreover – as in the first issue – you will selected current facts, figures and news as a background that will certainly enhance the information content and plausibility of one article or another. For example, in the form of decidedly positive economic figures that should give us courage for expansion and new ideas.

Of course we would also like to tell you about our company. A top priority in this regard is to introduce the people who are behind $BOBOTEX^{\circledR}$ and who play a role in shaping our company. We only achieve top quality and success as an effective team.

Now, however, we extend our best wishes for your reading enjoyment of this new issue of CORSO. Again we would like to encourage you to support us with your criticism and suggestions, but also with your own suggestions for topics or articles. Our objective is not just to produce a good company magazine, but rather to be a medium for the industry.

All the best,



OLIVER JUNG MICHAEL ECH
MANAGING PARTNER MANAGING PARTNER









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OPTIMAL ECONOMIC CLIMATE

EURO AREA ON THE UPSWING

According to the ifo Institute for Economic Research, in the third quarter of 2017 the economic climate in the Euro area again improved significantly, from 26.4 to 35.2 balance points. This is the highest value since autumn 2000. The economic experts surveyed for the analysis, in particular, assessed the present economic situation as more favourable than it was in the preceding guarter. The prognosis for the next six months is also decidedly positive. With a probability bordering on certainty, the strong growth should continue in the second half of 2017. Based on Germany, France, Italy, and Spain – The four largest national economies of the Euro zone – the situation and expectations improved. The expectations in France showed the most substantial increase.

However, there are still differences in the assessment of the economic situation. The experts almost unanimously assessed the economic situation in Germany now as good. A slightly positive assessment is also reported for Spain. In France and Italy the experts rated the situation as not yet satisfactory.





LOOKING FOR YOUNG TALENT

LACK OF SPECIALISTS ALSO THOSE TO BE

The German mechanical engineering industry views with concern the Apprenticeship Year 2017 that began in August. More than half of the mechanical engineering companies complain about the massive difficulties they are facing in finding suitable school leavers for a commercial or technical apprenticeship. The situation is particularly difficult in Eastern Germany.

The reasons for this situation are diverse: On one hand there is the demographic change; in 2017 the number of school leavers was lower by more than 100,000 than it was just ten years ago. More than

50%

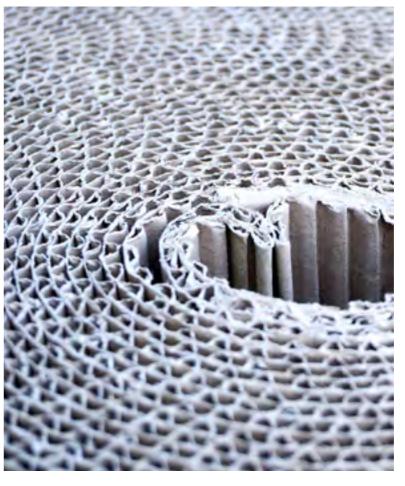
of school leavers conclude their school education with a higher education entrance qualification.

For this group an academic education is clearly more appealing than an apprenticeship. Moreover, companies complain of an increasing lack of training maturity on the part of many applicants. Industry and politics are called on to achieve an overall sustainable improvement; however this will require the creativity and flexibility of all participants.

HIGH-TECH MECHANICAL ENGINEERING IS BOOMING

RESEARCH & DEVELOPMENT PAYS OFF

The VDMA can report markedly positive numbers for the robotics & automation sector. After posting total sales of EUR 12.2 billion in 2015, this sector achieved a 5% increase to EUR 12.8 billion in 2016. The prognosis for 2017 forecasts an additional 7% growth. This would correspond to total annual sales of EUR 13.7 billion.



FIGURES / DATA / FACTS

MILLIONS, BILLIONS AND FORECASTS

1.4%

OF THE GROSS DOMESTIC

in Germany is spent for environmental protection, 1.2% is for military spending, though 4.1% is spent for education.

9.9

the German corrugated board industry sold 9.9 billion square meters of corrugated board in 2016. This would cover more than two million football fields.

67

dollars is the monthly salary for textile workers in Bangladesh.

65,139

the German textile and clothing industry employed 65,139 people in 2016.

4.3

the German plastics industry produced 4.3 million tons of plastic packaging last year.

AND THE TREND IS UPWARDS.

119

the average German family spends EUR 119 for clothing each month.

HIGH OCCUPATIONAL SAFETY

THE POSITIVE TREND CONTINUES

The German Social Accident Insurance shows 877,071 reportable work-related accidents for 2016. Thus the downward trend that we have seen for years is continuing. Currently the risk of suffering a work-related accident is 2.2%. Unfortunately in the previous year there were also 424 accidents with fatal outcome to lament. However this is also the lowest number that has been reported in years.

Not least, in the textile industry on the consumer side an increasing sensitivity relating to the topic of occupational health and safety and working conditions associated with clothing production is apparent – particularly in Asia. The comparatively high standards in Europe could become an important sales argument.

The effort that is expended at BOBOTEX® for our presappropriate for the respective demand situation, new

The effort that is expended at BOBOTEX® for our presence at trade fairs in Germany and abroad is considerable. For more than 35 years the Wuppertal specialist for roller coverings has been exhibiting at foreign trade fairs. At mid-year 2017, we could already look back on participation at Techtextil in Frankfurt/Main, Chinaplas in Guangzhou, as well as Saigon-Tex in Vietnam. And as this issue of CORSO is being sent to readers, BOBOTEX® is again on the road, this time in Portugal, at Maquitex in Porto.

The question can be asked, why is a medium-sized enterprise involved in such extensive trade fair activities? For BOBOTEX® Managing Director Oliver Jung the answer is quite simple: "The national market is finite, significant growth rates can hardly be achieved here. We have an export share over 70 percent and the growth markets that are attractive for us are simply outside of Europe. And to a not insignificant extent in Southeast Asia". However, BOBOTEX® does not participate in "sales fairs". The main focus is on customer acquisition and customer care, and on developing new markets; even beyond the classic textile business. In addition,

appropriate for the respective demand situation, new trading partners are targeted relative to expansion of the dealer network. For Managing Director Michael Ech there are two other important aspects: "For us a foreign trade fair is always an outstanding opportunity to conduct selective market research with attractive target groups, to learn what makes new markets and potential customers tick. And particularly in Southeast Asia, potential new customers appreciate the personal presence on site and honour this commitment".

And even though the topic of trade fairs does not apparently elicit any stress reactions at corporate headquarters in Wuppertal-Langerfeld, a lot of work and detailed planning are involved in every single trade fair presentation. Indeed BOBOTEX® does not provide its trade fair stands with larger exhibits or even machines, but rather focuses on personal and in-depth discussions. Nevertheless for the comparatively small company the mountain of tasks that must be accomplished is enormous. Michael Ech explains how this can be accomplished with a small effective team: "You must quickly and without pretence recognise where your own limits are. We

are specialists for roller coverings, others are specialists for trade fairs. We carry out our trade fairs in Europe with a local stand builder, for the trade fairs abroad, we rely on the services of internationally active German trade fair companies, such as Messe Frankfurt or Messe Düsseldorf. This arrangement has been running very well for many years.

In addition, the company uses its membership in the VDMA, so that we can successfully present ourselves overseas with its support and network. One example in this regard is the German Pavilion at ITMA Asia, which was carried out with the participation of the federal government. Nevertheless the trade fair business is also a financial challenge.

However: "All of this pays off for us. Without international trade fairs, presumably we would have disappeared from the market long ago", is how Oliver Jung summarises the activities. A professional trade fair presence is one thing. A trade fair that is successful from the sales perspective is something else entirely. Here BOBOTEX® relies on classic follow-ups

with subsequent contacting, preparation of quotations and execution of next steps. In light of the high proportion of export business, the essentials for these activities are a precise allocation to the respective sales organisations in the foreign country with appropriate reporting.

BOBOTEX®

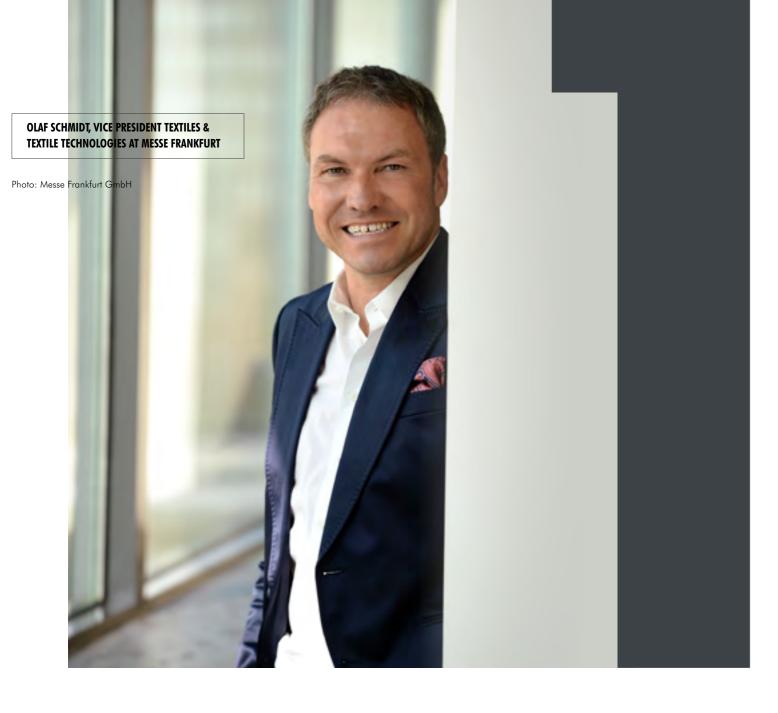
WE WILL BE PARTICIPATING HERE IN EARLY 2018

After the trade fair is before the trade fair. And thus some scheduled dates on the BOBOTEX® for the first half of 2018 are definitively blocked for trade fairs: In February Plant India, in March we are headed to Sao Paulo for ExpoPrint, and in May to Milan for Print4All. We'll see how the trade fair agenda develops by the end of the year.





PRINT4ALL



IAA, BOOK FAIR OR ACHEMA: THESE ARE INTER-NATIONAL MEGA FAIRS THAT YOU IMMEDIATELY ASSOCIATE WITH MESSE FRANKFURT. LAST YEAR 134 TRADE FAIRS WERE STAGED – HOWEVER FAR MORE THAN HALF OF THEM WERE NOT STAGED AT THE FRANKFURT/MAIN LOCATION BUT RATH-ER IN FOREIGN COUNTRIES. THE TRADE FAIR ORGANISERS IN THE METROPOLIS ON THE MAIN OFFER FAR MORE THAN EXHIBITION SPACE. DE-TAILS IN THIS REGARD ARE PROVIDED HERE IN THE INTERVIEW WITH OLAF SCHMIDT, VICE PRES-IDENT TEXTILES & TEXTILE TECHNOLOGIES AT MESSE FRANKFURT.

A trade fair company offers a trade fair for a specific topic area, makes exhibition space available and ensures the entire infrastructure surrounding the trade fair. This is at least what outsiders imagine. However, in the case of your company this appears to fall quite short of the real story. How would you describe Messe Frankfurt, its task areas and core competencies? We view ourselves as a service provider for our customers, and as a service provider we offer comprehensive support to enable a successful trade fair presentation for our exhibitors. Service offerings are central components in the trade fair and convention business. In their entirety these service offerings underscore the quality standard of the organizer and make a crucial contribution in the success of an event for the customer. Messe Frankfurt offers an extensive palette of consulting and service



offerings, custom-tailored and demand-oriented, depending on the event and the desires of the customer. This extends from professional stand construction to logistics services, marketing associated with the tradefair marketing, e.g. in the form of striking advertising possibilities, online banners, multimedia solutions or even to individual promotion and catering. Via our Messe-to-Gate-Service/Gate-to-Messe-Service, i.e. the luggage service, trade fair guests in Frankfurt, for example, also have the possibility of being brought via limousine directly from their arrival gate to the Frankfurt Messe trade fair grounds and back to the airport for departure. At selected events you can check-in directly on the fairgrounds and have your baggage conveyed to the airport, including baggage check-in directly on site. These are just a few examples from our overall service offering.

Currently the German economy is booming, the export business is excellent, products and services Made in Germany are in greater international demand than ever before. What is the importance of trade fairs in this regard? According to the Association of the German Trade Fair Industry, AUMA (Ausstellungs- und Messe-Ausschuss der Deutschen Wirtschaft e.V.), categorically, next to the online presence, trade fairs are the second most important marketing instrument for companies. Moreover, trade fairs not only contribute to the success of the represented industries, but also ensure considerable socio-economic effects. Thus via trade fairs on the Frankfurt trade fair grounds, approx. EUR 3.1 billion is generated each year in directly participating industries, such as logistics, the hotel industry, gastronomy, agencies, and approx. 32,000 jobs are secured. In terms of internationality at the home venue, Messe Frankfurt is the leading

organizer by a wide margin; more than 70 percent of serve the competition. In this regard the proportion of our exhibitors and approx. half of the visitors come from customer distribution varies depending on the industry. abroad. According to AUMA, the average proportions for Germany are approximately one half for exhibitors From your many years of experience: What are the trade fairs Made in Germany primarily contribute by supporting our customers in their national and interright demand.

ganisation also export hits? And if yes, who? Messe Frankfurt events really are export hits. In 1987 we were the first German trade fair company to go foreign with a textile trade fair: Interstoff in Hong Kong. Today we have 28 subsidiaries around the world and of our 134 the worldwide export of successful trade fair concepts, as well there is still room to improve. or brands, is expanding in every direction. Thus, for example, Messe Frankfurt, with more than 50 textile trade complete value creation chain.

reasons why trade fair appearances should not be missing in a company's marketing mix? Trade fairs are highly-efficient marketing instruments, formats for teem, and the most important instruments in B2B commore efficient market overview in such a short period of time than at a trade fair, when the entire industry is gathered at one location. An AUMA study from March 2017 shows the importance of trade fairs for companies. According to the study, in the years 2017/2018, exhibitors of capital goods, the B2B communications friendly smile suffices in this regard budget is almost 50 percent.

If we disregard for a moment the consideration of exhibition space sold, which is certainly important for a trade fair company, and analyse in absolute numbers, what does the approximate customer distribution of global players / corporate groups, large medium-sized enterprises, as well as small and mid-sized enterprises, look like in Messe Frankfurt's total busi**ness, in percentage shares?** More than two thirds of the exhibitors at our leading trade fairs are small and medium-sized enterprises. These exhibitors, in particular,

and approximately one fourth on the visitor side. Thus most frequent mistakes that small and medium-sized enterprises, in particular, make in the planning and execution of trade fair appearances? A trade fair national activities, and supplying the right offer for the presence, actually like all marketing activities, should be well thought-out by the exhibitor. How should the customer be addressed, what messages should be con-Are German trade fair concepts and trade fair or- veyed, how can the customer be inspired and informed, and what services does he feel good about on the trade fair stand. To achieve this, clear objectives must be set, and they must be worked through, one-by-one. Unfortunately this does not occur frequently enough. Moreover, a trade fair presence should be planned with measurtrade fairs, last year 84 of them took place outside of able, realistic targets, right from the start. For example, Germany. Our concept of Geo-Cloning, in other words how many customer contacts do I want to achieve. Here

In your opinion what are the basics that must be in fairs also accompanies its customers abroad, and as place in all areas associated with the trade fair, to the largest organiser in the textile industry, we cover the make the appearance successful? This starts long before the trade fair – make the fact that your company is participating in the trade fair known to the public. Invite From your perspective what are the most important vour customers to the trade fair. Schedule meetings on your stand. Use the communication channels provided by the trade fair, by contacting the marketing contact persons and informing them of your new products. Take encounter with worldwide primacy and the highest es- advantage of the trade fair services, for example, admission ticket vouchers, free-of-charge advertising or munication. Nowhere else will a company obtain a press releases. Review the services that can be booked for the trade fair, to generate even more awareness, for example a prominent position in the exhibitor search on the trade fair's website, a banner in the official tradefair app, or advertising space on the trade fair grounds. Stage your products and services on the trade fair stand the 500 exhibiting German companies surveyed, spend in a manner that is exciting and inspiring. And ensure 45 percent of their marketing budget for trade fairs. For that people feel welcome on your stand. Sometimes a

Small and medium-sized companies, in particular shy away from trade fair appearances, often due to a lack of experience, the marketing budget is limited, or simply there is not enough manpower available. What would your advice be for such companies; what assistance can you as a trade fair company offer? For exhibitors that are still inexperienced there are extensive continuing education offerings, for example via the Seminar Alliance, which also belongs to Messe Frankfurt. Likewise there are valuable tips on the AUMA website. Mess Frankfurt itself, offers an extensive palette profit from the fact that they are presenting themselves of exhibitor and visitor services with offerings from secuto an international public, they increase sales, enter into rity to professional stand construction, and extending to cooperations, test the labour market, and they can ob- logistics services, marketing that accompanies the tradefair and catering. A single source for services supportthe customer right from the start in his planning, so that he can concentrate on his business transactions. In this regard, our experience and longstanding collaboration with proven partners, ensure a uniformly high quality. We facilitate the initial trade fair experience for young, innovative companies with special funding programs.

Sooner or later amounts must certainly be discussed. Is there something like a rule of thumb, for calculating the costs of a "standard trade fair presence"? No, there is really nothing that could be considered a rule of thumb. The various trade fairs are too different. The standard is that you pay a certain amount per square meter of exhibition space. These prices are listed transparently on our websites and in the respective sales brochures.

What importance - particularly for medium-size companies - do industry associations have relative to trade fair participation and what is the collaboration like with your company? The industry associations are important contact partners for us and they are also multipliers, with whom we collaborate closely but differently depending on the trade fair. For the Texprocess, for example the VDMA trade association Textile Care, Fabric and Leather Technologies is the ideal sponsor and thus a very significant partner. For Heimtextil or Techtextil the relevant industry associations are part of our advisory counsel and there is a close exchange with us.

Participation at a trade fair in Germany is one thing. A presence at a foreign trade fair is a totally different dimension from the perspective of a medium-sized enterprise. As an international trade fair company, what can you do to facilitate the technical leap to a

foreign exhibition presence? Messe Frankfurt offers its customers standardised services at the highest level, in all aspects of organisation and staging of trade fairs, conventions, and events, not only at the home location of Frankfurt, but rather worldwide – as implementation company of German joint stands abroad (German Pavilions). Often companies that are interested in a trade fair presence as part of a German Pavilion, are already presenting on the Frankfurt trade fair grounds and they know Messe Frankfurt as a reliable partner. Consequently, at our trade fairs in Germany we frequently get inquiries from our small and medium-sized customers from the mid-sized sector as to whether we offer a trade fair presence at one of our foreign trade fairs that is suitable for them. The contacts in Frankfurt and also the worldwide sales partners, then are pleased to mediate additional information and the registration form for the appropriate German Pavilion in the foreign country.

A medium-sized company in the machine tool components sector, wants to establish itself in Asia via the trade fair "bridgehead". In specific terms, what would Messe Frankfurt's assistance look like in this case? That can be quite different depending on the "prior knowledge" of the company. Basically, we would start by informing the company of the different exhibitions and their structures in terms of exhibitors, product categories, and visitor structure. Sometimes it can be effective to first visit a leading trade fair in Frankfurt and here make the initial contacts to potential customers from Asia. The relevant industry partners and associations are always present. If you want to venture the direct step to Asia as exhibitor at a trade fair, then, in particular, participation in a so-called "Country Pavilion" is a good idea. Thus for example, in 2016, German companies







CORSO INTERVIEW 12/13

presented themselves at the Cinte Techtextil in Shanghai, subsidised by the Federal Ministry for Economy and Energy (BMWi). Organisationally and financially this is a big help. AUMA, the Association of the German Trade Fair Industry, is also a good partner for national and international trade fair appearances.

In your company are there also points of contact where companies can, without obligation, obtain advice relating to possible trade fair activities, or trade fairs as a component in the marketing mix in general? If a company expresses interest in an event in writing or

on the phone, his inquiry will be forwarded directly to the colleagues on the respective team that is organising the trade fair. This is where the interested party can obtain advice without obligation. In addition, other technical departments in-house, such as Advertising Services or Fair Construction, are available to the interested party. Each of our exhibitors has a direct contact person.

What procedure in terms of partners do you recommend to companies without their own communications department in the planning and staging of trade fair appearances? On one hand agencies specialising in trade fair appearances are a good partner of choice. On the other hand Messe Frankfurt support as needed and in accordance with requirements. We see ourselves as a marketing partner for our customers. In this regard the initial contact is the responsible person on the respective

trade fair team. Early planning considerably facilitates a trade fair presence.

What are the Messe Frankfurt trade fair highlights for the rest of the year that you could recommend to our readers for a visit? Traditionally, and due to the rotation of events the second half of 2017 is impacted by a variety of guest events. Allow me to cite a few examples: At the Frankfurt site, with IAA Cars and the Frankfurt Book Fair in September two prestigious guest events will open their doors one shortly after the other. As part of the 30th Rheingau Music Festival, one of the largest music festivals in Europe, the jazz musician Michael Wollny will perform in the Kap Europa Congress Centre. A super athletic event, the Frankfurt Marathon will be take place on 29 October. In the pre-Christmas season the Internationale Festhallen Equestrian Tournament is a meeting place of the elite. An unusual audio visual happening, "Night of the Proms" follows in mid-December.

Traditionally with SPS IPC Drives Europe on 28 to 30 November a leading technical trade fair for electrical automation takes place in Nuremberg. Outside of Germany, our calendar is once again well filled with more than 40 events, for example, ISH Shanghai CIHE, Texworld in Paris, Heimtextil in Russia, Automechanika in Johannesburg, Interlight Moscow powered by Light + Building and in India with the Automotive Engineering Show Chennai.



Techtextil, product group non-wovens
Photo: Messe Frankfurt Exhibition GmbH/Jean-Luc Valentin

MESSE FRANKFURT

MESSE FRANKFURT IN NUMBERS

GROUP SALES 647 Mio. Euro
EMPLOYEES 2,307
NUMBER OF 134

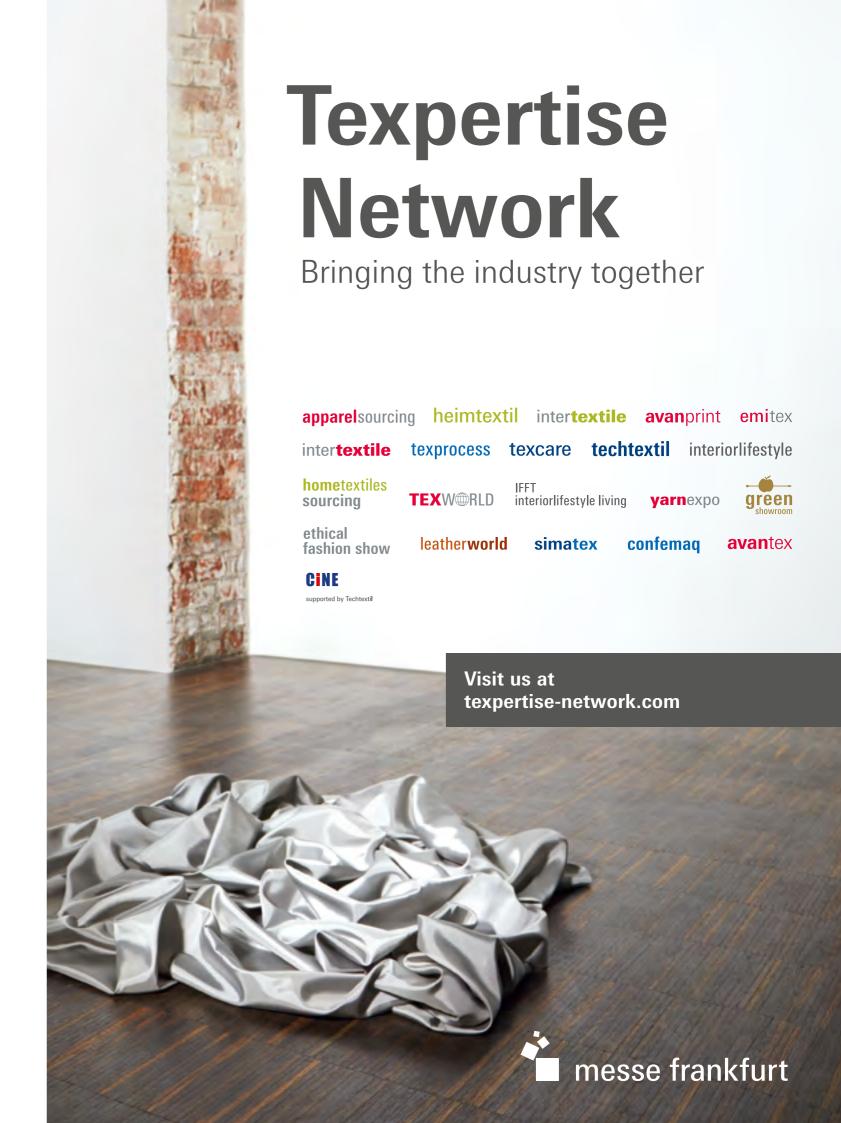
INDUSTRY TRADE FAIRS

EXHIBITORS 90,8

VISITORS approx. 3.5 million NET EXHIBITION SPACE (m^2) approx. 2.6 million

MESSEFRANKFURT.COM





14/15 INDUSTRY & PARTNERS

CORSO

MORE THAN VELVET & SILK

WHEN THE TOPIC OF TEXTILE FINISHING COMES UP, WHO DOES NOT FIRST THINK OF FASHION FABRICS FOR CHIC CLOTHING. HOWEVER TEXTILE FINISHING MADE BY PLOUCQUET IS FAR MORE THAN THAT. THERE IS GOOD REASON WHY PLOUCQUET COUNTS MANY INTERNATIONAL FASHION LABELS AMONG ITS LOYAL CUSTOMERS.

The Ploucquet Group has made itself into a leading specialist for textile finishing in Europe. And it has done so with an incredibly broad spectrum of applications and services. Technical textiles from Ploucquet are used in many sectors of industry, the public sector and the construction industry. Furthermore, the company has an outstanding position in the international market for medical-hygiene products. Also, or perhaps because more than "just" fashion; but rather optimal functionality, maximum load-bearing capacity, and uncompromising safety are involved.



CUSTOM-TAILORED SOLUTIONS AND A COMPLETE SERVICE OFFERING

Flexibility, fast response, a broad product know-how and state of the art technology guarantee the best prerequisites for implementing new solutions. The latest processing methods and optimised workflows guarantee excellent results in the Ploucquet plant in Zittau. The thinking is project-oriented, the consulting is individual and the company is pleased to place its in-depth knowledge at the service of its customers. Ploucquet creates considerable development possibilities for the future, since contract finishing is becoming increasingly significant for a wide variety of textile industry applications.

The interaction of technology, know-how and commitment enables rapid implementation of product innovations, a constant high level of product quality, as well as high profitability with an optimal price/performance ratio. Physical and chemical textile tests are performed in the firm's own laboratory. The special tests include light microscopy with scientific photography and the rain test in the rain tower.

For those who would like to know more about our products and services Made in Germany:

PLOUCQUET.EU

locken · **Milling machine** · Thermoformanlage · Rattanliegen $\mathsf{folzhaus}$ bauen günstig \cdot Polyrattan B-Ware \cdot Loungemöb Androgel · Metall Zerkleinerungsanlagen · **Brikettiersysteme** · Hörbuch uropa Download · Stair lift · Marvelon · Mobile paint shop · Prozessanaly analyse · Koffer · Androtop · Reihenfiltersysteme · Luxushaus · Leuchten nöbel M/Or Rekolustik M/Or Resser Lad Aus No Josiermaschine : Juer-Apotheke : Flusskreuztahrt : Pressentilter : Fa Heilsalbe · Blasen Itania Con Con Con Bridge Ration Serkstatt · Verbin-Hungsklammern · Brikettpressen · Verhaltensforschung · Kattan Möbel · Royal Canin · Rührwerkaustragefilter · **Garden furniture** · **Neuro-economics** · Sitzgr lling machine · Zuluftanlagen · Neuromarketing · Suitcase · Scoring systems rtenmöbel · Hot Air Welder · Nostrilvet · Polyrattan lounger · Metal macerator Magalog · **Aluminium chairs** · Heißluftnietanlagen · Milbemax · **Cruise · Nu** zeuge · Infrarot-Schweißanlagen · Master workshop · Mail-order-pharmacy

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ONE AND HALF CENTURIES AGO TODAY'S WUP-PERTAL – THE AMALGAMATION OF THE FORMER CITIES OF BARMEN AND ELBERFELD – WAS ALREADY ONE OF THE MOST SIGNIFICANT EUROPEAN TEXTILE CENTRES. AND NOT JUST WITH A CRAFTSMAN'S STRUCTURE, AS A CENTRE IT FUNCTIONED ON AN INDUSTRIAL SCALE QUITE EARLY ON.

If you are looking for historically-relevant players you will unavoidably encounter the Engels family. Friedrich Engels senior was not only operating textile factories on the Wupper river in the middle of the 19th century. Even in the initial stages of industrialisation Engels was positioned internationally – for example, with a cotton mill in England. How his son, Friedrich Engels junior, responded to the social effects of industrialisation and what consequences he drew from these social effects, is written in the history books. Likewise historical chronicles note that at the end of the 19th century the textile sector made up approx. 70% of Wuppertal's production.

In 1875 there were 424 steam machines in use in the Wuppertal textile industry; for the standards at that time this was an extremely high degree of mechanisation, and no doubt it was the foundation of the booming industry sector. Shortly before this time the invention of the synthetic dye, alizarin, had revolutionized the industry. It increasingly replaced the natural dyes that had been used up to that time. The Wuppertal company, Friedrich Bayer & Co., quickly recognised the incredible potential and erected an alizarin factory.

A few years later the company invented aspirin and thus laid the cornerstone for what today is one of the world's largest chemical and pharmaceutical groups. The listing of other global players with textile roots can be continued. For example with the Barmer ribbon weavers, the Vorwerk brothers. In 1873 they succeeded in developing the first fully mechanical ribbon loom that could be driven by steam. The cornerstone was placed for industrial rug production in "oriental quality". Today the Vorwerk Group is a showcase example of successful industrial diversification, which started with textiles and further developed via carpet cleaning devices into its present complex product range.

Companies that specialised in the dying and finishing of textiles surrounding the actual textile production prospered. Furthermore, classic suppliers and enterprises were established that manufactured the technical equipment necessary for the production plants. Whether, and to what extent the narrow valley location of the Wupper river was responsible for the close collaboration of all participants in the textile value creation chain, is virtually impossible to verify. But it was certainly not a hindrance.

The demise of the "Bergisch" textile industry can be traced using the example of the former world market leader for "Glanzstoffe" (viscose) Vereinigten Glanzstoff-Fabriken AG. Due to the oil crisis in the mid 1970's and the associated rapid increase in the prices of raw material, the company ran into difficulties. Expiring patents and massive low-cost competition from the Far East did the rest. Ultimately the company was taken over by the Dutch AkzoNobel Group. From this crisis on, a strong specialisation in fewer competition-sensitive special products has been characteristic for this industry.

Even though today the textile industry's share in total industrial sales is just four percent, Wuppertal is still an important textile location. The logos of well-known international companies, such as Dupont, Akzo, or Acordis were to be found and are still to be found in the cityscape of Wuppertal.

And: To this day, Wuppertal and the Bergisches Land are the location for highly specialised companies in the textile industry, such as the specialist for roller coverings, BOBOTEX®.

IT'S NOT ROCKET SCIENCE — BUT ...

IT IS AN ART

ROLLER COVERINGS: OFTEN THEY LEAD A HIDDEN LIFE, ONLY A FEW INSIDERS ARE AWARE OF THEM, AND YET THEY ARE TRUE WONDERS. THEY ARE HARD OR SOFT. THEY ARE SMOOTH OR STRUCTURED, THEY ARE ROUGH OR SOFT. THEY WITHSTAND INCREDIBLE PRESSURE. THEY ARE MASTERS OF HIGH SPEEDS. THEY CAN HANDLE TEXTILES, FOILS, PLASTICS, OR PAPER AND CARD-BOARD. THEY ARE FORMATIVE FOR A LOT THINGS OR GIVE THE WHOLE AN ORDER. THEY PROVIDE A HOLD OR ARE TRANSPORTERS. THERE IS ONLY ONE THING THEY MOST CERTAINLY ARE NOT: PARTICULARLY ADAPTABLE.



IN ITSELF

For optimal use with the different materials to be processed, and depending on the type of processing, in each case roller covering materials that are especially developed and produced are used for specific applications. This is the only way to achieve optimal processing or treatment results. Accordingly the range of implementation possibilities for each individual covering material is quite narrow. Thus the choice of the right material on the rollers is a crucial factor for the entire production process. Therefore, it is not surprising that BOBOTEX® as a company specialising in roller coverings keeps 90 different covering materials in stock for immediate delivery, and can produce and deliver an additional 150 materials on short notice.

The development and provision of a roller covering material that is suitable for a specific application is a complex business, as Michael Ech knows: "With our decades of experience, of course we know what works in principle. But even minimal changes in the application parameters, such as coefficients of friction, rotational speed, hardness of the material to be processed, etc. can in some cases have considerable effects. Consequently, we test and try-out – often together with customers or machine manufacturers – until we can deliver a material that functions optimally for a new application".

However optimal function characteristics are only one side of a quite complex coin. Aspects, such as stability or service life or price-performance ratio often reflected on the other side. And this is where some users



have been compelled to recognise that a roller covering solution that initially looks quite attractive, because its inexpensive, ultimately turns out to be quite a costly proposition. If the quality is not right, the inadequate short service life results in short replacement intervals and frequent machine downtimes, the economic result quickly gets out of hand.

And this is precisely why BOBOTEX® invests incredible effort in material selection, quality assurance and products for the processing and care of its covering materials. Whether the raw materials are different types of rubber, such as NR, EPDM, nitrile, silicone, or even consist of PVC or polyurethanes.



Precision of Rottolin already starts by developing the PVC- and TPE-S-compounds and ends with the final quality control.

We attach great importance to ecological compatibility concerning our products as well as our production process.





IMPORT EXPORT

AT THE BEGINNING OF THE YEAR, THE INTERNATIONAL ECONOMIC RELATIONSHIPS WERE STILL CHARACTERISED BY SEVERAL MAJOR QUESTION MARKS. RUSSIA SANCTIONS, BREXIT OR THREAT-ENED IMPORT DUTIES IN THE USA, PUT A DAMPER ON THE PLEASANT ANTICIPATIONS OF MANY EXPORT-ORIENTED COMPANIES FOR THE FORTHCOMING BUSINESS YEAR, ACTUALLY MOST OF THESE QUESTION MARKS WERE UNFOUNDED, AS IT TURNS OUT NOW IN THE FALL.

CETA IN FORCE CANADA BUSINESS GETS EASIER The free trade agreement between Canada and the EU, which has been in negotiation and discussion for years, has provisionally entered into force as of 21 September

ber states have ratified the agreement.

However, imports from EU to Canada and from Canada to the EU with tariff concessions through the CETA treaty are not simply automatic for the companies involved. Here's why: Companies must first be registered as "Registered Exporters" (REX) to benefit from the agreement. Relevant information in this regard is available from the International Chambers of Industry and Commerce, or Chambers of Foreign Trade, Economic Ministries, etc.





MECHANICAL ENGINEERING REALLY SHINES

EXPORT SALES ON THE PLUS SIDE

The German mechanical engineering and plant construction sector was able to increase its exports by a healthy 5.9% in the first half of 2017. After an already guite positive business development in the previous year, the total volume of exports from January to end of June amounted to a respectable EUR 82.4 billion. The engine for this boost were the good economic conditions in many countries and the associated high demand. The People's Republic of China provided a particularly stimulating impetus. Here an increase of 22.6% was achieved. And contrary to all gloomy predictions at the beginning of the year: The USA business at mid-year delivered a growth rate of 7.3%.

4TH PLACE FOR GERMANY

THE TOP 10 TEXTILE EXPORT NATIONS

Even if in light of China's gigantic \$108.8 billion total export volume, all other market players are only little lights, it is pleasing to find Germany among the top five. One reason for this: With regard to sales, it is not just the mass that counts, but rather the price

THE RANKINGS IN DETAIL EXPORT VOLUME IN BILLIONS OF US DOLLARS		
CHINA	108.82	
INDIA	17.29	
USA	13.76	
GERMANY	13.21	
ITALY	11.75	
TURKEY	10.95	
SOUTH KOREA	10.65	
TAIWAN	9.68	
HONG KONG	9.11	
PAKISTAN	8.23	

THE TEXTILE INDUSTRY EYES AFRICA

IS IT THE SCANDALS SURROUNDING REVELATIONS OF DEPLORABLE ABUSES, SUCH AS UNACCEPTABLE WORKING CONDITIONS, COLLAPSING TEXTILE FACTORIES, INCREASING PRODUCTION COSTS IN ASIA, THAT ARE ENABLING AFRICA TO EVOLVE INTO A NEW PLAYER IN THE GLOBAL TEXTILE BUSINESS?

Africa is gaining increasing significance as a producer for the international textile market. For example, for years now the brand company Tommy Hilfinger has been having parts of its collection produced in Kenya. The argument that on the African continent the paths from harvesting the natural fibres to producing clothing are significantly shorter than they are in Asia, cannot be so easily dismissed. Ethiopia is the shooting star among the African textile producers. It's clear: The country on the Horn of Africa is a signifi-

cant supplier of cotton. However, the low wage costs must also be a weightier advantage for the location: The average monthly salary of a textile worker is 25 dollars. In the Asian low-wage country Bangladesh, the minimum wage for a textile worker is 67 dollars per month.

Also, from the logistics perspective, the significantly shorter paths to the main sales markets in Europe certainly play a role in the overall cost consideration.



REAL PROGRESS OR A SHAM?

To start with, here is the most important fact from the economic perspective: Without innovation (economic) growth is not possible. Just imagine that the development of the mobile phone industry had stopped at the status of a Nokia 6310. There would be no booming smart phone industry, hundreds of thousands of jobs in the online services, etc, would not have come about,

the permanent global flow of data and information would be a very pathetic rivulet. Without doubt, the entire IT industry has been the essential innovation driver of the last decade.

But what other real pioneering innovations have there been in the last 20 to 30 years?

A RETROSPECTIVE OF THE 19TH AND 20TH CENTURY REVEALS GREAT THINGS

A retrospective of the 19th and 20th century reveals great things: The discovery of penicillin revolutionised medicine. The invention of plastic fibres changed the textile industry more than almost any other development. Steam engines, the automobile and the light bulb each marked the beginning of a completely new era. Innovations that triggered quantum leaps. In those days people were enthusiastic about innovations, today we are in a climate where innovations are critically questioned, or they even trigger fear. Key word gene technology, etc.

Even if ever shorter production cycles require ever faster tempos of innovation, today, to keep the engines of economic growth running, we must consider the present -

in spite of all euphoria – prosaically: Where are the innovations that have triggered quantum leaps in recent decades? Right: There are really not very many.

Well-known economists are already talking about an era of stagnation in this context. The American economics professor Tyler Cowen, in his book that is certainly worth reading, "The Great Stagnation", asks the facetious question what is the significance of the invention of Facebook compared to the invention of flush toilets? However he also emphasises that without technical change growth cannot occur. And here we arrive at an essential formulation with a subsequent question ...

TECHNICAL CHANGE = $OR \neq INNOVATION$?

Basically there is lot that is hyped up as innovation, which is actually only change in the sense of further development or optimisation of existing things. A new, more attractive package with a few additional features for a familiar system or product.

In the context of innovation, i.e. technical change and growth, the "total factor productivity" is an essential key figure. For example, in the USA in the 1920s and 1930s this was four to six times higher than it is today. But it feels to be different. Not least the high degree of market transparency in a globalised economy and the dissemination of information in real time, enable each product change to become "important information around the globe".

There is no question that the necessity of economic growth and striving for survival in international competition, of necessity are involve high innovation pressure. Or would it not be better to speak of pressure for change and further development? It does not help a term of high significance – and innovation is such a term – if it is used in an inflationary manner, if each small change or further development is vociferously referred to as an innovation. It is also certainly an indication of the seriousness of an enterprise if communication even marketing communication is conducted with terminological moderation and \boldsymbol{a} sense of proportion. It is surely good for all of us to critically question whether that which someone wants to sell to us is really innovative in terms of sustainable progress, or whether it is just old wine in new bottles.

2 YEARS

VDMA

WHAT ARE THE GREAT CHALLENGES FACING THE HUMAN RACE? AND WHAT CONTRIBUTION CAN MACHINES AND MACHINE BUILDERS CONTRIBUTE TODAY TOWARD MEETING THESE CHALLENGES? AS AN ASSOCIATION THE VDMA HAS BEEN BRINGING INFORMATION CONCERNING THE MECHANICAL ENGINEERING INDUSTRY TO A BROAD PUBLIC FOR 125 YEARS. TO SHOW WHAT PEOPLE ARE PRODUCING WITH MACHINES TODAY, AND HOW THIS GIVES RISE TO PROGRESS – ARE TWO OF OUR MOST IMPORTANT TASKS.

MACHINES AND TEXTILES FOR A BETTER FUTURE

With the motto "Humans – Machines – Progress" the VDMA wants to use its 125-year anniversary to bring in focus the smart connection of people and machines that results in progress and the welfare of all.

On the new Internet portal **mensch-maschine-fortschritt.de**, examples and solutions for several major social issues are provided in twelve multimedia reports. Major topics include energy, mobility, infrastructure and health. The reports clearly demonstrate: Machines are not an end in itself for the machine tool industry. Machines play a significant role – often a hidden role – in improving the quality of daily life.

For example, textile machines are a starting point for resource-efficient construction. Lightweight construction materials based mesh or web goods, as well as nonwovens, offer incredible savings potential in aviation. With 20 kilograms less weight, for the A 320, 1,974 litres of kerosene can be saved per aircraft and year.

Maintenance of the infrastructure is time-intensive and cost-intensive, because the concrete that is used is reinforced with steel. Steel can corrode, which causes cracks in the concrete. Textiles offer a robust alternative, in that steel is replaced by carbon. Carbon concrete is durable and versatile in its use. The carbon that is used to reinforce concrete, is even stronger than steel, however it is much lighter and has a longer service life, because it does not rust. This means that structural elements made of carbon concrete can be much thinner and that fewer resources are required. Energy consumption and CO_2 emissions are reduced by almost half. These materials are manufactured on warp knitting looms; the yarn is processed into net-like rovings or even into three-dimensional spacer fabrics.

In the reports Lightweight and Health on the VDMA mensch-maschine-fortschritt.de portal more exciting examples are cited that show that the mechanical engineering and plant construction industry is the driving force for lightweight construction and how medical technology and textile technology ensure health and the quality of life. The VDMA extends its best wishes for many new insights to all interested parties on the Mensch-Maschine-Fortschritt (Humans-Machines-Progress) portal.

MENSCH-MASCHINE-FORTSCHRITT.DE





PROFILE

OF THE PERSON FRANK WELLENBRINK

YEAR OF BIRTH

HOMETOWN

PROFESSION

1959

Wermelskirchen

Operations manager Soccer, motorcycles

HORRIES Communication, SPECIAL

analytical troubleshooting

FAVORITE ACTIVITY

Planning + control of workflows, troubleshooting and fault rectification,

developing the employees

FAVORITE

S 24 and KMC 14

Techtextil

YOU COULD APTLY REFER TO OPERATIONS MANAGER, FRANK WELLENBRINK, AS A "SAFETY SPECIALIST". HIS JOB IS TO ENSURE THAT THE PLANT AND PRODUCTION RUN EFFECTIVELY AND SMOOTHLY.

Frank Wellenbrink is an East-Westphalian; he reflects essential character traits of this breed. He appears to be self-contained, he dislikes avoidable hectic, as much as he dislikes idle talk. A man of action, a doer-type, in whose genes a textile DNA is evident. His grand parents operated a weaving mill. As a child here he acquired important tools for his subsequent career path, which took him initially to an apprenticeship in a well-known corporate group. This phase brought Frank Wellenbrink to an essential realization: I never want to work in a corporate group again! Short and direct decision paths, dealing openly and fairly with each other, as well as holistic work on projects are important for him.

QUALITY-CONSCIOUSNESS, RESPECT, **ESTEEM, OPENNESS AND COLLEGIALITY**

When Wellenbrink came to BOBOTEX® after working as operations manager of a dye house for almost five and half years, the important prerequisites for a satisfying and successful professional were fulfilled for him: An extremely lean decision-making hierarchy, a high degree of individual responsibility and an uncompromising quality consciousness. All of this in a family-oriented, open and cooperative environment. Problems and decisions are not discussed forever in endless meetings, but rather are discussed ad hoc with the management team and taken care of. The exchange with the "bosses" takes place daily as part of produc-

tion discussions. In leading employees, Frank Wellenbrink pursues a philosophy, which – unfortunately – is no longer commonplace.

"You cannot mandate important values like quality-consciousness, mutual respect, esteem, openness and collegiality. You must exemplify them. And it must be done every day, in every situation, and for all employees uniformly", is how Wellenbrink describes his motto. For him it is important to take the people along with him, to work together with them on individual weaknesses, and to specifically encourage strengths. However it must also be clear, "who's in charge". These are all factors that constitute an excellent work climate, and ultimately these factors are the basis for the success of the company.

LONG-TERM ORIENTATION AND CONTINUITY

In addition to these social aspects, the incredibly broad

product palette, the varied production possibilities without necessary involvement of third parties, as well BOBOTEX®'s as the special machinery, are the reasons why Frank Wellenbrink feels very comfortable in his professional environment.

However, the special machines in particular are also becoming an increasing source of concern for Wellenbrink: "Given the lack of specialists, it is becoming more and more difficult to get good new employees. We cannot simply replace machine operators. Each new staffing requires long-term planning. Top quality and flexibility require continuity among the employees; and that is what characterises BOBOTEX®". Ultimately a long-term orientation and continuity are the guarantors that abrupt changes are avoided and that the inner-company transfer of knowledge functions optimally.

EASY KNOW-HOW TRANSFER?

PAPER & ROLLERS AND ROLLE A WIDE VARIETY OF OUT THEM MANY WOULD BE CONDEN OF THINGS WOULD

ROLLERS AND ROLLER COVERINGS ARE USED IN A WIDE VARIETY OF INDUSTRIAL AREAS. WITH-OUT THEM MANY PRODUCTION PROCESSES WOULD BE CONDEMNED TO STANDSTILL. A LOT OF THINGS WOULD NO LONGER RUN SMOOTH-LY, IN THE TRUEST SENSE OF THE WORD. HOW-EVER, THE REQUIREMENTS ARE ALSO JUST AS VARIED AS THE INDUSTRIAL IMPLEMENTATION POSSIBILITIES, AS SHOWN BY THE APPLICATION AREAS PAPER AND FOIL.





Question on Radio Eriwan: Can a person who can make roller coverings for textile, also make roller coverings for paper and foil? Answer: In principle yes ... but only in principle. That which on first glance appears to be logical and easy, on closer consideration apparently turns out to involve a transfer of know-how that is not so easy. The difficulties are often in the most minute details.

In print shops with sheet-fed offset printing presses, when sheets of paper are pulled through the four colour stations at breathtaking speed, or endless paper webs appear to fly through the rotary presses at what seems to be the speed of light, this is only possible with aid of roller coverings. Large quantities, in some cases extreme speed and vet a production process in which a tenth of a millimetre makes all the difference. As a rule, even the slightest slip due to deficient grip of the rollers, or the slightest displacement of the paper causes a poor print result. And this is what fills the paper waste container and not the delivery pallets. Accordingly the development and material selection for roller coverings is complex. Here it is not just the optimal grip that is responsible for precise transport of the material. The hardness of the covering can also influence processes. If the available surface structure or the density of the paper changes due to unsuitable covers, this will have inevitable consequences on the absorbency of the paper and on the print image.

CORSO APPLICATION & PRACTICE 28/29



Print shop inking roller in use with a red printing ink.

PAPER IS NOT ALWAYS PAPER

For optimal transport, a glossy, high-quality "art paper" requires a different coefficient of friction than does a fibrous recycling product, for example. To combine all these requirements in as few covering materials for a printing machine as possible, and in addition still offer optimal stability, requires a little more than basic knowledge in the production of a roller covering material.

Development and production of coverings for the processing of plastic foils are several degrees of difficulty higher. Paper is still a comparatively rigid material, foils – for example, for packaging – are in some cases extensible and not rarely their processing characteristics change significantly even under slight thermal influence. Therefore: All in all, a quite complex task that BOBOTEX® has been handling successfully for some time. Not least the globally increasing sales numbers for plastic packaging and plastic foils, confirm that this will also be a growth market in the future. On first glance it may seem like a paradox, at least in Germany, since here an ever-more sensitive handling of plastic packaging is evident. However, this picture is different in other parts of the world with growing populations, booming national economies and rapidly increasing consumption. Thus optimal prerequisites to let the BOBOTEX® decision to engage more intensively in the area of foil and downstream production processes, become an additional chapter of a success story.

And: Not only in Germany but also in some other countries, printed paper bags and printed packaging made of a wide variety of cardboard boxes are experiencing a veritable renaissance. Thus in this area the market — at least aside from the classic print segment — is also programmed for growth.





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LIFE & STYLE

WHEN YOU ARE STANDING IN FRONT OF A MATERIAL STORE OF ROLLER COVERINGS, A LIFESTYLE PRODUCT DOES NOT IMMEDIATELY COME TO MIND. THIS WHAT WAS WRITTEN IN OUR 1ST ISSUE OF THE NEW CORSO MAGAZINE. BUT WHAT WE HAD NOT ANTICIPATED WERE THE NUMEROUS RESPONS-ES. MANY READERS WERE SURPRISED AT ALL THE OTHER THINGS THAT YOU CAN MANUFACTURE FROM THE MATERIALS OF THE ROLLER COVERINGS. CONSEQUENTLY WE HAVE FURTHER EXTENDED THIS SEC-TION. ONE REASON IS TO SHOW EVEN MORE OF THESE LIFESTYLE PRODUCTS, AND ANOTHER REASON IS ALSO TO PROVIDE IDEAS FOR THE FORTHCOMING HOLIDAYS.

HOUSE & GARDEN

HELLO COLLECTORS

Everyone is familiar with the problem, where to put the magazines and newspapers, where to put the wood for the fireplace. This problem would be solved immediately. This felt basket is ideally suited for bringing order into chaos. Available in anthracite or brown, this felt basket can be folded together flat and thus it can be easily stored. A little tip: It is also ideally suited as a "waste paper basket" for the office.

SANDSPROMOTION.DE



WHITE & RED

WINE CONNOISEURS TAKE NOTE

The colour and the age of the wine are completely meaningless to this wine bag of cork. Whether Barrique or from the discounter, this wine bag is more than just a visual delight. With a weight of merely 96 grams and an advertising surface of 5 x 8 cm, it is also a fantastic promotional gift for the Christmas season.



MODERN & SOPHISTICATED

WHAT WOMEN DESIRE

Naturally, shoes must be mentioned at the very top of the list. Followed closely by jewellery. And here the preferences, like the shoes are widely divergent. Not however, if the piece of jewellery is a silicone necklace. The right accessory for every occasion and for every article of clothing, the icing on the cake, so to speak, for the entire outfit. The modern silicone cords with bayonet clasp of anti-allergenic stainless steel, have a diameter of 3 mm and are delivered with a decorative metal box. Slip it around your neck and let the Christmas festivities commence.

MANOMANIA.DE









ELEGANT & ANTIQUE

LIKE THE ANCIENT GREEKS

The game of backgammon dates back to the era of the Trojan War. Backgammon is now played all around the world. In 1967 the first world championship took place in Las Vegas, the tournament colours of the felt were defined as green, red and white. And precisely these colours are in this backgammon case. Backgammon is not only one of the oldest board games, it is also one of the most popular board games in the world.

CONNEXXION24.COM



NATURAL MATERIAL IN USE

USB sticks made of ecological and natural materials are the optimum for imparting to your customers an impression of your sense of responsibility and sustainable behaviour via an exclusive promotional gift.

USB-STICKS.COM





A MUST FOR EVERY PARTY

If you ask party guests what they think is the most important thing at a party, you always get the same two answers. Good music and cold drinks. Ice cubes can't sing yet, but they do cool every beverage in every season. Available in different colours, the provided stand ensures a stable hold in the freezer compartment. The silicone mould ensures effortless detachment of ice cubes from the mould.

ONSHOP24.EU



HEART & LOVE

NOT JUST FOR BRIDE AND GROOM

These cork coasters with the provided black leather band are perfect for placement of glasses of any size. They protect the table surface, they look chic and stylish, and are available in the 4-coaster set.

TISCHDEKOR.COM



LISTEN & ENJOY

SMALL IS BEAUTIFUL

These headphones with comfortable silicon ear buds promise the best sound for the ears. Select from four colours and three sizes. The ear buds fit comfortably and securely in the ear even in intensive training units. But not just when jogging, also in the office or on the commuter train you can "switch-off" wonderfully and enjoy the best sound.

WERBEMITTEL-1.DE



Automation



GLOBAL **PLAYER**

HEXPOL TPE IS AN INTERNATIONAL GROUP ACTIVE IN THE AREA OF TPE COMPOUNDINGS, THAT SPECIALIZES IN THERMOPLASTIC ELASTOMERS (TPES) FOR KEY INDUSTRIES, SUCH AS THE CON-SUMER GOODS INDUSTRY, THE MEDICAL INDUSTRY, THE PACKAGING SECTOR, THE AUTOMOTIVE INDUSTRY, AND THE CONSTRUCTION INDUSTRY. HEXPOL TPE HAS SIX PRODUCTION SITES IN GERMANY, SWEDEN, GREAT BRITAIN, CHINA AND NORTH AMERICA, WITH A PRODUCTION CAPACITY OF 75,000 TONS PER YEAR.

HEXPOL TPE is known for customer-adapted, technically progressive materials and has a long history of success in delivering specific products to a variety of end markets. The enterprise has developed one of the most extensive portfolios of soft polymers for the market. The compounds manufactured are based on TPS, TPO, TPU, TPV and also include bio-based materials. In addition, soft PVC, coloured and additive master batches, as well as cork compounds are manufac- tive, caps and closures, construction and consumer tured at the German production site.

GLOBAL DEVELOPMENT CENTERS

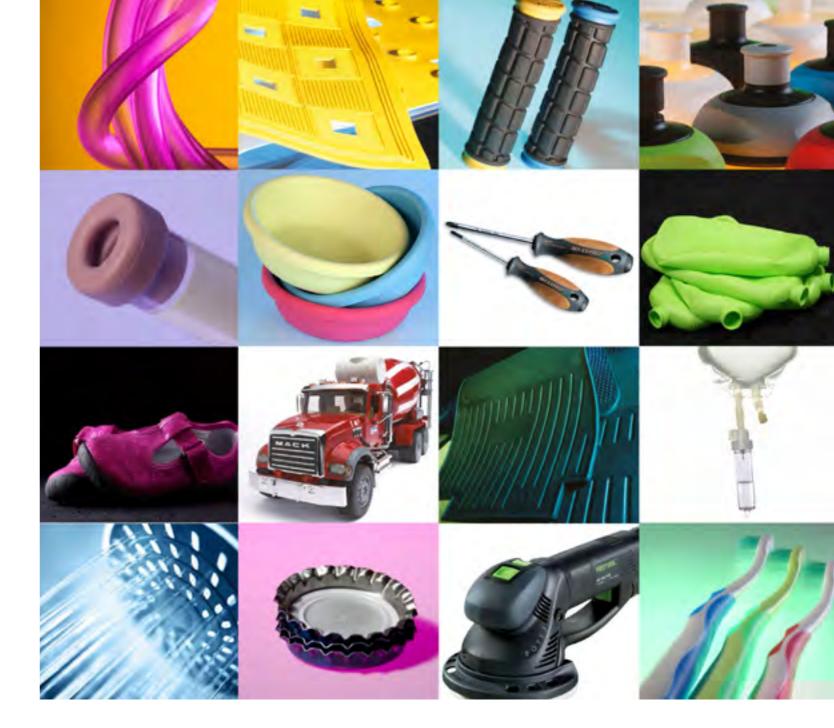
The majority of compounds manufactured by HEXPOL TPE are directly tailored to the requirements of the customer. In some cases these requirements vary widely: from a detailed list with the specific requirements to general information or concepts of product design. The daily work of sales personnel and technicians includes transforming these requirements that are imposed on the compounds into the right characteristics, processing procedures, product safety and functional characteristics. This capability of quickly and flexibly making adaptations and taking the material properties of the latest raw materials into account, are the reasons why HEXPOL TPE relies on local R&D teams and development centres at each location worldwide.

EXPERTISE IN KEY MARKETS

Due to their adaptive capacity and variety, TPEs can

be used in many different markets. For instance, HEXPOL TPE's products can be used for wearable technologies, floor mats for automobiles, threaded medical fittings, seals in containers that keep products fresh, baby sippy cups and handles for power tools. Compounds for new applications are developed daily. HEXPOL TPE has many special teams that are available to customers in the medical, automogoods sectors. These teams have in-depth knowledge of the requirements and challenges in these markets, and thus can offer the best solutions quickly and accurately for the respective demand.

With ultra-modern compounding and product development sites, HEXPOL TPE focuses on top operative capacities and high quality compounding, so that the customers get products that have a uniform workability. HEXPOL TPE works in accordance with internationally recognised quality management standards ISO 9001, ISO 14001, ISO 50001 and ISO 13485. The teams from HEXPOL TPE have extensive knowledge of the regulatory and industrial standards, as well as national and international laws. In the development of polymer compounds, they manage each step of the process from the acquisition of suitable raw materials and their suppliers to production, traceability and reproducibility, and extending to detailed knowledge of the application requirements.



COLOURFUL & SMART

Our goal is to engineer intelligent solutions which precisely match application and processing requirements, but also to find solutions that meet gaps in the market. This is an exciting task and one which has sent our products across the globe.

Our products are turned into everything from wearable technology to car mats, medical tubing to sealing in beverage closures, baby drinking cups to power tool grips ... with new applications being introduced every day.



hexpoltpe.com

We I(i)ove textiles

Since 1806 we have been a reliable source of inspiration and of textile know-how. As one of the leading European providers of innovative, ecological textile finishing technologies, we set standards for the product of tomorrow.

