

Builder

EXCLUSIVE



OVO WROCŁAW



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DOUBLETREE
BY HILTON
WROCLAW

New upscale hospitality place for business and leisure

189 rooms
10 conference rooms including prestigious ballroom
Vibrant bar & restaurant with green patio

Where the little things mean everything





Ladies and Gentleman,

Builder Exclusive project has been created to comprehensively show only best and exceptional investments in Poland. Using uncommon form, distinguished layout and best photographic materials publisher wants to match the quality of described facility. Last year's first edition was warmly welcomed by the widely understood building sector. That is why, another investment, which We will present on this exclusive pages will be futuristic OVO Wroclaw. In this issue you can find materials from those who took part in entire realization process. Beginning with an interview with concept architect Asaf Gottesman by extensive investor and general contractor materials, to the presentation of advanced technologies and products which have been used to meet highest expectations.

OVO Wroclaw, Poland's first building, so bravely referring to the blobitecture architectural style is a perfect example that nowadays most futuristic concepts and visions of can be realized. This exceptional publication that we offer to your hands, shows that available on the market technologies, relevant experience and professionalism in the execution give architects and investors enormous creative possibilities. Visionary and courageous work of architects combined with dreams of ambitious investor will bring to the city of Wroclaw new hi-tech multifunctional space that will serve all of its residents.

Let us not fear of dreaming.
Sky is the limit.

Project Manager

A handwritten signature in orange ink that reads "Michał Grocki". The signature is stylized and cursive.

Michał Grocki

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Asaf
Gottesman

CONCEPT ARCHITECT
OF OVO WROCŁAW,
ONE OF INVESTORS

GOTTESMAN
SZMELCMAN
ARCHITECTURE

Inspiration can be used in practical purpose

Michał Grocki: Let's start with a general question.

How to design luxury?

Asaf Gottesman: Luxury means different things to different people. Time can be a luxury, space, light, air, the quality of a cloth even a fragrance but I suspect that in all cases the critical factor is Generosity

M.G.: How did the OVO Wrocław vision come into being?

**What factors came into play as far as the design was concerned?
What did you strive to attain?**

A.G.: The requirement of the competition was to construct an international 5 star Hotel, yet we always envisioned an urban project

that layered additional elements that would compliment each other. It seemed obvious to us that the OVO could be more than just an international hotel so we focused upon designing a new urban generator with multiple functions. An important element is the creation of internal courtyard that would enable the OVO to be accessible to the entire city.

M.G.: How did the design evolve before the actual development was initiated in 2012?

A.G.: The development of OVO Wrocław has taken 10 years. We won the international competition in 2006, but in 2008, the global economic

crisis occurred. We were literally stuck with a big hole and without the resources to continue. In early 2010, we resumed the design process improving certain elements and streamlining the whole undertaking. Like all architectural projects, there is an extensive planning process prior to the development itself. The first stage is research; we researched the social, economic and cultural forces that are prevalent in Wrocław. We researched the actual site; its history and specific surroundings. Next we developed a program that we believed could maximize the potential of the site and also contributes to the city. It is only after we had defined our objectives that the actual design process began. At a certain point we chose JSK Architects as local executive architects and began to assemble a new team. We worked quickly and together with JSK Architects developed an extremely detailed tender package. What followed was quite remarkable. Five leading construction companies began competing for the opportunity to build the OVO. They all realized that a development of this quality would both be a challenge and an opportunity to show what they could do. Each contractor formed a team of consultants and over a period of several months undertook a process of value engineering and pricing. Ultimately Eiffage won the tendering process and in 2012 we're-launched the development stage of the project.

M.G.: Why the idea of having so many functions within a single building? Is it a result of the vision, the design process or the investor's requirement?

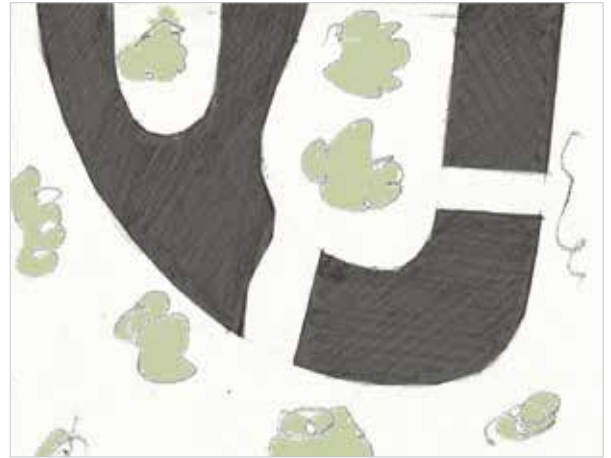
A.G.: Basically we believe that what contributes to the vitality of a city are the layering of different activities and a certain balance between high density and public spaces. The inclusion of an international hotel was a given but we felt that there was an opportunity here to add additional functions that would both ensure the vitality of the site and enrich the overall experience. Thus in addition to the hotel with its meeting and conference facilities, we introduced retail, food and beverage, Spa & Gym, a Casino, offices and a range of apartments and penthouses of various sizes. We considered how each element could contribute to the whole and in spite of the resulting technical and logistical challenges we realized that this was the right solution both as a commercial development and as an important urban landmark.

M.G.: Architectural space, apart from serving a practical purpose, should be inspiring. What is OVO's potential as far as the latter goes? What outcome did you intend to attain?

A.G.: "Inspiring" is also a "practical purpose". In our opinion it is a pre-requisite and is as tangible as square meters or a particular function. Creating architecture offers us the opportunity to define and add values; culturally, socially and also monetarily. Quality architecture has consistently proven to be of higher value and longer lasting. It reverberates; stimulating its surroundings and generates further growth and development.

M.G.: OVO Wrocław draws on blobitecture – an architectural current mimicking shapes found in the world of nature. Why was it important to you to deliver a development characterised by this kind of feel and what thoughts or emotions should it evoke?

A.G.: Actually "blobitecture" was not a part of our thought process. As strange as it may seem the building evolved as a result of various considerations and problem solving. To begin with, it was important for us to develop a dialogue with the adjoining Post Office, which is a massive and solid red brick building. Rather than mimicking the solidity and inaccessibility of the post office we sought to develop an alternative that would be more accessible. The form of the OVO is partly due to the varying widths required on the various floors and



Extension of public and green areas

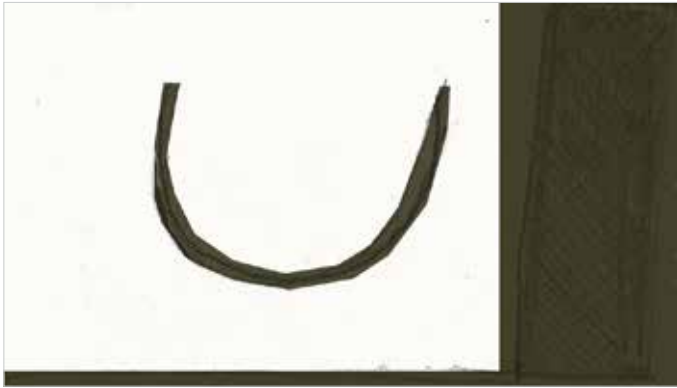


Contrasting building mass; Contemporary OVO – Historic Post Office



Linear light & shade Bauhaus strips in contrast to repetitive classical window system





Floating mass enabling flow to inner courtyard in comparison to wall boundaries



Soft, free flow solids and voids in contrast to rectangular, hard edged massing

our pre-occupation with resolving the dissonance that often exists between architectural vision and its translations into reality. The choice to use Corian as a cladding material, for example, was our way of bridging the form we were generating through our CAD programs and the need to convert our vision into execution drawings.

M.G.: Could you talk about the characteristics of your work in Poland compared to other countries where you have developed projects?

A.G.: We are fortunate enough to have worked in many countries across Europe but I can clearly state that our most satisfying experiences have been in Poland. We have found that both the planning and construction industries in Poland are of an exceptionally high standard. Now that the OVO is reaching completion we are looking forward to finding new projects that will enable us to continue working with the many professionals we have collaborated with.

M.G.: What will be Corian's applications inside the building? Where will one see it?

A.G.: The majority of the Corian used is on the exterior facades. Generally we have opted to use Corian in areas where we require high endurance/resistance and complex forms were required. Thus, inside the building, our main use of Corian is restricted to items of furniture such as reception desks.

M.G.: The structure of OVO draws on Wrocław's architecture. To what extent was this context significant? Did you draw

Founded in 2003, Gottesman-Szmelcman Architecture is an international practice that focuses upon projects requiring innovative, multi-disciplinary solutions. We have developed particular skills in the domains of hospitality, urban planning, mixed use residential developments, and in one-off iconic developments that tend to crystallize key issues and generate extra-ordinary values. We specialize in concept development while partnering with highly qualified local practices and consultants. Our approach extends beyond the conventional architectural services and often includes commercial considerations, program development, business plans, financing and marketing strategies.

on Wrocław's particular, select buildings? The Centennial Hall, Rudolf Petersdorff's department store (today's „Kameleon”), or Renoma department store?

A.G.: Petersdorff's department store is inspiring and there are certainly elements of the OVO that I believe recall Bauhaus architecture with its strong horizontal lines and inset balconies. Yet what is arguably more typical of Wrocław's architecture is its remarkable architectural diversity and individuality. No two buildings seem to be alike with different periods and architectural styles comfortably adjoining each other. It enabled us to be less concerned with architectural context.

M.G.: How will OVO impact Wrocław – its development, the perception of its architectural tissue and the residents' way of life?

A.G.: Its early days yet but we believe that the OVO will contribute in various ways. Firstly as a successful development it will serve to inspire others and continue the on-going development of the city; adding homes, places of work & leisure and strengthening the city in numerous ways. Hopefully the OVO will also encourage more quality architecture because architecture does not only define cities it is also a major cultural and economic generator. As a completed building that incorporates a DoubleTree by Hilton with extensive meeting and conference facilities, close to 4,6 tys m² of retail & leisure, 3,8 tys m² of offices and 8,6 tys m² of apartments, the OVO will be a very lively destination while serving as an important source of work. The synergy that we have worked so hard to create will enrich the lives of OVO residents and DoubleTree guests while serving as a new and vibrant leisure destination to both tourists and the citizens of Wrocław.



Ron Ben Shahar

PARTNER WITH
ANGEL POLAND GROUP,
ONE OF OVO WROCLAW
INVESTORS



ANGEL POLAND
GROUP



It's time for premium investments

Michał Grocki: When and why did you start investing in Poland?

Ron Ben Shahar: We started operating in Poland as a group in 2003. From day one, we considered operation on the luxury property market, but when we talked about it to our friends or partners, they thought we were either joking or being crazy. People were trying to talk us out of such investments as they didn't think the Polish market was ready for it. As it turned out, the truth was different. Over more than a decade, we have successfully delivered 10 development projects in Kraków, Wrocław and Warszawa. The latest development that has been put to operation is the mixed-use OVO complex, and a bit earlier we have finished Angel Wawel in historical place in Kraków.

M.G.: Why is the mixed-use luxurious OVO complex coming into being in Wrocław?

R.B.S.: We look for best places for our developments, and we focus on big cities, so we had also taken Wrocław into account right from the start. Together with partners we had developed here facilities including the Granary hotel, which – as the name suggests – was converted from a former granary. Moreover, recently we have opened Angel Care – the first facility of a planned senior citizen centre network. Wrocław is a city that entered a phase of dynamic growth in the middle of last decade. You could feel that strong impulse driving change. Wrocław turned out to be open to new ideas and

investments. As Angel Poland Group, we decided that the unique concept of OVO should become reality here. We knew that with the right location and a well thought-out design we would become successful.

M.G.: What was your strategy at the beginning?

R.B.S.: Location, location, location – it is our priority. We always go for top one. Central, or near-central location is bound to attract clients. When we chose our location for OVO, together with our partners GS Arch with Asaf Gottesman at the helm, we could concentrate on building the team. We selected managerial staff and the Wrocław team, we built the sales department, and chose our contractors. In the year 2014 – as one of the investors and a developer at the same time – we were ready to begin construction.

M.G.: As far as such challenges are concerned, investors often have an exceptional inspiration. Was there a sort of prominent idea behind the development of OVO?

R.B.S.: It was important for us to offer a new life style in the best possible location. The vision involved creating an exceptional space to serve the tenants providing specific functions, and at the same time – to enrich the city's life. We attained it thanks to the multiple functions which we enclosed in a structure that is original in architectural terms. Therefore, apart from luxury apartments and penthouses, we wanted to introduce functions which would mean the tenants' and other users' comfort and easier day-to-day business. The fitness and relaxation zone, shopping facilities, service outlets and restaurants – all of these were supposed to be available on the spot. We wanted to offer much more than what traditional residential developments deliver. That was the idea we turned into OVO Wrocław.

M.G.: How do you think OVO Wrocław development project will impact the city's life?

R.B.S.: Still before its opening, OVO Wrocław had become a building, and a certain point of reference, recognisable in the city. After the opening, its friendly and inviting architecture will attract residents of Wrocław and tourists. OVO' green courtyard will become a place of meetings and various events. It is the opening to business, social and cultural interactions that will make the building a vibrant, living thing. It will certainly become one of the city's most recognised buildings.

M.G.: Angel Poland Group had invested in Wrocław before.

R.B.S.: Yes, we have completed some of the developments, while certain other ones are under construction. The first one was constructed with partners the boutique hotel Granary, opened in 2009. It was developed where once there was a medieval granary, with the use of its remnants. The building was carefully renewed and adjusted to its new function. In this way, a luxury hotel housing 47 apartments came into being. We have developed Angel Wings apartments by the river, and we opened the senior citizen centre Angel Care in April this year. However, it is not only Wrocław that we focus on. Last year, we completed the development of the luxury Angel Wawel, which uses three historical buildings formerly occupied by the order of Colettine nuns. This historical place, located near the river Vistula and the castle Wawel, set new standards for residential properties. The building was ranked Poland's most prestigious residential development in 2015 by Otodom online portal. In Kraków, we have also developed Angel Plaza, the city's first genuinely luxurious residential building (Central and Eastern European Real Estate Quality Award 2007 for the Residential Development category) and another prestigious residential complex in the very centre. We have also invested in Warszawa.

M.G.: Is there space in Wrocław for more development projects like OVO?

R.B.S.: Wrocław is open to new developments, including visionary ones. For Angel Poland Group, attractive location is most important. If we find one, we are keen to become involved in another such investment. As a matter of fact, we're already doing it. We're going to begin the construction of Angel River apartment development soon. The project will be located by the river Olawa, in close vicinity of the city centre. It's a quiet place, from where you can quickly reach the Market Square – a several minutes' walk should be enough. Here, we also offer a new style of urban life – with access to the river and its wharfs, as well as amenities such as a fitness club or an electric vehicle charging station.

M.G.: What do you think is the future of similar multi-function developments in Poland? What is the trend for a few years to come?

R.B.S.: Poland is a dynamic market bound to develop in coming years. Thus, more and more multi-purpose developments will appear. Over a few years to come, the number of well-off Poles will keep increasing, which means that also the demand for a luxury offering will rise, and obviously including luxury apartments. Purchase of such real estate is always a good idea – regardless of whether you want to live in your property or let it. It's excellent allocation of capital. There will always be a demand for high standard flats in attractive locations. OVO Wrocław a testimony to the fact that a good design, location and a perfectly developed offering guarantee success.

M.G.: So, is Angel Poland Group planning further developments of this sort?

R.B.S.: We're planning to develop a network of 10 comprehensive senior citizens centres in Poland. They will follow the example of the newly completed Wrocław based centre. We are also developing the mentioned Angel River apartment building in the capital of Lower Silesia. Additionally, we are now taking time to get ready for another investment, as well as thinking about new developments in Kraków. We already know that one of our projects will be developed in this city. It will be, as the case is with OVO Wrocław, a mixed-use building, with a hotel and apartments of the highest class.



Angel Poland Group is a development group that shapes Polish luxury real estate market. Group has invested in Angel Wawel in Kraków, and now runs Angel Care and Angel River investments in Wrocław.



Shuckie
Ovadiah

ONE OF OVO WROCLAW
INVESTORS AND
OVO WROCLAW CEO

ovo  wroclaw

Investment will be teeming with life

Michał Grocki: When did you first visit Wrocław and why did you decide to make an investment here?

Shuckie Ovadiah: We started to look at Wrocław in 2005. It made a great impression on us. It's a city of a rich history and optimistic about the future at the same time. It gave us the ultimate certainty that it would be the best location for a development as original and modern as OVO Wrocław.

M.G.: What emotions does an investor feel when developing a project such as OVO? Are these mainly stress and tension?

S.O.: I wouldn't say so. Yes, construction process itself is stressful. But I think it is more satisfaction with overcoming challenges. I think that

these feelings are mutual to the whole team, as they see the building growing from the ground.

The challenges are daily... in the construction process, there are daily design issues and details that needs to be solved, you need to make sure construction schedule is on time, coordinate between the many designers of different fields, coordinate works, supervision and quality control. Besides, there is a whole scope of issues to deal with daily – sales, marketing, financial, legal, logistics, administration and more. We have designers, engineers, contractors and subcontractors and other members of the team, but It's the investor is the one coordinating all the project operations to bring it together to successful ending, keeping the schedules and qualities. Nevertheless, when I saw OVO

Wrocław rising from the ground, growing and taking its planned shape, it was the positive emotions that took over and, all in all, it is them that prevail. It's good, because otherwise nobody would like to invest in innovative projects or original architecture. A completed building serves people – it's something that you leave behind, something that gives you immense satisfaction.

M.G.: Was the initial concept and vision of OVO modified during the construction works?

S.O.: OVO Wrocław is a demanding development project, but we wouldn't have compromised on anything. The vision of a multi-function and luxurious complex has been retained. The construction works consisted in making this vision become reality.

M.G.: OVO Wrocław is being developed according to the design&build model. How well, looking at the matter from the investor's point of view, did this model work?

S.O.: Design and Built model is a process where the tender for General Contractor is based on schematic design and tender documentation, and does not include execution/detailed drawings. The execution drawings are developed by the General Contractor and this is the hard part, as it has a potential to create conflicts of interpretations of the plans, details and materials between the Concept Architects to the General Contractor, who is responsible for the execution drawings. You will need a good General Contractor, good Architects that are doing the execution drawings, and good technical team and project management of the investor to coordinate and supervise all parties involved. And of course a lot of care and attention to the details quality. In OVO we were very lucky to have the opportunity to work with JSK Architects, who took the concept of GSA and developed it to tender documentation, then continue to work and develop execution drawing for the General contractor. Our main partner, Eiffage Polska Budownictwo, proved to be an excellent choice, as cooperation is good and quality of works is high.

All this could not have happened without our outstanding design team, technical team and project management led by Marcin Kaznowski who supervised the process to the highest standard and construction quality. So, in OVO I can say that this model is successful as we have committed partners and strong project management team. This is a good opportunity to thank all our partners, suppliers and manufacturers who were and still involved in the project, for their

support and commitment, and to my friends and investors of OVO – Asaf Gottesman, Angel Poland Group and HPMC partners.

M.G.: If one says „OVO Wrocław”, its mixed-use philosophy immediately springs to mind. Wouldn't it have been enough to develop only the hotel and apartments?

S.O.: A building housing a hotel and apartments might work very well, but we wanted to give much more to the tenants, hence the idea of multifunctionality and comprehensiveness of services. All parts of OVO – the apartments, offices, the DoubleTree by Hilton hotel, conference centre, fitness club with a swimming pool and spa, retail and service outlets, cafe, restaurant, casino or the ball room – may work separately, but here they have an opportunity to merge and support each other, creating a lifestyle hub. The whole ensures a lot of comfort and highest quality services to the tenants and users of OVO. Therefore, instead of getting by with what is enough, we began aiming much higher. We wanted to offer something that Wrocław hasn't had before. Only a goal like this was what we could focus on. Soon afterwards, it turned out that it was a good decision – people crave for uniqueness and highest class.

M.G.: Sales of OVO's apartments and penthouses have turned out to be very successful. I would like to congratulate you on that.

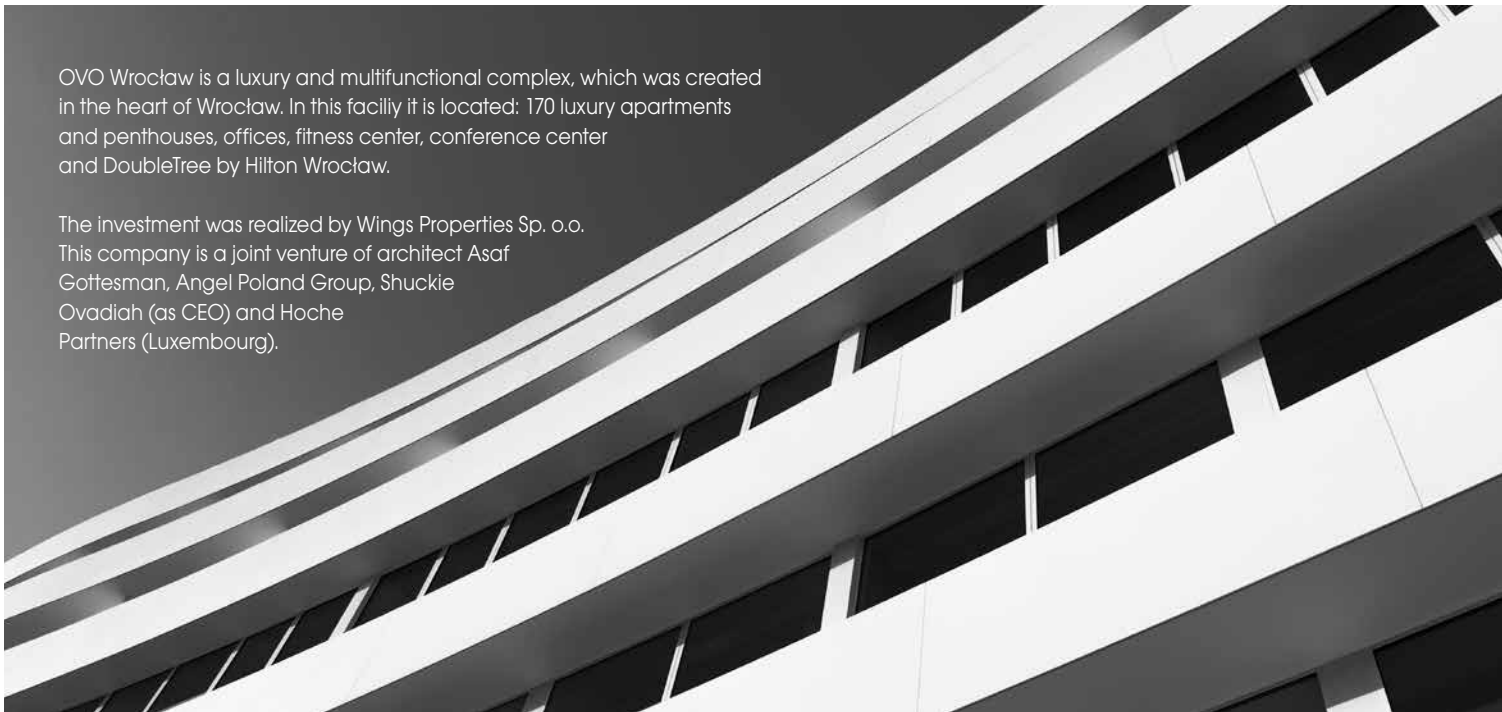
Did you expect such interest? What contributed to these results?

S.O.: We expected the interest in the apartments to be considerable. However, we did not expect this kind of success in terms of sales. About half a year before the development completion we had sold over 90% of space. Certainly OVO Wrocław's unique concept contributed to that, including the mentioned multifunctionality. When the construction kicked off and people learned more about the project and its premises, a craving for luxury offered by OVO came about in a natural way.

M.G.: The grand opening is round the corner.

What are your expectations in relation to this development?

S.O.: We are currently focused on completing the development. Seen from the outside, the structure is actually ready, but equally demanding works in the interiors are still in progress. As far as the opening goes, I believe that OVO Wrocław will become an exceptional meeting place and a benchmark for future mixed-use developments.



OVO Wrocław is a luxury and multifunctional complex, which was created in the heart of Wrocław. In this facility it is located: 170 luxury apartments and penthouses, offices, fitness center, conference center and DoubleTree by Hilton Wrocław.

The investment was realized by Wings Properties Sp. o.o. This company is a joint venture of architect Asaf Gottesman, Angel Poland Group, Shuckie Ovadia (as CEO) and Hoche Partners (Luxembourg).

We enjoy
ambitious projects

Zbigniew
Zajączkowski

CEO EIFFAGE POLSKA
BUDOWNICTWO



Grzegorz Przepiórka: Was it difficult for the contractor to turn the architectural vision behind OVO Wrocław into reality?

Zbigniew Zajczkowski: When executing such a complex project, key to success are mutual trust between the investor, the architect and the contractor, as well as sensible and responsible technical solutions. OVO Wrocław is a multi-functional building, unique both in Poland and worldwide. Its innovative concept and streamlined shape are a true architectural challenge. The role of Eiffage Polska Budownictwo was to perfectly implement the investor's and the architect's vision on the construction and engineering level. Of course, we were aware of the responsibility. But we were sure that we could deliver on what we had committed to do.

Let me repeat it once again – for such large-scale investments, expertise – and partnership-based cooperation with the investor, the architect and construction site inspectors during the entire execution process is crucial. That was exactly the case for OVO Wrocław and we greatly appreciate it. Successful execution is the direct outcome of a number of factors: know-how gained by Eiffage Polska Budownictwo over the years; implementation of procedures which ensure safe execution; high-quality materials; and precise concern for details. The technical solutions we implemented were developed by a team of experienced specialists. One of the technical challenges was Corian® – a spectacular and beautiful material for facades – which has been applied here on such a large scale for the first time in Poland.

In such demanding construction projects like OVO Wrocław, of utmost importance are the foundation of specialist know-how and many years of experience. Eiffage, also as a multinational group, has specialized in executing bold and ambitious projects for years. A showpiece of our engineers' capabilities is the Millau Viaduct over the River Tarn in southern France, the highest structure of that kind in the world – it is 343 metres high and 2460 metres long. Lately, we have erected Stade Pierre-Mauroy in Lille – the most modern facility of that type in France – which is sure to attract worldwide attention during the Euro 2016 tournament. Other impressive examples of modern architecture include the new Ladeux Technology Centre of Michelin – an extensive complex which meets all the latest environmental protection standards and which has integrated existing scattered buildings into one structure – and the Louis Vuitton Foundation building. So, OVO Wrocław, with its innovative architecture and technology, perfectly fits into the area of Eiffage's professional expertise.

G.P.: Does the construction of such a multifunctional complex as OVO Wrocław require a special approach from the contractor?

Z.Z.: For sure, construction of such a non-standard building as OVO Wrocław requires a contractor who competently rises to the challenge while satisfying the expectations of the investor and the architect; a contractor with appropriate competence in execution but also in technologies and design. As a multinational group and its subsidiary in Poland, Eiffage has completed a number of ambitious and innovative projects. We have highly unique experience in this area. Despite scale effects, we truly believe that every project is unique and one of its kind and requires full commitment of our entire execution team. Our engagement in OVO Wrocław was extraordinary, though. We paid a lot of our attention to e.g. The finishing works, the assembly of the unique facade and to the sophisticated interiors.

Eiffage Polska Budownictwo draws on international experiences and makes use of its extensive know-how gained on the domestic market. In almost 26 years, we have developed over 550 investments in Poland. Already on the planning stage, Eiffage applies state-of-the-art technologies and puts a lot of emphasis on ensuring safe execution. The construction design is often just an outline setting out the form and limitations. It is our task to suggest on an ongoing basis – and then

to implement – optimal technical solutions. We turn the architectural vision into practice thanks to the joint commitment of all parties involved in the investment process. We have created and continue to develop our technical and design resources as well as a team of specialist who complete each other in their competence.

G.P.: What other projects have been added to the company's portfolio lately?

Z.Z.: It was yet another good year for Eiffage in Poland. Recently, we have completed a dozen or so investments, including the "Artistic Żoliborz" housing estate in Warszawa, the modern, though historic, "Angel Wawel" apartment complex in a beautiful area of Kraków, the extension of the Michelin tyres production plant in Olsztyn and Solaris office tower in Bolechowo, near Poznań. Also, a particularly interesting project is the extension of the Jaworzno power plant, which is to be one of the most efficient power units in Europe. As can be seen, our projects represent different areas – from services to industrial.

G.P.: What is the structure of your stock of orders? In which sectors is Eiffage Polska Budownictwo especially visible?

Z.Z.: In Poland, Eiffage focuses on the high-volume construction sector and our trademark are executions of ambitious and non-standard projects. Our strong point is residential, commercial and industrial construction. From all our projects currently under execution I would like to single out "POSNANIA Center" in Poznań, "Angel Care" in Wrocław, works in the Jaworzno power plant and the construction of Radisson Blue Hotel in Zakopane. We are very proud of the fact that a significant part of our contracts is won through recommendation – which is testimony to the trust placed in us by investors, which we have acquired over the years.

G.P.: What are your plans for future development of the company in Poland?

Z.Z.: For many years, we have consistently co-created user-friendly projects, successfully leveraging the experience of the French Eiffage Group and our domestic technical potential.

In Poland, Eiffage's activities are focused on further improving and expanding the range of services offered in emerging sectors of the construction market. Our goal is to support execution of high volume projects in a complex manner. We go beyond classic construction services – we support our partners at the pre-investment stage and use Value Engineering, a method of comprehensive analysis of costs at every stage of the investment project. This enables us to meet our customer's needs as well as the technical requirements of the project. Experts are increasingly stressing the decisive role of advanced digital tools and processes of analysis of high volume investments for the future of the design and construction sector worldwide.

Following this trend, Eiffage is implementing the BIM technology in Poland. In a nutshell, BIM means digital, so flexible modeling of all information about the building in 3D. It is a global trend – in many countries it has already become a standard requirement at the design stage. BIM significantly lowers all risks as it largely helps in "predicting the unpredictable", that is measuring the key variables which could have been overlooked otherwise.

Another promising direction of development we have consistently followed for two years is real estate development. Eiffage Polska Nieruchomości (EPN) – a subsidiary of the Eiffage Group – has developed projects on land owned by the Eiffage Group. In 2016, we are planning to launch investments in three Polish cities: Warszawa, Kraków and Kielce. The most advanced is the residential project in Kraków. We have already signed a preliminary contract for sale of ready apartments with a fund belonging to BGK. And that is not it – EPN is also considering buying new land for further development projects.



Eiffage Polska Budownictwo (EPB) has developed more than 550 investments in almost 26 years. Already at the design stage, EPB applies the latest technologies and focuses on ensuring safe execution. All over the world, the Eiffage Group is famed for executing bold, ambitious and extremely demanding projects.



Futuristic vision, extraordinary project



Piotr Bury

ARCHITECT,
DIRECTOR
OF THE WROCLAW
OFFICE

J·S·K

Architekci Sp. z o.o.

Grzegorz Przepiórka: JSK has been invited by Gottesman-Szmelcman Studio to cooperate in OVO Wrocław project as an executive architect. What was your role?

Piotr Bury: Putting it vividly: basing on the concept of Gottesman-Szmelcman Studio, our task was to create not only the Styrofoam model, but also a building made of steel, concrete, glass, Corian and other materials, with all necessary technical equipment – all this in the very center of Wrocław and in the direct neighborhood of the historic buildings.

The scale of this project caused almost four years of work. During this time we passed through different phases of the project: from the multi-industry concept, construction design, tender for the general contractor – to the executive project, which was created alongside throughout the construction period.



G.P.: What is the superiority of OVO Wrocław and what challenges were generated for JSK architects?

P.B.: OVO Wrocław is a very original building because of its architectural form and the use of Corian as the external elevation material. It was used at this scale for the first time in Poland.

The premise of architects was to create a daring, internally consistent and distinctive complementary building. Creating a solid with gentle, soft form, contrasting with the building of post office, but matched with scale and proportion.

A characteristic elements of the OVO Wrocław project become the horizontal white stripes of elevation, gently tailored with smooth, undulating form of the building.

Since the beginning of work on the project we were aware that such unusual form need unusual material. The intended effect was achieved through the use of external cladding from large-size sheets of acrylic polymer – slabs of Corian from Du Pont company (12 mm thick).

Large-size elements combined with only 8 mm joints compensating thermal deformation, create a sense of unbroken continuity.

It is worth noting that the construction of such difficult forms would not be possible without the use of the computer spatial modeling at every stage of the project and verifying the 3D model during the works on site.

G.P.: How did the dialogue with the other participants of the investment proceed?

P.B.: This type of investment – so-called “fixed-use project” and a form of its realization – characterized by many participants in the investment process.

Merely regarding the investor site, we must remember about the apartments and offices buyers, commercial premises tenants and the largest user – hotel Double Tree by Hilton.

On the side of the general contractor we have a whole range of sub-contractors of individual parts of the building, vendors, etc. In our design team there are not only the architects, but also engineers, consultants, appraisers. You cannot also forget about the offices and media, who are also the participants of the investment process.

This type of investment, to be successful, need all the parties to be up to date and regularly communicate. This dialogue was a challenge for OVO Wrocław, due to the investor assumptions of maximum design flexibility.

G.P.: OVO Wrocław is one of the many objects that in recent years are a sign of the changing landscape of Polish architecture. Which of JSK projects should be noted as significant in this context? Certainly one of the most recognizable is the National Stadium – and besides?

P.B.: National Stadium in Warszawa is certainly the most recognizable due to its architecture, scale and location, but also because of the unique place in our hearts that takes the national football team.

However, all of our stadiums, i.e. Stadium of Legia Warszawa or Śląsk Wrocław Stadium, have a special place in our contemporary architecture, as the first Polish sports facilities of this scale on a global level.

Similarly, I think airport terminals in Wrocław and Gdańsk have a special place in the changing architectural landscape in Poland.

G.P.: On what projects are currently working the architects from JSK Office?

P.B.: We’re quite big office, so we are involved in the development of several projects at the same time. In particular – projects of office parks in Warszawa and Wrocław, hotel in a central location of Warszawa or the expansion of the urban shopping mall. We are also working alongside on several projects of stadiums including Italy, Qatar and Belgium.

In our office in Wrocław we are currently working on a project of a private clinic with a small hospital. We also begun work on the sport complex – at the beginning of this year we won the architectural competition for the realization of Zagłębiowski Sports Park in Sosnowiec. As a part of this investment there will be a football stadium for 15 000 places, indoor winter stadium for ice hockey competitions and multipurpose sports hall.





JSK Architects Office, founded and run by Zbigniew Pszczulny and Mariusz Rutz, It's a team with many years of international experience in planning and implementing projects in the greatest scale. The company stands out by individual solutions in projects and timeless architecture, which even after many years will be up-to-date and understandable.

OVO Wrocław

– from the futuristic vision to the perfect execution

The daring and unique design of the futuristic building OVO was born in Gottesman-Szmelcman Architecture under the direction of Arch. Asaf Gottesman. Eiffage Polska Budownictwo was selected as the General Contractor responsible for all construction works. The building has been composed into a challenging, narrow plot in the centre of Wrocław, which has added to the difficulty both at the design stage as well as during the execution.

“Completion of a project of such rank as OVO Wrocław poses a big challenge to all parties involved. As the General Contractor, we derive additional satisfaction from the fact that we have been given the opportunity to take part in the construction of this extraordinary building” – states Adam Dziejdzic, Commercial Director of Eiffage Polska Budownictwo. “This project is unique not only because of interesting architectural assumptions, high-quality materials, and state-of-the-art technologies and solutions ensuring comfort and prestige for future users of the building but also its multi-functionality. In a single body, it houses a residential section with luxury studios and apartments, a five-star Hilton hotel, offices and a services and retail area. In OVO, on just one construction site and in a single structure meet all the elements of high volume construction that Eiffage Polska Budownictwo has specialized in for over 25 years. Our knowledge and expertise have once again

been recognized by an investor who has placed confidence in us and created the atmosphere of a true partnership which is key to success during the execution of such complex projects” – he adds.

OVO is an intelligent building – it will be monitored using BMS, a modern computer-based control system that steers, amongst others, access to its separate sections, as well as systems installed such as fire protection, lighting and ventilation, etc.

The characteristic shape of the facade is highlighted by the use of Corian, which is a functional, durable, esthetic and adaptable material. Also the imposing dancehall situated in part of the two underground levels will be lined with Corian. Its ceiling will feature impressive light islands in the shape of volcanoes.

„Just the preparation of Corian panels for assembly is a complicated and multi-stage process.” – says Jarosław Jabko, OVO Construction Site Manager, Eiffage Polska Budownictwo. “For cutting them, a special machine, the only one of that kind in Poland, was bought: a 5D cutter plotter. The initial stage is thermoforming. First, the Corian panel is heated up on both surfaces and then placed on a forming mould where it is given its chosen shape. Next, the thermoformed panels are cut as required using the plotter and transported to the construction site. There, they are laid on the previously prepared substructure. In OVO, the so-called invisible assembly has been applied, which is necessary to get the effect of streamlined facade. Corian is an extremely demanding material, and the most complicated process during assembly is the proper and precise fitting and linking of thermoformed panels with the flat ones.” – Mr Jabko explains.

OVO interiors have a soft, rounded shape. The area of the hotel lobby smoothly opens up into the bar lobby and the restaurant. In some places, the walls seamlessly meet the ceiling where the building’s signature light islands are featured. All these elements required from the General Contractor absolute precision during the construction and finishing works.

Apart from perfect organization of construction works, Eiffage attaches great importance to health and safety issues. This year, its efforts have once again been recognized – the construction site of OVO Wrocław was awarded the 2nd prize in the latest edition of the Lower Silesian “Build Safely” competition organized by the National Labour Inspectorate. What is more, the Construction Site Manager, J. Jabko, received a special distinction for good practice in health and safety. In its verdict, the Awards Committee stressed his extraordinary commitment to and achievements in safe organization of works and strict observance of health and safety regulations. The Committee also stated that all his projects are exemplary for effectiveness and good practice in construction.

„We love ambitious projects.” – concludes Zbigniew Zajączkowski, CEO of Eiffage Polska Budownictwo. “The scope of challenges faced here was huge but thanks to the good cooperation with the investor, demanding but open to our ideas, the futuristic vision of OVO Wrocław has just become a reality”.



Timeless architecture



Pushing the limits, calling admiration and amazement are challenges that motivate us every day at work. Therefore, nearly from 20 years, we are trying to reach higher and farther, creating a timeless architecture that after many decades will continue to be valid and understandable.

Today's office, founded and run by Zbigniew Pszczulny and Mariusz Rutz, is an international team with knowledge and experience in the development and implementation of projects with the largest scale and complexity. JSK Architects is also the engineering precision and apothecary attention to the smallest details of the designed architecture. JSK stands out not only by finding individual solutions in design, but also by special attention to the quality realizations.

A team of 50 creative designers, working in a modern environment in two offices – in Warszawa and Wrocław – provides complete support for urban and architectural planning, interior design and project management.

Currently, JSK Architects Office is one of the largest and most recognized design companies. Due to our leading position, many highly skilled and creative architects apply for work at JSK.

In our portfolio there are offices, apartments, shopping malls, hotels and convention centers. The particular specialty of JSK is the design of airport terminals, stations and sports facilities such as multifunctional arenas and stadiums. JSK Architects Office carries out projects for Polish and international investors, both private and public.

The most important achievements of JSK in the recent years includes: project of Legia Warszawa Stadium, design of the National Stadium in Warszawa and the Municipal Stadium in Wrocław as UEFA EURO 2012 venues or the new airport terminals in Gdańsk and Wrocław. In addition to active operations on the Polish market, JSK Architects Office is implementing a number of projects in international markets: Germany, Italy, Czech Republic, Kenya and in the Middle East.

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Corian.



Corian® – freedom of design and expression

Michał Grocki: Hi tech surface material DuPont™ Corian® is ideal to accomplish creative visions of architects and designers. The most recent example is 'OVO Wrocław', built in Wrocław, Poland. What 'OVO Wrocław' acquired by using Corian® on its façade? What features distinguish this material to other facade materials?

Robert Dawidowicz: DuPont™ Corian® means not only elegance, originality and freedom in design which are represented by OVO Wrocław. It means, above all, durability, mechanical strength and hygiene. After almost a decade of experiences and completed

projects Corian® was proved to satisfy not only users but also architects and companies involved in processing this material. I think its resistance to weather conditions, UV radiation, dirt and graffiti, as well as ease of potential repair are key values for its customers. It is also the only product on the market that can be thermoformed, which allows to obtain the 3D effect. It can also form parts with maximum dimensions of 5.5 x 3.5 m.

M.G.: The whole Corian® façade on OVO Wrocław has an area of more than 5.5 thousand square meters which is an area

of a full-size football field. For the first time in Poland, this material was used on such a scale. What kind of support investor and architect can have from DuPont?

R.D.: Each implementation of the facade is treated individually. Architects are being supported by our technicians from a concept to execution of a project, including work on details, choice of appropriate substructure and assembly technology. We help investors to reduce investment costs by individual panel production for each project. There is a DuPont network of EC Converters who are able to provide a highest quality for the most complex implementation.

M.G.: There is Corian® being used not only on the façade but also in the interiors of OVO Wrocław. It is being used, among others, in the ballroom, restaurant and lobby of this newly constructed facility. How does the Corian® change a character of the interiors?

R.D.: I like to say that 'Corian® means freedom – freedom of design and expression.' Due to its unique properties and numerous of colours matched to current trends, Corian® is being used both inside and outside of the buildings. It can be used as a ventilated façade but also as internal walls, reception desks, countertops, furniture, lamps, sinks, shower trays, bathtubs and many other items. In fact, the only limit is our imagination. The most interesting is the fact that Corian® can be subjected to various processes such as seamless bonding, thermoforming, backlighting or engraving. OVO Wrocław is already known for its original shape which was possible to obtain due to thermoforming of Corian®. It has also added elegance and durability of the various committee rooms of this extraordinary facility.

M.G.: Corian® can be thermoformed. Does this mean that it is easy to install? How Corian® panels were manufactured for OVO Wrocław?

R.D.: Thermoforming and assembly of the panels are two completely different processes. Corian® panels had to be thermoformed due to a simple reason – the façade is cylindrical while Corian® is being produced in even panels. Thermoforming is a process of heating a Corian® element to temperature of 160-170°C, so that the material becomes plastic. It is then transferred to pre-prepared mold and placed in a membrane press to cool. During this process, wall panels were getting a desired shape. Thermoforming process for OVO Wrocław panels was extremely complicated because of a significant number of panels that had to be shaped in two planes. This is the first façade of its kind in Poland and one of a few in the world.

M.G.: Polish Building Research Institute has committed to use Corian® on facades in Poland just four years ago. What are other Polish projects with façade made of this material?

R.D.: It may seem that four years is quite a short time to encourage or persuade architects to use new possibilities of Corian® in their projects. We are pleased to receive more and more positive opinions from the market, especially that there are several buildings which we can be proud of. There is an amazing design of black Afrykarium in Wrocław Zoo, terminal building at the airport in Gdynia-Kosakowo, part of a facade of a new terminal at the Warszawa Chopin Airport, Fashion House 'Klif' in Warszawa, apartment block 'Nereus' in Jurata or newly built pavilion J. Czapski National Museum in Kraków.

M.G.: DuPont promotes the idea of "Endless evolution". What is it?

R.D.: "Endless evolution" is a long-term initiative launched by DuPont™ Corian® across the Europe, Middle East and Africa region which is represented with the "Endless Evolution" slogan and logo. The initiative encompasses manufacturing innovations, new product development, and technical and marketing programs, development of the product itself and its possible uses, connections with other revolutionary solutions. One of the examples of a technologically advanced solution using DuPont™ Corian® is a wireless charging smartphones and tablets. The other is a modern production of colours in two different technologies – DeepColour Technology™ and Fusion™ Technology. There are also proposals for new sinks and bathroom sinks for the private and public sectors as well as offering new colours.

M.G.: The first building, which facade is entirely made of a hi tech DuPont™ Corian®, is Seeko'o Hotel in Bordeaux, built in 2007 in France. It's been almost 10 years ago. What are other projects in Europe that DuPont can be proud of?

R.D.: There is more than 60 buildings in Europe and during each year many countries, where Corian® is approved to be used on facades, can be proud of several new ones. I think the most interesting, in terms of architecture, are highlighted Motel One in the City of London, villa with seamless and rounded edges "New Water" (Westland in the Netherlands), tiered and illuminated façade of auditorium in the courtyard of the Icade building (Munich), "punctured" effects at the Community of Municipalities building (Lacq, France), Trampolines hotel (Riccione, Italy) or engraved children's pavilion Anansi (Utrecht, the Netherlands). One of our most spectacular execution is the headquarters of Microsoft in Munich, which will be completed this summer.

M.G.: The scope of usage of Corian® is very wide – from the facades of public buildings and private villas to hotels and health care. Does it testifies to the fact that the price of the product in combination with its properties is also attractive for a potential investor?

R.D.: The price of the material is only one of the elements that every professional investor takes into account when deciding to purchase it. And it's not the most important element. We are using Corian® to help investors to solve a lot of important issues, including reduction of risk of infections in hospitals, cleaning costs in hotels, restaurants or public facilities, cost of repairs, maintenance and replacement of damaged components. In the long term it translates into savings much greater than the difference in price compared with other materials. These are the reasons why Corian® is so widely and readily used in a variety of market sectors.

M.G.: How would the market of Corian® grow in Poland and Europe according to your predictions and observations?

R.D.: The interest of Corian® continues to grow for several years in Poland. The new architecture as well as the renovation of old buildings develops very dynamically. There are new spectacular investments – in both public and private sectors. In many of them our material is being used and we estimate that this trend will continue over the next few years. Our technologists are constantly working to improve the material and technicians and managers on new applications and market sectors where Corian® would be used. A similar trend can be seen not only on the west, but also on the eastern borders of our country.

M.G.: Thank you for conversation.



Corian.

DuPont, founded in 1802., offers a wide range of innovative products and services based on strong scientific foundations. Thanks to cooperation with governments, non-governmental organizations and experts, DuPont creates sustainable solutions to ensure sufficient healthy food for people around world as well as reducing dependence on fossil fuels and ensures people's lives more safe and healthy.





The original façade on OVO Wrocław made of unique material

The façades of modern buildings are often a showcase of new investments and, in many cases, they proudly present achievements of modern architecture. Materials and innovative architectural solutions allow a great freedom in creating original forms while maintaining high quality parameters and functionality which were used in a construction and finishing of façade.

An example of the innovative façade design combined with advanced technology is OVO Wrocław. Its outer part was created by solid surface material – DuPont™ Corian® – the only material of its kind that has passed demanding tests of Building Research Institute, especially in terms of mechanical properties and fire resistance. The material was subjected to thermoforming in two planes, so that it was possible to form the body of OVO Wrocław with all of its rounding.

DuPont™ Corian® was invented in 1967. Initially it was used in kitchens and bathrooms for countertops, sinks, bathtubs as well as furniture and lighting. Assets of this material were finally used in construction. External cladding made of DuPont™ Corian® has a homogenous structure throughout its thickness, does not absorb water and is resistant to all kinds of paint, varnishes and many chemicals. The material is also resistant to UV rays and temperature changes (thermal shock, freezing / thawing in winter). Non-porous surface prevents from penetration of dirt, and mechanical damage can be repaired on site or replace the item without having to remove the entire façade. The façade can be also refreshed by cleaning or grinding. Such cleaning is done using standard tools like a manual or a pressure washer.

DuPont™ Corian® is made in 1/3 of acrylic resin and in 2/3 of natural minerals, among which the largest part is aluminum trihydrate (ATH) derived from bauxite. The colour that was used on OVO Wrocław is Glacier White, however, the full colour palette of this material has 70 different tones. DuPont Research and Development Centers evolved a few colours that can be successfully applied in façade applications. These colours are covered by a 20-year manufacturer's warranty.

Emilia Cichocka, DuPont Protection Solutions, A&D Relations Manager Poland, DuPont Surfaces (Corian®), emphasizes "The 'magic' of this material lies not only in its properties, ingredients or colour palette. A powerful argument in the context of design possibilities is freedom to combine it with other materials. DuPont™ Corian® is known not only for its versatility in the interiors, but also for a combination with wood, glass or metal. It is the same in architecture and façade applications. Technical Approval AT-15-2465 / 2012 issued by the Building Research Institute for Corian® enables the use of it

in a wide range of substructure systems and assembly. It can be used successfully on one wall with other materials taking into consideration the natural properties of thermal expansion and contraction between the two materials."

"In addition to the properties that seem essential today and the solutions available on the market, Corian® has several other advantages, which can be very interesting for lovers of modern architecture. The façade made of our material can be highlighted; Corian® has several colours in its collection, which are translucent and with addition of light it can illuminate the entire elevation or selected panels, thus creating an unusual effect. By milling patterns in the surface, there is the possibility of obtaining specific reliefs on the façade. And thermoforming allows to create interesting forms by bending preheated material. The latter solution has been used on the OVO Wrocław to get its original form." Another advantages lists Łukasz Gagato, Country Sales Manager Poland, DuPont Surfaces (Corian®).

The first building with a façade entirely made of DuPont™ Corian® was founded in 2007. It was Seeko'o Hotel in Bordeaux, France, in the shape that reminiscents a flowing glacier. A unique black exterior also boasts the Wrocław zoo, where 'Afrykarium' building was covered with DuPont™ Corian® in Nocturne colour.

Good design, solutions and used materials states of good architecture.



More information can be found on www.corian.pl or in a meeting with a representative of DuPont Poland.

Multifunctional buildings are our specialty



Recently put into service, the OVO Wrocław building deserves special attention for its exceptional facade finish, created with Aluprof aluminium systems: MBSR60N facade systems and MB-70HI window system. All this in a streamlined form, resembling a drop of water.

Selected to conform to the expectations of the project architects, Aluprof's systems fulfill the required thermal, static and visual specifications.

Current technologies of production of aluminium window profiles, and the ability to use insulating materials in it, enable the fabricators to offer structures with better thermal insulation properties. MB-70HI window system is a thermally enhanced version of the 3-chambered MB-70 system that is present on the construction market for several years now. 3-chambered profiles have a depth of 70 mm (door frame) and 79 mm (casement). In the space between the thermal breaks and around the edges of the glass are special inserts that improve the thermal insulation of the construction. The central gasket plays here an important role – it has a two-component structure that makes it flexible, and provides a better insulation of the space between the casement and the window frame.

Aluprof's offer also includes the MB-104 Passive window system. It is intended for fabrication of external structure elements such as various types of highly insulated (UW for openable window from 0.53 W/m²K) windows, entrance enclosures, shop fronts and spatial structures of an excellent water resistance, air tightness, and sound insulation performance. The performances of MB-104 Passive-based windows exceed the most stringent requirements of applicable standards and building regulations, and that's why MB-104 Passive is a system dedicated to energy-efficient & passive structures. This was confirmed by the certificates issued by the Passive House Institute in Darmstadt for MB104 Passive SI and MB-104 Passive Aero.

MB-SR60N system used in OVO Wrocław is intended for creation and fabrication of lightweight, hung & infilled curtain walling, roofs, skylights, and other spatial structures. The supporting profiles are characterised by a 60 mm constant width and are flushed on the inside of the facade. The system enables the use of many types of facade-dedicated openable elements from the wide range of Aluprof window & door systems, and of solutions intended for mullion and transom

curtain walls: roof windows and top hung and parallel opening windows.

MB-SR60N supporting structure consists of vertical and horizontal box-section aluminium profiles (mullions and transoms), that are respectively interconnected. The external side of the facade consists of clamping strips that support the glass and of cover caps that can be of any shape. The system also includes a number of additional aluminium elements, gaskets and accessories. In order to obtain the optimum thermal and sound performance, MB-SR60N uses polyethylene insulation. MB-SR60N-based facade is connected to the building with the use of special brackets of a sufficient capacity, intended for this purpose. A proper drainage and ventilation of the facade is achieved through the use of indirect butt joints between mullions and transoms – this allows to perform cascade drainage and ventilation of glazing grooves, and the performance of ventilation and drainage holes in clamping strips and cover caps.

Apart from OVO Wrocław, MB-SR60N was also used to create the Pomeranian Science and Technology Park in Gdynia. For this purpose, a bespoke solution was developed. The mullion and transom system uses specially shaped profiles: strips that give the facade its unique look, and mullions that allow for an esthetic connection with the elements that fix the facade to the steel structural system of the building. It also uses accessories enabling the loading of the transom with a force of 2.5 kN on each side, which in turn enables the installation of large and heavy glass sets.

SILVER TOWER CENTER, a 55 m high multifunctional building, consisting of two facade-characteristic forms is another example of MB-SR60N-based bespoke solutions. MB-SR60N mullion and transom system used for this building has ensured the proper functioning of the facade, this taking into account high glazing and standard-exceeding slab deflections provided for in the project. The project uses a bespoke mullion, whose shape was optimized for material consumption, and for cooperation with fasteners. Rectangular aluminium profiles on the outside of the structure have emphasized its vertical lines and ensured the desired architectural effect.



ALUPROF SA offers a great variety of aluminium systems to satisfy the needs of even the most demanding building designers.

Zbigniew
Poraj

SALES
DIRECTOR
ALUPROF SA



Designed for the most demanding applications

Grzegorz Przepiórka: What is Aluprof's involvement in the completion of the investment OVO Wrocław?

What solutions have been used?

Zbigniew Poraj: OVO Wrocław uses MB-SR60N facade system and MB-70HI window system. These were selected to conform to the expectations of the project architects, and to fulfil the required thermal, static and visual specifications.

G.P.: Why, exactly, ALUPROF solutions were considered the most appropriate for this type of building?

Z.P.: ALUPROF SA offers various aluminium systems that meet the needs of even the most demanding designers. Increasingly, and despite our wide range of products, new projects call for brand new, bespoke solutions. This is due to the necessity of satisfying a number of technical and aesthetic requirements, while optimising systemic costs.

G.P.: What part of ALUPROF's project portfolio, both domestically and internationally, is represented by such multifunctional facilities as the OVO Wrocław?

Is it a promising market?

Z.P.: ALUPROF SA systems were used to create many hotels in Poland and abroad, just to mention Hilton, Qubus or Puro. Hotel market is a very promising one, not only because of the current hotel buildings volume net, but also because of the exceptional architecture of these buildings, not to mention the expectations of designers with regard to technical parameters. Aluprof offers numerous office-dedicated solutions that can greatly enhance hotel interiors or office spaces. To note is also the whole range of fire protection solutions necessary in this kind of public investment.

G.P.: Speaking of exports – ALUPROF is dynamically expanding into foreign markets. What is the situation like today, and what are the further developments of ALUPROF's worldwide expansion?

Z.P.: We're consistently and systematically seeking expansion opportunities into foreign markets. Today, ALUPROF has 10 foreign companies. Western Europe is our major development — and it's not the only one. We have construction contracts in the U.S. Referrals from the American market are very important to us, they demonstrate the potential we have as a company. In the UK, we're involved in some prestigious projects: London's Scotland Yard headquarter or Microsoft headquarter in Dublin.

G.P.: Finally, I'd like to take the opportunity to ask you about a new product in your offer: MB 86-FOLD LINE system. Could you say a few words about it?

Z.P.: Our latest system for external folding door is a unique solution that allows for almost complete folding of the glass, whilst opening the interior space to the garden or terrace. This solution works perfectly well for both single-family houses and apartments with spacious terraces. MB-86 FOLD LINE can also be used in cafés or restaurants, which may want to increase their outdoor space (beer and wine garden, etc.)

G.P.: Thank you for your time.





Aluprof S.A. is the Europe's leading manufacturer of aluminium systems. The company has branches in many European countries, as well as in the U.S. With over 50 years of experience, 1,300+ regular customers, Aluprof S.A. delivers its products to 42 countries worldwide. Aluprof S.A. annual sales exceed EUR 200 M. Exports represent about 36% of total sales. The company employs more than 1,300 employees.







Teresa
Żołnerek

DIRECTOR



Innovations that shape standards

Michał Grocki: Custom materials and unconventional design requires highest professionalism in the execution.

Was it a difficulty for G-U Polska?

Teresa Żołnerek: There was essentially no difficulty, because the OVO project itself is a project very unconventional and the materials used there – perhaps besides the facade – are our standard. Our work was to deliver the system of lift-slide elements and the only thing that was extraordinary, was their

number – there were over three hundred such elements. The highest standard of performance was also significant in this project, due to the proximity of the street and that the rooms had to be comfortable in a certain way, providing the highest thermal and acoustic insulation. It was not a problem, because we use these solutions every day. What was interesting for us in this project? its size and how we had to deal with everything in terms of logistics.

M.G.: Can OVO or other building features in your products, be retrofitted in the future with further automatic and electronic solutions? Is it connected with fundamental change in all systems?

TZ: Retrofitting is absolutely possible. The only problem may be the power supply – because if we want to use electronics, we must have electricity. But it is possible.

M.G.: OVO has become an architectural showcase of the city and an icon of modern Wrocław. How do you treat the presence of your products in such a prestigious realization?

TZ: I am very happy. Firstly, because there are products which are the showcase of our company. A second reason – and it is quite prosaic – is that I was born in Wrocław and I feel very proud that our company has participated in the creation of such investment.

M.G.: When you heard, that you will have the chance to take part in the realization of OVO Wrocław, you felt some extra excitement? Perhaps these were the emotions associated with the company or maybe you took it personally – you thought that it will be something that no one in Poland have ever done before?

TZ: Hilton somehow delighted in G-U Polska, because for example, Hilton hotel built in Kraków is also equipped with elements of the G-U. These elements with G-U fittings are one of the oldest products of our company. And G-U was an inventor of this product. Twenty-five years ago in Germany, manufacturers had to take a special exam and receive a certificate confirming that they can use such elements. Not everyone could freely buy these elements, you had to have the confirmation of skills and knowledge. Surely, object of this class and scale raises some emotion. For me it would be more interesting if there were also applied some electronic solutions – a combination of mechanics with electronics. In OVO there is a pure mechanics of the highest standard, but no electronics. I think my emotions would be even greater if the OVO strove in the direction of so-called “intelligent building” – that is, if the elements were not only opened and closed with the help of electronics, but also controlled in an intelligent way.

M.G.: Unusual shape of the building and its design requires a lot of attention, accuracy and time to complete. How big challenge for you were the assumptions of architects and general contractor?

TZ: To meet these high requirements, it was necessary to use materials of the highest class. On OVO Wrocław there were held acoustic studies at different times of day, because the architect has specified the level of noise – these apartments have a high price and therefore they should meet certain conditions. The assumptions and requirements of architects on the acoustics were met, because there were supported by research. Comparable fittings manufactured by G+U Polska, can produce only two or three companies in the world. And it's like with cars: if we choose one or another brand, each car has four wheels, but each one runs differently.

M.G.: How was the mentioned executive aspect in OVO Wrocław implemented?

TZ: I think that the company Eiffage, which is the general

contractor, assumed that with the help of our fittings all of the architect assumptions will be met and he focused on whether the woodwork contractor done everything in a proper manner. Fittings differ from one another and may be placed in profiles of different thicknesses. We adjust fittings to the profile. Windows or sliding elements can be thinner or thicker. Thermal and sound insulation depends on whether the glass is 20 mm, for example, whether 30 mm or 40 mm. The task of fitting is to bear this weight – and our fittings are absolutely adapted to this. The bearing capacity of such elements is 400 kg. If we consider that a square meter of a glass flooring weighs between 30 and 40 kg, we can easily imagine how big are the parts that can be carried by our fittings.

M.G.: G-U Polska provided for OVO Wrocław more than 300 systems of lift-slide fittings. Can we say in this case that the amount is also a quality?

TZ: The quality of components delivered by us is absolutely perfect. We do it from 30 or 40 years. Last time I've seen more than thirty years old elements of this kind – they are functioning flawlessly, as if they were built yesterday. So we can actually give a guarantee that it is absolutely perfect system. In addition, they used thermal threshold, which ensures that the thermal insulation is also excellent. Nobody inside will ever feel that it's cold outside.

M.G.: Was the involvement of G-U Polska limited only to providing the fittings and solutions?

TZ: Surely our role was not limited only to the provision of fittings, building elements such as lift-slide systems is not something that's done by companies every day and you can make many mistakes. Therefore, our representatives were present at the site, assisted the manufacturer with advice and action. Our presence at the construction site in Wrocław was also very important – where the acoustic tests took place and we could advise the constructor what insulation materials should be used. Installing the element is one thing and the other – that it must be mounted with steam-tight and vapour-permeable tapes, so that neither noise nor heat can get through.

M.G.: Were these tapes also provided by your company? It is all your product, including the fittings?

TZ: There are many comparable systems on the market, but of course we recommend our products, because they are examined, certified by a research institute in Germany and Austria. As a result, we know what quality we offer. We cannot speak about other products, because they are not always confirmed by the tests.

M.G.: We know that even the best product that is poorly installed, will not fulfill its functions. Is the right installation a key to the functionality of your products?

TZ: Indeed, the corresponding installation is necessary. Even the best product poorly installed will not function as it should. And here you need to consider how heavy are these elements. As I already mentioned, it is 400 kg, so all elements must be properly supported – otherwise they will not work. Therefore installation as such, is very important. If the product is unsuitable, the installation will fix it, but if the installation is performed badly, it can break even the best product.



M.G.: G-U Polska is present not only in the objects like OVO. Where else is your presence most noticeable?

TZ: Definitely the biggest and highest objects are beyond the Polish borders. I must say that the G-U is a group of companies and the number of products we offer are more than 50,000. This means that we not only provide fittings, such as for OVO, but also all kinds of locks: the door, multipoint, "let-in" locks, panic locks for escape routes – by the way, in the technical doorway at OVO, there are also used this type of fittings. It is known that in public buildings must be an escape route and this is also our specialty. We also offer our clients closing elements, locking cylinders or elements automatically opened. The G-U company has to offer virtually everything that moves, opens and closes the holes in the facades, which is very important in terms of safety and functionality of the building.

M.G.: Please tell me, on the example of OVO Wrocław and others, on what kind of support from the G-U Polska can count the investor?

TZ: Here we can talk about two aspects. One aspect is advisory – that will allow the investor to use the right product. For example – the door, regardless of what type there are: for the apartment, a detached house, for the escape route, technical doors or doors in the facility under the protection which must be signaling – we can find the right product and match it to this object. For example, oils factory in Kruszwica – there can be absolutely no electronics, and at the same time everything has to be safe and there are special requirements that must be met. The second aspect of the support of investor is the performance and the entire logistics chain, that is to provide the right product – on time, in the right quantity and at the right price.

M.G.: How do you evaluate the potential of the Polish market due to the ongoing projects and urban development? What will be the nearest future from G-U Polska point of view?

TZ: Polish reality in the joinery industry is divided – into what is going on with us, and what is exported. At the moment Poland has become the largest window manufacturer in Europe. I think it will continue, because our producers are very ambitious – they built huge capacities and are striving for higher quality. We are in Poland for over twenty years. While in the early years the priority was mainly the lowest price and there was a mediocrity, now the level increased and more ambitious projects are made. Objects such as OVO will certainly be created in Poland, but also Polish companies will built such projects outside the country.

M.G.: In 1907 Viktor Gretsch started the production of window profiles and small fittings. How does the company, which in next year will celebrate the 110 years of existence, presents currently?

TZ: He didn't start production of window profiles, it is a certain misrepresentation. It was a consortium, Viktor Gretsch and Johan Maus – these gentlemen produced windows locks and fittings for horizontal pivot casement. Viktor Gretsch died childless, but the company is still in the hands of the family – you can say that this is a family business. There is no hole in the facades, which could not handle with our elements. The company, which was established in Stuttgart,

at the moment is a corporation consisting of several production plants in Germany and France and sales companies all around the world. Polish company is just such a sale branch – we run here the magazine, we provide consultations and sale, while production takes place in France and Germany. We are a very large recipient, we can say that one of the biggest and in full spectrum.

Gretsch-Unitas Group is one of the world's leading suppliers of windows, doors, automatic entrance systems and buildings management systems. For many years, the Group is formed by significant brands such as BKS (locking technology), FERCO (hardware fittings) and GU Automatic (automatic entrance systems).



This means that we do not specialize only in window and door fittings, but we develop the Polish market in terms of everything that the company has to offer.

M.G.: Thank you very much for the interview and wish you success in the future.



Advantage of the system

In 1958 Gretsch-Unitas has developed and introduced first Lift&Slide system on the market. This innovation has shaped demands of customers, and to this day has a significant impact on the applicable standards in terms of profile geometry, function and quality.

As the market-leading innovator of the Lift&Slide opening method, GU boasts an unrivalled range of Lift&Slide hardware offering excellent operating comfort, reliable burglary protection, variable room ventilation, and ease of assembly. The hardware is suitable for timber, PVC and aluminum windows and balcony doors. We also offer an exceptional night ventilation solution, matching thresholds and an optional sash speed limiter.

OVO Wrocław is an unconventional project that requires highest professionalism in the execution. A similar high-end facilities seem to convince that best standards cannot rely on the costs. They should place on first place products and solutions with best quality

How on OVO Wrocław, Lift&Slide system installation look like?

1. The construction was put on insulating support of hardened polystyrene. Thanks to the properties of the insulation (thermal conductivity = 0.035 W / (MxK)) it minimizes energy losses and prevents condensation. Specially shaped G-U Thermostep thresholds makes installation easier.
2. In addition, inside threshold has been plugged, available EPDM coat, dedicated to GU Thermostep threshold. It is a necessary element to prevent penetration of water under threshold. Part of threshold frame is extremely exposed to the penetration of water especially if on the outside there is a terrace, paving stones, etc. EPDM may also be used, with the ability to stick it under the threshold or with an adhesive butyl tape, available in many widths and inwardly version. Other dedicated specially to the Lift&Slide constructions are corners with butyl tape - dimensions: 400 mm x 200 mm (length x width). This is a very good solution for the faced wall installations.
3. To seal remaining elements of woodwork at OVO Wrocław, from the outside has been applied mineral wool insulation and vapor permeable GU tape with a width of 200 mm
4. From the inside was applied vapor barrier tape with a width of 75 mm



Seal assembly set

All mounting materials are available in our online shop at www.mongutage.pl

More than a lighting!

Philips Lighting is the world leader in lighting products, systems and services. Our understanding of the positive impact of lighting on people combined with advanced technical expertise enables us to deliver innovative digital solutions that open new business opportunities, enrich the user experience and help to improve life quality.

Nowadays in professional lighting you need something more than products only. Therefore, in response to the rapidly changing trends, Philips offers an integrated lighting systems and services. Our lighting systems combine world-class traditional and LED luminaires with analog and digital controls that let you to deliver exactly the right illumination experiences, whenever and wherever you need them.

As leaders of the technological LED revolution, we create lighting systems which prioritize energy efficiency, sustainability and the reduction of operating costs. Philips systems deliver value beyond illumination. They improve the livability and effectiveness of indoor and outdoor environments, providing everything from functional general illumination to spectacular color-changing experiences that enhance your brand, encourage social interactions, and revitalize communities.

Integrated lighting systems, light fixtures and other appliances are connected to IT networks in order to enable collection,

distribution and storage of large amounts of data. This advantage provides important added value for our clients and enables them to provide better service to their customers.

In our offer clients can find intelligent lighting systems that can be applied in every market segment, starting from the Intelligent Room systems dedicated to hotels, Indoor Positioning for large stores, Connected Office for offices, CityTouch for cities ending with Hue for household use.

Beside luminaires and control systems, each lighting system also includes a broadly defined service, beginning with audit of the existing infrastructure, lighting consultancy, project preparation, through project management and financial services, ending with the installation and maintenance of system in operation.

Philips Lighting employs globally in more than 70 countries, about 36 000 people. 8% of sales is invested in R & D.

Philips in Poland represents 90 years of tradition and experience. The company employs approx. 5000 employees and has production facilities in Pila, Kętrzyn and Bielsko-Biala. Philips Lighting is the ninth largest Polish exporter.



Philips Lighting – partner and consultant in lighting systems

Michał Grocki: Jewels are the most beautiful when sparkling in the light. Illumination of OVO Wrocław looks great. What were the basic requirements which you had to overcome?

Jan Sewerynik: Each investment is approached individually. In the project OVO Wrocław objectives were clearly defined by investor and designer, as well as the final effect they would like to achieve on the facade. However, Philips Lighting was not only a supplier of lighting systems and services, but also the lighting consultant and had to create a solution that will guarantee the desired effect, which was the uniformly illuminated surface without visible fixture. It required not only selection of the appropriate LED solution, but also our coordination with other suppliers of construction elements. Additionally, our solution has to comply with strict requirements of Hilton. Of course, the aspects related to energy efficiency, durability, ease of use, functionality and quality of light were also the main topics of conversations.

M.G.: What were the assumptions adopted when creating the concept of illumination?

J.S.: Each project starts by identifying the needs of the investor and future hotel guests. The aim is to prepare such illumination that will not only emphasize the beauty of the building, but will also help to attract visitors and draw them to return again. Final result is increase in revenue for the hotel. Given the location of the object – in the center of the city, by one of the main streets of Wrocław, near the old town and in the vicinity of the oldest Wrocław post office, outdoor lighting design of the building required a special approach. Lighting solution had to be chosen in a way that we could achieve the desired effect, and also that

the light does not disturb the tranquility of the sidewalk, the street or a hotel room. This required of course, a number of consultations with the city.

M.G.: Why it was decided to use LED lighting technology in the illumination of OVO Wrocław facade?

J.S.: Due to the technical requirements and design assumptions, as well as the main features of LED technology, which are incredible design flexibility, easy adaptation to the current needs, technical requirements and desired end effects. LED luminaires can be individually addressed, which allows creating specific scenes, including changing the intensity of light or the introduction of dynamic lighting, which will attract potential visitors to the hotel. Another very important reason to use LED technology was also the opportunity to test various color temperatures and color selection that will perfectly match Corian facade.

M.G.: What are the other advantages of LED technology in lighting similar properties?

J.S.: Philips Lighting is a pioneer in this field and the leader of innovation. Nowadays we have more than 400 patents covering LED technology. The main advantages of LED technology are energy efficiency, durability, flexibility in creating custom solutions, low cost of ownership and the ability to create dynamic scenes. LED lights are also environmentally friendly – low carbon, no mercury, no UV and IR radiation. Sustainable solutions are saving money due to low energy consumption, long lifetime and less maintenance. At the same time such solutions provide safety

The company is primarily people, and we have firstclass experts in the field who listen and understand customer needs and shape solutions around them.

and comfort of guests whose stay is not interrupted for lighting maintenance. A very important aspect is quality of individual diodes. The market is filled with LED products of various origin. Philips LEDs are tested by high standards of quality and for the production of our luminaires we choose only the best, so that we can be sure that they will serve customers for many years.

M.G.: It is believed that a well-executed, professional lighting should be the result of cooperation between experts from three disciplines – architecture, lighting technology and electrical installations. How does this collaboration look at the implementation of the OVO?

J.S.: I absolutely agree with this statement. Only teamwork and cooperation with experts can lead to completion of the project and achieving the desired effects. That's why Philips so much relies on cooperation with the whole ecosystem involved in the project. We are one of the few companies in the market with experts in various fields on our team, who have extensive experience in working with design offices, architects and installers. The most important thing is to start the project at the early stage and actively cooperate with the entire ecosystem, in order to share



Jan
Sewerynik

BUSINESS LEADER
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knowledge and experience. Such approach eliminates many risks which can occur in the future.

M.G.: Lit were not only the futuristic facade of OVO Wrocław, but also its multi-functional interior. Whether this multifunctional object and its versatility have been a challenge for you?

J.S.: OVO Wrocław building consists of a hotel, apartments, office area and a small part of the trade space. Philips Lighting has extensive experience in each of these areas, so leading this type of complex projects is natural for us. We are proud when we can be an innovator in the market and use our best skills. In addition to our local team of experts, we have the opportunity to engage also our global team, which share with us the knowledge gained in international projects. With such resources, we are confident that we can meet any challenge.

M.G.: Why Philips Lighting was selected to cooperate on this project as a company specialized in lighting technology? What determines the quality of your systems?

J.S.: Philips Lighting is the largest lighting company in the world, with extensive experience gained over several decades in the implementation of large and complex investments. With such complicated projects it is very important for the investor, that on the other side there is a flexible, stable company, which is listening and understanding the needs of the client. Investors decide to cooperate with the Philips due to the international scale, security, quality assurance and certainty that in a few years the company will not

disappear from the market. Another advantage of our company is the completeness of our offer. Our portfolio is focused on lighting solutions – indoor and outdoor, control systems, decorative products and also products tailored according to the developer or architect. The company is primarily people, and we have first-class experts in the field who listen and understand customer needs and shape solutions around them. For large projects we always appoint a team of professionals, who together with the entire ecosystem work for the success of the project.

M.G.: OVO Wrocław is an exclusive facility. Can we also talk about the exclusive dimension of light? And if so, how would you characterize it?

J.S.: of course, the light plays a key role. It gives a character to the interior. From the beginning, the investor put great emphasis on this aspect and gave importance to the smallest detail. For this reason we have created tailored solutions, produced in accordance with customer expectations. On the ground floor, featuring the lobby, reception and conference rooms, the main lighting system creates organic forms integrated with the ceiling, in the shape of volcanoes. Thanks to the LED technology and Dynalite control system, investor has the ability to create dynamic scenes. Hotel corridors are also dominated by unusual lighting solutions and the decorative fixtures in the rooms were tailored to the expectations of the investor and the operator (shape, color, finish, etc.). It is important that the FOH part (Front of the House) of property, is dominated by warm light colors. It gives the visitor a sense of warmth, security and home



atmosphere, because, as we know, for many of us the hotel is often a second home.

M.G.: Which specific systems of Philips Lighting were used, and in which OVO areas were they applied? How does those solutions define the space of this building?

J.S.: As I mentioned, at the OVO, the Philips Dynalite lighting control system has been used almost throughout the building. The main areas – lobby, reception, meeting rooms, ballrooms, restaurant and corridors are plugged into the system. This gives you the opportunity to really control the whole building from one

place at the hotel, and even through the web application while being outside the hotel. In addition, the system gives an investor the unlimited possibilities of creating any scenes and adjusting rooms to current needs (e.g. conferences, weddings, etc.). The entire lighting control system is integrated with a BMS (Building Management System).

M.G.: Philips solutions are synonym for energy efficiency. What savings will they generate during its operation in OVO?

J.S.: Lighting solutions implemented in the OVO Wrocław are based primarily on LED technology. Due to energy-saving



luminaires and additionally installed Philips Dynalite lighting control system, the whole building will have low power consumption and insignificant operating costs. The use of LED technology with lighting control system can generate savings of 75-80%.

M.G.: On OVO Wrocław example and others, please tell me on what support from the Philips Lighting can the investor count?

J.S.: Philips approach is shaped 100% around our customer. We focus on the customer and his needs. The client, deciding to work with Philips on the project investment, can count on our full support. What does it mean? As part of the project we cooperate with the entire ecosystem of the investment.

I refer to the investor, office design, architects, general contractor, electric company, etc. We are actively involved in the whole process of the project. From the beginning, we cooperate closely with architects and interior designers, together working out the concept of lighting and control systems inside and outside the building, in line with the expectations of investors and the requirements of a hotel chain. We actively participate in meetings with investors and regular construction meetings, often proposing concrete solutions and improvements, thus acting as a lighting consultant. We prepare guidelines for design and lighting control system, including calculations of light intensity in accordance with Polish standards and requirements of the network. To realize successful cooperation, each project is supervised by Philips specialists from different departments, including sales, design department, project management department, logistics. This professional approach allows control of every stage of the project and minimize the risk of any delays. Philips gives great importance to environmental issues. Therefore, in our team we also have specialists from BREEM and LEED certification who, thanks to their experience and knowledge, are able to offer such a solution, which will make a possibility for the investor to get the maximum number of credits. Very often, we also offer assembly, installation and commissioning, as well as carry out audits of lighting in existing facilities. We provide financial services and advanced warranty services. Preparation of standard rooms or testing of illumination is our standard service, which we provide in our projects. Thanks to these services the customer can see the final effect live, not just in visualization.

M.G.: Philips Lighting is present not only in the objects like OVO. Actually, there is no area that is not lit by Philips solutions. But where is the company presence most noticeable?

J.S.: Philips Lighting is a leader in lighting solutions and control systems tailored to specific needs. We are therefore present in all market segments – Hospitality, Retail, Office, Industry and Public. In addition, Philips provides outdoor lighting of buildings, roads and sports facilities, embellishing and giving the individual character of public space in hotels, shops and shopping centers, offices, industries. For each of the market segments mentioned above we develop dedicated systems, for example: Indoor Positioning, City Touch and Connected Office.

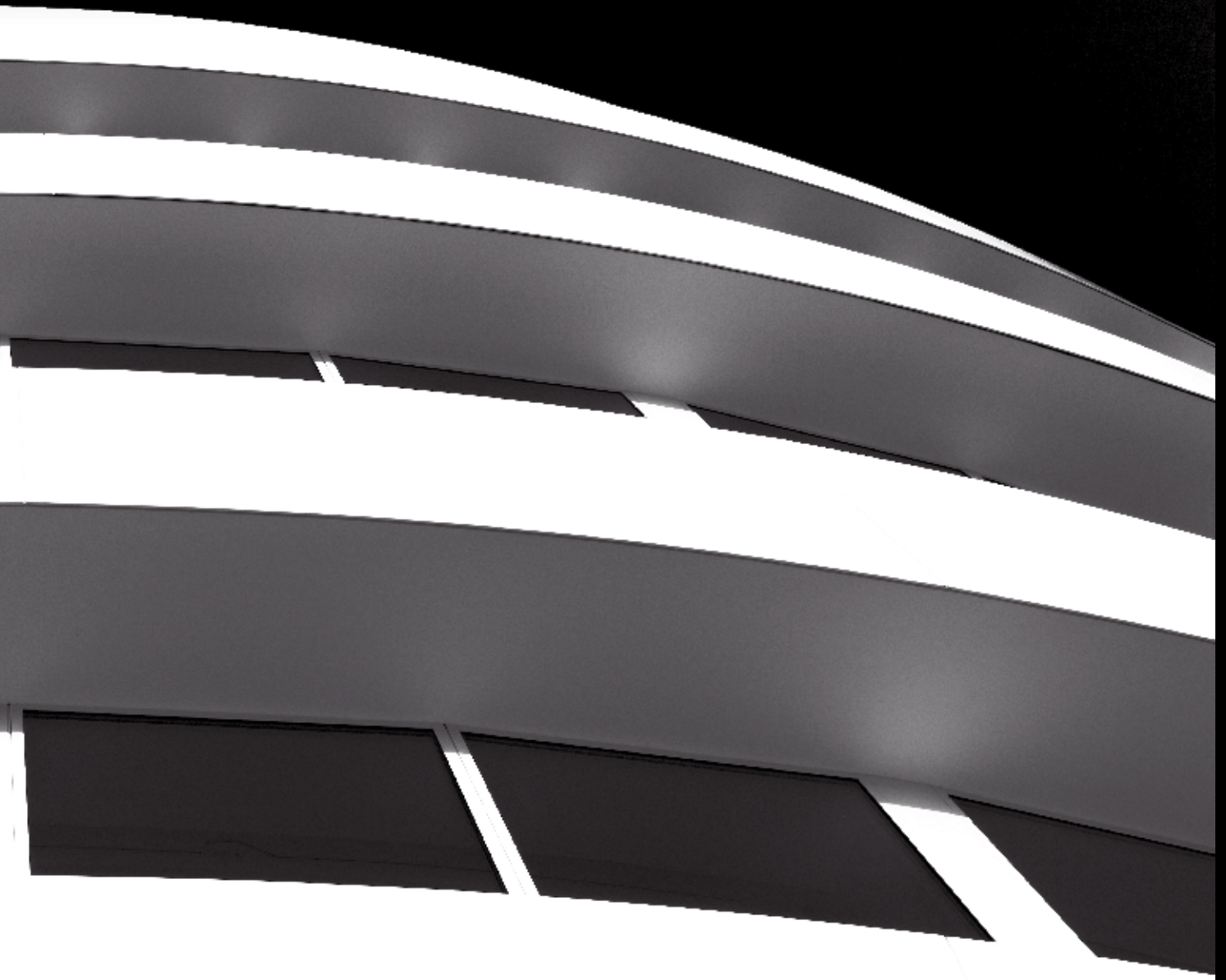
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People with passion



Robert Leńko

CEO
KOWARY AXPRO CARPETS SP. Z O.O.

Adriana Łączyńska: Kowary Axpro Carpets is the oldest in Poland and one of the world's oldest manufacturers of branded carpets and rugs. This brand is a symbol of the European history of weaving. How is the realization of OVO Wrocław influenced by this historical tradition of Kowary?

Robert Leńko: Weaving is not only industry, but also field of art. Hilton OVO is an architectural masterpiece in the capital of Lower Silesia, as well as the region where one of our manufacturing facilities is located. A challenging and demanding concept of OVO gave us a chance to demonstrate not only the craftsmanship of our weavers, but also creative passion of our designers, mostly artists and graduates of academies of fine arts.

A.Ł.: OVO Wrocław seems to be one of many prestigious realizations of Kowary AxPro Carpets in the reference list. Where else can we see your products?

R.L.: You can find our products mainly in hotels like Hilton, Marriott or luxury cruise ships. We have also some prestigious realizations in the headquarters of the Polish government offices like Sejm, presidential



palace or Ministry offices. I would like to invite art lovers to visit a very famous castle like Branitz Castle in Germany. We have been supplying this historical facility for over 140 years. You can also see our carpets in museums, such as Victoria & Albert Museum in London.

A.Ł.: In OVO Wrocław DoubleTree by Hilton hotel after fitting the carpet there were still ongoing construction works. What made it possible to apply such unusual solution?

R.L.: Manufacturers and suppliers who specialize in logistics of investment must take under consideration the possibility of some changes in the construction schedule. Special responsibility lies on carpet suppliers, because this is one of the last products of furnishings in the building. The secret of success is good organization, flexibility and experience in construction site conditions.

A.Ł.: For decades Kowary AxPro Carpets have been building its position in the market. Thanks to this you are ranked among the leading manufacturers of carpets and rugs in Europe. What mainly led to such a strong position of the company?



R.L.: Everything we have achieved is thanks to our professional team. We find in our work great pleasure. Moreover we feel lucky to sell our products not only to good investments, but also beauty and ecology. Most of raw materials in our products are wool, jute and cotton. Nevertheless, the greatest advantage of our offer is design and quality, not the price.

A.L.: Nowadays in order to produce the best product you cannot only use best materials. You also need a very important factor like passion and commitment of the team. What is their role in the process of manufacturing?

R.L.: In the weaving industry so-called "human factor" is crucial. Training process of a good weaver takes years, and please consider that nowadays there are no active schools of weaving. Experience is passed on from a father to a son. No spectrophotometer is as accurate as the eye of a colourist or dyer. Even the most modern machinery and equipment cannot replace a human. Isn't it exciting in this increasingly automated and dehumanized world?

A.L.: Definitely. Thank you for the conversation.

AXPROCARPETS



Kowary AxPro Carpets – A Polish manufacturer and the icon of the European textile industry with traditions dating back to XIX century. Environmental floor coverings and carpets under the brand of Kowary AxPro Carpets adorn most prestigious interiors of Belvedere Palace, Hilton hotels, Hapag Lloyd passenger ships and Aida cruises, and many others

Natural beauty under your feet

Kowary AxPro Carpets credo is a comprehensive implementation of individual projects, ranging from design stage of carpets and rugs, through their production, assembly, usage and maintenance. Floor coverings' offer have recently been expanded to fabrics for the hospitality sector.

One of the projects, where we had special pleasure to put those concepts into effect, was the OVO Wroclaw project with Double Tree by Hilton hotel.

The design of OVO Wroclaw was inspired by the blobitecture architectural style and urbanistic spatial concept of the city of Wroclaw.

Our inspirations were developed in close collaboration with the architects (Gottesman-Szmelcman Architecture) and the investor (Wings Properties Sp. o.o.).

The optimum solution for every project is when the investor and the architects from the very beginning are engaged in the selection of all of supplied products which influence the essential elements of the building's interior. This is very important because the choice and technical specification of the products' structure impacts the investment's final costs. This factor always refers to carpets.

The blob concept is a fanciful, spatial form of architectural work. It is characterized by nature-inspired abstract shapes. This resulted in the use of round, liquid-like and soft forms in the carpet designs.

Round, smooth and soft shapes in the carpet designs were not accidental. We were inspired by OVO Wroclaw architectural concept. Blobitectural style can also be found on our product.

The selected motif on the corridor carpets is animated by a slowly flowing river, which corresponds to the shape of the building, as well as the Odra River flowing through the center of Wroclaw.

The modern colour palette is based on the tonal range of stippled grays broken by the colours of grenade, sky and water. A particular challenge for Kowary AxPro Carpets was to incorporate the limitless design with the irregular shape of the corridors. We also have to take under consideration the technological width of woven carpets which has to fit the above mentioned corridors' shape irregularity. This was correlated with achieving the least possible installation waste in order to minimize the cost of the investor.

Most attention was paid to the hotel room design, where the carpet should assure friendly atmosphere for guests. Carpet design inspiration was a linear outline of the architectural style of OVO Wroclaw.

As a result the carpet design consists of gently interwoven ribbons. The final, approved room design was preceded by numerous designs and proposals of mock up rooms provided by Kowary AxPro Carpets. This procedure allowed the investor to select the most interesting room interior. Unifying the colour scheme for rooms and corridors made coherent effect of the entire concept.

Public areas such as a ballroom, should be the heart of every reputable object. The design of such spaces should remain in the memory of guests for a long time. Designers of Kowary AxPro Carpets created a drawing in the size of 24 m x 11 m without a repeating element. The pattern comprises whirls, each of at least 3 m in diameter, which are perfectly coordinated with the lights situated above.

Each carpet surface was drawn by Kowary AxPro Carpets in a very vivid way, with soft tonal gradations between colours. This leaves the impression of the carpet design being painted with a brush.

Not without any significance was the ability to use the Axminster technology in the carpet production. It gives us almost unlimited design possibilities. Kowary AxPro Carpets is one of the world's leading manufacturers in this technology.

In addition to the of hotel's surfaces Kowary AxPro Carpets delivered other floor covering products to the hotel management rooms such as carpet tiles, installed on raised floors.

The selection of those products was significantly influenced by the product technical characteristics that are not available in other manufacturers' offers. We are talking about the dimensional stability (0.1 mm) and ecology (up to 70% of raw materials used in the production of tiles came from recycled materials, and the reduction of CO2 emission is approx. 40% lower than in other traditional manufacturing processes).

Nowadays, meeting highest environmental standards is not only the sign of environmental awareness but also a tangible benefit for investors.

It is worth mentioning that the fitters from Kowary AxPro Carpets finished the installation before confirmed deadline, and the work was done without any interruptions. Cooperation between the Kowary AxPro Carpets' team and the general contractor (Eiffage) was exemplary.

Kowary AxPro Carpets employees feel very fortunate, being able to combine business with the joy of creating in such unique places as the project of OVO Wroclaw.



Well-thought-out development strategy

FAST SA is a stable and experienced organisation, which has been present on the furniture market for over 25 years. The company from Tricity started its business at a difficult but promising time of transformation. Its origins reach back to shipbuilding industry and it started with equipping ships. At the beginning of the nineties furniture by FAST initially went to hotels overseas – in Germany and Switzerland, where the company had already established strong business relations. At the moment it thrives on overseas markets as well as in Poland.

Within interior equipment experience allowed FAST to become a specialist in equipping the most demanding hotels, ships and public access facilities. When you analyze the systematic company development you cannot resist an impression that the success of its projects has been fundamentally developed and the strategy – well-planned methodologically. The FAST development curve does not feature coincidences and reckless projects, moreover, it clearly shows that from the very beginning the business was conducted and developed in a specific direction. The company sensibly diversifies revenue resources and spreads the burden on three basic business pillars. Such approach allows the company to become independent from the pressure of competition's actions and minimise the risk of tremors at poorer economic situations. FAST seems to be doing their "homework" on a regular basis in terms of market and own potential analysis, because its development is consistent, which is very clearly displayed through sales, employment reports and expert ratings. Suggestive financial charts resemble steps of stairs. Currently, the number of partners is at the level of about 600 and in 2015, for the first time, FAST was on the list of top 2000 biggest Polish entrepreneurs in the "Rzeczpospolita" rating. Recently FAST has been awarded in another edition of Forbes Diamonds, rating of companies increasing their value at the fastest rate.

Effective management of such a large, multi-level team requires a sense of crew responsibility and specific competences of the management staff. And here lies one of the FAST success secrets



– organisation of work. Staff with excellent training, trust for the crew and very efficient project management system allow to undertake even the most demanding and technologically complicated projects. Naturally, this involves continuous investments in development with respect to technological standards and managerial competences. FAST maintains and continuously develops the certified Integrated Management System (IMS) with the key element being the Project Management Process as well as for quality, environment and safety. IMS meets the ISO 9001, ISO 14001, PN-EN-18001 standards as well as AQAP 2110-2009 quality assurances publication. The company operates in compliance with the IPMA standards (International Project Management Association) – the certification system of this prestigious organisation is a globally respected competence tool within project management.

Management is a manner of effective communication – customers are happy with their cooperation with FAST also due to a specific manner of communication, which allows them to have regular updates at every stage of project implementation. Therefore, they feel they are safe and they are aware that they have everything under control. A huge advantage of this seaside company is also their own furniture factory with modern, regularly updated machinery and very efficient purchase and logistics system. Due to all those features, FAST is a comprehensive contractor running turn-key projects from scratch, frequently with several parallel projects. The portfolio includes prestigious, cosy SPAs as well as enormous hotel and conference centres. FAST successfully equips smart offices and chain sales salons for leading corporations. With respect to technology, space and quality there are no limits, which is visible in the facilities equipped. We can boldly state that FAST fulfils customers' fantasies. Furniture industry in Poland is highly developed which involves significant competition. Of course, this is incredibly motivating. Regardless of market restrictions and vast competition FAST pleads to its professionalism, perfect work organisation and meticulous finishing. The company is invited for increasingly demanding domestic and overseas projects and all points to the fact that we is about to gain more excellent credentials.



Highest standards

FAST has provided professional services and delivered specialist projects within surface protection, insulation and interior & furniture for over a quarter of a century. We offer our Customers high quality solutions within technology and production, support and advisory at every stage of implementation. Numerous investments with FAST's participation include also OVO Wrocław. Head for Sales Development, Andrzej Haak talks about the scope of completed works, experience in similar investments and about cooperation with other partners.



Andrzej Haak

DIRECTOR OF SALES
AND BUSINESS DEVELOPMENT
FAST S.A.

Dorota Rdest: OVO is a large investment. What works were carried out by your company?

Andrzej Haak: FAST provided complete furnishing of hotel rooms and communal areas at the DoubleTree by Hilton hotel and the entire office and apartment area at OVO. It is true that the investment is impressive, however, our company has already carried out projects even twice the size. OVO's distinguishing feature certainly is the fact that it is an unusually attractive construction in an elegant area of Wrocław, therefore is mediagenic and broadly recognised. It will definitely constitute an important and spectacular position in our portfolio.

D.R.: It is not the first project of such significance FAST was involved in. Could you please tell us about similar developments and output capacity?

A.H.: As I have mentioned, we are experienced in implementation of much larger projects in this standard, even up to 400 rooms.

One of the recent projects was a hotel and conference centre DoubleTree by Hilton Kraków Hotel & Convention Centre. DTbH Kraków is a part of the first Polish double brand construction of the Hilton chain. The second part of the complex – Hampton by Hilton – has also been equipped by FAST.

Our company is perfectly ready for such projects with over 25 years of experience within that area. We have equipped the best hotels all over the world, recently Marriott in Amsterdam, Hilton in Moscow or Art'Otel in Berlin. We always carefully listen to the expectations to have the best understanding of the concept and the needs – then we are able to implement a project to our Customer's full satisfaction. We are extremely careful with the requirements of the investment, deadlines and the budget assumed. Throughout the entire process we rely on a team of qualified experts, who support the Customer at every stage of the project. Our portfolio presents unusual projects which require comprehensive approach and particular precision, with the application of state-of-the art technologies and expertise. We emphasize efficient communication, our Customers are well aware of what they may expect at every stage of our works. Our production and organisation efficiency allows us to implement every project – we are neither limited by quality, nor space, nor technology – we can manage with any challenge. My words are uttered with the certainty of a person who has successfully managed many of such projects.

D.R.: All of those projects feature a specific management system. What is so typical about it?

A.H.: I am certain that the main strength allowing us to complete such projects successfully is our experience. Nevertheless, theoretical knowledge acquired during many hours of training allows us to manage the experience with higher effectiveness. We have implemented and are developing a very efficient project management system based on the IPMA methodology (International Project Management Association). Our managers went through certification process successfully and manage commissioned projects effectively. We put enormous trust in our entire team – their competences as well as ethical standards they represent. The projects conducted are prepared in detail which results in excellent references from our Customers.

D.R.: Let us return to the subject of OVO Wrocław. Work on this investment involved cooperation with other partners. What was it like?

A.H.: Due to its versatile character the methodology I have mentioned allows communication among professionals. I must say that we have had the opportunity to work with such companies. The investor as well as the general contractor are companies with thorough preparation to implement such projects. I hope that their perception of FAST is the mutual.

Over 25 years of experience has allowed FAST to become a specialist in equipping the most demanding hotel, ship and public utility facilities. They are full of elegance, uniqueness and perfect finishing. The solutions FAST experts undertake may even be the most technologically advanced and complex.



With Flügger painting is simple



Matgorzata
Undziłło
COUNTRY SALES MANAGER

Flügger farby

Flügger – Scandinavian manufacturer of paint, wallpaper and professional painting tools. Over 200 years of experience in the industry, products with highest quality and professional service in more than 600 stores across Europe – these hallmarks distinguish Flügger from the competition.

Adriana Łączyńska: One of the maxims of Flügger is “Painting can be simple.” was on OVO Wrocław easy as well?

Matgorzata Undziłło : OVO Wrocław is a unique investment in nationwide scale – futuristic architecture inspired by a drop of water, intelligent building management systems, inspiring interior design. With Flügger the painting is simple, because we are able to respond to many investors expectations for wall finishes. Moreover it is also important that our products are easy to use and the application time is short. That is why contractors choose products of Flügger brand. Going back to your question i can happily say that mentioned maxim has gearing on OVO Wrocław – with Flügger paint becomes easy.

A.Ł.: OVO Wrocław is extremely challenging investment. What properties of Flügger products can help to meet all requirements for this and other implementations?

M.U.: For investment in Wrocław we choose solutions which are customized for utility rooms requirements. Flügger has a comprehensive offer to the interior finishing with highest aesthetic and quality demands. This concerns areas which are very much used or humid, living rooms and offices. Contractor is feeling comfortable when he knows what products have to be applied. Selection of our paints



was obvious of the contractor. We also deliver great support of our technical adviser which was present during construction works. Other advantage was also nearby located Flügger paint shop.

A.Ł.: Flügger for more than 15 years operates on Polish market. How the current position of Flügger on Polish and Nordic markets looks like?

M.U.: Flügger roots are dated to eighteenth century, that's why tradition and experience of the company are much longer than its presence on Polish market. Flügger is synonymous of high quality products and best customer service through its own distribution network – Flügger paint shops. We focus on comprehensive, professional and friendly service in our stores. Here everyone can count on an individual approach and appropriate advice in the selection of products for surface finishing, decorative paints for interiors and facades, wall coverings, wood preservatives, tools, etc.

A.Ł.: What trends – if we are talking about paints – we have to deal recently?

M.U.: Some time ago we used to buy paint which would provide us interesting color on our wall only. Currently, clients requirements for

this type of product are much higher. We want to have paint which can be easily applied and resistant to abrasion. Moreover, expectations also concern structure that we receive on our wall after application. Our customers also look for products for allergy sufferers. They have to meet highest environmental requirements. Flügger meet these expectations as well.

A.Ł.: Scandinavia is considered a pioneer in thinking about environmental protection. Such way of thinking is also represented by Flügger. Its proven by a Ecolabel sign or the European Union. Why for company producing paints ecological factor is so important?

M.U.: Taking care about nature and our roots is fundamental for philosophy that we follow every day. Our products carry the Ecolabel sign which is awarded to products with have minimal impact on the environment at every stage. We are talking about production, storage, application and usage. For us, taking care about our nature is obvious.

A.Ł.: Thank you for the interview.



Flügger supports professionals

FLÜGGER FARBY

Flügger is a leading Danish producer of decorative paints and wallpapers having more than 200 years of experience. For several decades, Flügger has also provided a wide range of products for surface finishing and professional painting tools. High quality products, Scandinavian design and comprehensive, professional and friendly customer service – these are the features which distinguish the company from its competitors. Flügger products are sold in their own network of 600 shops, 60 of which are located in Poland under the brand Flügger farby. An extensive sales network enables the company to nurture the goodwill of their customers and guarantees direct, closer contact with them, this enables the company to dynamically respond to customer needs and market changes. Flügger has 6 modern factories where paints, wallpapers, and tools are produced. One of the factories is located in Gdańsk, Poland.

which is recognised and much appreciated on the market for its deep anti-reflective matte, which allows the customer to mask the imperfections of the base. When it comes to wall paints, customers are particularly fond of three products. Flutex 5 guarantees a fashionable matte effect. For lovers of elegant satin, Flutex 7S is the perfect choice. Dekso 5 provides a solution for the most demanding users who need a stain-resistant and easy to clean paint. The tinting system is available for most paints, this means that they can be produced in any colour and in any quantity. The only limit is the imagination of the customer.

The Scandinavian design, characteristic of the brand, is both elegant and minimalistic, it is clearly inspired by nature and has a tastefully subdued colour palette. Calmness does not mean monotony and tedium. The idea that guides Flügger is to show that it is possible to play with the Scandinavian style and interpret it in different ways. The company constantly surprises everyone with new ideas. This is the starting point for

innovative creation that results in, among other products, designer wallpapers and paints of every possible colour.

Flügger is the only paint manufacturer that also produces wallpaper. For years they have been valued by both designers and interior architects as surface finishes, this is due to their decorative qualities and high quality of production. These wallpapers are available under the Fiona Walldesign brand. They are made of 2 layers of durable paper using environmentally friendly materials. Thanks to their non-woven materials they produce a smooth surface. The technology used, makes Fiona products extremely easy to hang, without the drawbacks of wallpaper contraction or creasing, so the result obtained is perfect.

Caring for nature and one's own identity constitute the basis of the philosophy which Flügger follows each day. Flügger products are Ecolabel certified, only products which have a minimum impact on the environment

at every stage: production, storage, application and use, receive this award. Thanks to all of this, Flügger products are also recommended to allergy sufferers.

Products sold in Flügger farby stores are more than just products. Customers are offered the opportunity to consult the company at every stage of their investment. Customers can also count on a personal approach and professional advice from specialists. Therefore Flügger farby stores are the natural choice for their customers, regardless of their profession, be they artists, architects, designers, or individual clients.



The company has a complete range of products for interior finishing that meet the highest aesthetic and quality standards that are synonymous with the Flügger company. The assortment includes paints which are both resistant to scrubbing and produce a pleasing finish, there are also paints that create the perception of a smooth surface. Products can be matched with both heavily used or moist surfaces, and to living rooms or offices. It is worth highlighting a few of the products from the brand assortment which are most highly trusted by customers. The bestselling brand is a ceiling paint; Flutex 2S,

Frapol – 25 years of tradition, the highest standards, innovative solutions

In the aspect of air-conditioning, ventilation, and fire safety, OVO Wrocław investment was a very complex project.

Various functionalities of particular parts of the building (apartments, hotel, service facilities, gastronomy) required a different approach and assurance of separate solutions on the part of air-conditioning and ventilation systems. All such functions required designing and execution of separate installations.

Supplies of AF section units were performed in seven phases. In total, OVO comprises 35 Frapol ventilation units with total output of approx. 163,500 m³/h, including standard and outdoor (roof-mounted) units with air supply and air supply/exhaust functions and heat recovery systems in the form of cross-flow or rotary heat exchangers, or featuring systems with a special medium.

AF section units are designated for air preparation in ventilation and air-conditioning systems.

The extended type series assures a broad range of applications in residential buildings, public buildings (including stores, offices, shopping centres, hotels, and restaurants), as well as industrial facilities (production halls, warehouses, workshops). Frapol's non-standard approach to equipment design also allows for tailoring it to individual needs of a particular investment.

Apart from ventilation units, Frapol also supplied to OVO 20,000 m² ventilation ducts, 1600 fire flaps and smoke extraction dampers, rectangular and round ducts and profiles, constant and variable air volume regulators, grills, diffusers, slot diffusers with boxes, silencers, dampers, wall-mounted air intakes and roof-mounted foundations.

It is worth mentioning the latest version of PD smoke extraction ducts offered by FRAPOL. This is the third generation of the system produced owing to Frapol's long experience and hundreds of completed projects. The latest system of rectangular PD steel smoke extraction ducts supporting one fire compartment, with fire resistance of E600120 (ho) S1500 single, bearing CE mark, is a response to the market needs related to the necessity to improve safety of smoke extraction systems with simultaneous reduction of the investment costs. Changes refer to the installation with cross-sections not larger than 1250x 1000 (mm). Larger ducts are continuously offered under the national Certificate of Conformity.

Frapol's long experience linked with innovative approach to clients' needs has allowed for achieving the success of participating in the OVO investment. It has also allowed for marketing several significant new products.

These include GHP BluePower gas heat pump, which is a technologically advanced solution that effectively transforms fuel into heat or cooling within one device. The greatest advantage of the gas heat pump is its heat efficiency that significantly surpasses other heat production devices, even gas-fired condensation boilers, as it recovers heat from fuel and allows for its acquisition from another, free source, namely the air. GHP BluePower consumes very low amounts of electricity as compared to its rated capacity, and offers



production of chill, or heat and chill at the SAME TIME. This is maximum efficiency and effective use of energy from natural gas.

Another innovation is the Framedic integrated air-conditioning system for clean rooms, dedicated to places with the highest requirements for hygiene, such as surgery units, pharmaceutical or electronic laboratories. Framedic system includes: precise air-conditioning cabinet, recirculation module for clean rooms, laminar ceiling with HEPA filter, air diffuser with an absolute filter, air distribution system in the hygienic version, and the air flow regulator system. Framedic automation integrates all the above devices to assure transparent control, data archiving, and cooperation with other systems in the building.



Tradition and modernity

FRAPOL, a company owned by INSTAL KRAKOW group is one of the largest manufacturers and suppliers of standard and highly specialized air conditioning and ventilation systems in Poland. Continuously for 25 years, company extends its offer and delivers into national and international markets latest solutions maintaining stringent quality standards which reflects current trends in the industry.

FRAPOL offer consist of:

- Universal solutions for public utility buildings (offices, hotels, shopping centers, sports, leisure and industrial facilities)
- Compact air handling units with integrated automation for residential and commercial buildings. Designed in accordance with current most requiring energy-efficient trends.
- Complete FRAMEDIC system for healthcare and pharmaceutical sector. Designed for air-conditioning rooms with the highest strict hygiene requirements.
- Implementation of non-standard projects that will meet expectations of most demanding investors.
- Devices implemented in customized versions and configurations, working in particularly difficult and demanding environmental conditions

The package of services offered by FRAPOL provides a comprehensive supply and assembly of materials and devices. Selection of devices is based on the FRAPOL proprietary "Business Selection Programme" and "AHU Selection Programme". We also carry out, installation of: tooling, components, automation technologies, boot procedure with the performance of tests and measurements, preparation of a detailed report of handover, warranty and service and the comprehensive installation project of HVAC system.



FRAPOL company was founded in 1990. It is one of the largest producers and suppliers of standard and highly specialized air conditioning and ventilation systems. Many years of experience allows us to implement innovative products using highest standards as well. The range of the company customers includes most European countries, UAE and Kuwait.





Marek Pastuszek

DIRECTOR FOR CONSTRUCTION AND ASSEMBLY PRODUCTION FOR THIS INVESTMENT

One of recently implemented projects where the FRAPOL company participated was OVO Wrocław.

– Most important during the implementation of this project was the fact that OVO is a multi-purpose building (hotel, apartments, services, horeca), requiring a diverse approach with the construction of installation of air conditioning and ventilation – says Marek Pastuszek, Deputy Director for construction and assembly production for this investment. – This required us to mount special (separate) installations for every function of this facility. A few examples and figures:

FRAPOL installed on the OVO Wrocław 35 air handling units, 20 thousand sqm of ventilation ducts and 1,600 fire and smoke dampers. Completion of much diverse project turned out to be very challenging, in a short period. Nevertheless we executed this task flawlessly. In OVO Wrocław we have done all sanitary and fire installations. We are particularly proud of ventilation and air conditioning systems. Participation in OVO Wrocław investment we can define in one sentence. We are deeply proud that Polish technology and quality represented by FRAPOL meet all expectations and standards of such global investor.



The green logo means an obligation



Jarosław
Stankiewicz

GLOBAL PROJECTS BUSINESS HEAD
HANSGROHE SP. Z O.O.

Adriana Łączyńska: The secret of Hansgrohe's success is a fusion of their more than a century-old traditions with innovations and a huge passion for the element of water. Has the recipe worked out also during OVO Wrocław?

Jarosław Stankiewicz: All Hansgrohe products are characterized by the highest quality and the assertion of the user's comfort. The latest trends in hotel bathroom design bring out two key aspects – saving water and intuitive operating. Our products meet these requirements perfectly.

A.Ł.: The Hansgrohe brand is always one step ahead with modern design and innovative technologies. What was used while designing the OVO Wrocław bathrooms?

J.S.: Bathroom fittings applied in OVO Wrocław use the EcoSmart technology to reduce the water consumption by up to 60% according to the current standards. It also has the QuickClean system to remove limescale residues from mixer aerators easily. Apart from the benefits for users the Hansgrohe's bathroom fittings and showers are perfectly designed by the prestigious Phoenix Design studio.

A.Ł.: Hansgrohe is an industry trailblazer in the area of sustainable development, and environmental and climate protection. How much does the eco-balanced production mean to you?

J.S.: Experts and researchers in our laboratories constantly look for new solutions to minimize the environmental pollution. We deal with matters as they arise by adjusting either the production process or our products. Attention to environmental protection has been a part of our mission for many years, however it also gives direct benefits to users. Hansgrohe bathroom fittings need up to 60% less water than devices of other producers. Less water to heat up means more measurable savings.

A.Ł.: The company's policy is "zero-tolerance" towards counterfeit products. Clumsy imitations of ideas by other producers mean not only economical damage. Why is Hansgrohe so strongly against fakes?

J.S.: The Hansgrohe brand takes part in exemplary actions of destroying fake products and fights against plagiarisms in court. Fighting against unfair competition in Poland as well as on other

hansgrohe

Hansgrohe is a company with over 115 years of tradition which is today an international corporation highly regarded for the quality, innovation and pioneering design. Hansgrohe is a manufacturer of fittings, shower systems and bathroom collections which are designed by the greatest designers, e.g. Philippe Starck, Antonio Citterio or Patricia Urquiola.

world's markets is very complicated. Nevertheless, what we try to do constantly is raising the bar for potential imitators by introducing technologies which are hard to be copied or by the quality of materials used. Counterfeits often look like originals but only at a first glimpse – they imitate the product's shape but their quality is very low; they usually don't meet current standards set for drinking water.

A.Ł.: Hansgrohe products are present in 130 countries and the major part of incomes is realized outside Germany. In what way the world-renowned brand carries out its global development strategy?

J.S.: In fact, Hansgrohe is a global producer what determines the development of international investments, among others in North America or in China. The company which want to grow has to expand its portfolio as well as its range. At the same time – while being a global supplier – we have to respond to needs of different markets by taking into consideration their regional specificity. Thus the product series directed to individual markets or the Axor Manufactur.

A.Ł.: The first quarter is a good time for summaries. How do you evaluate the previous year?

J.S.: 2015 was an extraordinary year for Hansgrohe. We saw big increases, mainly in effect of our projects carried out in the hotel business. At the same time we can see increasing awareness of investors who more and more often are willing to spend more at the start of the investment and decide on taking products of the higher quality. Good, or more expensive, products have better parameters, higher efficiency and longevity. You can find on our site the water savings calculator. It helps you to estimate how fast the money you spent on your bathroom fitting pays off. When it comes to Hansgrohe fittings and showers it is less than three years, then products start bringing benefits and allow to make systematic savings in fixed costs. To sum up, we can say that Hansgrohe bathroom fittings' don't need much time to amortize in the process of using a facility, so It's worth investing in.

A.Ł.: Thank you for the conversation.



Hansgrohe in Hilton

HANSGROHE SP. Z O.O.

Jarosław Stankiewicz,
Global Projects Business Head

While equipping bathrooms in the Hilton hotel in OVO Wrocław the investor had certain demands toward bathroom fittings, connected to water saving and a long-term warranty. Finally, one of the Metris collection fittings has been chosen. It uses the EcoSmart technology which allows significant – according to current standards – water savings. The Metris washbasin tap uses only 5 liters of water per minute.

These fittings are also equipped with a Boltic handle lock protecting from damages and ceramic cartridges produced by Hansgrohe. The QuickClean anti-limescale function allows easy cleaning of mixer aerators and shower jets which makes the product work perfectly and look well for many years.

In case of showers chosen for hotel bathrooms in OVO Wrocław two conditions had to be fulfilled: investor's demands and technical standards set by the Hilton hotels net. Considering this, all showers have thermostatic mixers and hot water outlet blocks set on 43 degrees Celsius. The warranty time for all products is 5 years.

Hansgrohe bathroom fittings and showers perfectly match the interior design by the J.S.K. Architekci studio.

heads and fittings equipped with EcoSmart, from various Hansgrohe lines of products. You should type in a chosen model and your data: a number of rooms, an average time of using water, an average price for water consuming and waste, and the kind of energy used.

The calculator will compare selected shower heads and fittings with standard products on the market without the EcoSmart technology.

Within the next few seconds We will be informed about certain water and CO2 savings, and the time of amortizing the costs of buying the fitting. The water savings calculator is also available on tablets and smartphones.

From the investor's perspective

All Hansgrohe products are compatible with public facilities. The applied solutions allow water and energy savings and maintaining cleanliness. The EcoSmart technology reduces the water consumption. Hansgrohe basin mixers normally use around 5 litres per minute. It's possible to reduce it to 3,5 litres per minute if it's required by the investor. Overheads and hand showers use only 6 – 9 litres of water per minute.

All fittings are equipped with drinking water SoftPEX hoses and Boltic handle locks which guarantee good working order for longer. QuickClean mixer aerators is fitted with flexible silicone naps to remove limescale residues instantly and keep the fitting clean. The CoolStart technology ensures thermal energy savings.

The top mark for Hansgrohe is WELL (Water Efficiency Label), or the quality seal of the European sanitation industry for water and energy efficiency.

The WELL label gives a clear guidance how mixers and showers are efficient in water and energy savings (efficiency class a to D). Class a denotes the most efficient use of resources. The WELL label makes a distinction between the private sector and the public/commercial sector. In both sectors, Hansgrohe has many mixers and showers with a place in the top category (most efficient). Hansgrohe is the first manufacturer to submit a hand shower for WELL certification. The top class A**

(two stars maximum possible) mark two hand showers: Crometta 85 Green and Croma 100.

Investors who appreciate the reasonable water and energy consumption and seek for economic and technologically advanced solutions should carefully look for this certificate.



Water savings calculator

The Hansgrohe company provides a special water savings calculator which allows to estimate costs of water and energy consumption in a facility. All you have to do is entering the site www.pro.hansgrohe.pl/kalkulator. Then we can select three different shower

Breaking conventions

Ideal Standard Poland had the pleasure to take part in the prestigious realization of OVO in Wrocław. For this project we have proposed bathroom equipment products by Ideal Standard. Finally were selected two collections, Connect and Strada, from which it was chosen conventional as well as special products i.e. designed for people with disabilities. Selected series have plenty of advantages like uncommon design and high functionality. That's why, not without reason, these are very popular and willingly applied for investments of similar nature

Among Connect series products used in OVO Wrocław and which are designed by a recognized English designer Robin Levien, were applied wall-hung bowls, sinks, accessories and bowls for people with disabilities. Such bowls are equipped with Rimless flushing system. Mentioned bowl design without traditional collar, is dedicated to the premises and facilities of higher hygiene requirements. This type bowls ensure easier cleaning, also minimizing the growth of bacteria inside. Lack of bowl upstand gives every user access to the entire surface. Therefore cleaning is quick, easy and does not require application of strong detergents. All of this makes our products friendly to the environment.

Other Ideal Standard products, which were selected for use in this investment are from Strada collection. Sink with its minimalist rectangular shapes is suitable for bathroom exclusive character, making bathroom interiors more modern and stylish. Strada collection beyond rectangular shapes has in its offer also sinks in oval. There are available versions of bench-top and underbench sinks, which are great for hotel investments.

Ideal Standard is a producer of design-driven bathroom solutions with innovative technology. New technology AquaBlade® sets new standards in both toilet design and optimum flush performance – the smooth, gently curved surface with no overhanging rim also means it is much more hygienic and as easy to clean as any other toilet currently available.

During the latest months, in fact, Aquablade® products won an IF Design Award 2015, a Red Dot Design Award, a German Design Award and the AIT "Innovation Award for Architecture", all judged by a panel of internationally renowned architects and designers.

Ideal Standard presents during Milan Design Week Connect Air: the new multi-product collection with a timeless modern style. Based on the Connect family, launched by Ideal Standard in 2008, it builds on its success and adds thin rims and innovation to the offering. Ever-popular Connect range was developed by award-winning design studio Studio Levien and his acclaimed team. By building on the intrinsic design DNA of Connect, they've taken a classic to the next level – creating the refined evolution we call Connect Air. The designer Robin Levien said: "Connect Air showcases the evolution of the bathroom, incorporating lightness at every element of design. The collection is a high quality, contemporary range of furniture offered in an infinite choice of styles and sizes. The diverse range



offers something for everyone and every bathroom types depending on your space and needs. It gives to architects and designers many opportunities to make a fresh and modern looking bathroom which breakdowns conventions of the bathroom areas"

The combination of AquaBlade® performances with Connect Air versatility – with many sizes & shapes options – makes the perfect solution for a large spectrum of projects. From offices to hotels, from new residential to renovation, large or small spaces, Connect Air allows architects and designers to create efficient, durable, and stunning bathrooms projects.

Robin Levien creator of the Connect collection

Levien is one of the most successful and innovative product designers in the UK. He became a Royal Designer for Industry in 1995 as well as being recognized with several awards. His work is also part of the permanent collection in the Victoria and Albert Museum in London. He has been the non-Executive Design Director at Ideal Standard since 2003 creating many collections for the brand, including the Studio range – that revolutionized the UK bathroom market – and now the evolution of the Connect range: Connect Air.

Harmony between science and art

Producing products for bathrooms for over a hundred years Ideal Standard company creates its offer range based on finest materials, efficiently combining science with art. Their ergonomic bathroom designs are suited to both residential homes and large investments. About philosophy of the company, its product range and participation in the creation of OVO Wrocław talks



Plamen Dimitrov
PRESIDENT OF IDEAL STANDARD
POLSKA SP. Z O.O.



Dorota Rdest: Your company has adapted to multiple recipients wide range of products. Ideal Standard adapts to each customer in every space?

Plamen Dimitrov: Yes, that is our goal. We believe that everyone deserves a bathroom that is functional, comfortable, but also beautiful. Beauty is a subjective feeling, so we know that customers are looking for individual solutions. To adjust our products to customers expectations and their space we had to create wide offer. We are distinguished by the fact that Ideal Standard creates complete solutions for the bathroom. Our offer is coherent and mutually aligned, so a customer have the opportunity to equip bathroom from a to Z. This possibility definitely speeds up the whole process and saves time.

D.R.: Achieving harmony between science and art is not easy. How Ideal Standard products can manage both factors?

P.D.: I believe that in our products, we combine this unsuitable elements to each other in a very good way. Our solutions has been chosen by professionals pay special attention to above aspects as well as individual clients, who are intuitively looking for products that combine functionality and beauty. Ideal Standard products for years promote innovative solutions that reduce consumption of natural resources and thanks to perfect design we can implement our innovative technology into reality. Scientific issues we entrust to our



engineers, and what regards to art we rely on cooperation with the leading, renowned designers. In this manner for over a 50-60 years we have created a number of unique products that gained recognition and international awards. Our solutions has captured the attention customers. An example of such harmony is the fact that the Ideal Standard in the 60s as the first has patented ceramic head for single-lever mixers. That had a considerable impact on the development and design of current valves. Perfect and current example of combining science with art in our new product. Patented by Ideal Standard innovative flushing technology – AquaBlade. It marks a step forward, not only from the functional side, but also in terms of design and art. Thanks to this innovation you can discover and create new shapes of products to yours bathroom.

D.R.: Investments such as OVO poses a variety of challenges. What was the biggest one?

P.D.: OVO Wrocław investment, like in other large investments, it is a big challenge for all bodies of the project. For Ideal Standard, as a supplier biggest challenge is – time, which is not restricted only to the delivery of the products. In such a prestigious projects we pay special attention to product selection, installation and its further exploitation. In large projects everything is correlated and must be carried out accordingly with the schedule and demanding deadlines. Successive stages must

be implemented on time. As a result at the very end we can say that investment was a success. We are excited about our participation in such a prestigious realization as OVO. We hope that investors will see our commitment and willingness to participate in similar projects in the future. I'm convinced that Ideal Standard, a world-renowned brand which is present on many investments on all continents, has a strong predispositions to achieve most demanding expectations.

D.R.: Thank you for this interview!

Ideal Standard is a manufacturer of products necessary to equip the bathroom. Company was founded by John B. Pierce and its roots dates back to 1872. Ideal Standard, thanks to its experience has become leading manufacturer on the bathroom industry, which has always followed the path of innovation and design. Ideal Standard products are recognized as innovative and functional. Best design and highest quality combined with care for the natural resources are our top priorities.

Complete Knauf systems



Adam Ruks

PRODUCT MANAGER
AQUAPANEL® SYSTEMS
KNAUF SP. Z O.O.

KNAUF

Knauf belongs to the leading suppliers of building materials worldwide. We are a reliable and dependable partner for our customers. We understand their needs and together with them we are ready to undertake new challenges. Knauf determine new trends for the entire industry. We build the world around us and improve quality of people lives.

Adam Zyzman: How Knauf company activity looked line during OVO Wroclaw investment? was your involvement responded to delivery of single products only or Knauf delivered its special multiple solutions?

Adam Ruks: During OVO Apartments construction process we used complete Knauf AQUAPANEL® systems. They were made with AQUAPANEL® Cement Boards SkyLite or Outdoor. We were also supplier of external insulation systems. For the selection of suitable products were responsible product managers from our company. Throughout duration of the investment, contractor could count on our technological support.

A.Z.: Did among these products used in OVO Wroclaw are any innovations?

A.R.: Obviously. In the external ceiling system we used Knauf AQUAPANEL® Cement Board SkyLite with a thickness of 8 mm. It is the lightest cement board available on the market that allows execution of external suspended ceilings. It is also possible to use this solution in wet or damp rooms.

AQUAPANEL® Cement Board SkyLite is base product of our complete ceiling Knauf AQUAPANEL® SkyLite system. This solution consist with all necessary components that are able to carry out even most ambitious and creative ceilings projects. Our system can handle spectacularly large and



impressive surfaces as well as rounded organic shapes. This lightweight, flexible, easy to install system provides the highest quality and durability.

A.Z.: Going through your offer, your clients can expect that Knauf products can be applied at every stage of the investment. How was with OVO case?

A.R.: In the case of OVO Apartments Knauf systems have been used in the final stage of implementation – external finishing. Ceilings and partitions balcony were made of our products and can be admired both from the streets surrounding the building as well as OVO Wrocław atrium.

A.Z.: Did investor set any particularly high demands?

A.R.: Yes, partitions between the balconies of apartments made in the AQUAPANEL® Outdoor system couldn't be directly placed on floor. To meet this requirement, the subconstruction of AQUAPANEL® Outdoor partitions were redesigned by the contractor especially for this case. This activity was carried out in collaboration with technical department from our company.

A.Z.: In which part of the building your products have been applied? we are talking about areas of public, common and individual, eg. apartments.

A.R.: AQUAPANEL® Outdoor Systems have been applied in parts of the common object. Both the exterior ceilings and balcony partitions were made in AQUAPANEL® Outdoor technology. Moreover, from public and common parts visitors can see the beautiful walls and ceilings white plains, which have been obtained thanks to Knauf products from a range of external thermal insulation systems. We used products such as Knauf glue reinforced with SM 700 fiber with reinforcing grid, as well as cement-lime finishing coat for outdoor applications and Knauf silicone paint that give outstanding final result.

A.Z.: to what extent Knauf employees were involved in the OVO APARTMENTS?

A.R.: We can say that at every stage of the construction. This class projects often require individual solutions that must be implemented in early stage of design. In Knauf company for cooperation with architectural offices is responsible our newly created Investment Department which brings together best experts in the field of fire protection, acoustic, thermal insulation and drywall systems (in which AQUAPANEL® systems are). Technical Advisors provide support at the execution stage.

The processing of the architect's vision into concrete building solutions always fascinates me. Especially when it concerns projects like OVO Apartments.



Take advantage. Choose AQUAPANEL®

The Knauf Exterior Wall with AQUAPANEL® Technology Inside is a new generation building material that can be utilized to create long lasting structures offering advantages unobtainable to conventional construction materials.

As a resilient and weather proof system the Knauf Exterior Wall forms a building envelope that's able to resist extreme rain and humidity. It's completely water resistant and since it's inorganic, it won't get mouldy, soften or swell.

With up to 75% less weight in the installed wall compared to conventional materials there's greater design freedom and superior performance available for every application. New build or renovation, Knauf Exterior Wall with AQUAPANEL® Technology Inside offers unrivalled economic and sustainability advantages.

Key Benefits of the Knauf Exterior Wall:

- Slimmer wall with the same energy performance (0.20 W/m²K at a thickness of only 22 cm compared to 32-34,5 cm for blocks, both with 16 cm insulation)
- Faster construction time (up to 27% faster) compared to brick and block.
- Up to 8% extra interior room due to the thinner width of the materials.
- Better energy performance achievable with more space for additional insulation to save energy and reduce costs during occupation.
- Comparable acoustic, fire, seismic, and thermal performance to brick and block, with the additional benefit of being a lighter construction.



Knauf Exterior Walls don't confine a building but instead they make space. Thanks to the flexibility of AQUAPANEL® boards you can give them spectacular forms.

Knauf wetroom solutions with AQUAPANEL® technology

Designed as an ideal solution for humid and wet areas, it's 100% water-resistant. It's able to withstand extreme humidity without softening or swelling and is the material of choice particularly for demanding applications such as swimming pools and saunas.

Key Advantages of Knauf Wetroom Solutions:

- 100% water-resistant. These solutions are even suitable for environments such as swimming pools with corrosive chlorine and high humidity.
- Extreme temperature resistance, making it ideal for wellness centers and saunas.
- High impact resistance and sound insulation.

It's the solution that's perfect for applications such as sports halls and schools, due to high rigidity and strength.

- A wall that stays clean and hygienic. Not even intense chemical agents will make it soften

Knauf Wetroom Solutions with AQUAPANEL® Technology Inside are the tried and tested solution for design innovation without any risk.

Knauf ceiling solutions with AQUAPANEL® technology delivers NEW LIGHTNESS FOR INDOOR AND EXTERIOR CALLINGS.

Give space to your creativity and make even your most ambitious projects reality with Knauf Ceiling Solutions with AQUAPANEL® Technology Inside – a complete system combining cutting-edge technology with innovative support structures for use in both interiors and exteriors.

Knauf Ceiling Solutions with AQUAPANEL® Technology Inside are ideal as a suspended ceiling for a long-lasting system to cover and protect interior and exterior areas. That's the benefit of Knauf Ceiling Solutions with AQUAPANEL® Technology Inside: our complete system provides you with all of the necessary components and services to be able to realise even the most ambitious and creative ceiling designs – from spectacularly large and impressive surfaces to round, organic shapes. These lightweight, resilient, easy-to-install materials ensure quality and durability.

Solutions that are close to perfection

For over 25 years in Poland and for 55 years in world, MEIBES company is looking for solutions to make its products increasingly closer to perfection. We know that anyone who owns a new apartment today, takes into consideration not only the price and location, but also costs of its exploitation. This knowledge is our major motivator. For every our object, for which we supply products, we choose only best solutions to make system performance most effective. In a case of detached house, we apply our newest five-valve CONDIX pump solutions, with double cooling factors of condensing boiler, causing a significant increase in its effectiveness. As well as in OVO Wroclaw facility using an optimized Logoterm system, which was professionally designed thanks to many hours of engineering consultations.

Logoterm system is an innovative solution for central heating and hot water regulation in multi-family buildings. Each apartment is equipped with one controller. Therefore production of hot water takes place only when a tenant needs it. Thanks to Logotherm heating of your home stays always under control. Logoterm is equipped with a heat exchanger which heats water from the water supply system having a temperature of 8-10°C to a final temperature of 55-60°C in the tap. Thanks to our system there is no need of production, storage and distribution of thousands liters of water in the building when it is inhabited. Another Logoterm feature is heating system. Our solution is equipped with electronic programmer that allows users to decide about constant level of temperature of apartment. Owner can determine level of temperature at any time of day or night.

For every of 212 OVO Wroclaw apartments we designed 17 types of Logotherm system with various equipment. Our solutions guarantee every user of OVO Apartments best heating comfort with full control of water heating process.

During OVO Wroclaw project Meibes company carry out full optimization of operating parameters. That's why we prepared detailed guidelines for the heat source design which became supplied by Meibes BALLOREX valves. Such valves are balancing heating risers for water flow and pressure. This design and unique system installation not only give best comfort to every user, but also provide measurable operational savings of up to 30% of heat consumption in comparison to traditional systems. It is very important to emphasize impact of the power heat source on operating costs. If you implement Logoterm system less monofunctional junction power junction results in savings on permanent charges such as ordered power or transmission fees.

A perfect example of advanced technology that meet highest expectations of our customers is participation in the realization of prestigious building Angel Wawel



in Kraków. We delivered there Logoterm system, in which part of our equipment also support underfloor heating. Every tenant thanks to our management devices can remotely control heat using web browser or smartphone application from every part of the world.

Decision on such a serious investment like buying an apartment is certainly not easy, especially when it results for many years. Let us remember - by calculating your monthly expenses and repayment of the loan, we should also take into consideration monthly maintenance costs of our new apartment.

Modernity at the service of comfort

Operating in Poland since a quarter of a century Meibes company specializes in the production of heat distribution systems, residential exchangers stations, as well as the fittings and heating equipment. About its offer, environmental awareness and commitment to OVO Wrocław implementation says



Przemysław Klabiński
PRESIDENT OF THE BOARD

meibes
Perfekcyjne Systemy

Meibes company is part of the international concern Aalberts Industries NV based in the Netherlands. Fundamentals of our business and developed offer is a result of many years of experience. This year we celebrate the anniversary of 55 years on the world market and the 25th anniversary of the Polish market.



Dorota Rdest: Meibes offers a wide range of heating equipment. Would you tell us more about your products?

Przemysław Klabiński: Meibes is a specialist in the production of heat substations and residential heat transfer stations – Logoterm. It is also engaged in the sale of fittings and heating equipment to the wholesale installation network. The company carries out rapid installation techniques and is active in the field of renewable energy sources. Before official launch of every Meibes product is carefully tested in our special laboratory. Afterwards if test is positive product ready to use in selected European country. Only then we start implementation of mass production. Due to such great care customers have the confidence that Meibes products are technologically advanced, and also tested for trouble-free work.

The company Meibes built its reputation not only on same-brand products, but also on the logistics. Modern infrastructure and automated manufacturing processes is a guarantee of accurate execution and high quality products. With well-organized storage facility a significant part of the products in our offer are available to dispatch within 24 hours from order



acceptance. Meibes supports customers at every stage of project. We are talking about technical support at the stage of conception, design and implementation, as well as by professional on-site service.

D.R.: Currently, much emphasis is put on environmental awareness. How systems offered by your company deal in with this trend?

P.K.: Energy efficiency ensures best thermal comfort to the user in most profitable way. To achieve such ratio clients need adequate management of the individual energy solutions. Systems activity should not duplicate or exclude. All our products are designed in a way that can seamlessly cooperate with other devices, as well as those using renewable energy sources. One of Meibes top ideas is to optimize expenditures at the stage of investment, and during building operational process. Thanks to meticulous development and test process in laboratory conditions, construction of building system concept and its operation, we care about the most efficient usage of investors financial resources. As a result we deliver to client energy efficient solution, which is environmentally friendly.

D.R.: How look Meibes involvement in OVO Wroclaw facility?

P.K.: Meibes involvement in this investment began exactly four years before its completion. Till this time we participated

in the process of facility concept as well as we were advisory body for investor and design offices. Afterward, during tender phase we tried to optimize the Logoterm design concept, where a lot of merits must be returned to the investor and consulting companies. During the execution a major challenge for us was the logistics issue – to 212 apartments there were designed 17 various types of Logoterm with differing equipment. For this occasion, we have developed a special logistic model which relies on personalized marking of party supplies – 212 stickers on the packaging clearly indicated the apartment, which is to be supported by particular device. I guess that biggest challenge for this project was to bring possibly best energy efficient system to supply line of entire residential apartments. One of its elements was to determine highest power of heat distribution centers, so that the comfort obtained by the residents was high with the lowest possible exploitation cost. Entire OVO Wroclaw investment process went very smoothly and seamlessly. However, despite this success we are constantly working on developing our solutions. This year we launched innovative, long-term development strategy, which will make the Meibes offer even better than ever.

We want to be as close to our clients as possible



Łukasz Luto

VICE PRESIDENT
OF PORTA KMI POLAND

Adam Zyzman: How to maintain high interest in the brand on such competitive market like joinery? What is the recipe of PORTA KMI POLAND for customer acquisition, including big investments?

Łukasz Luto: The key is a good knowledge about customers and willingness to answer their needs. If we take into consideration individual approach, modern design and adequate quality of products, there is a great chance of success. A recent example is our implementation in OVO Wrocław investment. This is the most awaited multi-functional facility in southern Poland.

A.Z.: Could you tell us more about PORTA quality management policy? You have recently received "Consumer Quality Leader" award.

Ł.L.: The quality of our products consists of many different factors. We care about specialized staff, which properly ensures our product's development and production itself, as well as sales and post-sales service, modern machinery and optimal communication with customers. Currently, we are investing in each of these sectors. Since 2015 we have been running a new marketing campaign, which is focused on the individual approach to final customers. This June, we are going to open our brand new PORTA STEEL factory.



PORTA KMI POLAND is a door manufacturer who has been and still is an industry leader on Polish market for over a decade now. Doors manufactured by PORTA are chosen by more than 20 thousand customers every month. The 25th anniversary of the company coincides with the opening of a new PORTA STEEL factory equipped with one of the most modern machine parks in Europe.



A.Z.: What range of products will be produced at this new PORTA facility?

Ł.L.: PORTA STEEL will be a factory producing steel doors. Facility will be highly automated and equipped with one of the most advanced machine parks in Europe. Factory area exceeds 14 thousand sqm, and the investment cost is estimated at over 70 million PLN. In this factory we are going to use our own model of production line, which has been developed by our specialists after many years of experience in the industry. Unique solutions provide exceptional speed production and high quality of manufactured products. We estimate that thanks to new investment the company's revenues will increase by 100 million PLN in upcoming years.

A.Z.: Is the new PORTA investment associated with joining to Polish Metal Processing Cluster?

Ł.L.: Our membership in a cluster is a part of the long term strategy. As a member, we have an access to innovative technologies and external sources of financing. Also, as a part of Cluster, we may improve the development of this industry segment in our country. It is a valuable experience that will strengthen our business.

A.Z.: Can you tell us more about upcoming PORTA investments which are included in your development strategy?

Ł.L.: As a manufacturer of door we use not only metal intermediates, but especially wood and wood-based products. We are the leader of WOODSTRATEG Consortium, which has developed and reported their research program for the National Centre for Research and Development. Thanks to this program, wood has a chance to become a modern and extensively used product. We are deeply sure that our wooden products may be considered in a close future as a strong Polish specialization on international markets. We are also sure that this will be our another great contribution to the development of the entire industry, as well as promoting our country and its economy in Europe and the rest of the world.

How to equip an investment with doors?

A case study based on the project realization of PORTA KMI POLAND for OVO Wrocław

OVO Wrocław, the newly formed complex of hotels, offices and residential buildings, is distinguished by its unique shape and elevation. Solutions applied in the interior of the building are also noteworthy. The investment has been equipped with a thousand sets of doors for various purposes, produced to an individual order.

The equipment of such a building as Wrocław OVO poses a challenge for investment managers. The surface of nearly 50,000 m² in this nine-storey facility contains 169 residential apartments and 189 hotel rooms. Almost 4,000 m² of the office space and more than 4,500 m² of retail and service area required the installation of 1,100 sets of entrance, interior, as well as technical, acoustic and fire-resistant doors.

"In order to equip such a large project, we have completed about 70 individual orders. All the doors have been specially designed for the needs of OVO Wrocław," explains Sławomir Wójs, Head of the PORTA Investment Supervision. "Team of PORTA technologists, together with the investor representatives, has played a key part in the project."

Individual order

Due to the architectural solutions used in the OVO Wrocław investment, we needed to prepare customized door designs. PORTA technologists had to face, among others, the need to produce doors of non-standard dimensions, such as the height of the inner leaf

of up to 2.5 m. The expectations in terms of the colour and door finishing materials were also a challenge for the manufacturer.

"The intention of the architects was to design a building that constitutes a harmonious unity. Doors were covered with a natural white veneer to match the building arrangement. Doors located in the public utility area were covered with CPL veneer, which is extremely durable and functional. An interesting solution was to cover the fire-resistant shaft doors with a vinyl wallpaper, identical to the one used to finish the walls," says Sławomir Wójs, Head of the PORTA Investment Supervision.

Another interesting, extraordinary solution are doors with motion sensors in the hotel restaurant located inside the building. It is a facilitation in a daily work of the restaurant service. This solution not only improves usability of communication routes in such a busy place but also increases user's safety.

An individual solution was also a creation of counter-rebated front and bathroom doors matching the interior design of the rooms.

Costs and completion period

The project value for OVO Wrocław far exceeded the standard amounts of investment. Completing the order from the moment of signing the contract with the investor till the closure of the list of demands took approx. 4 months. The next step was to prepare door designs, then production and further assembly. The process

of equipping the facility with doors lasted 7 months in total.

"The average completion time of individual investment orders takes approx. 60 days. For OVO, we had to deal with many specific solutions that required a customized approach to the production process. In case of such contracts, we have to engage dozens of specialists from many departments to meet the expectations of the investor," specifies Sławomir Wójs, Head of the PORTA Investment Supervision.

Soon you will be able to see the effects of PORTA KMI POLAND and OVO Wrocław collaboration. The building will be completed in June this year. For more information on other projects, visit the company's website: <https://www.porta.com.pl/>



Materials that solve problems

Energy efficiency, safety and durability of commercial buildings are now one of main factors considered by purchasers or renters. Having of environmental certificates, like LEED and BREAM, is one ways to confirm effectiveness of the solutions. To design buildings energy and economically efficient, investors and designers need a reliable partner – Rockwool company, whose stone wool products provide thermal insulation, fire protection, sound insulation and resistance to weather conditions.

At the service of energy efficiency

The biggest energy consumers are buildings that absorb 40% of total energy consumption in the European Union. We can identify energy with electricity, that's why we try to minimize usage by disabling unnecessary lighting, using energy efficient solutions, etc. Meanwhile, major part of energy is absorbed by heating and cooling. Poorly insulated buildings envelope have greatest impact on inefficient energy consumption. In proper insulation we can find greatest potential savings. Starting with heating of buildings where we work, learn, spend free time and live, through lighting, water heating, air conditioning, as well as the use of home appliances society consume more energy than the entire industry and transport. We could use less energy, thanks to "warmer" buildings and more energy efficient.

Best protective barrier

Architects, doing projects of commercial buildings, focuses mainly on energy efficiency, cost-effectiveness, safety and attractiveness of the created concept. In such moments, when every little detail is important, selecting the right material is crucial. Designers often choose reliable insulation solutions from Rockwool. Not every insulation ensures an adequate level of protection required by strict rules. Rockwool stone wool solutions used in ventilated facades provide natural protection against factors such as heat, cold, noise and fire. Thanks to this our products provide best protective barrier. It is particularly effective in the case of complex ventilated facade systems.

The issue of fire safety is especially important. Its increasingly has an impact on issues related to the insurance of large objects. Stone wool helps to protect structure of the building and its occupants inside before the fire, creating a protective barrier and giving more time to evacuate and finally giving firefighters extra time to carry out rescue operation.

The highest A1 class of reaction to fire which have Rockwool insulation products is particularly important in the case of multi-storey

buildings. Insulation made with stone wool does not contribute to fire spreading in ventilated space. It significantly reduce risk of so-called "chimney effect". Rockwool wool resist temperatures up to 1000°C. In case of external walls our wool reduces significantly risk of fire spreading, including transferring it to the next floor. It does not contribute to the emission of toxic and deadly smoke.

Effective, durable and aesthetic insulation

The energy efficiency of buildings largely determines also insulation of underground garages, crossings. Moreover installation of heating, ventilation and air conditioning should be insulated as well. Garages, underground parking's, basements and underpasses remain as unheated space in buildings very often. Thermal insulation of the ceiling separating heated space from unheated is essential.



As a result it is reducing heat loss through the floor to following rooms. Selecting the optimal insulation made with stone wool guarantees high insulation, fire safety and aesthetic finish. For example Rockwool FASROCK G plates have a visually attractive milling, so you do not need extra finish of interior. It is also important to carefully execute insulations of HVAC system. As an outcome you will ensure their efficient and functional work. It is particularly important to select optimal lagging, will also raise fire safety installations. It will contribute significantly to of fire safety improvement.

We have the courage to be a pioneer in the industry

Dorota Rdest: 20 years on Polish market has allowed ROCKWOOL Poland to explore main needs of your customers. You know how to respond to this needs and as a result you gain trust. One of the main reasons of such positive feedback is complexity of your products.

Piotr Pawlak: All our activities on the Polish market were based on a dialogue with customers and permanent development of our products. We carefully analyze details of our market – thanks to this we see the changing needs and that's why quick response is crucial. Our strategic approach to business allows us to expand continuously and as a result we strengthen the offer – eg. through acquisition of FAST, a manufacturer of building chemistry, or

expansion of our factories. Many years of experience, complex strategy and fruitful cooperation with groups of architects, contractors and investors contributes to providing comprehensive product solutions for our customers. We deliver a comprehensive offer based on a broad base of products and brands available. They are dedicated to various segments of the construction industry: eg. for ventilated facades – ROCKWOOL® and ROCKPANEL®; for stucco facades – complete systems for thermal insulation containing stone wool. Besides specialized product base we offer our customers expert advisory service. Created with highly qualified departments which are fully able to support architects and contractors at any times.



Piotr Pawlak

PRODUCT MANAGEMENT
& TECHNICAL ADVISORY MANAGER
ROCKWOOL POLSKA



D.R.: What else distinguishes your company from other producers?

P.P.: First of all quality and the range of ROCKWOOL Poland offer. Our stone wool products are characterized by perfect quality and excellent durability. Beyond basic feature (thermal insulation), products deliver additional, but equally important features like flammability, sound insulation and durability. We also conduct very extensive communication activities which goes far beyond simple information channels. We carry out educational activities as a part of 'sixth fuel' campaign. It aims to inform clients about the economic and ecological benefits of implementing energy efficiency systems also in households. Our educational activities are addressed to already working contractors, architects and designers as well as students. Our wide knowledge about market makes us courageous to be a pioneer in the industry. Our actions go beyond current situation in the building sector. We are not afraid to take the risks. We set ourselves goals and follow new paths to meet all the expectations and needs of customers, and even overtake them. In our business, we do not focus on sales only – we deliver a full advisory support before and after purchase, guaranteeing full service quality.

D.R.: In conclusion, ROCKWOOL Poland clients can expect not only excellent product quality but also many other services like professional technical support...

P.P.: Our specialized departments provides comprehensive support to architects, contractors as well as investors and private customers.

ROCKWOOL®
N I E P A L N E I Z O L A C J E

ROCKWOOL Poland, part of the ROCKWOOL Group, is a world leader in the production of stone wool. In Poland the company has been operating for 23 years and has two factories. ROCKWOOL Poland is actively involved in social and educational campaigns on energy efficiency and fire safety.

The ROCKWOOL Poland support team helps in various stages of investment with various types of buildings. We are talking about large-scale commercial buildings as well as small single-family houses. Our qualified sales forces are specialized in solutions for different segments of the construction industry. Thanks to this we can help architects to find the right solutions, and contractors which are planning and carrying out construction process in the best possible manner. We also provide logistical investments support, based mainly on an individual approach of every single client.

D.R.: Thank you for the interview!



The showpiece of modern Wrocław is safe



Grzegorz Ćwiek

PRESIDENT
OF THE MANAGEMENT BOARD
SCHRACK SECONET POLSKA

SCHRACK

S E C O N E T

Schrack Seconet is among the largest and best-known manufacturers of fire protection systems in the world. Having operated in the European market for over 120 years, the Company is a leader in the production of technologically advanced building protections including fire alarm systems and nurse call systems for hospitals. Since 1997, the Company has been a part of Securitas AG, a top protection systems corporation, and it is the first European company in protection systems industry to have received ISO 9001 quality certificate in all areas of its activity.

Adam Zyzman: The OVO Wrocław building project carried out with the participation of your company is a multi-use building combining residential, office and hotel functions. Does the fire protection of a facility with such a diverse use require special technical and managerial efforts or financial outlays?

Grzegorz Ćwiek: Fire protection for a multi-use building is an extremely responsible task that requires broad knowledge and experience in ensuring fire safety in buildings of varied use. Each part of the building with a different designated functionality needs to undergo a reliable individual risk analysis process. Afterwards, process conclusions are compiled and submitted to a follow-up analysis including mutual relationships and interactions. Hence, the fire protection concept of such a distinctive building is a product of work by different specialists and is dependent on the efficiency and scope of interdisciplinary coordination as well as selection of appropriate technology. In fact, the success of such a project is a combined effort of several dozen people who create a unique value chain with the final result being a maximum protection of life and health of many people.

Even though the process is complicated and it requires high quality work from all its participants, it does not necessarily involve higher financial outlays than the processes involving single use buildings. The key

is the experience of project managers and selection of tools and physical measures appropriate for each of the unique building functions.

A.Z.: I assume that such buildings have different fire protection techniques in different zones. Does it make operation and daily maintenance of such a sophisticated system complicated and costly?

G.Ć.: The question of simplicity of operation in the case of a fire safety system with disparate functionality and use is critical, however not just with regard to costs but, above all, with regard to the aim it serves. If we assume that automatic hazard detection and prevention systems should be activated within the shortest time possible and if they are expected to operate in a reliable and continuous mode, their daily operation and, particularly, operation under conditions of stress and real fire hazard cannot be complicated. Accordingly, life cycle maintenance of a building cannot generate excessive costs that the owners might seek to avoid, thus putting the project at risk.

The newest technologies help avoid such traps. The OVO building has been equipped with Integral IP, a state-of-the-art fully integrated fire system. It features a distributed network system and full redundancy, which means that 100 per cent of its primary system functions are duplicated. This eliminates a chance of fire safety system failure while preserving



its coherent control. In fact, there are several parallel detection and control systems supported with self-controlling logic.

System operation is reduced to a necessary minimum as it is supported by a series of automatic procedures that make quicker and better decisions than any human being could make. It should be borne in mind that in case of a real fire hazard it is the Integral system that will take over the management of the whole OVO building technical infrastructure, from the power supply of individual systems, through the sound alarm system, building automation, ventilation, smoke removal systems to automatic fire service call-out and active support of rescue and fire units in the evacuation of the building.

A.Z.: The building that is meant to be the icon of modern architecture and the pride of Wrocław must require innovative security solutions. What special solutions have been applied in the building?

G.C.: As boastful as it may sound, Schrack Seconet is a technology leader in the fire security industry. We have equipped this modern and unique building with our latest fire safety system that is not only fully in line with the current strict international industry standards but goes beyond them. System control units are duplicated and they also feature double software package sets and the so-called black boxes which store key system data as undeletable files. This way in case





of major disturbances in detector circuits or control units the system stability controls may immediately upload an operational and undisturbed data package required for uninterrupted fire rescue operation in the building. This unique solution has never before been applied anywhere in the world. What is more, we use identical solutions in the aviation industry, military and oil infrastructure protection, major industrial and government facilities.

The advanced Boolean-algebra-based system logic allows to tailor safety system network software to specific conditions of a multi-use facility. This ensures intelligent and diversified operation of SAP installation depending on fire-affected zone of the building because a hotel, for example, requires a completely different evacuation procedure from commercial or residential facilities. In all cases the key criterion is smoke or temperature change detection and that is the reason for the use of multi-criteria and multi-sensor smoke and temperature detectors as well as early fire detection systems capable of detecting smoke particles that are undetectable for human vision and olfactory senses.

The system offers options of remote supervision and real-time anywhere notification of disturbances which may be caused by improper repair works or sabotage. The operators will receive notifications even when they are away from the building.

Yet, it should be noted that such buildings undergo changes over time and the fire safety system must keep up with the life cycle of the facility. This necessitates monitoring of changes in the building use and layout. Specialist software installed in the Integral system allows quick and easy adaptation of parameters to such variable environment. We have more than 600 engineers trained in that field working for Schrack Seconet in Poland. Therefore, we are sure that the showpiece of modern Wrocław is safe.



GRG – If you can draw it – we can do it!

If you are looking for interesting architectural effect, note the possibilities of GRG (GLASS FIBRE REINFORCED GYPSUM). This innovative material becomes the first choice of architects trying to make arrangements with unusual shapes. Quick to install, with seamless finish, gives a sleek and modern look. GRG is an innovative product, and one of the newest types of gypsum decoration. This material is made of high density gypsum of alpha class and embedded glass fibers inside.

TMK's Projekt product is an alternative to standard ceiling panels made with plasterboard. Ability to unlimited modeling of product and obtaining a variety of shapes, sizes and structures is main advantage of such plaster casts. GRG can be easily combined with other materials commonly used to form ceilings and walls.

The best advertisement of GRG, are realizations of TMK Projekt in OVO Wrocław. Beginning with seamlessly connected with ceilings "volcano" luminaires in the corridors (performed in partnership with Philips), through bending double level ceilings and arched pillars casings in the restaurant ending with more than 10-meter phenomenal diffuser luminaires made with DPS coatings in the ballroom.

GRG technology is verified by developers and investors, i.a. Mokotów Gallery, Arkadia in Warszawa and CH Aura in Olsztyn. Thanks to this technology designers visions are now a reality. Additionally, in realizations of National Forum of Music in Wrocław or Philharmonic in Kielce our product worked very well as acoustic cladding.

Simultaneously with the work on the OVO our company performed works on Warszawa Spire investment, where Massive Design studio and Ghelamco Investor put trust in GRG technology. For this project, Przemek MAC Stopa, owner of the Massive Design studio, scooped 4 Red Dot awards (commonly known "Oscars" of design).



If you can draw it – we can do it!

TMK Projekt company is operating for over seven years on the Polish building materials market. We started our activities as a pioneers of GRG technology. We specialize in the manufacture and installation of GRG and classic stucco plasters, nevertheless our offer is much richer. About TMK Projekt success, GRG technology, and during OVO Wrocław realization says



Mariusz Whorowski

OWNER AND A BOARD MEMBER
OF TMK PROJEKT SP. Z O.O.

Dorota Rdest: TMK Project entered on Polish market as a leader of GRT technology.

What were the beginnings of yours activity?

Mariusz Whorowski: TMK project is a team of people with many years of experience in the production of stucco plaster and prefabricated GRG on English market. For our company development we needed Polish architects becoming interested in our offer. We have been promoting our brand, at Retail Destination fairs (REDI) in the National Stadium and Energy For Creativity in Milan. Furthermore we can be very proud of our increasingly growing portfolio.

D.R.: However, your company delivers much wider offer...

M.W.: TMK Projekt main activity includes the production and installation of stucco plaster and prefabricated GRG of very different shapes. In our offer you can find, among others, cornices, moldings, decorative facets, pilasters, columns and ornaments. We also produce details for individual clients like architects or investors. We produce a range of spectacular 3D gypsum panels which have best quality and affordable price. Moreover our company offers complete professional restoration and maintenance of facades and elevations, as well as revitalization of stucco plasters.

D.R.: Among realization that yours company recently executed, is OVO Wrocław facility.

What works has been carried out there?

M.W.: a very characteristic element of the OVO Wrocław interior design that we have done are fixtures referring to the shape of the volcano in very different sizes. In the corridors you can find ours GRG binging with a diameter of about 40 cm. Walking through the hotel restaurant, we see volcanoes which have a diameter of 3 m. Finally biggest GRG lighting element having almost diameter of 10 m is suspended in ballroom. Implementation of the elements of such shapes once again showed that our slogan "If you can draw it – we can do it" is reflected in reality. On the building we have also implemented GRG elements which are smoothly connecting wall to the GH ceiling, thanks to this we joint our prefabricates together.

D.R.: Thank you for conversation!

TMK Projekt represents a long-standing experience gained through the implementations of various projects, and proven team of professionals. We cooperate with many design and construction offices. We also have our own assembly groups, which allows us quickly and accurately achieve upcoming targets. In our extensive portfolio you can find e.g. National Forum of Music in Wrocław Philharmonic in Kielce, Czartoryski Museum in Kraków, the palace and park in Sanniki, "Arcadia" shopping center in Warszawa, "Aura" shopping center in Olsztyn, Galeria Mokotów in Warszawa and Adgar West Park office complex. TMK also performed works in a historical building of Queen's Gate Place in London and in tenement house in Berlin. Also boasts performance of stucco in many hotels, banquet halls and conference rooms throughout the Polish. TMK also done stucco implementations in many hotels, banquet halls and conference rooms nationwide.

The icon of heaters

RETTIG ICC

Janusz Frąckowiak,
RETTIG ICC

Thanks to the efforts of many people RADSON brand gain privilege to occur on such a prestigious investment as OVO Wrocław. has been written that "OVO Wrocław realize the idea of the Lower Silesia capital witch is perceived as open, inspiring and multicultural city. OVO will become an architectural showcase of the city, an icon of contemporary Wrocław. We are proud to emphasize that the word ICON fits perfectly for RADSON heaters RADSON. Our brand operate on market for exactly 50 years. However, our products are no archaism, which is evidenced by modern line of AURA convector heaters. This products were used in the highly anticipated investment in Wrocław. Our team representing the RADSON brand – Ms. Joanna Kruczek-Klepa (Lower Silesia) and Mr. Marcin Piwkowski (Malopolska) – were "spiritus movens" for all actions taken on this investment. Clever people told me that design of the OVO Wrocław solid is based on modern architectural style called blobitecture. This style inspired by a shape of a water drop refers also to outstanding performance of Ms. Joanna and Mr. Marcin. Thanks efforts "hollow out the rock" by mentioned water drop. That's why RADSON products were successfully implemented in OVO. RADSON convector heaters AURA are universally applicable. Copper-aluminum heating element is tastefully hidden in steel housing which is sheltered from the top by duralumin grille. Case of AURA radiators are not heated directly from the heating medium. Such solution prevents loss of energy by direct radiation to the glass surface. As a result this is lowering operating costs, and whole heater is mounted to the floor by aesthetic assembly consoles.

The manufacturer of RADSON heaters is Rettig ICC, a leading European supplier of heat emitters, which is part of a group RETTIG – a large family business, with nearly 250 years of tradition. It's headquarters is located in Helsinki. In the 70s of the eighteenth century Steffen Cerillius Rettig began a story of a RETTIG group by launching tobacco production.

Rettig ICC employs approx. 3 thousand. employees and has 23 factories in 12 countries, with customers in more than 50 countries around the world. We manufacture and supply panel, convector and bathroom steel heaters. In our offer our customers can find underfloor heating, installation systems and fittings as well.

The entire production in our factories is covered by strict quality control managed and based on the ISO 9001. Moreover complying with the ISO 14001 we take care of environmental protection. RADSON brings its products to market in accordance with Regulation of the European Parliament and of the Council (EU) No 305/2011.

Taking the opportunity we present our largest international projects where solutions provided by RETTIG were implemented:

- technology park AIRBUS II, Hamburg, Germany,
- Launde Abbey, Leicestershire, Great Britain,
- Opera de Paris, Paris, France,
- Dagang Oilfield, Beijing, China,
- Centre de Congres, Mons, Belgium,

- Promenada Mall, Bucharest, Romania,
- Karolinska University Hospital, Sztockholm, Sweden,
- Fashion Promotion Centre, Łódź, Poland,
- Beach Resort Kamperland, Cadzand, the Netherlands,
- Formuły 1 track, Olymic Park Soczi, Russia.

In Poland, RADSON heaters are provided by Rettig Heating Sp. o.o. with headquarters in Rybnik. Company distributes its products through authorized distributors, especially in collaboration with a HYDROSOLAR group (HBH). Tradition, 50 years of experience, modern and innovative products distinguish us on the market. Excellent relationships with designers and contractors allow us to develop and improve. All of this would not be possible without dedicated and devoted to their work colleagues. I would like in public to thank them all for their outstanding performance.



RETTIG group owns Rettig ICC (heating industry), Bore (container) and NORDKALK (Aggregates). RADSON (Rettig ICC) was established in 1966. Rettig ICC have many brands like: Radson, Purmo, Thermopanel, LVI, Vogel & Noot, Myson, Finimetal, MMA, Hewing and EMMETI. All of them are supplied to over 50 countries in Europe, Asia and America.

RADSON 
clever heating solutions

MATERIALS
SYSTEMS
TECHNOLOGIES



OVO Wrocław is a modern, building located in one of the most prestigious locations of Wrocław. The project was realized by: investor with extraordinary aspirations, renowned international design office and reliable general contractor, which used highest quality materials and technologies.



1

investor



3

general contractor



2

concept architect



5

Corian® façade



4

executive architects



6

architectural aluminium systems



13

bathroom fittings



12

air conditioning and ventilation systems



16

heating equipment



18

rock wool



AXPROCARPETS  **9**

branded carpets
and rugs

PHILIPS **8**

lighting systems

GU **7**

automatic entrance
systems

KNAUF **15**

aquapanel® systems

Flügger farby **11**

paints

PORTA
DRZWI **17**

doors

ideal
STANDARD **14**

bathroom
equipment

TMK
PROJEKT **20**

GRG technology

SCHRACK
SECUNET **19**

fire protection
systems

FAST  **10**

complete furnishing

RADSON  **21**

clever heating solutions

heater





Wings Properties Sp. z o.o.



INVESTOR

A special purpose vehicle set up to develop OVO Wrocław – a joint undertaking of the architect Asaf Gottesman, Angel Poland Group and Shuckie Ovadiah, and Hoche Partners. Asaf Gottesman is a co-founder of GS Arch studio specialising in projects that require innovative and interdisciplinary solutions.

The studio has developed projects worldwide, including hospitality and utility facilities, as well as residential and mixed-use buildings. Asaf Gottesman is also a concept designer of OVO Wrocław. Angel Poland Group is one of Poland's largest property development companies. It has operated on the market for over a decade, focusing on luxury developments in the biggest cities of Poland. So far, it has invested in 10 development projects, including the apartment buildings located in Cracow – Angel City, Angel Plaza and Angel Wawel,

as well as the Wrocław based senior citizen centre Angel Care. Currently, the company is beginning the development of Angel River apartments. Shuckie Ovadiah has been active on the real estate markets for many years. He is the founder of several real estate companies and held the position of managing director at GS Arch. Apart from being an investor in OVO Wrocław, he is the CEO of the project. Hoche Partners is an international consultancy company, established in 2003 in Paris, whose aim is to support investors, including high net worth individuals, in the area of property purchase and management. www.ovowroclaw.com



GOTTESMAN
SZMELCMAN
ARCHITECTURE

Gottesman-Szmelcman Architecture



Founded in 2003, Gottesman-Szmelcman Architecture is an international practice that focuses upon projects requiring innovative, multi-disciplinary solutions. We have developed particular skills in the domains of hospitality, urban planning, mixed use residential developments, and in one-off iconic developments that tend to crystallize key issues and generate extra-ordinary values.

We specialize in concept development while partnering with highly qualified local practices and consultants. Our approach extends beyond the conventional architectural services and often includes commercial considerations, program development, business plans, financing and marketing strategies. Worldwide projects of Gottesman-Szmelcman Architecture studio are i.a. Terra Porra Palombaggii, Corsica, Arsuf in Arsuf, Israel, Zinout 2000 Beit Yehoshua, Israel. Selected projects in Poland: Angel City in Kraków, The Granary in Wrocław, OVO Wrocław.

In 2010, studio increased the range of activities and set up a studio – GS Interiors, dedicated to interior design. www.gsarch.org



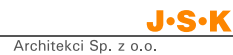
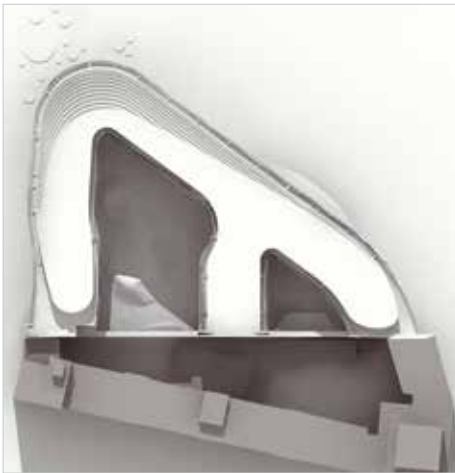
Eiffage Polska Budownictwo



3

Eiffage Polska Budownictwo (EPB) belongs to the Eiffage Group – one of the largest construction groups and concessions operators in Europe. The Group employs over 60,000 people and generates a turnover of around EUR 14 bn. EPB is a general contractor of construction works which currently employs 300 people. The company specializes in comprehensive services in the development of high volume structures: office buildings, retail facilities, hotels, housing estates and residential buildings, education centers, industrial projects and sport facilities.

www.eiffage.pl



JSK Architekci Sp. z o.o.

4

JSK Architects Office specializes in designing offices, apartments, shopping malls, hotels and convention centers. The particular specialty of JSK is the design of airport terminals, stations and sports facilities such as multifunctional arenas and stadiums. JSK Architects Office carries out projects for Polish and international investors, both private and public. The most important achievements of JSK in the recent years includes: project of Legia Warszawa Stadium, design of the National Stadium in Warszawa and the Municipal Stadium in Wrocław as UEFA EURO 2012 venues or the new airport terminals in Gdańsk and Wrocław. In addition to active operations on the Polish market, JSK Architects Office is implementing a number of projects in international markets: Germany, Italy, Czech Republic, Kenya and in the Middle East.

www.jskarchitects.com



DuPont Poland



5

DuPont™ Corian® has been created as a high-performance material for use as kitchen and bathroom countertops. Over the years, the DuPont company turned DuPont™ Corian® solid surface in a unique tool for designing every application you can imagine. Kitchen, bathroom, lighting, facades, seat heaters, home automation...

DuPont™ Corian® can be found everywhere today: In commercial, domestic and public space applications. www.corian.pl



Aluprof S.A.

6

MB-SR60N system is intended for creation and fabrication of lightweight, hung & infilled curtain walling, roofs, skylights, and other spatial structures. The supporting profiles are characterised by a 60 mm constant width and are flushed on the inside of the facade.

The system enables the use of many types of facade-dedicated openable elements from the wide range of Aluprof window & door systems, and of solutions intended for mullion and transom curtain walls: roof windows and top hung and parallel opening windows. www.aluprof.eu





Gretsch-Unitas Group



7 Gretsch-Unitas Group is one of the world's leading suppliers of windows, doors, automatic entrance systems and buildings management systems. For many years, the Group is formed by significant brands such as BKS (locking technology), FERCO (hardware fittings) and GU Automatic (automatic entrance systems). Developing and implementing new ideas for over 100 years, according to the maxim „Advantage of System”, the Group has developed innovative solutions tailored functionally and technically to the individual needs of each client. www.g-u.com



Philips Lighting Poland Sp. z o.o.

8 Philips introduces new unlimited possibilities for reviving space color, movement, texture and light. Luminous Carpets is a patented flooring solution that combines durable LED technology from Philips with light conductive carpet, whereas the Luminous Textile combines multi-colored LED diodes, which patents that also have sound-absorbing properties. More at: www.largeluminoussurfaces.com and www.lighting.philips.pl

AXPROCARPETS



Kowary AxPro Carpets Sp. z o.o.



9 Kowary AxPro Carpets – 100% Polish company, provides: carpets and rugs, carpet tiles, technical floors, floor accessories and most of floor coverings. Approximately 85% of our products are manufactured using natural and renewable raw materials. We provide such services like: project budgeting, technical consulting, individual designs, construction and installation. Kowary AxPro Carpets offer a combination of professionalism and passion of our employees and comfort with safety of investment at a reasonable price. www.axprocarpets.com



Fast S.A.

10 FAST, providing comprehensive interior equipment, may boast unquestionable advantages such as complete production infrastructure and efficient logistics system. The Company owns a factory and modern machinery, they specialise in the application and combining of a variety of materials. A wide range of raw materials, advanced painting technologies, proven bending methods, ability to create asymmetrical forms as well as precision and beauty of finishing constitute definite advantages of FAST. www.fast.pl

Flügger farby

Flügger Sp. z o.o.



11

Flügger – Scandinavian manufacturer of paint, wallpaper and professional painting tools. Within OVO Wrocław investment we implemented following products: Flügger Acrylic – one of the best paints available on entire market. Acrylic is a powerful, latex paint with high opacity ratio, which forms anti-reflective matt coating. Flügger Sandplast S – ready to use polymer plaster mass with sand. Very good filling in combination with an application machine makes this product an ideal set for quick application to large areas. Unmatched in its price category. www.flugger.pl



FRAPOL Sp. z o.o

12

FRAPOL is one of the largest manufacturers and suppliers of air conditioning and ventilation systems in Poland. Company's offer includes i.a.: air-conditioning and ventilation units, compact air handling units with integrated automation, FRAMEDIC air conditioning systems for clean rooms, gas heat pumps, ventilation and smoke ducts, fire protection flaps and valves, controllers and silencers. FRAPOL provides delivery and installation of materials and equipment selection. We also carry out, installation of: tooling, components, boot procedure with the performance of tests and measurements, preparation of a detailed report of handover, warranty and service and comprehensive installation project of HVAC system. www.frapol.com.pl

hansgrohe

Hansgrohe Polska



13

From the very beginning, Hansgrohe has been innovative. The company introduced the first hand shower, the shower head with regulated flow rate (1968) and the first multi-jet showering panel. Nowadays, Hansgrohe mixers and showers make your bathroom functional and aesthetic. Hansgrohe products are present in such prestigious places like the luxurious ocean liner TS Queen Mary II, Heathrow Terminal 5 at Heathrow Airport in London or Burj Khalifa in Dubai (the world's highest building). Hansgrohe products are often internationally awarded with prizes like Red Dot, Wallpaper Design Award or IF. www.hansgrohe.pl



Ideal Standard Polska
Sp. z o.o.

14

Ideal Standard wide product range provides plenty of solutions tailored to the needs of individual and business clients. The company's offer include: sinks, toilets, fittings, bathtubs, shower cubicles, shower trays, furniture and accessories. Basic portfolio includes over 3,000 products that provides comprehensive bathroom set with best quality and style. Considering the the size of our offer and willingness to provide best service, Ideal Standard invites you to contact and visit a website. www.idealstandard.pl



Knauf Sp. z o.o.



15

Knauf offer includes drywall systems, panels made from gypsum or cement – lime, adhesives and basecoats, thermal insulation systems, joints, silicones, screeds and leveling mass. We offer comprehensive solutions in the field of acoustic systems and passive fire protection.

Knauf hallmark are high quality products and plenty of innovations.

so that we can meet the rapidly changing demands of the market of building materials. As a result, Kanuf company can react to rapidly changing market demands www.knauf.pl



Meibes Sp. z o.o.

16

“Innovation and friendly attitude to customers is our mission.”

this slogan is very close to Meibes from the very beginning. Through constant work and improvement of most important areas of our activities we strive to fulfill our mission best as we can. We focus on providing systems that meet the highest expectations. We are

constantly developing our offer to provide comprehensive and innovative solutions. Customers can count on our support at every stage of the project, from concept, through design, organization, logistics, to professional maintenance services. www.meibes.pl.



PORTA KMI Poland



17

PORTA offers outside and inside entrance doors, as well as interior and technical doors. The company provides services taking into account both the needs of architects and individual customers who have become increasingly eager to personalize the objects around them. The most popular custom-made solutions include changes in the door dimensions. In many collections of

lacquered doors, it is possible to change the colour to any of 200 individual schemes. Models with engraved patterns provide the customers with the opportunity to create their own design which will be later applied on their door. For more information visit: www.porta.com.pl



ROCKWOOL Polska Sp. z o.o.

18

Rockwool Poland is a leader of rock wool production, commonly used in the construction, energy and heating market. Rockwool products improve energy efficiency and fire security of buildings. Products are mainly appreciated for the quality and its versatility, which guarantee rock wool qualities

- flammability, durability, high thermal and acoustic insulation.

A company offers products and comprehensive solutions for the commercial and private sector. www.rockwool.pl



Schrack Seconet Polska Sp. z o. o.



19

Fire safety of the OVO Wrocław is supervised by Integral IP MX, a technologically advanced fire alarm and fixed extinguishing equipment control system made by Schrack Seconet. There are over 1500 interactive multi-sensor CUBUS MTD 533X detectors installed in the building that may serve as smoke detectors, heat detectors or combined smoke and heat detectors. The innovative technology CUBUS Nivellierung® allows them to adapt their sensitivity to changing operational environments. The facility has also been equipped with the modern early smoke detection system AirSCREEN to ensure highest detection sensitivity through the use of state-of-the-art HD technology applied in the smoke detector. www.schrack-seconet.pl



TMK Projekt Sp. z o.o.

20

TMK project is a team of people with many years of experience in the production of stucco plaster and prefabricated GRG. In our offer you can find: cornices, moldings, decorative facets, pilasters, columns and ornaments. We also carry special details on individual order of architects and investors. We produce a series of spectacular 3D gypsum panels with highest quality for affordable price. Moreover, we do complete professional restoration and maintenance of broken facade or elevation, as well as the revitalization of stucco plaster. www.tmkprojekt.pl



RADSON/Rettig Heating Sp. z o.o.



21

Rettig Heating Sp. o.o. is part of the Rettig ICC Group, a manufacturer of RADSON heaters. Since its inception, the RADSON products quality is put in the first place. Thanks to belonging to international Rettig concern our customers can be assured of best quality and development of our products. The whole process of heaters production is carried out in a management system based on ISO 9001 which is additionally certified by TÜV Rheinland. www.radson.pl



PR Expert

The agency responsible for multi-channel promotion of OVO Wrocław from the beginning of construction works. Highly specialised in the area of services delivered to development projects. Its resources allow it to handle the entire development process, including devising strategy and image, media communication, marketing, social media and crisis management. It focuses on building the image of people working in the property sector as experts as well as on reinforcing the public brand awareness. It provides services to Angel Poland Group in relation to the group's many development projects. The agency boasts ten years' experience. www.prexper.com.pl

STRIDA

the folding bike

- dimensions: 114/116 x 51 x 23 cm
- wheel size: 16" or 18"
- weight: 10 kg



www.strida.pl
tel.: 722 077 727



Enjoy the journey.

First in Wroclaw luxury fitness and wellness center soon in OVO.

Everyday we work to make Holmes Place your place to enjoy the journey. In our new exclusive health club we offer you great design and technology, cutting edge cardio and gym zone, fully equipped functional training zone, qualified personal trainers and wide range of group fitness classes.

Holmes Place in OVO Wroclaw is also a place of relaxation with a swimming pool, sauna and a comfortable resting area.

 HOLMES PLACE

WWW.HOLMESPLACE.PL

””

Architecture is a form of Alchemy. It is all the more magical because its realization requires the goodwill, talent and commitment of thousands of individuals. We are very pleased that "Builder" magazine considers OVO Wrocław an extraordinary architectural project and has chosen to publish a special issue dedicated to celebrating its completion.

Asaf Gottesman, Concept Architect of OVO Wrocław, one of investors

””

Share capital, location, lifestyle – these are key words to describe our vision and mission. Implementing OVO Wrocław, we have set a new standard and proposed above-average quality of life. OVO is our great success. Additional satisfaction brings awareness that the investment has been recognized by professionals in the construction industry.

Ron Ben Shahar, partner of Angel Poland Group, one of OVO Wrocław investors

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Publication in "Builder Exclusive" is a great distinction for us. Builder magazine perfectly knows Polish construction market, and this significantly increases prestige of this special issue devoted exclusively to OVO Wrocław. This success was achieved thanks to the joint teamwork of OVO and our partners.

Shuckie Ovadiah, CEO of OVO Wrocław, one of investors

FOR POLISH VERSION
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BY OTRZYMAĆ POLSKĄ
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