



moment

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Generation Y

How EJOT secures its future with young technology enthusiasts

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Dear partners of the EJOT Group,

the first issue of "moment" was circulated six months ago and we have received a lot of encouragement for the format. Our intention is to keep you informed about EJOT – a complex organisation: One holding, two divisions, nine business units, over 30 subsidiaries and three sales organisations serving various market segments. This infrastructure might require some further explanation.

We are still a European-influenced group. Over 80 percent of our revenue is generated here. For a long time an island of stability in a dynamic world. But our European environment is changing. Uncertainties grow. Wars and terror are moving closer, many countries in the European Union tend to think about themselves first and less about the community. From America we also hear: "America first". The British have decided to leave the European Union and want to be independent again in the future. Political landscapes, and even the culture of interaction has changed. The digitisation of business processes continues to increase and has the potential in itself to turn entire industries upside down and it creates room for new competitors. Climate change drives the activities to reduce CO₂ emissions through insulation, lightweight design or electrification. All in all unsettling times.

Regardless of these circumstances, the EJOT group has continued to develop positively this year. We are currently experiencing double-digit growth in sales and the number of employees has grown to almost 3,000. In this magazine issue we want to put them in the focus. EJOT has its roots in South Westphalia. A rural area that has been recognised to be one of the three strongest industrial regions in Germany. At the same time we are witnessing a new rural exodus and thus a smaller and smaller pool of employees. EJOT claims industry leadership, as the best supplier in its specialty areas. This requires people who are absolutely enthusiastic about their jobs. The combination of vocational training and stability of the workforce, in my opinion these are the essential factors.

Do you have any suggestions? Criticism or feedback? We are looking forward to it. Please talk to our employees or write to us (moment@ejot.de).

Kind regards

Christian F. Kocherscheidt
 Managing Director



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Best quality worldwide

Generation

Y

They were praised and praised. They were to stay on at school, to study, to discover the world and to find a good job. The children of generation Y have grown up feeling that they are something special. This generation is highly motivated and excellently qualified.

Yet the employment market is already full of managers. As their elders, generation X, will still be holding the reins for some time to come, the young generation Y must wait. There are conflicts ahead.

>>Text: Andreas Wolf





Learning and working will be different in future. A good illustration, albeit slightly exaggerated, is a father looking round his daughter's bedroom door. The television is on in the background, the music turned up loud, and his daughter is sitting in front of two screens with a video running and various chats open. When her father asks what she's doing, the daughter casually responds: homework. It's a clash of two very different worlds. The world of the father, who is generation X, and his 15-year-old daughter, who is generation Z.

It is obvious that generation Y, and generation Z even more so, not only learn and communicate differently from older generations, but will in future also work differently. We are already seeing the implications of demographic change and the retirement of the baby boomers: the war of talents is escalating. We are all experiencing this in our daily work. Most importantly, we are now also dealing with a new generation of young professionals at the start of their careers, who will in the medium-term also be filling management posts. The post-1980 generation Y wants to work differently and be managed differently – and will in future also manage differently.

Any company seeking to attract well-qualified young specialists must be prepared to adapt to new perspectives, a different approach to performance, new incentive mechanisms and much more. But what exactly makes generation Y tick? How do tomorrow's managers themselves see their professional role? What motivates young people in their work and on their way to the top? And how can companies adapt to this, so that they do not lose out in the near future in the competition for fresh talent?

Willing to learn up into old age

Knowledge is now recognised across the world as a key resource for economic and social progress. Companies' and countries' competitiveness increasingly depends on human capital and the corresponding ability to innovate. This means that "an apprenticeship" or "a degree" that once signalled the end of the learning process and qualified you for an entire career is no longer enough. Those who want to succeed in the world of work must retain their thirst for knowledge and willingness to learn right into old age. Continuing professional development is becoming an integral part of life planning; a personal investment in one's own employability.

Yet young people in particular do not see this requirement as an obligation or a threat. Far from it. They are open to the challenge and face it with confidence, for they know that education signifies greater mobility and personal autonomy: according to the Zukunftsinstitut research institute, 85 percent of 20 to 35-year-olds cite life-long learning and maintaining their thirst for knowledge as one of the most important goals in their life.

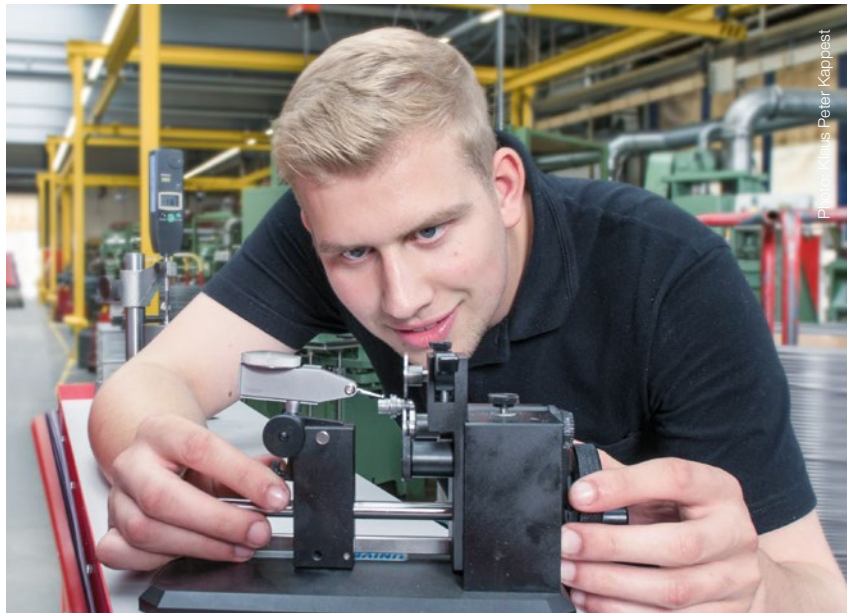
This has implications for companies and their personnel development models: this generation is prepared for lifelong learning and continuing professional development, and expects companies to help realise the intellectual potential and develop the expertise of their pool of specialists. The children of this generation are



Y



Photo: Paul Masukowitz



reflecting and strengthening a clear trend: the basis for growth, progress and innovation will in future be very different from what it was in the old industrialised world.

The megatrend “New Work” is raising the concept of work to a new level: the brave new professional world is as unsettling as it is fascinating. Knowledge, skills and talent are all being redefined by a new generation of professionals in the context of all-embracing digitalisation. Generation Y is in the process of rewriting the rule book for recruitment, talent management, career planning and personnel and management development.

But that is not all. The attitudes and expectations of this young generation are also set to have a huge impact on companies. Surveys and studies present a clear picture: the desire for independence, personal fulfilment and autonomy comes with a good dose of hedonism. Future employees of both sexes will almost all demand a focus on “their” life prospects. For personnel management, this means first of all an unconditional acceptance that each employee is and must be engaged with as an individual.

Biographies are very individual

The well-known sociologist Ulrich Beck spoke of individualisation as far back as the late 1980s, and he did not mean individualism, or indeed emancipation, autonomy or individuation. Beck described the disappearance and replacement of modes of life in industrial societies (class, rank, the relationship between the sexes, the normal family and a profession for life), with changing training routes and increasing mobility on the employment market. He argued that the new environment emerging required individuals to create, present, put together their own biographies. According to Beck, the “normal biography” becomes an “elective biography”, a “do-it-yourself biography” or indeed a “failed biography”.

The rule in industrial societies was that “people follow jobs”. Jobs have now long followed people. Highly qualified young professionals in particular are less and less willing to adapt to conditions at companies and employers if these do not correspond to their expectations, wishes or needs. Alongside professional fulfilment and a secure income, an increasing focus is now on reconciling work with family life. The boundaries between professional and private life are blurring, and a work-life balance can no longer be managed merely with time in lieu. Work-life balance is an integral part of professional life as a whole. Work and private life are not in competition.

Many are increasingly doubtful whether these demands come with a similarly impressive desire and ability. The global human resource consultancy Odgers Berndtson asked the heads of personnel at the 500 largest companies in Germany about the expertise and commitment of generation Y compared to the previous generation X, born between 1965 and 1979. →

Generations in the job market

Baby boomer

The baby boom generation is those born in the years following the Second World War. This is the generation now approaching retirement. They have earned it – for the most part, the baby boomers put work at the centre of their lives and popularised the term “workaholic”.

Generation X

The 30 to 50-year-olds are seen as ambitious and high-flying. For generation X, the most important goal is their professional career. The members of generation X are well qualified, and work so that they can be able to afford a secure life of material comfort.

Generation Y

Generation Y (Why?) are those born between 1980 and 1995, known for calling established traditions into question and turning the world of work on its head. They are also called digital natives or millennials.

Generation Z

Today’s young people who are set to enter the employment market in the next few years belong to generation Z. This is the generation that has grown up with digital technologies from the outset: the Internet and smartphones are an integral part of their lives.



Photo: Tanja Evers

The pursuit of work-life balance

The findings are a serious damper for the Y generation, so used to success. While the personnel managers praise better foreign language and Internet skills, the survey found that the digital natives rate significantly worse on specialist expertise, leadership, ambition and personal initiative. Instead of seeking to scale the professional ladder through work like generation X, many new young professionals are more focused on reducing their individual burden. Companies cite the determined search for a work-life balance as a great minus point. Work first, believe the Xers, who will still be occupying management posts for some time to come. Their successors see things differently: willingness to put the professional before the personal has fallen dramatically, the personnel managers surveyed complained.

“Who needs to learn from whom?” asks former Telekom boss Kai-Uwe Ricke, who now coaches young professionals at the start of their careers. “Many personnel managers from the previous generation are too traditional in their thinking and often do not recognise the potential of today’s young generation.” Which model will ultimately prevail, or what the compromise between X, Y and Z will ultimately look like, is not yet clear. Management experts agree that an understanding of internationality, in particular Asian countries, networked thinking and good technological skills are key competencies.

“There’s no point in complaining”, writes Thomas Sattelberger, former Telekom director and one of the more high-profile German personnel managers, in an article for the Manager-Magazin. “A breath of change in the old established structures can do companies good.” Ultimately, the same applies to companies as to parents: “each generation gets the children it has nurtured and developed”. ■

Interview

Digitalisation has spread to all areas of life. How much potential does it have to cut the need for human labour across a wide range of fields?

Prof. Niehaves: The latest forecasts and the debate on “Industry 4.0” suggest that robots could allow less complex tasks to be processed more cheaply, and this could remove some jobs. On the other hand, the demand for “knowledge work” is set to grow even more strongly. Knowledge work requires a high level of creativity and innovation. If we weigh up these two developments, the balance appears to have changed in favour of “knowledge work”.

How will ongoing digitalisation affect employment?

Prof. Niehaves: We are currently seeing more and more smartphones and tablets in German companies; in future this will probably also apply to wearables such as smartwatches and smart textiles. We refer to this development as IT consumerisation. Consumer technologies are often inexpensive, very easy to operate and versatile, and people frequently come across them first in their personal environment and only later at work. One implication of this for the workforce is they are no longer merely using IT passively as consumers: they are actively employing IT to do their jobs. This development means many employees using just one device for both business and personal affairs.

What opportunities and challenges does this pose?

Prof. Niehaves: The digitalisation of work is driving the integration of new modes of working into company practice. One example here is the home office. Such modes of work are set to become more widespread. New technologies such as augmented and virtual reality are offering new opportunities for telecommuting. IT consumerisation developments demonstrate the importance for many people of realising or achieving their own preferences, ideas and expectations. In the specific case of technology, this can mean that people prefer a familiar app to the company solution. This poses new and hitherto unknown challenges for companies. Companies must find new concepts that allow for the individual preferences of their workforce, with a “one size does not fit all” solution.

How does the project SUGAR involving both EJOT and the University of Siegen contribute to improvements in work?

Prof. Niehaves: There are currently clearly a number of very different realities. One good illustration would be a young father who wants to pick up his daughter from nursery at 3pm and then finish the rest of his work in the evening once she has gone to bed. On the other hand, there are many people who prefer to work continuously

“What is the future of work?”

Prof. Dr. Dr. Niehaves spoke to us about what developments we can expect and which concepts currently appear to offer the most potential for the modern world of work.



Prof. Dr. Dr. Björn Niehaves is an expert on digital innovations and their role in business value creation and the professional world of today and tomorrow.

After stopovers i. a. in Harvard (USA), at the Waseda University (Japan), London School of Economics (UK), Copenhagen Business School (DK) and the Hertie School of Governance (Germany) he is now Professor of business informatics at the University of Siegen. In addition to his research Professor Niehaves is also a popular lecturer and consultant for companies, public administrations and international organisations. Many of his more than 200 publications have been awarded research and innovation awards.

for their set hours. If we explore flexible working hours on the one hand and regular hours on the other, we can find a whole range of different needs. The SUGAR project aims to pinpoint these various

needs in relation to working hours and availability, so that new concepts for future working and availability models can be developed on this basis.

SUGAR is a concept for designing working and availability hours. Is that not something that each employee can and must negotiate individually with their employer?

Prof. Niehaves: Individual negotiations on specific working hours and availability often only happen following a significant change in someone's circumstances, for example pregnancy or a family member requiring care. In general, individual negotiations are seldom held in companies beyond such specific situations. That is why SUGAR is seeking to develop a set of different profiles, for example "international projects" and "core working hours with interruptions", that cover most preferences. The aim is both to strengthen employees' individual responsibility and to protect them from overwork.

You said "individual responsibility". Are there many employees with catching up to do?

Prof. Niehaves: Digitalisation means that you can now work and be contacted more or less 24 hours a day, 7 days a week. Many employees can therefore work extremely flexibly and independently. The attitude to "individual responsibility" in relation to working hours is in many cases very positive. The main area where there is catching up to do is protecting employees from overwork, which is in some cases self-imposed. The objective of the SUGAR project is to retain individual flexibility in terms of working hours and availability, whilst at the same time further helping to prevent overwork.

What aspects are particularly relevant for a company such as EJOT?

Prof. Niehaves: EJOT has in recent years set up sites all over the world. This poses major challenges in terms of working hours and availability for those who work with business partners in different time zones. Such situations further blur the boundaries of work. From a company perspective, this can only be regulated so far at an individual level, as working hours and availability outside of the typical core working hours depend on the specific job. Concepts such as those developed in SUGAR could be a solution to this problem. E

Demanding and promoting achievement



Companies actively compete for skilled workers and for apprentices. In the past the jobs were missing and today the applicants are missing. The competition for apprentices is in full swing. Sometimes the young people are not only baited with expensive advertising campaigns, but with bonuses or even expensive gifts. This might convey the deceptive impression that the training will be a piece of cake. After all - the company needs me. Is an apprenticeship today not very difficult anymore or laborious? Not at all.

>>Text: Andreas Wolf

How does EJOT help the apprentices? EJOT demands effort: For the apprentices this means a motivated participation. Diligence, dedication, endurance and reliability – requirements that every apprentice needs. Equally important are team work and social skills. “This is what we explain to the young people in school”, general manager Winfried Schwarz says. As personnel manager at EJOT, Mr. Schwarz has built a relationship with the schools, long before the looming shortage of applicants. “We

maintain school partnerships to show examples of the economic life with all its demands in the schools.”

“But of course we also encourage the young people, and indeed in many ways” Mr. Schwarz stresses. At EJOT a number of measures are in place, to secure a high quality of the training. Training in the factory, assistance in exam preparation, the opportunity for in-depth practical training on modern machines in the new



learning workshop at the site Herrenwiese in Bad Berleburg – for apprentices and skilled workers.

EJOT is keen to ensure that the young people also acquire skills that go beyond the curriculum of each profession. An internal further training programme is available for this purpose. The contents are learning techniques, etiquette in business, conflict management, presentation skills, team building, quality, environmental and energy management or a three-week language course in London for the commercial clerk apprentices.

One of the highlights during each year of training is the two-day camp for apprentices and students of all German EJOT locations. Over 100 young people develop real team spirit, learn about technical know-how at EJOT and of course have lots of fun.

Comprehensive training options ensure the professional development and career planning even after the training. For example qualification courses for master or technicians are offered. Moreover, there is the possibility of part-time study. For this EJOT has cooperation contracts with technical colleges and universities. The training at EJOT is also interesting for high-school graduates with Abitur.

EJOT also offers career opportunities at an international level – in all areas of work. With production facilities in China, Mexico, Poland, Switzerland, Turkey, Taiwan, UK and the USA as well as sales companies in numerous other countries EJOT is internationally well positioned.

Training at EJOT is an interplay of challenge and support. “That is good for the people and good for EJOT”, Mr. Schwarz assures. With this philosophy, we advertise to students as well as professionals. **E**

Successful businesses rely on well qualified staff. They have always relied on initial vocational training. Not that alone, but primarily. Because young people who undergo high-quality training in industrial facilities and vocational colleges, can be seamlessly integrated into business processes after a successfully completed apprenticeship. They know the business processes from their own experience and thus contribute directly to the creation of value.

Many companies now regret that school and sociopolitical developments increasingly put a brake on corporate growth. Not only because the companies are confronted with significantly declining numbers of high school graduates. Often enough it is suggested to young people, that studying is preferable to an apprenticeship. Particularly striking: Only about 14 % of high school graduates want to go into industrial training, more than 50 % say that they want to go to college. However, about one-third of those high school students does not know which subject they want to choose. This also explains why there are such high drop-out rates. Many graduates are just not at all clear about what career they might take up at the end of their studies.

This not very targeted career choice is often enough the reason that potentials are not used in the best way for the individual student and not least also for the economy. In addition, in the eyes of trainers and HR decision-makers, a significant part of young people is not really ready for an apprenticeship once they leave school. Math skills that can not be described as such, spelling without any adherence to rules and a lack of general knowledge have been a complaint from companies for years. If this is also coupled with inadequate behaviour, the companies are hardly in a position to provide successful training. But without appropriate apprentices the whole system must be called into question.

To rephrase it: We are currently in the process of undermining the dual training system from the inside out; a system that ensured our business success for decades and also happened to keep youth

Yield to the initial vocational training

Today many young people consider a university diploma as the only guarantee for a secure and interesting future career. Particularly in South-Westphalia though, the prospects for skilled employees with a completed vocational education are very good and also very versatile.

>>Text: Klaus Gräbener



In our region the opportunities for trained professionals - especially in the industrial and technical fields - are extremely good.

*IHK Siegen, managing director
Klaus Gräbener*

unemployment at a low level like nowhere else in the world. It is almost a paradox: The apprenticeship concept is in a tight spot between increasing demands for practical skills of the staff, and many young people who do not perceive the dual training as an equal alternative to studying. This is also caused by parents who consider “the best” for their children, to be high school followed by university. In the eyes of some people, the normal person needs to have completed a Master’s degree. Whether or not “salvation” is really to be found in more than 17,000 different courses at German universities at Bachelor or Master level, will probably remain undecided.

In our region the opportunities for trained professionals – especially in the industrial and technical fields – are extremely good. Anyone who believes that industrial work is noisy, dirty, physically demanding and has not much to do with communication and teamwork, has not been involved in it for a long time. Digitised, high technological methods require professionals who think in processes and can solve problems as a team. Companies with international operations are dependent on their employees being cosmopolitan, articulate and mobile. Robots and other aids cause physical labour to become less and the mental work increases. All of this means that the contents of the work continue to change. In ever shorter cycles. Who knew an iPad 10 years ago, and who talked about 3D printing 5 years ago? All the more important is the willingness to learn and a sense for trends. What is happening in the economy right now, has almost nothing to do with the boring repetition of simple and strenuous work steps, that many still associate with production and manufacturing. To work for companies like EJOT, who manufacture sophisticated products for sale on international markets, is certainly more meaningful, exciting and fulfilling than many other activities. To give young people more awareness of these facts is an important sociopolitical task, for which you cannot have enough supporters at your side. **E**

Technology is fun

Enjoying manual work. A solid basic knowledge of math. Diligence. These are the most important requirements for an industrial training as summarised by Lena Becker. The 18-year-old is an apprentice in the field of production technology at EJOT in Bad Berleburg.

>>Text: Andreas Wolf



Lena Becker was already very interested in technology during her schooldays.



Michelle Lübbe achieved the best intermediate examination in the IHK region Siegen-Wittgenstein



Christian Schäfer works in his dream job as tool mechanic

Young women in this field of vocational training are still the exception. “A hidden reserve in the now highly competitive market for apprentices” according to Martin Neutzler, head of industrial training at EJOT. Applicant numbers are decreasing. The demographic development with low birth rates and the fatal trend towards more academic education is increasingly troubling for companies: Candidates for the dual education are lacking.

EJOT has always invested in a high quality standard of the training. Apprentices as the “future of EJOT”, are a value for the company itself and not just a personnel reserve, but instead they guarantee steady renewal and maintenance of the achievement potential. “EJOT owes its success mainly to the skilled employees” as Christian F. Kocherscheidt, managing partner of the EJOT Group, stressed.

At comprehensive school Lena Becker preferred the elective subject technology over the subject area housekeeping, and later she also completed internships in metalworking. Her parents left the choice up to her for an apprenticeship in a “male dominated” job – as many still seem to believe today.

Male profession – female profession. This separation is still firmly rooted in many minds. “Unfortunately” says Martin Neutzler. “Men and women have equal predispositions for vocational training in the industry.” Hard physical work is a thing of the past, today we have a modern and clean work environment where computer-controlled machines have to be operated accurately.

Michelle Lübbe also decided to take up an industrial apprenticeship. The 18-year old former comprehensive school student could not really relate to technology before. During her school time she still completed an internship in the industry and in metal working. And what has become of it? Michelle Lübbe is now in her third year as a tool mechanic apprentice in the field of moulding. In the spring she achieved the best intermediate exam grades in the IHK district Siegen-Wittgenstein, a region with numerous industrial companies.

The result of intensive exam preparations during the training at EJOT. She also studied a lot at home for the exams. Precision

is not only important for her work pieces, but also for her hobby: As a successful marksman, she has already taken part in the German junior air pistol championships where she came in 19th place. She enjoys the apprenticeship very much, and with a monthly salary of over EUR 1,000 the pay is much better than in most service occupations. Martin Neutzler considers Michelle Lübbe to be a prime example that the job has to be fun. “This way the grades are good and the motivation and performance is also good.”

Dream job: Tool mechanic Christian Schäfer knows what he wants and he already knew as a child that he wanted to be a toolmaker. Not as others – fireman or police officer. Christian Schäfers dream occupation is not just a dream anymore. He works as a tool mechanic at EJOT. “At the workbench” as he calls it. And for now it is going to stay that way. This summer the high-school graduate finished his apprenticeship with 98 out of 100 points and in three instead of the regular three and a half years.

Why tool mechanic? His father Wolfgang is also a toolmaker and works as application engineer at EJOT Construction Fasteners. At home in Laaspherhütte, a small village close to Bad Laasphe. the family Schäfer owns a small farm. As a child Christian Schäfer spent much time with his father in their own shop, repairing tractors or other agricultural machinery. “The work was very interesting for me” Christian remembers. “My father is a perfectionist” the young man also reveals. Everything had to be absolutely precise. “I did things the same way, because I was fascinated by it.”

Christian Schäfer achieved good Abitur (German university-entrance diploma) grades with advanced courses in Physics and English as well as Mathematics as a third examination subject. All of this are great prerequisites for academic studies. But he dismisses this immediately. He was interested in studying physics at first as he says, but he could not have stayed in Wittgenstein for University research and the other option of becoming a school teacher was not at all appealing to him. He loves his home Wittgenstein. This is where he wants to live and work. And not sitting at a desk for 500 euros more per month, but instead as a skilled worker at the work bench.

The delusion of university education

The Bertelsmann study “after-school education 2030” states, that already in 2013 more young people took up university studies than those that began a dual vocational training. If this trend continues, companies will have 80,000 apprentices less in 15 years.

>>Text: Andreas Wolf

The demographic change will cause an even bigger gap – it lowers the numbers in all areas of post-school education. In 2030 only 700,000 graduates can be expected – in 2011 there were 880,000. Because more and more high school graduates will be pushing towards the universities, the decline will be less noticeable there: The study assumes that the number of first semester students will fall only slightly, to around 485,000.

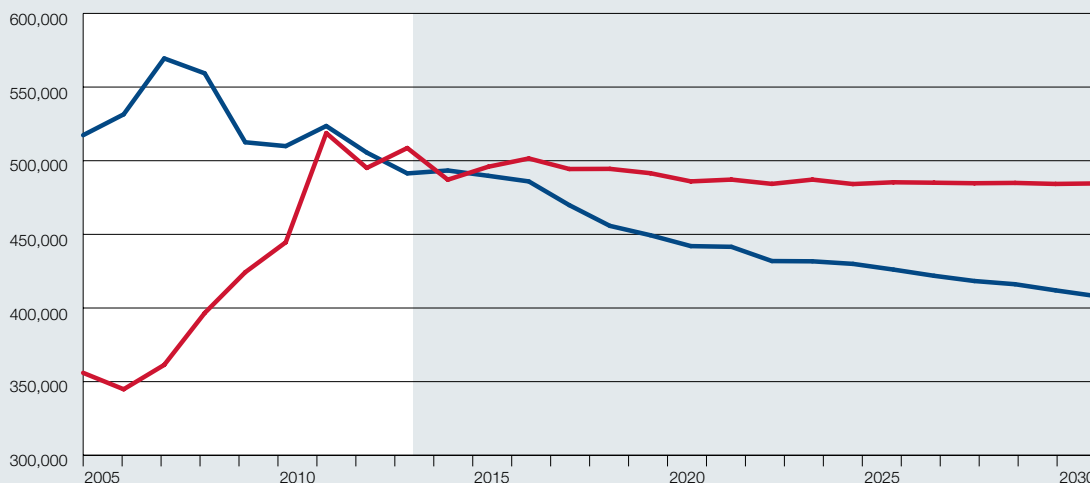
“The trend towards academisation cannot be stopped. The entire after-school education must change and adapt”, Jörg Dräger, member of the Bertelsmann Stiftung, is convinced. To make the dual training for high school graduates more attractive, the authors of the study recommend a two-year combination of study and training to introduce three options at the end: continuing vocational training or studying or beginning to study. Other target groups are also taken into focus. Immigrants, refugees, college dropouts and persons leaving the schools that are currently regarded as not ready for training, will have to receive easier access to the vocational training. Young people with a weaker learning performance could be allowed to learn the educational content in stages.

The trend to study instead of taking up dual training is exacerbating the shortage of skilled workers in industry and trade, the former Minister of Culture Julian Nida-Rümelin has been saying for a long time. A man of the SPD, who coined the slogan “Education for All” in the 1970s. Ironically, exactly this man wrote a furious book entitled “Der Akademisierungswahn”. He finds that increasing academisation is a “fatal error in educational economics”. It threatens to ruin the universities and the vocational training along with it. The professor of philosophy from Munich speaks of “Akademisierungswahn” in Germany

Much too often, graduates and parents focus on high school and university, rather than the opportunities offered by dual training. What the dual training is missing in social prestige, it makes up for with the actual future prospects. “It is simply a mistake to think that the main needs of the labour market lie in the field of academically educated people” said Mr. Nida-Rümelin. In subjects such as law, about one-third of graduates do not find adequate employment, also biologists or geographers have great problems in finding a job. On the other side foremen, technicians and well-trained skilled workers have the lowest risk of all to become unemployed. ■

Development of beginners of dual education and university studies compared.

Beginners of vocational training
 Beginners of university studies
 Actual numbers until 2013



Source: Bertelsmann Stiftung



26-year-old Obinyan Dickson from Nigeria is completing an internship at EJOT at Herrenwiese in Bad Berleburg.

Integration – hands-on

The integration workshop for refugees in the Bildungszentrum Wittgenstein gives refugees access to education and training. During a six-months long training measure for the participants they come in first contact with job market.

>>Text: Andreas Wolf

The many people who come to Germany as refugees and asylum seekers pose a huge social challenge for our country. For the short term, we have to grant them a safe place of refuge and then decide on their applications for asylum.

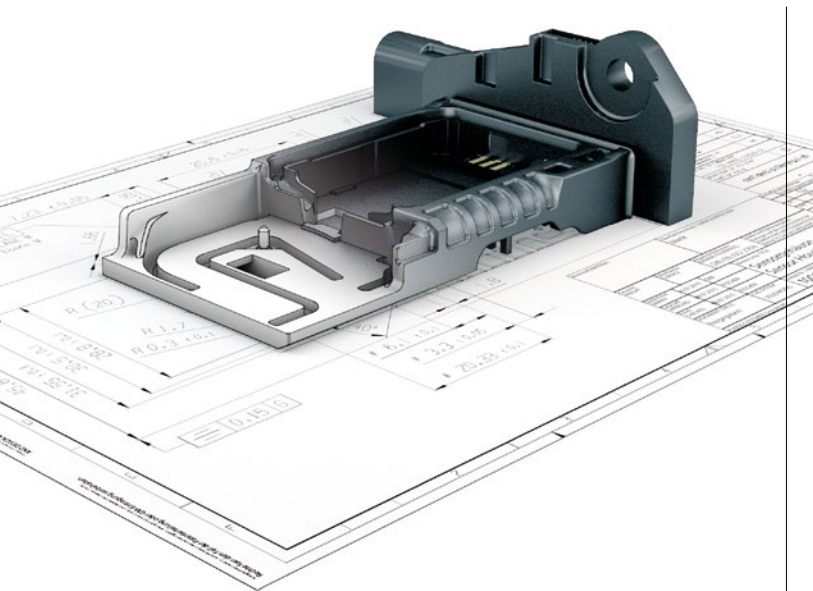
For the long term, the more important political challenge of the refugee crisis is also clear: We must now lay the foundations that the people will have a permanent perspective to stay here and to be integrated. Learning the German language, access to education, vocational training and jobs are the central fields where integration policy has to prove itself.

That is where the integration workshop for refugees in Wittgenstein starts working: It is a certified further training measure in the Bildungszentrum Wittgenstein (BZW), which has taken place since April in cooperation with the Berufsbildungszentrum (bbz) of the Chamber of Industry and Commerce Siegen. The initiative was started by CEO Winfried Schwarz. Also teachers of the

Berufskolleg Wittgenstein are involved in the project and take over a part of the theoretical lesson.

The measure is financed by the Job Agency Siegen and the Job Centre Siegen-Wittgenstein. Also the Arbeitgeberverband (AGV) Siegen-Wittgenstein (employers' association) participates financially and pays part of the transportation costs. The eleven participants in the age of 20 to 35 years come from Afghanistan, Albania, Eritrea, Iran, Syria and Nigeria. The level of education is rather different and ranges from university degrees to unskilled workers.

The target of the six-months training measure for the participants is to make first contacts with the education and job market in the metal and construction industry. At the moment the refugees are passing a six-week internship, four of them at the EJOT locations Herrenwiese in Bad Berleburg, Berghausen and Bad Laasphe. The contents of the project integration workshop have been organised in several modules. **E**



Innovative and functional

EJOT Insertmolding

Manufacturing of functional plastic parts with integrated contacts in a single production step and then assembling further components – this is possible with EJOT Insertmolding! From design engineering of the parts, advice with regards to materials and surface coating, design of the stamping grids, in-house tooling shop and automation lines, up to highly complex plastic injection moulding processes – EJOT offers the complete range. And the best part: These innovative products are also available internationally - always with the same high quality standard.

Practical fastening aid

EJOT® LT-tool

The new EJOT LT-tool for reliable fixing of facade board screws, the so-called LT screws, which feature a wide head with 16 mm diameter. In contrast to the use of normal Torx bits, the LT tool prevents lateral buckling of the screws and guarantees optimal installation in every position.



Hard, harder, duoHARDtip®

EJOT duoHARDtip®

Process reliable direct fastening in high-strength sheet metal and iron / cast steel materials is now possible – with EJOT duoHARDtip® screws. By combining a conventional tempered shank with a high-strength forming zone, this innovative fastening solution is optimally suitable for highest demands and hardest materials.

www.ejot.com/duoHARDtip





EJOT Teams German Champions

The same procedure as every year: In 2016 the EJOT teams of the TV Buschhütten once again won the championships of the 1. Bitburger 0.0 % Triathlon Bundes League.

For the male part of the EJOT team this is the seventh title and the sixth in a row. The athletic dominance of the EJOT team is also mirrored by the female team results: Since their ascent into the Bundes League five years ago, the ladies have won the German championship every year. An outstanding performance.

The outstanding performance of both teams was crowned with a double victory at the season finale in Tübingen in the individual standings: Jodie Stimpson won, as did Sven Riederer, who once again won the overall individual classification of the triathlon Bundes League.

What sounds easy is actually hard work: For 15 years the former team manager Rainer Jung has not only shown a talent for selecting the best triathletes, he has also formed a team with these outstanding athletes which blends well in a variety of different formations. The success is based on the philosophy: "If better is possible, than good is not enough."

The professionally organised work with the young athletes is also successful: The 19 year-old Jonas Hoffmann is a "home-grown" EJOT-team member, and during the competition in Ingolstadt this year he was able to breathe Bundes League air for the first time. He came in place 27, amongst 75 starters in the individual standings. Last year Jonas Hoffmann was runner-up in the junior category in Germany. The even younger athletes of the EJOT team have also won several titles in national competitions.

NEW TEAM MEMBERS



Takao Moriyama new general manager EJOT Japan L.L.C. The new Technical Centre in Kawagoe (30 km north of central Tokyo) is currently under construction, the Grand Opening is scheduled for November. In Japan EJOT focuses on automotive lightweight design.



Paulo Roberto Teixeira is new general manager at EJOT ATF Fasteners de México. He was previously responsible for the technical area.

EJOT in the TOP 100

The company headquartered in Bad Berleburg is part of the in-novation elite of Germany

The TOP 100 – the most innovative enterprises of German medium-sized businesses – have been awarded in Essen. This year, EJOT GmbH & Co. KG also belongs to this innovation elite. In a scientific selection process the innovation management and innovation success were examined.

One of the guarantors of success of EJOT GmbH & Co. KG is its innovation management. In order to offer customer-specific solutions continuously, the top management attaches great importance to an intensive contact with the target markets. „We want to be industry leader – and measure ourselves on this basis“, says chief executive officer Christian F. Kocherscheidt.

An interdisciplinary steering committee, comprised of general management, R&D, manufacturing department and marketing controls the activities.

This year, more than 4,000 companies were interested in the participation in TOP 100. Questions were asked about 100 parameters in five categories.

In their respective industries the TOP 100 belong to the pace-makers. Amongst them are 97 national market leaders and 32 global market leaders.



The mentor of TOP 100, the science journalist and TV moderator Ranga Yogeshwar, hopes for a signal effect: „How the TOP 100 generate new ideas and then develop pioneering products and services, is remarkable in every sense of the word.“

Heinrich G. Homrighausen (Information bass: KD Busch/compamedia)

20 years EJOT Switzerland AG

"Grüezi Mitenand" – with this Swiss introduction Christian F. Kocherscheidt greeted the employees and guests for the 20-year anniversary of EJOT Switzerland.

In the festively decorated warehouse over 200 guests, including many relatives of the employees, as well as guests from ASYST Technologies, the joint venture partner from the USA, celebrated the special birthday. It was a family affair for the family business, in the truest sense of the word.

The chairman of the supervisory board and EJOT manager Dr. Frank Dratschmidt recalled the positive development EJOT Switzerland has taken. A strategically important decision was the placement of new STR anchors in Dozwil in 2002.

Further important pillars are the aroma protection valves as well as products for adjustable steering columns and levers for the automotive industry. The fourth pillar, according to Dratschmidt, are the sales activities in the Construction Division: The business unit ETICS Fasteners is firmly established in the Swiss market and the just as well established business unit Building Fasteners, has taken a significant upswing with the acquisition of the construction business of Tocafix AG. EJOT Switzerland

has seen a very positive development, Christian Kocherscheidt stressed. As has the whole EJOT Group: "We are a global brand name that is trustworthy and trusted."



Secure fastening of attachments

EJOT Iso-Corner



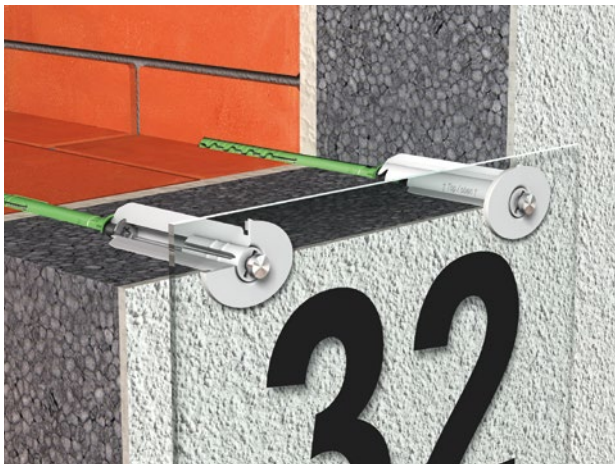
The EJOT Iso-Corner is a mounting angle from polyurethane hard foam and the optimum solution in order to fix medium-heavy up to heavy attachments to ETICS facades permanently and safely. As planned element the angle is mounted before or during the application of ETICS. After completion of the system the attachments such as guardrails and balustrades, can then be mounted safely.

The special geometry and the two mounting surfaces allow a universal use in the surface and in the soffit of the facade. The Iso-Corner can be shortened to the relevant thickness with commercial means even after the installation. There is no evening out necessary because the Iso-Corner always fits flush to the surface of the insulation board.



Hitting the mark flexibly

EJOT® Iso-Dart



External Thermal Insulation Composite Systems are an important part of the energetic renovation of a building, but the insulation material does not feature the same strength properties as a monolithic substrate. If attachments such as letterboxes, lamps or downpipe brackets, need to be retrofitted to the facade the EJOT Iso-Dart is the right choice. EJOT Iso-Dart is a flexible fastening system, specifically for the attachment of light to medium heavy parts to External Thermal Insulation Composite Systems.



Thinking outside the box

– a method for innovative products

When looking for innovations some perseverance can work wonders. One example where this was confirmed, is the development of the thermal adhesive bonding boss TSSD®.

>>Text: PD Dr. Ralph Hellmig

In the search for new ideas it often helps to think outside the box, where, amongst other things, known information or principles can be transferred to a completely different field. A well-known example is the use of biological models, as popular in bionics.

The TSSD® idea was derived from the closer examination of extreme light-weight design. As a manufacturer of fastening elements, EJOT deals with two very contrasting lightweight construction strategies. On the one hand, vehicles can be built lighter through the use of high-strength materials, in order to save on material thickness and therefore weight. The focus here is on high structural strength. On the other hand, extremely lightweight composite materials are used if non-load-bearing structures need to be created due to a need for lightweight design. Examples can be found in vehicles in loading floors or parcel shelves, or also examples for increased strength in the interior of airplanes.

In particular panels made of composite materials often present a huge challenge for screw-like joints, as they mostly consist of two relatively firm, but very thin layers, between which are mostly air-filled honeycomb structures. This combination of materials results in surprisingly stiff, yet extremely lightweight panel materials, in which screws are difficult to install due to the thinness of the layers.

Another solution had to be found. There was an inspiration – as it is also virtually impossible to fasten screw-like fastening elements in EPP foam materials – unless you use a very large thread design. For such materials an alternative fastening method already exists – the EPPsys friction-welding boss. Such a system works excellently in soft foam materials – especially since a friction-welding boss made of stronger plastic is also a more stable anchoring point for a screw which has already been proven in practical experience.

It remained to be seen if a fastening element for composite board could perform in a similar way to an EPPsys friction-welding boss? The answer is a resounding 'Yes!' Tests in the APPLITEC – the







EJOT application engineering laboratory – showed that with a sufficiently high axial load and using rotary motion, the surface layers of a typical composite board can be penetrated.

After appropriate adjustment of the boss geometry a first test version of a boss was developed, which was tested on a number of sample boards provided by various customers.

Using the reinforcing effect

It became clear, that the sample boards, which featured thermoplastic in the surface layers, showed a surprisingly strong connection with the boss despite the low dimension of the element. The reason was that the outer layer of the fastening element, as well as the surface layer of the board were partly fused and thus formed an adhesive bond with each other. This effect could be increased by forcing the joining element up to the lower surface layer (basically the base of the board) during the fastening process and also sufficiently warming this layer through the rotation, in order to form an additional strengthening joint.

With these results the process control was clearly improved. Thus, by suitable combinations of rotational and axial force as well as hold phases, the bosses appropriate for the respective composite material were set, and the parameters relating to the combination of holding force and setting time, were optimised. To realise such a setting processes, adjustments to the installation tool were



necessary. In cooperation with a partner it was possible to develop a universal installation tool, which fulfills all requirements for the use of this new installation process and a flexible range of fastening elements.

Once a working system has been developed, the next logical step is to find out where the application limitations are. So the TSSD® System was subsequently tested on further materials.

In connection with organic sheet, i.e. continuous fibre-reinforced thin thermoplastic sheets, it was proven, that a boss made of fibreglass-reinforced plastic can be perfectly capable to penetrate such a sheet to form an adhesive bond at the surface and to embed most dissolved filaments into the melted edge area of the dome. Using an appropriate pilot hole in the top sheet, it is possible to joint two organic sheets together, wherein the lower sheet is joined without pilot holes.

Compared to many joining processes, the clear advantage is the fact that the samples usually do not have to be pre-treated or specifically cleaned, to be securely fastened with the TSSD® method.

Further tests also showed that it is even possible to securely fasten non-fusing composite materials, for example materials with a duroplastic top layer. This changes the joining mechanism, as these kinds of material combinations do not form the typical adhesive bond. But with suitable joining parameters it is possible to install the TSSD® into a composite sheet in such a way, that it expands under an axial load and then forms a force-locked mechanical joint.

Since the TSSD® is a fastening element made of plastic, the application range is not limited only to the joining properties. For example functioning elements such as snap-in joints or conductor holders can be installed in appropriate lightweight panels. The diversity of ideas is limitless – depending on the potential application fields for the customer.

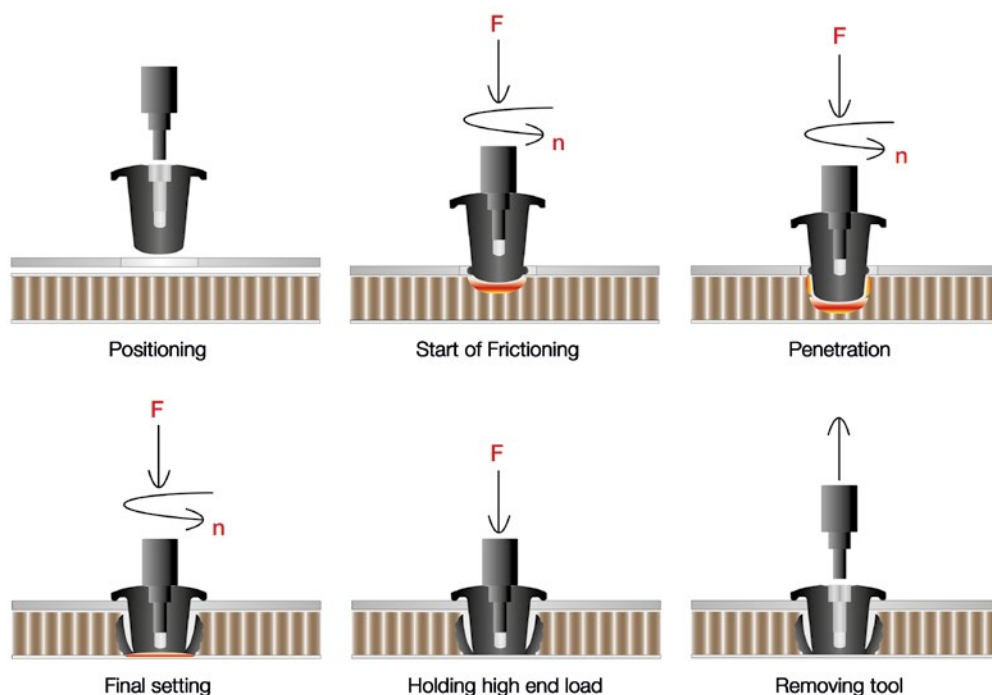
Suitable for series production

The initial presentation of the TSSD® technology was followed surprisingly fast, by implementations for selected customers that process such extreme lightweight materials. There are now already vehicles on the road in which the loading floors are fixed with the TSSD®.

An expansion of the technology to completely different business areas seems to be the next step. For example the many lightweight panels with high strength properties in many aerospace applications, in particular in the aircraft interior. Some suppliers in the aviation industry have been convinced of this fastening technology, as the current solutions for a secure joint in plastic honeycomb panels require not only much more expensive fasteners, but also a very complex procedure for the preparation of the joints. As a logical consequence, the TSSD® has been assessed accordingly and included in the next version of the aviation technology manual.

What started as "thinking outside the box" about various joining methods and showed first results in the laboratory, is now developing into a versatile and flexible method, which can be individually adapted to the requirements of each customer and has already proven its suitability for mass production. E

Joining process



Long live freedom

It is indisputably the most versatile amongst facades, because it is intelligent, durable, offers great design freedom and enjoys extraordinary popularity with architects. The rear ventilated facade, short VHF (for German: Vorgehängte Hinterlüftete Fassade).

>>Text: Matthias Möldner in cooperation with FVHF

If you look at it matter-of-factly, the facade is one of many building components with a specific functional task. Specifically, as part of the outer wall, it needs to protect the underlying insulating layer against weather influences. But the facade is more than mere function. It is the link between the private inside of the building, and the public view onto the visible architecture. More than any other part of the building, it stands in a dialogue with the viewers and is ideally able to visually express the function of the building through the design aesthetics.

Contrary to other facade types no requirements are placed on VHF regarding the building statics, because it is – as the name suggests – only hung in front of the actual load-bearing wall. And exactly this decoupling of statics, thermal and weather protection is what enables architects and builders to have a very high design freedom and versatility.

From A like aluminium to Z like zinc

The range of possible materials that can be used for cladding is extensive: In addition to HPL and fibre reinforced architectural panels, panels of compressed rock wool and fibre or wood cement, ceramic, stoneware and bricks; metals and alloys such as steel and aluminium, aluminium composite panels, lead, copper, tin and zinc are also used for the building envelope. Corrugated profiles, standing seam, horizontal and overlapping panels as well as grid facades of cassette systems or small-scale structures such as square and diamond-shaped tiles or shingles always bring forth new and creative solutions. Individual combinations of different materials are also possible.

Strong hues – strong impression

In addition to shape, material and structure it is especially the colours, which give the building visibility, character and individuality. The manufacturers of clothing materials supply a wide range of hues, shades and transparencies, and ensure a harmonious interaction or a daring contrast in the facade design.

A strong connection to its surroundings is shown, for example, by the ensemble “Rheinloggen” from Nebel Pössl architects in Bonn. Directly on the left bank of the Rhine, in the immediate vicinity of the opera, the new complex of four buildings with 75 condominiums was created, grouped around a green courtyard. The house Fidelio is the most striking of the buildings, with a multi-storey “peep” in the direction of the river. Its southern and eastern facade and the bottom view of the projecting part of the building, are rear ventilated facades and designed with subtle grey tones. Bold red ribbons accentuate the south-facing balconies and create vivid colour accents. The metal strips that are playfully curved and seem

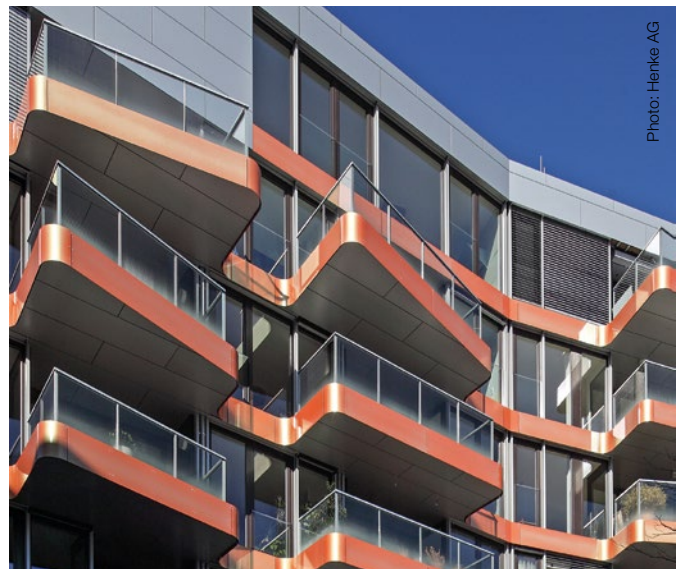
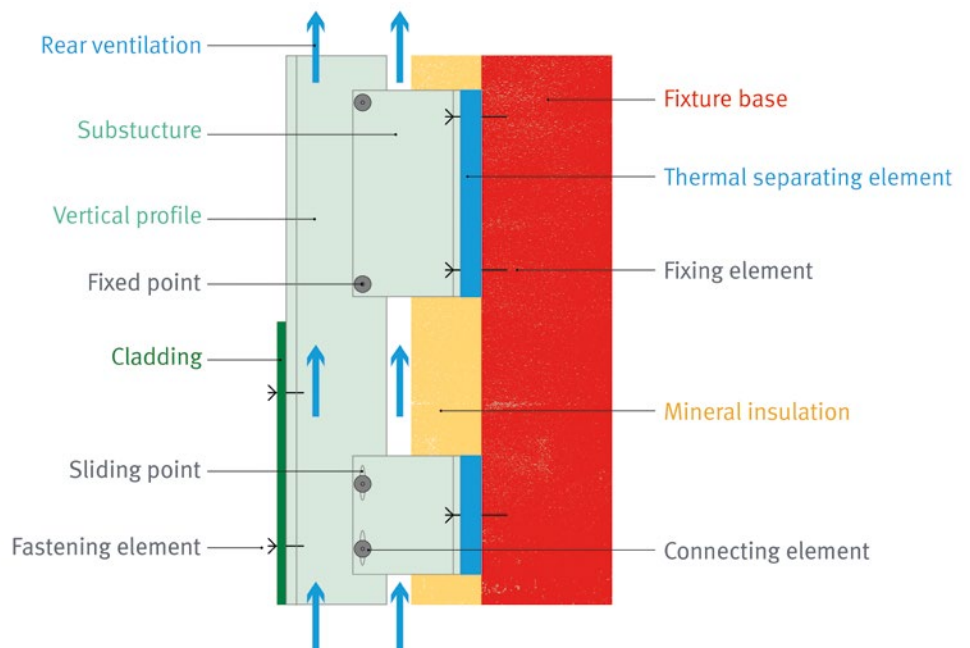


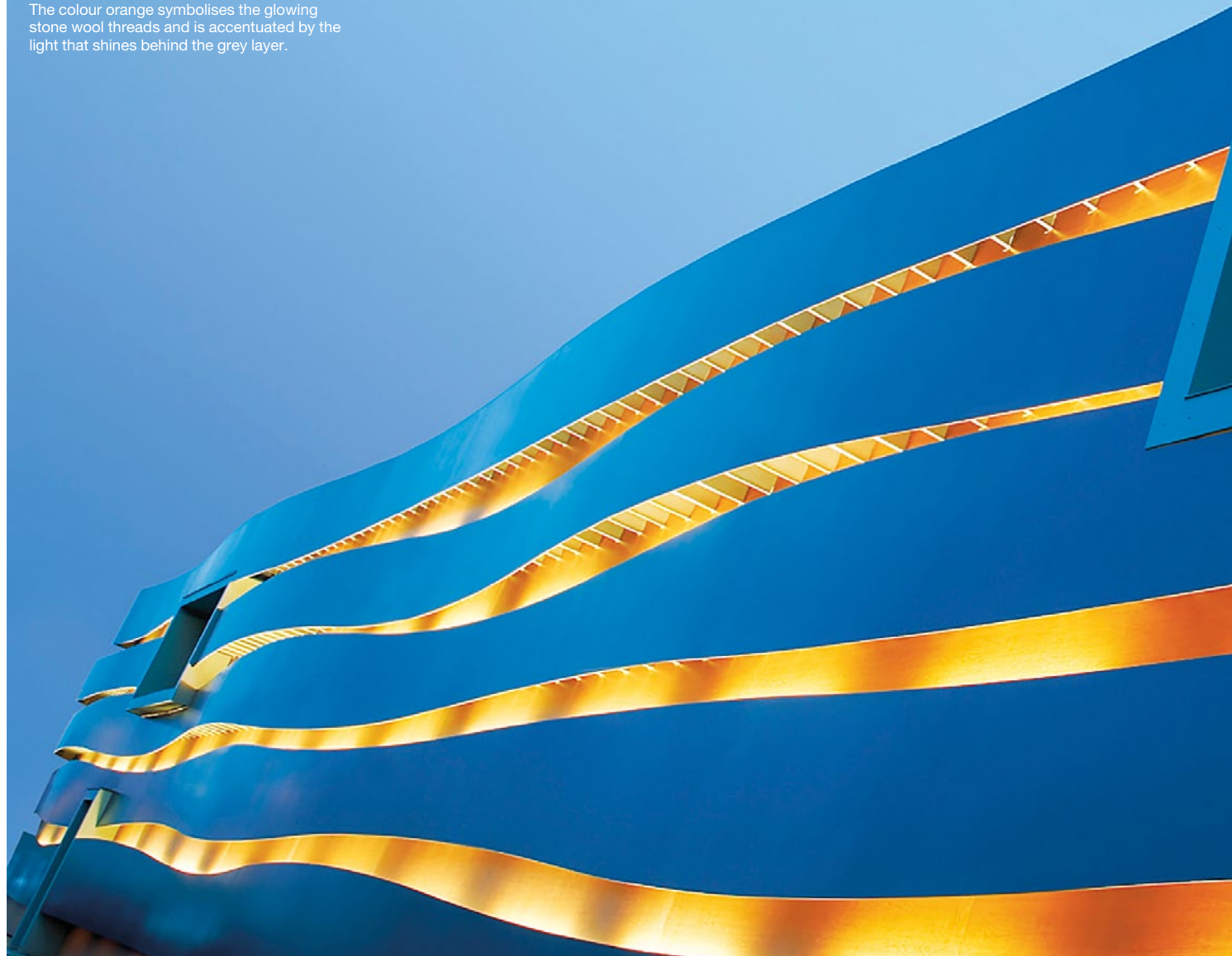
Photo: Henke AG



System of the rear ventilated facade (VHF) according to DIN 18516
Graphics: FVHF



The colour orange symbolises the glowing stone wool threads and is accentuated by the light that shines behind the grey layer.



to be moved by the wind, draw the eye of the viewer and give the building additional momentum.

Facade panels symbolise manufacturing processes

Another impressive example is the ROCKPANEL Group building. For the construction of the production facility in Roermond, Netherlands, the design of the facade was realised with own products. The design by Luc Nooijen/ Architekten aan de Maas, Maastricht, tells the story of the production process. "It is much more than just a facade. It is the face of the unique Rockpanel product. Expressive, but without a cacophony of colours and shapes. At the same time modest. I wanted to do something, that stimulates others subtly to use this material", the architect says about the facade which he designed for the building of the ROCKPANEL Group in Roermond. The design idea for the facade developed during the observation of the production process of stone wool: After melting basalt at a temperature of 1,500 °C, the melt is frayed and binding and impregnating agent is added before the fibres bond into a kind of wool fleece. The moment of the apparent flight of the liquid, glowing substance over the spinning wheels, is shown in the facade according to the architect. The curved facade panels

in dark grey symbolise the disintegrated rock, which is illuminated at night with orange light from behind – a symbol of the heat during production.

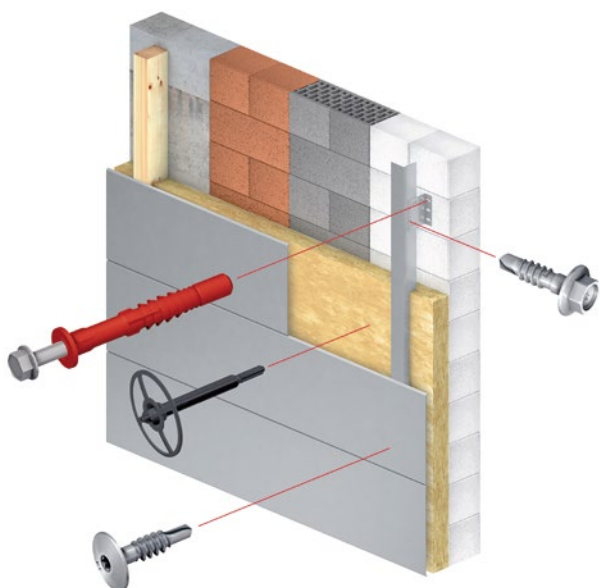
Of lasting value

In addition to the design freedom, VHF also scores in the areas of sustainability and profitability. For to plan and build a building is one thing. The preservation of an intact function throughout the useful life and the proper handling of the used up resources at the end of life is another. VHF works like a modular system, in which the individual components can be dismantled according to usage and separated according to type. The return to the material cycle or even a reuse of individual components is no problem

Thanks to a long service life and the low cleaning and maintenance expenses, the initially higher investment compared to other cladding systems is not unreasonable. A useful life of 50 years is attributed to the individual components of the system. Because of the low susceptibility to damage of the cladding system, the maintenance intervals are very long. If the rugged cladding is nevertheless damaged, individual elements are easily replaceable.



Photo: Rockpanel Group



Unlimited freedom securely fastened: EJOT products such as insulation support anchors, facade anchors, floating point screws and facade panel screws for reliable hold of every facade design.

Creative building envelopes require a special fastening technology

As boundless the design options for façade cladding may be – any architectural concept must be securely anchored to the load-bearing exterior wall. In this case the substructure is the static link. The most common materials for this are metals such as aluminium, galvanised or stainless steels, but also wood and combinations of wood and metal can be used.

Even though the seemingly most insignificant, the different fastening elements at this point are literally playing a key role. Because they ensure that all system components, such as insulation, substructure and facade cladding, are joined in a lasting and secure way. **E**

A strong home region

One of the "youngest" regions in Germany: As recently as 2007 Südwestfalen (South Westphalia) has been established. Five strong counties that make up a fifth of the area of NRW. A region that is full of economic strength and innovation. High time to look more closely on the strengths but also the weaknesses of the region. In short: what characterises South Westphalia.

>>Text: Marie Ting







Foto: Hans Blosssey

Bigge water reservoir

A population of almost 1.4 million, one of the most successful business locations in Germany and also the “youngest” region of the Republic – South Westphalia. Not quite ten years ago, the five counties merged: Soest, Olpe, Siegen-Wittgenstein, Märkischer Kreis and Hochsauerlandkreis. 59 cities and towns were included in the merger of the region and transformed Südwestfalen, in several aspects, into a real heavyweight. Strong, beautiful and authentic.

The tourist destinations of the region – Sauerland and Siegerland-Wittgenstein – are known nationwide. Who has never been hiking on the Rothaarsteig, skiing in Winterberg or biking on one of the best linked bike paths? Whether it is for the lakes, dams or caves – millions of tourists have visited the region for years to relax and to unwind. The largest natural park area in Germany is located in the region. The Siegen-Wittgenstein district, home district of EJOT, is the most densely wooded area in Germany. And by the way, Siegen-Wittgenstein belongs to one of the safest regions in Germany, as recently confirmed by police statistics of the state NRW. The labour market and education opportunities are good, the living environment, in comparison to nearby urban centres on the Rhine and Ruhr, is relatively intact. A region that is known for its beautiful landscape and for the realisation of personal life dreams.

What many not – yet – know though: South Westphalia is also the third largest industrial region in Germany – measured by the share of persons liable to compulsory insurance deductions in the production sector. More than 150 global industry leaders are located between Lippe, Ruhr, Lenne and Sieg. And if you look closer, you will soon notice that products and services from South Westphalia are in demand around the world: Lobbe GmbH in Iserlohn for example, was once the nucleus of the standard garbage can that is used in millions of households around the globe. Aquatherm GmbH, based in Attendorn, installs plastic pipes in all parts of the world. BSW Berleburger Schaumstoffwerk GmbH, located in Bad Berleburg, is the world leader in sports flooring and running surfaces, on which track and field

athlete Usain Bolt has sprinted towards his world record form. And whoever serves Stollen at Christmas, can be almost certain that even this comes from a South-Westphalian bakery: Kuchenmeister in Soest.

Sure, no (global) champion appears out of nowhere. But even greater is the importance of the industrial region in the countryside as an excellent place to study. More than half a dozen sites with different focal points, institutions and fields of study, can be found in South Westphalia. Ranging from the University of Siegen with more than 18,000 students and Siegen University Business School for training of executives for the middle class, over the Hamm-Lippstadt University, the Fachhochschule Südwestfalen, the Business and Information Technology School (BiTS) through to FOM Hochschule for part-time students, provides Südwestfalen the perfect tools for the career start.

New challenges have to be met

The region is well positioned – and it is constantly working on it: more than 42 projects were placed within the programme “Regionale 2013”, to sharpen the profile of the region further and to create new attractions. Whether new lakeside beach promenades, innovative vacancy management or the development of new industry-specific competence centres, there is a momentum in the region. One example of many: The project “Siegen zu neuen Ufern”, where the entire downtown Siegen has been altered, in which the inner-city Sieg river was returned to near-natural conditions.

Yet not everything is looking bright (yet) between the “Sauerlandlinie” Autobahn in the Southwest and the A44 Autobahn to the north, between the Sieg and Lippe rivers, between the towns of Burbach and Geseke. The forecasts are clear: The number of inhabitants will decrease by 2035 to almost 200,000 – which corresponds approximately to the population of all municipalities in the district of Siegen-Wittgenstein minus the city of Siegen itself. The shortage of skilled workers – as the experts agree – has long since arrived in the region. →



Photo: University Siegen

Siegen University with over 18,000 students

World record holder

BSW Berleburger Schaumstoffwerk GmbH



The company Berleburger Schaumstoffwerk GmbH headquartered in Bad Berleburg is one of the leading manufacturers of products made of polyurethane bonded rubber granulate and foams. Amongst the wide range of products are indoor and outdoor sports flooring, cargo securing, shop floors, children's playgrounds and flooring for vibration isolation. The sprinter Usain Bolt ran the world record on tartan tracks manufactured by BSW and since then he trains on the tracks installed by BSW on a regular basis. With the manufactured products Berleburger Schaumstoffwerke GmbH primarily addresses companies from the construction and sports industry. Products are also sold in subsidiaries in the USA, Dubai, Australia, Switzerland and Shanghai, as well as by over 80 dealers and sales offices across the globe. In 2015 BSW achieved EUR 100 million in turnover with approximately 500 employees worldwide.

www.berleburger.com





Autobahn A45, lifeline for South Westphalia

Perfection

Heinrich Wagner Sinto Maschinenfabrik GmbH (HWS)



Heinrich Wagner Sinto Maschinenfabrik GmbH (HWS) was established in 1937. A majority stake in the company was acquired by the Japanese Sintokogio Group in 1983. HWS is the group's largest European subsidiary. It is a leading manufacturer of moulding systems and machinery, moulding equipment for tightly compressed sand moulds, and castings for modern foundries.

The company's cast products are used in a wide range of applications including vehicle manufacturing, the railway and shipping industry, sewer casting and mechanical engineering in general.

HWS has commissioned more than 700 plants and machines worldwide and currently employs a workforce of around 320. The company's clients include three global market leaders based in southern Westphalia: Hugo Lahme, Olsberg and Viegener. All design, production and assembly is carried out at two HWS plants in Bad Laasphe, southern Westphalia.

www.wagner-sinto.de





Photo: Sascha Katz

EJOT site at Herrenwiese in Bad Berleburg with new distribution centre

In addition, there are infrastructural weaknesses: The A45 is the lifeline in north-south direction but because of numerous dilapidated bridges there is only restricted access for heavy vehicles. Until the “Route 57”, one of the most important road projects in Siegen-Wittgenstein, becomes actual reality, many years are probably going to pass. What applies to the roads in general, is valid for the information superhighway in particular: In the Olpe district not even half of all households have an internet connection quality of more than 50 megabits per second – in Hochsauerlandkreis there are at least 83 percent, in Siegen-Wittgenstein yet only 64 percent.

The backbone of NRW

Typical challenges of a rural region. Nevertheless, the region has the power of standing up for itself and to face challenges. Precisely, this means to communicate very clearly and confidently: Rural yes – and yet a real economic and growth engine in NRW. “The strong backbone of NRW is located in South Westphalia – and we must clearly articulate this”, says Marie Ting, Regional Marketing Manager of the Südwestfalen Agency “This is the only way South Westphalia will be heard on state and federal levels and to position itself competitively compared to other regions.”

To meet this challenge the regional marketing, led by Marie Ting, was launched in 2012, with the clear aim to raise awareness for the strengths within and outside of the region. Over 200 companies, from the one-man operation to global players, are currently members of the “Wirtschaft für Südwestfalen e.V.” association, which is the sixth shareholder of the Südwestfalen Agentur.

Genuine, authentic, straightforward

South Westphalia has established itself as a strong brand with the regional marketing. It also serves to organise companies within the region together as interesting employers and can then move into the focus of job seekers. The focus is to build an adequate image: no false advertising veil, but instead clear statements that convey the true picture of the region and also convey positive arguments for relocation to the region. The claim “Südwestfalen – Alles Echt! / South Westphalia - All Real!” summarises the essential feature of regional identities – genuine, straightforward, authentic.

In recent years the digital portal “suedwestfalen.com” has become the pivotal point, where not only facts and figures of the region are presented but which also guides the user along virtually. Whether exciting job offer or interesting employer: If the right one is found, offers for local real estate, kindergartens and schools are also just a click away. For business partners of South Westphalian companies or individuals who are looking for possibilities: With the portal a showcase for the region has been built and it opens doors into the region.

The history of the South Westphalia region sounds fantastic – especially because so many companies, associations, organisations and the local government have recognised, what benefits can be achieved by cooperating.

Now the objective is to push ahead on this path and continue to establish THE region nationwide as an example for good jobs, industry leaders and personal life dreams. ■

“Quality is, when the customer returns and not the product”

During the awards ceremony of the supplier award of the EJOT Group not only hard facts were in the focus. Factors such as reliability and partnership were highlighted and rewarded.

>>Text: Andreas Wolf

There was no red carpet, but the award ceremony for the supplier day 2016 of the EJOT Group nevertheless showed a touch of Hollywood. To the applause of numerous national and international guests, the prizes were awarded in the festively decorated hall of the community centre Bad Berleburg, to the following companies: Friedr. Brüninghaus & Söhne GmbH & Co. KG from Altena, Hapema GmbH from Engelsbrand, Weber Schraubautomaten GmbH from Wolfratshausen and Essence Method Refine Co. Ltd. from Taiwan.

How relevant are the suppliers for EJOT? Wolfgang Bach, CEO of the EJOT Group, said in his welcome speech, that their relevance is not only measured in hard facts such as costs and delivery reliability, traits like dependability, partnership and quality are also very important factors. “Quality is when the customer returns and not the product“, Mr. Bach stressed.

A long-time tradition is the cooperation with the company Friedr. Brüninghaus & Söhne GmbH & Co. KG. In 1942 Hans Werner Kocherscheidt and his uncle Adolf Böhl started buying wire from Brüninghaus in Altena. This customer relationship has existed for over 70 years and it is a relationship characterised by partnership and quality.

Excellent delivery quality, adherence to deadlines, short and flexible delivery times and the ability to address and to implement improvements. This is what the company Hapema stands for, which

was also awarded. Over the years Hapema has been involved in many good ideas in the field of Engineered Plastic Components at EJOT.

EJOT and the company Weber Schraubautomaten from Wolfratshausen also have a long-standing development partnership, initiated by a completely new and innovative idea to join composite materials with friction welding. The start of the friction welding series production in the automotive industry in 2013 was the absolute highlight of a very successful cooperation.

Exemplary delivery reliability and technical quality - this is what the company Essence Method Refine Corp., headquartered in Guanmiao in the south of Taiwan, stands for. The broad range of this cooperation also includes articles from the fields of thermal insulation, rain screen and window construction. The screw production at Essence is characterised by high productivity, reliable process control and a comprehensive quality assurance system.

Before the award ceremony the guests received interesting information about the EJOT Group. Products, application engineering and technologies were presented, which have been the reason for the growth of EJOT. Last year EJOT invested over Euro 33 million worldwide, as Christian F. Kocherscheid, CEO of the EJOT Group, explained. “Innovative products lead to a successful development of this dimension“ and that is why research & development are vital. A clear philosophy is behind this: “We are not the cheapest, but we are the best“.



EJOI®

Wire from Altena

Friedr. Brüninghaus & Söhne GmbH & Co. KG



In Altena in Westphalia, where Brüninghaus is located, iron and steel production has existed since 1,000 AD. Due to natural iron deposits in the forests in the "Süderland", today's South-Westphalia, there was an early specialisation in the production of wire.

After the first world war, in 1918, the owner and his two sons, entered the company Friedr. Brüninghaus & Söhne in the commercial register. With Kim Hücking, nee Brüninghaus, the 5th generation is leading the company today. 50 employees work in a three-shift operation at Brüninghaus.



Photo: Friedr. Brüninghaus & Söhne GmbH & Co. KG

The company almost exclusively produces cold-heading wires from 0.6 mm to 16.00 mm in strength. A surface coating line was commissioned in 2014, an annealing plant (heat treatment with two high-convection furnaces, with N₂ or H₂ atmosphere) and various wire drawing plants are also in operation.

The specialisation in high-quality cold extrusion steel (e.g. for automobiles) led to a quality management early on. Brüninghaus was thus the first wire drawer certified according to ISO/TS 16949. The implementation of an energy management according to DIN/EN ISO 50001 was also certified in 2014.

The long-standing company affiliation of many employees is what makes Brüninghaus special, and over the years trusting relationships with the customers have developed. Short communication channels, continuous improvement and optimisation of working processes are in place and Brüninghaus focuses on customer requirements. This also includes a high degree of individuality which is supported by consistently high levels of quality at Brüninghaus.

Precision in metal

Hapema GmbH



Hapema, based in Engelsbrand in Baden-Württemberg, is a medium-sized company in the field of stamping technology and die technology. Since the foundation nearly 30 years ago, the company has grown steadily and solidly. Today the company employs about 70 people, with a work space of over 7,000 sqm. of production and warehouse space.

Equipped with 6 Bruderer stamping machines they manufacture high-quality stamping parts in band/tape thickness from 0.05 to 2.0 mm and a bandwidth up to 200 mm. The parts are used in many different areas of everyday life. Established companies from the automotive and electronics industries as well as the demanding medical technology industry, all count on solutions made by Hapema.

With regards to current and future requirements, it is a particular concern to be a productive partner and secure the customer success with competitive products. True to the motto: Reliable processes, error avoidance instead of error correction, costs control and continuous improvement.



Photo: Hapema GmbH

The principles of the corporate policy include not only economic objectives and investment in pioneering technologies, but especially a social and dutiful handling of employees relations and the environment. Only with qualified and motivated personnel and a careful use of natural resources, a maximum of success can be achieved and permanently secured.

Fast and efficient fastening processes

WEBER Schraubautomaten GmbH

Q 1956 marked the beginning of an extraordinary company history: What began as “Elektromechanische Werkstätten”, today is the “WEBER Schraubautomaten GmbH” which stands for innovation, quality and comprehensive service in the automation of assembly processes. WEBER creates customer-specific and innovative product solutions with high quality and process reliability in the field of fully automated fastening technology.

For 60 years, WEBER has been selling “technology that connects”. The WEBER machines and systems realise fastening, connecting, feeding and control functions – in a process reliable way and highly efficient.

260 employees in Wolfratshausen and a total of 350 employees worldwide develop, produce and sell top products. The office and shop floor space totals 6,500 sqm. The result are reliable solutions for demanding fastening technology processes. Over 1,000 machines and system are manufactured every year.

WEBER Schraubautomaten GmbH stands for technology that connects. This slogan sums up the motto for all activities both within the product portfolio as well as the interaction of employees, customers and partners.



Quality from Taiwan

Essence Method Refine Co. Ltd

Q In 1997 a group of engineers, technicians and process technologists founded Essence Method Refine Co. Ltd.

At first they focused on the production of automotive screws and just one year later began producing precision screws and special screws. To date, the product portfolio has constantly developed.

In addition to a steady growth in the market, the manufacturing process today allows for better and customer-specific products. This includes the development of patented screws and the expansion of product variety.

In order to meet the constant changes in the markets, the Essence Method Refine Co. Ltd. continuously works on the further development of the traditional screw manufacturing process – from innovative drives to changes of the thread structure to improve the practicality and functionality of these fastening elements.

Essence Method Refine Co. Ltd. attaches great importance to the business relationships with customers and manufacturers. While the technological landscape steadily evolves today, the partners should benefit through continuous improvements and first-class products.



Room for cleanliness

Technical cleanliness as defined by VDA 19 has established itself as a quality-assuring feature in the automotive sector in recent years.

>> Text: Andreas Blecher

The progressively complex components in modern vehicles are becoming increasingly susceptible to particle contaminations. Hence, even a single, electrically-conductive particle in an electronic component can lead to total failure. One particular risk in this respect is particle contamination of driver assistance and safety systems in the vehicle.

Car components that are critical for proper functioning are increasingly provided with cleanliness specifications, for that reason the concept of “technical cleanliness” is in the focus of many development departments. And fasteners are no exception. Even just a few years ago, it would hardly have been conceivable for screws to be subjected to a complex cleaning process, because the cleaning of screws, as cold-formed, galvanically-coated bulk material, presents a very specific challenge. This area has seen a significant increase in investments in the latest cleaning technologies and packaging concepts in recent years.

Because small parts such as screws are cleaned in high numbers per cleaning unit, it becomes necessary to remove the smallest particles from inside a cleaning basket, so that they can be extracted and then transported through the cleaning agent in use. After this process, a re-contamination in the downstream process steps, such as packaging and transport, has to be reliably prevented. The relative movement of the screws to one another and the associated re-contamination due to surface abrasion, but also the settling of air-borne particles onto the goods pose the greatest risks.

EJOCLEAN® concept

From innovative cleaning technologies, over investments into the latest clean room technology to innovative solutions in the field of packaging concepts and coating systems – EJOT has developed comprehensive know-how in this market segment under the brand name EJOCLEAN®. For example, the development





In the cleaning plant, the goods are cleaned to the required cleanliness level

of a packaging concept that preserves the clean state of the screws after ultra-fine cleaning. Immediately after cleaning, the parts are apportioned by specifically trained employees in a clean room, and packaged into vacuum bags. The relative movement of the parts during transport has been effectively eliminated by evacuating the air from the packaging bag.

Re-contamination through surface abrasion during on-going internal transport or on the way to the customer is thereby prevented.

Growing demands

To keep abreast of the continuous further development of manufacturing processes in the automotive sector, the cleanliness of function-critical vehicle components will have to meet even higher standards in the future. "Technical cleanliness" is also gaining importance in technologies outside the automotive industry, since connection technology contractors will soon have to satisfy tougher cleanliness requirements. **E**

A clean event

Successful premiere of the EJOT expert seminar "technical cleanliness in the industry"

"That was a clean event" the participants of the seminar on the topic of "technical cleanliness" seemed to be very content at the end of the seminar which was hosted by EJOT on 26 and 27 April in Winterberg. Renowned speakers talked about the basics of technical cleanliness in front of designers and manufacturing engineers who had arrived from all over Germany. The main topic was the consideration of integral concepts on cleanliness for galvanically coated fastening elements and plastic components.

"Who is Who" of the automotive supplier industry

Right at the beginning of the premiere event each participant quickly realised that in Winterberg a very important topic would be addressed. The large number of visitors, mainly representatives of the "Who is Who" of the German and international automotive supplier industry had a good reason to travel to the Sauerland. This reason was cleanliness. Safety relevant, technical cleanliness Particularly in the automotive industry, where the concept of "technical cleanliness" has become the focus of development departments.

And exactly the designers and developers of these areas were represented amongst the participants and took the opportunity to learn firsthand about proper cleaning techniques for fasteners, cleanliness oriented packaging concepts and the most modern test methods for determining the technical cleanliness degree. The special requirements for cleanliness concepts for the production of plastic components were also discussed in detail in Winterberg. Head of the event, Markus Hansel, product manager for EJO CLEAN® at EJOT: "The large number of people interested in this seminar suggests that our topic mix



Markus Hansel explaining the EJO CLEAN® cleanliness concept

exactly shows the problems and issues with which our customers are regularly confronted. We are of course particularly pleased that we can give valuable assistance for their daily work with this new type of seminar."

Current status of VDA 19, part 1

Highlight of the event was the lecture by Dr.-Ing. Dipl.-Phys. Markus Rochowicz, group leader Contamination Control, Department for Cleanroom Manufacturing at the Fraunhofer Institute for Manufacturing Engineering and Automation in Stuttgart. He gave all participants an excellent overview of the current state of the VDA 19. The guidelines for testing the technical cleanliness in the automotive industry have been created by Rochowicz in 2004. **E**

Promote energy refurbishment of buildings Together

“First reduce consumption, then think about a future-proof production of energy” this is how the well-known TV presenter Ulrich Wickert advocates fast and consistent implementation of the energy revolution. This view is shared by EJOT and for that reason EJOT supports the activities of this initiative.

>>Text: Daniel Herr

Behind the campaign is the association Qualitätsgedämmt e.V., which has been promoting an objective public perception of the topic thermal insulation. Promotion of the energy efficiency of buildings and an improved quality of advice and material up to the actual realisation are further objectives. The foundation members of the association are the family-run businesses Baunit GmbH, Brillux GmbH & Co.KG, DAW SE and Sto SE & Co. KGaA. Together they have founded the initiative daemmen-lohnt-sich.de with the long time Tagesthemen news anchor Ulrich Wickert.

Germany's largest portal for insulation topics

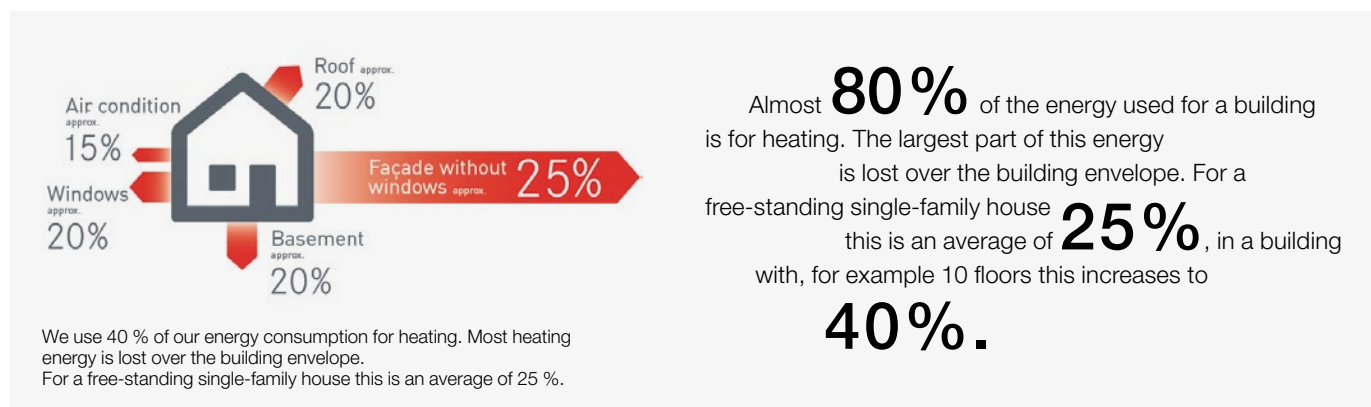
At the heart of the campaign is “daemmen-lohnt-sich.de”. With thousands of visitors every month it is Germany's largest on-line portal on the topic of insulation In dozens of articles home

owners can find important arguments, convincing examples, reliable facts and reliable professional advice in all matters relating to thermal insulation. Builders can also find the right partner for their own building project amongst 2,400 registered installers on the platform.

One voice for energy efficient renovation

The initiative also takes part in the public debate on energy renovation in the form of press articles in leading and specialised media, TV commercials and with the provision of information material for thermal insulation.

“Saving energy shows responsibility” is a central motto of the campaign. EJOT supports this notion.



Almost **80%** of the energy used for a building is for heating. The largest part of this energy is lost over the building envelope. For a free-standing single-family house this is an average of **25%**, in a building with, for example 10 floors this increases to **40%**.

Insulating is worthwhile.

For more thermal comfort and at the
same time less energy consumption.



daemmen-lohnt-sich.de



Connections around the globe

License management at EJOT is a success story. For the first time, the worldwide sales of PT® and DELTA PT® screws will be surpassing the sales mark of EUR 200 million. Behind the success is a quality philosophy that not only ensures the worldwide distribution of the products, but also consistently high quality.

>>Text: Andreas Wolf



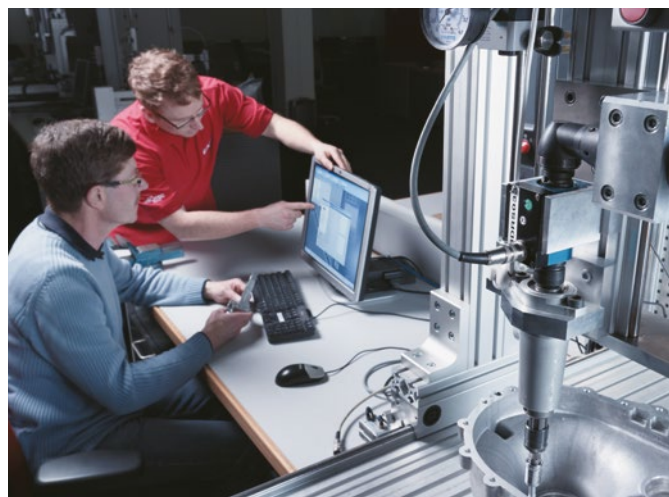
For EJOT manager Stephan Weitzel, who has been responsible for the global license management since 2003, a vision is coming true. “This year we will be surpassing the sales mark of EUR 200 million with PT® and DELTA PT® screws worldwide.” And another record number was announced by Mr. Weitzel during the EJOT licensee meeting in Hamburg: The number of licensees has multiplied from six in 1998 to over 100. “A good result”, Stephan Weitzel is pleased.

To be a EJOT licensee is interesting for many companies. The trick is to have enough good suppliers in the market. This requires great care in the selection. The worldwide market should be well supplied with the product, but not flooded. There are many inquiries by interested companies. But many do not fit the EJOT quality philosophy.

The licensee programme also guarantees that EJOT products are available worldwide in a consistently high quality. To meet this standard EJOT offers comprehensive know-how to the licensees. This includes production standards of the EJOT company standard and the sourcing of tools from licensed tool manufacturers. The licensees also receive access to the calculation programs ALtra CALC® and DELTA CALC®, which enable pre-dimensioning of the screw joint.

Employees of licensees are thoroughly trained and prepared for client visits or accompanied regularly on visits to clients. Comprehensive component tests in the EJOT APPLITEC are also part of the service programme, as well as training and seminar support. The licensees become intensely accustomed to the product and its application. “A complete service approach, that goes beyond pure selling of the product, which is new to many customers abroad”, that is the experience of Thomas Velte, engineer at EJOT.

Through decades of experience in fastening technology EJOT is able to supply solutions fast and support the licensees. “This creates trust”, Thomas Velte stresses. The close partnership with licensees also led to joint ventures over the years.



Calculations and component tests in the EJOT APPLITEC are part of the comprehensive service

The heart of the EJOT license management is the PT® screw, which was introduced to the market in 1980. In 1982 the first PT® license was sold to Thyssen, the former Vereinigten Schraubenwerke GmbH. One year later the PT® screws were introduced in Great Britain for the first time on the occasion of the Birmingham Motor Show. The British PSM was the first foreign company with which a license contract was agreed. The expansion of the license management to the American continent followed. The first order of 30 million screws for a licensee in the Chicago area resulted in further license contracts.

In 1989 the first PT® license was sold to Japan. The expansion of the license management to America and Asia was actually due to the demands of large customers such as Bosch and Siemens, which required worldwide availability of the products.

In the beginning of the year 2000 the license management was extended to ALtracs®, SHEETtracs® and FDS® screws. In 2003 the Global License Management was established. Ulrike Ljubas is responsible for the license fees and new license agreements. ■



Product licenses worldwide
 America 18
 Asia 42
 Europe 10

In addition to the product licenses there are 24 tool licensees and further exclusive suppliers worldwide. The total number of licensees was further increased during the last licensee meeting.

Reducing weight



Benefit from the potential for weight reduction and cost savings through the consistent use of lightweight materials in combination with appropriate joining techniques.