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impact.implenia.com

The Implenia Employee Magazine 2/2020

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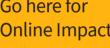
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Our vision remains the same: to become a leading multinational integrated construction and real estate services provider. Our "Way Forward" initiative, announced in October, is designed to intensify and accelerate implementation of our strategy: securing profitable growth by concentrating on our core business. We will focus on integrated construction and real estate services in Switzerland and Germany. In other markets we only plan to continue offering tunnelling and related infrastructure projects. You can read more about this on pages 10 and 11. These measures, which we have been implementing



Editorial

since the autumn, have presented many of us with additional challenging tasks – and all of this on top of the intense months we have had dealing with COVID-19. It's good that we will all soon be getting a well-deserved break during the holiday season.

I would like to take this opportunity to thank you all sincerely, also on behalf of the entire Implenia Executive Committee, for your dedication and for the work you do every day on our sites and in our offices. The efforts that you have made during this challenging year go beyond the call of duty. I would like to wish you and your families a happy and restful holiday period. Stay healthy and have a Happy New Year. I look forward to continuing working with you in 2021 on achieving our vision.

André



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Safety



Group-wide Safety Rules revised

Implenia has revised its binding Group-wide Safety Rules. We all need to respect and implement these rules in our day-to-day lives – to protect our fellow human beings and ourselves. We summarise the rules for you here in this article, and you will also find them on the enclosed poster. Put the poster up at work so you always have our Safety Rules where you can see them!



Safety Rules



I care for myself and my colleagues. In case of doubt I say STOP!



I strictly adhere to zero tolerance regarding alcohol and drugs



I only start my work after assessing any risk and taking mitigation actions



I take fatigue and stress seriously



I always wear the required Personal Protective Equipment (PPE)



I report all incidents immediately and inform my colleagues

I KEEP DISTANCE AND HYGIENE TO PROTECT MYSELF AND OTHERS

Our Group-wide Safety Rules are binding for all Implenia employees. They are there to highlight and raise awareness about possible dangers in everyday working life so we can avoid dangerous situations and prevent the accidents that can result from them.

Adapting to current conditions

"We wanted the revised Safety Rules to put the focus on each individual and their personal responsibilities," explains Frank Becker, Head Safety. "It may have been said many times before, but I'm happy to keep repeating it: our ultimate goal is for all our employees to return home safe and healthy after a day's work, and everyone has a role to play in ensuring this happens."

The International Safety Community has revised and condensed the previous rules, simplifying them and giving them a first-person perspective. The COVID-19 pandemic has prompted the inclusion of an additional section on distancing and hygiene rules.

But rules are not worth much on paper alone. They have to be put into practice. And each and every one of us has a responsibility to do this. We can all do our bit to ensure that Health & Safety at work is the top priority in everything that Implenia does. We should act in a way that minimises the risk of accidents – and other potential damage to health – at work. This is the only way we can make a success of the Safety Rules at Implenia. Posters with the Safety Rules are available in German, English, French, Italian, Norwegian, Polish, Portuguese, Swedish and Romanian. You can find them as a PDF file to download on the intranet or on our "Implenia on Site" website. They can also be ordered through your Safety Officer.

Rethinking makes the difference

"I'm asking all of you: apply the Safety Rules consistently in your day-to-day lives in order to protect yourselves and everyone around you. This will also help you respond more quickly and professionally in dangerous situations," says Frank Becker. So before you get back to your work, remember: safety at work is a management responsibility and a responsibility for us all. If a situation is not safe, it is the duty of every one of us to say "STOP!". Thank you very much for your commitment!

And if, despite all our efforts, something unfortunate still occurs? You can read in Online Impact how the Implenia Legal Team will support you when accidents happen.



News





Help is at hand - a task force for any event

None of us will be quick to forget 2020. COVID-19 has made this a challenging time, but it has also brought us together - and our task force organisation and hotline have played a part in this. Our employees can go to the highly motivated and professional team at Health Management (from left: Irene Rombach, Silvia Günter and Séverine Barmaz) for quick answers, solutions and reassurance.

Immediately after lockdown was announced in spring, Implenia set up a proactive task force organisation covering all our countries and divisions. This has allowed us to respond effectively to the constantly changing situation. We also set up a central hotline for our employees. Nobody knew back then what the team would be letting itself in for, but in retrospect we can see that the hotline was and remains a central element in our efforts to cope with the COVID-19 situation.

Hotline staff answer questions quickly and directly and give our employees reassurance amidst all the uncertainty. The hotline also helps us keep our fingers on the pulse of the organisation and feed recurring issues back to the task force so it is able to produce the right information and guidelines at the right time. The hotline team identifies delicate issues with great sensitivity and serves as an early warning system for internal challenges.

Asked for examples, Irene has a seemingly endless list: the team has taken a very large number of calls. Some people have called with simple questions about specific measures, others pri-

marily needed a sympathetic ear in this unusual time. With such a flood of calls it has sometimes been hard to maintain an overview - of the issues and of the constantly changing regulations. It has certainly created challenges for the team. "We have become real experts and have often gone to the Federal Office of Public Health with questions that they need to research before they can give us an answer," says Irene. Things got a little calmer when the first wave of the virus began to wane, but calls from employees are now rising again: the pandemic is still here and it continues to challenge us. The hotline has proved itself: it is helping us concentrate on dayto-day business despite all the challenges posed by COVID-19.

Read in Online Impact about the people who have made our hotline such a success.



Learn smart with eCampus

eCampus for employees in Switzerland and Germany is offering a growing range of courses. Click through our digital learning platform and find the training that meets your needs. Classroom sessions are now limited owing to the COVID-19 situation and are only taking place under strict conditions, but eCampus also offers guaranteed Corona-free e-courses, webinars and open access online courses. What subjects are

Interested in further training? The Implenia available? From first aid courses, sessions to help you stop smoking and communications coaching, to CAS construction costs planning, Value Assurance, Health & Safety at work and environmental protection, there is a course for everyone. One of the newest offerings is an introduction to Lean Management – essential knowledge for the future of our industry. Click around and become an eCampus graduate!



Go here for the Online Impact:



Swiss launch in January

The past few months have been intense for the INSPIRE project team, but its members have achieved a great deal together. Once the processes had been implemented in the system and preparations had been made for data migration, process and function testing began in order to ensure the quality of the system. End-user training has been underway since October to make sure all employees can use the new systems with confidence. Training consists of a general introduction to the systems plus more than 60 in-depth modules on construction projects, procurement, finance, HR, depots and master data.

All three of the main new systems, SAP S/4 HANA, RIB iTWO 4.0 and RIB iTWO Site, go live in Switzerland on 1 January 2021. This initial launch covers more than 140 processes that have been coordinated and harmonised across the whole company and adapted to Switzerland's country-specific needs. Further processes and functions will gradually be added. Interested? Read more in Online



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Smart scanning. Made by Implenia.

What do you do if the plans and drawings for existing buildings have been lost, or are not up to date, or if there's only a limited time to take measurements on site? René Kreil, a civil engineer at Implenia Instandsetzung in Erfurt, knows these problems only too well. So he has developed a clever digital solution, which is now available to Implenia and external companies.



RealitySite offers great benefits, as Instandsetzung Project Manager Katharina Gerstenberger can confirm. She arranged to use the digital scanning system on our Mülheimer Bridge project in Cologne.

From idea to implementation

He also kept finding in his work that measurements were not always accurate, which led to extra work and delays later on. "So I wanted to create an end-to-end digital process that would cover everything from taking photos and measurements on site, to tendering and billing. I wanted to improve the accuracy, but also improve the way everyone involved in the project works together," says René. After several attempts with a special 3D camera and a few setbacks, he finally achieved his breakthrough with a laser scanner. This let him produce a 3D photo view of whatever he was recording – and a 3D picture says more than a thousand words. Any interested party can then take a look at the image from any angle on their PC; they can also zoom in and out, remeasure and move from location to location. It's also possible to generate 2D drawings, which can then be imported and processed in the iTWO planning management system. "So you no longer have to make measurements by hand, then enter them into an Excel spreadsheet and then type them into iTWO," says René happily. He was given support for his project by

the Implenia Innovation Hub, a platform that encourages and supports our employees to develop their ideas into innovations and so create added value. René's scanning solution is at the second of the three Innovation Hub stages ("blue box") and has already been given a name: RealitySite.

Architectural landmark as pilot project

The first property to be scanned digitally was the Hyparschale, one of the most famous buildings in the German city of Magdeburg. We are currently renovating its distinctive roof, which is made up of four hyperbolic paraboloids. Three more Implenia projects are now also using the system: the school sports halls in Erfurt, the Mülheimer Bridge in Cologne and the silo system at the cement plant in Karsdorf (Saxony-Anhalt).

RealitySite is also available for use by interested colleagues and external companies. For more information and booking: www.realitysite.com

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The Way Forward for Implenia - concentrating on profitable core business

Now that the strategy reviews at all our divisions are complete, something has become very clear: we have to improve the risk profile of Implenia significantly. Consequently, we plan to concentrate in future on core businesses that can deliver solid margins. We will focus on integrated construction and real estate services in Switzerland and Germany. In other markets we only plan to continue offering tunnelling and related infrastructure projects.

With this more focused market presence, Implenia is still well on With its attractive development portfolio, **Division Real Estate** (pretrack to realise its vision of becoming a leading, multinational integrated construction and real estate services provider. In addition business units that lie outside our future core business or that are not profitable. Furthermore, we intend to reduce our participation in other companies and our ownership of depots and construction equipment in Germany and Austria in order to improve our equity ratio. We also want to improve the efficiency and effectiveness of our global functions.



André Wyss, CEO

"The entire management firmly believes that Implenia is well positioned to be a strong, profitable company and to achieve our vision of becoming a leading multinational integrated provider of construction and real estate services."

viously Development) will continue to grow as a trader and service developer in Switzerland. It will also now build up a similar business to this portfolio adjustment, we plan to sell or discontinue several with its own portfolio in Germany. It will expand its service profile along the whole real estate value chain, from investment management to comprehensive portfolio and asset management to newly developed, scalable real estate products for international markets (e.g. student residences, old-age homes and hotels). In addition, the division will build up its expertise in prefabrication and generate recurring revenue from services provided to Ina Invest and third parties. It will also receive dividend payments from Implenia's significant minority stake (42.5 %) in Ina Invest.

> **Division Buildings** will concentrate on a strong market presence in Switzerland and Germany. As an owner-centric end-to-end provider of construction services, Buildings will leverage its proven track record and competencies as a general and total contractor, and offer novel contract models to its clients. Non-performing businesses, such as Implenia Bau GmbH (South Baden, Germany), will be closed, and realisation capacities at the lower end of the value chain reduced. Activities in Austria will be transferred to the best possible owner.

> **Division Civil Engineering** will focus on planning, developing and executing complex infrastructure projects in Switzerland and Germany. In other markets, the plan is to offer only tunnelling and related infrastructure services. The division will therefore remain a leading multinational player in tunnelling, where Implenia has a strong track record and where international tendering practices are common. The plan is to sell or discontinue the activities of Sub-Unit Civil in Sweden, Norway, Austria and Romania, while the tunnelling business in France is being monitored. In Switzerland, Implenia intends to focus Sub-Unit Civil's activities on selected regions and to reduce execution capacities at the lower end of the value chain.

Division Specialties will develop scalable businesses in construction and engineering. The division is adjusting its business models for selected offerings (e.g. Timber Construction and Formworks), while looking for innovative solutions and identifying existing and new investment opportunities, such as facade technology and building technology services. The division will also develop and test business ideas from the Implenia Innovation Hub, some of which are already poised for market launch. Several non-strategic or non-performing businesses will be divested or discontinued, including Implenia Modernbau GmbH (Saarbrücken, Germany).



Jens Vollmar, Head Division Buildings

"With consulting services and innovative contract models, we involve our customers in the process early on. This allows integrated, early planning of complex projects in partnership with the customer."



Anita Eckardt, Head Division Specialties

"Our top priority is to be competitive on the market by creating added value for customers. To achieve this we will adjust business models where necessary, implement projects with discipline and promote innovations."



Adrian Wyss, Head Division Real Estate

"As Division Real Estate we continue to build up our successful real estate business under a new name. With comprehensive real estate services and our own real estate products we want to be one of the most innovative players in the market."



Christian Späth, Head Division Civil Engineering

"We are making best use of our highly specialised skills by concentrating on complex infrastructure projects in Switzerland and Germany. We will also take on complex infrastructure projects in other markets with our internationally recognised tunnelling expertise."

Based on this sound underlying business, the initiatives under the "Profitable Growth" strategic priority will be crucial in order for us to achieve our ambitious goals. Extraordinary write-downs on projects will be minimised through improved transparency and systematic risk management, and especially by our Value Assurance approach. Furthermore, we will continue to execute our Operational Excellence programme so that all complex projects benefit from the improvements we have made in procurement, digitalisation (INSPIRE, BIM, process automation) and Lean Construction. We will also improve our cash conversion cycle.

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Acting sustainably in all areas

With our ongoing "Sustainable Office" global initiative, we are taking various steps to promote sustainability at our office locations. The primary focus is on energy, resources, waste and mobility. We have run similar initiatives in the past for our building sites and yards.

Implenia has been following a sustainability strategy since 2009 as it seeks to meet its social and environmental responsibilities. An essential element of this strategy is the effort to reduce CO₂ and other environmentally harmful emissions produced by our activities. This premises as it does to our construction sites.

"Our work on construction sites obviously affects the environment, but so do our office-based activities. The impact may not be as big, but there are still a lot of little things we can do that cumulatively have a major effect," says Rolf Wagenbach, Global Head Sustainability. The "Sustainable Office" initiative helps employees make their day-to-day office lives more sustainable, while also encouraging sustainable thinking in other areas.

Variety of measures underway

"Sustainable Office" encompasses measures relating to energy, resources, waste and mobility. These include awareness-raising campaigns for employees, analysis and proposals for improvements at specific locations, and various pilot projects.

Bicycles and e-bikes have been available for employees to borrow at our offices in the Zurich region since June, for example.

Similar initiatives are underway in other parts of Switzerland, as well as in Sweden and Germany. An animated film clearly explains how everyone can help make our activities in the office, when mobile working and at home more sustainable with just a little effort. applies just as much to our yards, production facilities and office
Tips on all types of sustainable action can be found on a dedicated section of the Intranet.

Sustainability at the new head office

The Sustainability Team has also been heavily involved in the design of the new Implenia head office building ("Implenia Connect"), and has ensured that Sustainable Office guidelines have informed the operating concept. For example, LED lights with motion sensors and timers are being installed, along with energy-saving devices and recycling stations.

Read Online Impact to see what measures are planned in addition to the ones already initiated and find out how locations in Sweden are leading by example.

"Safety first!" at our depots

A lot has changed at our depots in Switzerland since last year. We have successfully introduced and implemented new safety rules, driven by the clear commitment of Implenia and the management of ETS Switzerland to Health & Safety in the workplace. This commitment begins with the company's own Safety Charter, which makes management's responsibilities clear: duties are explained, powers of authority and responsibility are clearly defined and the charter has been signed by all depot heads. But safety is not just a matter for managers. Each and every employee is responsible both for themselves and for their colleagues. The maxim of "say STOP before something happens" has been emphasised with a poster campaign by the Suva, Switzerland's national accident insurance fund. At work, the safety of all involved is always the first priority.

This message, together with monthly depot-specific safety courses and a Health & Safety training programme, have brought a new safety culture to the depots. And if an unfortunate incident should still occur, safety alerts will be posted immediately afterwards with information about the accident, advice, tips and rules of conduct. Near misses and dangerous situations are also thoroughly investigated in order to discover additional ways of preventing actual accidents. Further improvements include the removal of potentially hazardous obstacles, additional first aid equipment and the replacement of unsuitable tools and machinery. Continuous detailed audits are conducted to review, prioritise and adapt the measures. Markus Reinhard, who is responsible for safety at the depots, looks back on the last year with satisfaction: "The great efforts we have made on safety culture and employee training are improvements and a trend in the right direction."



paying off. The most difficult job here is to create a cultural change in people's minds. It will probably still take a while before we have a sustained reduction in accident figures, but we are already seeing

The Game

Win a trip for two to Munich!

With any luck you could win a travel voucher with Impact. This time for a trip to Munich, capital of Bavaria. How? You will find a crossword puzzle in our online edition at **impact.implenia.com**. Simply solve it and use the form to send the correct keyword to the editorial department. Good luck!

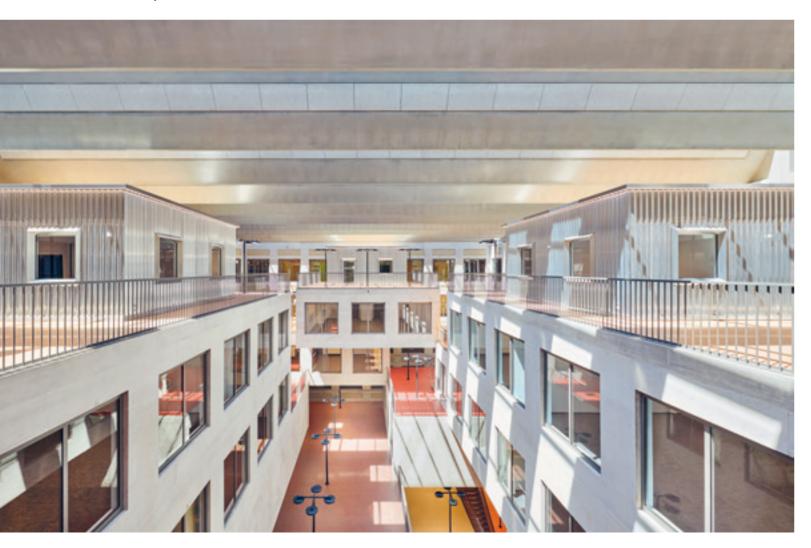




Our projects

From foundry to educational institution

Haus Adeline-Favre is one of Winterthur's finest buildings. It was named after the famous Valais midwife who had to fight for her education in the early 20th century. Around 2,000 healthcare students and 300 employees have been learning and researching at the new site, built by Implenia, since mid-September.



After almost ten years of development, planning and construction, the finished building is setting new standards. Haus Adeline Favre is easily Switzerland's largest training and research centre for occupational therapy, physiotherapy, midwifery and nursing.

Motivational speech

Speaking at the official inauguration celebration in August, Adrian Wyss, Head Division Real Estate at Implenia, said: "We are very pleased that the building is opening for operations on schedule. Our thanks go to everyone involved; their commitment and tireless efforts have allowed us to complete this challenging property development project in just under ten years, creating the new campus for the School of Health Professions at Zurich University of Applied Sciences (ZHAW). We'd particularly like to thank the client and project owner SISKA Immobilien AG for its trust and excellent collaboration throughout the whole project."

Client and tenant also praised the successful teamwork. By meeting the Minergie standard in the construction of the building, Implenia ensured that it fulfilled all the criteria for a modern, sustainable educational building. An open day will be held next year, and it's definitely worth making a visit! Impact would also like to offer its congratulations to all the Implenia people from different divisions and units that pulled together to complete the project successfully – and especially to those from Modernisation, Special Foundations, Concreting and Masonry, Building Technology and Controlling.





Prestigious accolade for Haus Adeline Favre

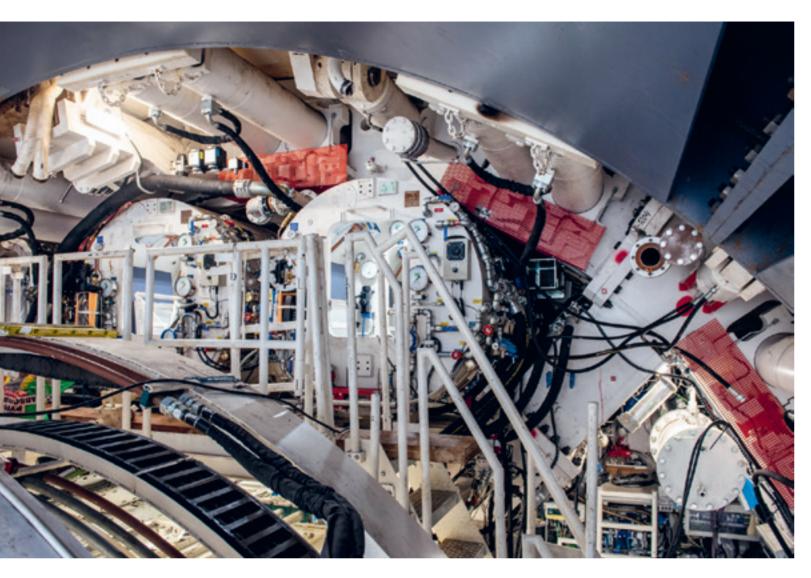
Haus Adeline Favre, designed by pool Architekten (Zurich), scored highly for its architectural quality in the 2020 architecture competition for the Winterthur region. The jury particularly liked how the large atrium creates a kind of internal outdoor space, and they appreciated the clever arrangement of teaching rooms – something that has also impressed students, teachers

and staff. The design has created various levels with welcoming spaces to relax, meet up, chat and exchange ideas.

Canton Zurich, ZHAW, SISKA and Implenia celebrated the opening of Haus Adeline Favre in August 2020.



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Journey to the centre of the earth – well, not quite

Implenia is building a 2.4 km tunnel through soft ground as part of the Metro Line B extension in Lyon. The cutting head of the tunnel boring machine has to be maintained in tip-top condition despite the extreme humidity, heat and high ambient pressure. No problem for our French colleagues, who are certified experts in this complicated procedure.

Hyperbaric work underground

"Coline", the variable density tunnel boring machine (TBM) being used for the Line B extension, was specially designed for work in highly complex geological conditions. A constant pressure is maintained to stabilise the subsoil, prevent collapses and maintain the cohesion of the excavated earth. The zone in front of the cutting head is a closed area, in which the pressure is three times greater than air pressure on the surface. It's what divers experience at depths of about 20 m. When maintenance is required on the TBM, or if worn cutting tools need replacing, the work has to be done in this zone.

These "hyperbaric" jobs are carried out using carefully controlled methods by employees specially trained in working in pressurised areas. Implenia France has around 40 employees who are suitably qualified. "You go through comprehensive training and have to meet demanding medical criteria," says Karine Puyjarinet, Safety Officer and consultant on hyperbaric prevention. Workers are put through ENT examinations, blood tests, lung function tests, stress tests and pressure tests. As a rule, 20% of candidates fail to meet all of the requirements.

"Being able to carry out this kind of work is a real strength of our Group because it makes us independent and able to react quickly," says Denis Vialle, Head of Underground Work and operational manager for hyperbaric work. Two or three workers who have been specially trained for pressurised environments work on each shift. Everything has to be done with the utmost precision. The temperature can exceed 40 degrees Celsius, and humidity can be virtually 100%. Individual replacement parts weigh up to 200 kg and require very careful handling. "Depending on the geological conditions, this process has to be carried out once every two weeks in clay soil, for example, but it can be once a day if we're drilling

through granite and alluvial soil," explains Armand Dupre, who is responsible for TBM production as well as being operational manager for hyperbaric work. There have already been 47 shifts worked in the first 700 m of tunnel.

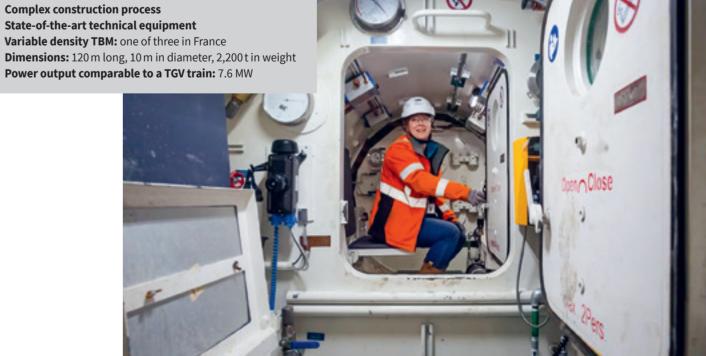
Reliable partnerships

The centre for hyperbaric medicine at the Edouard Herriot Hospital, which is located close to the construction site, looks after the teams. Medical professionals can intervene rapidly if there are any incidents or injuries, and a hyperbaric decompression chamber is available. Working under pressure can lead to severe joint pain and, in certain cases, may necessitate decompression in a medical pressure chamber.

Thanks to a partnership with Azoth System, the site also has a portable Doppler machine. Called the "O'Dive", this is a medical device used to examine workers after every shift. Results show which working conditions raise or lower the danger of a decompression incident, so risks can be reduced by adjusting the decompression procedure. The experimental system has proved effective for ocean divers, but until now had not been used for hyperbaric operations in dry environments such as underground work.

Key project information

Implenia Safety Officer and consultant on hyperbaric prevention Karine Puyjarinet in the TBM on the way to the hyperbaric zone.





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In step with BIM and Lean Construction

The "Südcampus" residential district in Bad Homburg certainly qualifies as a major project: 27 residential buildings, a creche, seven underground garages, offering a total of around 80,000 m² of gross floor area on a site of around 40,000 m². Having won the construction management contract, Implenia has been using BIM to plan the ambitious project, including construction pits, outside areas and access since 2019. We are already creating the construction pits and have now also won the contract for the plots one to four, which include around 270 apartments, the creche and four underground garages. Implenia will use Lean methods to carry out repeating sections of the job.





Life in the new district: more than 500 households will soon call Südcampus to the north of Frankfurt, home

Right from the first phase, Implenia has developed, planned and optimised the construction project as the client's contractual partner. The construction management contract includes all the planning stages that involve specialist planners. "This partnering project has been characterised by cooperation with the client from the first stage of planning," says Joris Vankeirsbilck, Head of the Major Projects Office. Next comes all the execution planning and then the actual realisation of the project. Our building construction work on plots one to four is scheduled to start at the end of the year once planning permission has been granted.

Full planning power

Matthias Jacob, Head Buildings Germany, has seen how the combined expertise of several departments has helped from the start: a single team that contributed value engineering and planning ideas in the early stages of the project; experienced design managers who can lead external planning teams and control the planning process in a structured way; the Major Projects Office, with its vast experience of multistage processes, partnering models, and proactive management of construction management contracts; in-house structural planning; the BIM team which, led by a BIM manager from the PES organisation, was involved in the project from an early stage; and last but not least, our Lean expertise which, combined with the use of BIM in the planning and execution phases, will create further synergies. See Online Impact to find out how such complex project coordination can be managed successfully.

Omid Haiati, Head of PES Germany

<u>"Our early involvement in</u>

the project meant we could use
BIM and Lean methods to optimise the preparatory work, identify conflicts and simplify project controlling. With interdisciplinary teams of specialists on the construction site, we can address requirements effectively and offer appropriate solutions.

'Let's go Gemba' is the phrase used for this approach."

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The new beating heart of Morges

Implenia is building the "Îlot Sud" project right next to the medieval walls of Morges in the middle of the town's popular station district. The "Southern Island" will be the new beating heart of Morges town centre, combining elegant modern offices and sustainable homes with boutique shops in lofty arcades.



Îlot Sud has been designed as a place for meeting people and exchanging ideas, with shops, state-of-the-art office space, 162 comfortable apartments – from studios to 5.5 rooms – most of which offer breathtaking views of the lake and the Alps beyond, a tree-lined courtyard and generous public and private parking space.

Sustainable throughout

The building is Minergie-certified and, thanks to its state-of-the-art design, guarantees excellent energy efficiency and environmental standards: it fulfills sustainable construction criteria for resource consumption, harmful emissions and mobility. Most of the roofs are equipped with solar panels, parking bays feature battery charging stations for electric cars, there are 350 bicycle parking spaces, and an innovative system uses lake water as the source for heating, hot water and cooling.

The first tenants are due to move into the roomy commercial and office spaces in summer 2021, while the light and airy residential units will see their first occupants in the second half of 2021. There is lots of work to do before then, and Implenia still faces several challenges: the hardness of the ground, proximity to the water table, the complex facade technology and the lack of space in the town centre. But the Lean approach means that all these and other challenges are being mastered – which you can read more about in





Plan and optimise together with Lean

Subcontractors are actively involved in the optimisation of the timetable during the weekly Lean meetings. Each trade makes a binding schedule for each day's work for the next three weeks, and the control room draws up a transparent plan of all the processes and how they interconnect. The project team ensures that the necessary capacities are in place (personnel, equipment, materials, plans) so that this plan can be

carried out properly. Our project manager Cyril Malczuk is a firm believer in the Lean approach: "It's easy to see on the construction site how the different jobs are smoothly interacting with each other without any interruptions."



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Employees from many divisions came to the IPD kick-off workshop to develop a common understanding of IPD and its implementation in the Schaffhauserstrasse project.

IPD: pilot project launched

The initials "IPD" have been heard increasingly often in the real estate industry of late. But what is IPD and how does it work? Implenia has launched a pilot project to implement "Integrated Project Delivery" and test it on real-life properties. An overview.

New mindset in the real estate industry

Cost overruns, delays, loss of quality, inefficient planning and execution, disgruntled investors, purchasers and users – the list of typical challenges faced by the property industry is long. Implenia wants to promote a transparent, goal-oriented and partnership-based way of working and has launched a series of pilot projects that use the IPD approach. It has just started a new project to build a multifamily dwelling on Schaffhauserstrasse in Zurich.

IPD, Integrated Project Delivery, is still uncharted territory for many. Katja Lässer, Implenia Project Manager for the pilot project, says: "Initial discussions have shown that a lot of clarification is still needed." Carolin Baier, Lean Construction specialist, adds: "Our aim is for Division Real Estate to initiate and implement IPD projects in future. Division Buildings, as the people actually doing the building work, should be actively involved in integrated projects and be able to position itself in the market accordingly."

What is IPD and what are its benefits?

IPD stands for Integrated Project Delivery. This approach seeks to create a project environment that encourages collaboration, innovation and value creation. It also includes elements of the Lean Management philosophy. The aim is to increase the efficiency of real estate projects and improve results.

Five equally important core elements characterise IPD:

- Early involvement of stakeholders: continuous collaboration between client, planners and builders from the start to the end of the project.
- Joint risk and income strategy: performance-related and equitable compensation for all parties involved in the project: "everyone wins or everyone loses".
- Joint project management: the entire project team works as an integrated whole with equal rights and shared responsibility.
- Multiparty contract between the project team and client: clear rules for collaboration by all parties, covering culture, organisation, methods and processes, as well as the compensation model.

• Liability and project insurance: liability exclusions prevent conflicts of interest and facilitate a trusting working relationship.

IPD has obvious benefits for investors in real estate projects and so for Implenia's customers: they can expect better risk management, more accurate cost projections and greater deadline security, all of which produces better overall results.

How is the pilot project working?

After an intensive preparation phase, a kick-off workshop was held at the end of September 2020, followed by an assessment to test the professional skills and ability to collaborate of future project participants, including the architects.

Once the team has been put together, multiparty contracts will be negotiated and signed. Project participants will be physically working together in the "co-location" from the start of the validation phase onwards, though current circumstances mean that opportunities for digital collaboration are also being explored. During this phase, target values are being refined, costs planned and different drafts compared.

Thanks to the early collaboration between everyone involved and to the application of BIM and the principles of Lean Construction, a high degree of detail is being reached in the validation phase and subsequent planning phase – which is a prerequisite for smooth execution.

IPD pilot Schaffhauserstrasse, Zurich

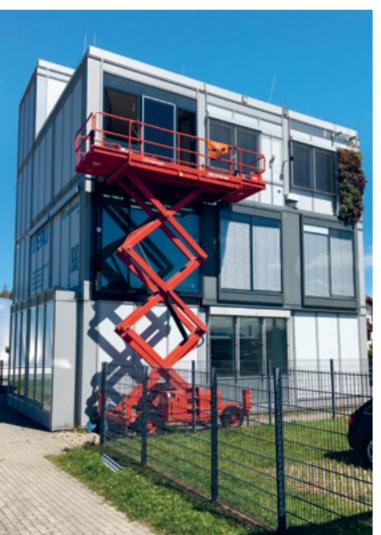
The Schaffhauserstrasse project involves the demolition of the existing building and the construction of a new replacement with 60 to 80 small apartments. Situated in a good location between Oerlikon and the University of Zurich, with excellent public transport links, the wide variety of small modern apartments are being built to meet a specific demand for small city homes. Construction is scheduled to start in mid-2022 and should be completed in 2024.



Our people

A smart package

When several partners are involved in a project, it's not unusual for opinions to differ, necessitating endless rounds of negotiation. But it doesn't have to be that way, as our colleagues at Implenia Fassadentechnik showed when they worked with three partners, including the Fraunhofer Institute, to develop a power-generating modular facade.



"The collaboration between all the parties involved was really very good. Everyone tried to understand each other's needs and find the best solution for all concerned," says Implenia Project Manager Dieter Paustian. The aim is to design a facade module with inte-

grated technical systems that can meet an office complex's entire heating, cooling and ventilation requirements.

The team reached a major milestone in August when the facade module was installed in a show house near Munich. Now the measuring phase has begun, the next few months should be less hectic. "The measuring



devices will run for a whole year," says Carlos Pinto, Managing Director of Implenia Fassadentechnik (pictured), "so we can see whether the facade's energy generation capabilities work as we want them to. We'll be able to see if reality matches the simulations we have done." You can read more about the project in Online Impact.



Learning to do good

Social Project Week is one of the highlights of the year for Implenia trainees in Switzerland. Although the number of participants was restricted this year owing to the COVID-19 situation, the trainees, including office-based trainees, were still able to work on some great charitable projects in the mountains of Saas-Balen. This year they built a barbecue area, a path and a wooden bridge for the municipality of Saas-Balen, and their great teamwork certainly earned them a celebration on the final evening. Social Project Week is a great opportunity to do something good, and at

the same time to enjoy a little break from day-to-day life. And as well as learning more about the job, participants get to know each other better or even meet new friends. It's particularly interesting for the office-based trainees to get an insight into the world of the construction worker, and to understand how physically demanding but satisfying the profession can be. You can read more about Social Project Week in an article written by the trainees themselves in Online Impact.



Stronger sense of community

This wooden bridge was one of the projects built by office- and site-based trainees during Social Project Week. They proudly present the fruit of their labours – a great improvement to the hiking path.