

### Extraordinary



# **Jika**®

# **Vertical eye-catcher**

Here is one reason why even on a Monday morning it should be easier to get out of bed and go to the office. Scientific studies have shown that office buildings and the comfort employees feel have a significant positive influence on job satisfaction. And this stunning building with its high-end architectural aesthetics indeed offers plenty of comfort. The colorful complex provides workplaces for 2'400 people and is the headquarters of the German Automobile Association ADAC in Munich in the southern part of Germany.

In total 1'152 façade units with an area of 10'000 sqm cover the 18-floor office tower. Furthermore 2'674 façade units in 22 different colors over an area of 9'000 sqm cover the podium building. With its organic structure it encompasses the 87 m high office tower and the foyer. The foyer is located in the inner courtyard and adjoins the various building units in the north and south. The connection level forms a roof over the 2<sup>nd</sup> floor.

In order to achieve state-of-the-art technology for the double skin façade, the window construction as well as the steel and wall roofing, Sika supplied various well-established façade and bonding products. Optimized vapor penetration, special mechanical properties and efficient weather resistance for high-strength outdoor applications were the most relevant quality factors. Comprehensive lab tests verified feasibility beforehand, and on-site application services were provided for specific application challenges.

### **Social Responsibility**

# One of the oldest inhabitants of the planet eliminates hunger

The World Health Organization reports that worldwide, malnutrition affects one in three people and affects all ages. Amongst them are estimated 101 million children underfive years of age who are underweight. These children are consequently at significantly more risk of disease or premature death. The most devastating effects of malnutrition occur in the pre-natal state and during a child's early years, when its physical and mental growth is hindered.

Eliminating hunger and malnutrition is a challenge which lies in generating realistic policies and taking concerted actions. The NGO Antenna Association has developed the necessary tools and training content for local nutrition production, on the sustainable and low-cost basis of an exceptional food supplement.

This exceptional food supplement is called spirulina (Arthrospira Plantensis), a tiny blue-green algae in the shape of a perfect spiral coil. Biologically speaking, it is one of the oldest inhabitants of the planet. Appearing 3.6 billion years ago, it provided an evolutionary bridge between bacteria and green plants. This aquatic plant has been regenerating for billions of years and has nourished many cultures throughout history in Africa, the Middle East and the Americas. Spirulina grows naturally in mineral-rich alkaline lakes which can be found on every continent, often near volcanoes.

NASA stated about spirulina that "The nutritional value of 1 kg spirulina is equivalent to 1'000 kgs of assorted fruits and vegetables". The algae is full of proteins containing all the essential amino acids. Another great feature is that its nutrients are very well assimilated by the body, since it contains no cellulose in its cell walls. A daily dose of just a few grams can lead to spectacular improvements in the nutritional state of malnourished children.

For the last 20 years, Antenna has provided support to the spirulina production and distribution programs undertaken by its local teams and partners. The aim is for each site to become financially viable. Selling spirulina also provides a new means of generating income for poor families. For years, Sika France has been supporting Antenna spirulina projects in Mauritania and Togo by providing financial assistance and waterproofing membranes for the construction of pond culture. In addition, Sika France has been providing materials such as extruder guns which are used to dry the algae in strips.

Spirulina is definitely set to remain top of the list of foods for the future: the protein uses only  $1/s^{rd}$  of the amount of water needed to grow soybeans and only  $1/s^{rd}$  of the water needed for beef protein. It needs 20 times less land than soybeans and 200 times less than is required for beef production. As if this wasn't enough, the National Cancer Institute of the USA has recently announced that spirulina is remarkably active against the AIDS virus. Regular intake of spirulina increases anti-viral activity, stimulates the immune system, reduces kidney toxicity, improves wound healing and reduces radiation sickness.









### World views

# What about China?

We are talking about one of the fastest growing markets and changing countries worldwide. Increasing its global outreach and participation in international organizations and activities, one of the highlights took place in 2008, when China's capital Beijing hosted the 29<sup>th</sup> Olympic Games. But we wanted to go a bit more behind the scenes, beyond any economic markets and growth. So we talked about responsibility and the promotion of young talents with Morten Muschak, General Manager of Sika China in Suzhou, some 100 km to the west of Shanghai.

# What is special about the Chinese market and economic situation right now?

Influenced by a global recession, China's GDP growth has slowed down as well. In the short term, we are facing a tough environment. The government has not yet loosened its control on real estate. Investment in infrastructure facilities is showing no sign of recovery, and capital in the market is still tight. But in the long term, China is still on track toward urbanization and industrialization. This process will lead directly to increasing demand for sustainable, energy-saving and environmentally friendly solutions in the construction and industry sectors.

### What is the situation for young academics in China? In these booming economics times, can Chinese companies find enough well qualified professionals?

Generally the labor resources of the Chinese market reflect a shortage, especially of blue collar workers. For the specific requirements of our industry, qualified professionals are sometimes also difficult to find. So campus recruiting, people & organization development (i.e. succession planning, process improvement) have become major topics when it comes to supporting our business growth.



Children in Jinyan School are happy about their new laboratory building



Morten Muschak, General Manager of Sika China

### What do you offer to young talents?

We started to sponsor scholarships for the Chongqing Energy Institute and would like to maintain a long-term cooperation with them. This year, some outstanding students from this institute are on internships with Sichuan Sika Keshuai Construction Material Co., Ltd. to get their first career experience. In 2012, we staged a "Sika Experience" event together with Sika Japan, which invited young talents to visit Sika companies and jobsites in both China and Japan.

### What about young professionals who want to gain initial work experience?

For new graduates, Sika offers a one-year trainee program after their onboarding. In the first year, HR will provide various training activities for the trainees. They will be assigned to different projects and be placed on job rotation. For example, a trainee in the business units will also work in sales, technical service and production departments, so they can gain a thorough knowledge of how the business operates. For each position in the job rotation scheme, there is a supervisor who will make evaluations of the trainee.

### Social responsibility is an important part of Sika's culture. Which engagements have you taken part in over the last few years?

After the Sichuan Earthquake in 2008, Sika China donated RMB 2 million to the Jinyan School in Dujiangyan in Sichuan Province to build the Sika Laboratory Building. In addition, we also took part in rebuilding the Longxing Township Kindergarten in Sichuan. Children are the future of our society. We are glad that we can contribute to providing them a better study environment.







# **Riverbank aesthetics**

Aesthetics is a branch of philosophy dealing with the nature of art and taste, combining the creation and appreciation of beauty. It is more scientifically defined as the study of sensory or sensori-emotional values, sometimes called judgments of sentiment and taste. More broadly, scholars in the field define aesthetics as "critical reflection on art, culture and nature".

The Riverbank House is one of those buildings that combines aesthetics and utility. The office building is in the heart of London and, as its name suggests, on the northern banks of the River Thames. With its balconies this building really is eye-catching, and fits into the sensitive urban location in central London, replacing an aging building from the 1960s. The new building, 46m high, restores access to the Thames. The building contains 42'291 square metres of office space spread over 10 of the 12 floors of the building. The essential layout is rectilinear which allows for very large and commercially efficient floor-plates.

Because it is mainly constructed of glass, high-class products from Sika were needed to ensure a long life. Aside from adhesives for structural glazing and weather sealing, the bottom glass edges of the balustrades are embedded in the floor with a self-leveling, high-strength fast-curing system, resulting in uniform stress distribution. Thus there is a reduction of high punctual stress. SikaGlaze<sup>®</sup> GG-735 with an optimized curing speed allows very convenient application on site.

The architects of the masterpiece, David Walker Architects, is an awardwinning architectural practice based in London. Since its foundation in 2002, the practice has been responsible for a wide range of projects including offices, hotels, residential, cultural and academic buildings.







### Refurbishment

### A new style for 28'000 m<sup>2</sup>

South Africa's Cape Town has become the first African city ever to be named the World Design Capital by the International Council of Societies of Industrial Design. This prestigious status is designated biennially by the International Council of Societies of Industrial Design (ICSID) to cities that are dedicated to using design for social, cultural and economic development, and will take place in Cape Town in 2014.

The 4 Dorp Street project also had to follow strict social and sustainable targets. The project encompassed the four interlinked Provincial Government buildings in the central business district. The design approach was to present the interface of this government institution in a more public-friendly way and improve the pedestrian urban experience. The design introduces a sequence of pedestrian forecourts, thresholds, centralized entrances and urban space-making techniques to celebrate the public activities in and around the site. Design interventions include moving the existing vehicle access from the walkthrough to the exterior to free it up entirely for pedestrian use.

Wind lobbies at either end of the new concourse and a glazed atrium housing the canteen, which is now open to the public, double up for special functions. Access from the concourse to the lift foyers was improved by separating the information desk and security activities. Dorp Street was to extend up to the existing central island, creating a new pedestrian terrace and kiosks to the East that continue the vibrancy of nearby Long Street and the cultural activities of the adjacent mosque.

All decisions in the design approach were guided by sustainability principles that would promote durability, suitability for purpose and appropriateness in terms of product selection sourcing, social impact, and reduction of mainte-



nance and operation costs. The architects specified eighteen products from Sika South Africa for the renovations, which included concrete repairs, joint sealing and protective coating.

First of all, major façade repairs were required, which included a prototypical floor plate renovation that not only improved the occupancy but also the air and light quality of the space. Very good ageing and weather resistance, as well as the highest UV resistance and excellent weatherability were the main reasons why Sika products were used in this challenging refurbishment process.

### **Our Employees**

# Sustainable construction for India



Philippe Stoll Head of Specifications Sika India Pvt. Ltd.

# how's life in this exciting country?

Talking about your change from

Switzerland to Sika India -

Mumbai is loud, dirty and crowded. On the other hand, people are friendly, food is great and my life as an expat interesting every day. And the company is still the same, which makes many things familiar in a way.

### As Head of Specification - how does your daily work look like?

The specification is the main part of a contract, according to which the main contractor (builder) has to execute the job. During my interaction with consultants (designers), I attend the customer how to specify our products and show the usage of our complete solutions as part of their design, at the earliest stage. But it is a long-term approach, especially for emerging markets like India with less standards and regulations and higher price pressure. But there is a big chance by passing knowledge about sustainable construction.

### What fascinates you and what has been your principal motivation?

### In what way would you change the world if you could?

Working as a Swiss engineer for a global company like Sika offered me the possibility of going abroad, somewhere completely different from my home country. It is a privilege and I didn't want to miss that opportunity. Finally, after developing new products and strategies in the headquarters, it is interesting to work in a regional Sika company.



The world was in a perfect balance before the existence of mankind. Over thousands of years, our presence changed it a lot. Seeing all the problems related to our development, and knowing that I'm part of the problem and not of the solution, makes me unable to answer this question in a conclusive way.









### **Experience** art

What do you expect when arriving at a hotel you will be spending a few nights in? Something that you have been used to during previous trips? A nice room? A pleasant spa? Delicious breakfast? Professional service? Choose one of the 182 rooms and suites at Sofitel Vienna Stephansdom and experience real art and discover design in a way you would never have expected.

In the avant-garde masterpiece of the Sofitel Vienna Stephansdom in the middle of one of the most traditional cities in the world, you will feel extraordinary. Built by French architect Jean Nouvel, it is more a work of art that blends its sculpture into the multi-faceted city. Conceived as a tribute to contemporary art, Nouvel has worked with a team of young artists to give the word "hotel" a totally new meaning.

"A building may never stand on its own, but must always take its environment into consideration", says Nouvel, who likes to show that modernity in old cities is not a contradiction.

It is important that visitors quickly feel at home in their rooms. Satisfying all the key criteria for a luxury hotel, the comfort floors are highly aesthetic, soundproof, easy-to-clean and low-maintenance. Furthermore, the floors have to fulfill indoor air quality guidelines and certain regulations. Sika was chosen as a partner owing to its expert knowledge and its wide range of products and systems for use in comfort rooms. These range from various wood flooring installation systems to comfort floors, which allow great design possibilities combined with seamless installation – and greatly reduce the transmission of sound.

The top floor of Sofitel Vienna Stephansdom houses the panoramic restaurant "Le Loft", and the bar also offers an impressive view over the city center. The Swiss artist Pipilotti Rist is responsible for the light and video installations and in the kitchen the Alsatian 3-time Toque award-winning chef Antoine Westermann combines Austrian and French cuisines.

You can be certain that you will have everything you need to ensure a great stay.







# One of the last adventures of mankind. Powered by Sika. Sika Mining Experience in Chile

Another Sika Experience Trip – this time in Chile – took four students through Chilean vineyards and even underground! During the unforgettable journey at the beginning of October 2012, the young engineers discovered how Sika products work and how they even help to improve working conditions.

The four young engineers – Oscar from Mexico and Monserrat, Ana Maria and Jorge from Chile – pooled a lot of academic knowledge. Two are studying civil engineering, one mechanical engineering and one engineering in the metallurgical field. With their interdisciplinary background they vividly discussed many topics around the extraction of minerals and its economic and ecologic impact in Latin America. The wine industry was another big topic – did you know that Sika products are used even there?

The trip started in an organic vineyard, Cono Sur, belonging to the most important wineries in Chile, where the SikaDust solution is employed. Its organic polymers help to prevent excessive dust formation for better working conditions and even for plague control on the vines. But the students could not wait for the next adventure: Chuquicamata, the biggest open pit copper mine in the world, is a 97-year old pit which is 4,500 m long, 2,500 m wide and an impressive 1,000 m deep. It is even visible from outer space! This is where enormous trucks carry weights of 400 tons at an altitude of 2,500 m in Chile's Atacama desert, moving Chile's wealth – a world that never ceases to amaze.

After their first mining adventure, another highlight was waiting for the students underground: the Chuqui Subterraneo project. People have been working here for 100 years, digging 10 km per month during operational phases, and the last 8 years were spent on infrastructure operations alone. The next stop was Codelco Andina; a great copper mine in Chile's centre, with a unique mineral concentration. It is the only underground operation in the Andes; at challenging altitudes of 3,800 m to 4,200 m.

During such an adventurous trip – 4,000 km by road and 3,000 km by air through mountains, vineyards and mines – the students had a lot to digest and discuss with the Sika specialists that accompanied them on their true Sika Experience trip. Jorge said, "*Now I know how Sika is involved in a market such as mining, and how its products are critical to the development of large projects. I am thrilled with this last point, since it was my main motivation to participate in this experience, and I wasn't disappointed. The way in which Sika is immersed in the various activities of the industry and how their values are shared left me with a good impression of the company and of the work people are doing. I was excited about the fact that Sika solutions create value for all, customers, employees and everyone related to the mining and wine industries".* 

Thanks to all of our Sika colleagues in Chile under the guidance of Danilo Leon who made this first Latin American Sika Experience possible.

More informations about the Experience: http://experience.sika.com/category/experience-trips



### Waterproofing

# The "smile" of their mouth line

Though comparing species' relative intelligence is complicated by differences in sensory apparatus, response modes, and nature of cognition, dolphins are often regarded as one of earth's most intelligent animals. The marine mammals are social, living in pods of up to a dozen individuals. In places with a high abundance of food, pods can merge temporarily, forming a superpod; such groupings may exceed 1'000 dolphins. Individuals communicate using a variety of clicks, whistle-like sounds and other vocalizations. Membership in pods is not rigid; interchange is common. However, dolphins can establish strong social bonds; they will stay with injured or ill individuals, even helping them to breathe by bringing them to the surface if needed. This altruism does not appear to be limited to their own species however. A dolphin near New Zealand has been observed guiding a female whale together with her calf out of shallow water where they had been stranded several times. They have also been seen protecting swimmers from sharks by swimming circles around the swimmers or charging the sharks to make them go away.









In Marineland d'Antibes in Southern France, children get an extraordinary opportunity to spend time with the trainers, have direct contact with the dolphins in the water and enjoy some unforgettable moments. The whole water park is dedicated to marine animals. But of course such a park needs robust pools. The dolphins' pool had been losing a significant amount of water each day. There had to be a sound solution which was comfortable and aesthetically pleasing.

The waterproofing system in the pool whichchwas provided by Sika France is made of the Sikaplan WP 5300-13 C membrane and this FPO membrane is totally neutral to the environment. The installation was simple and independent on natural terrain or prepared on subgrade concrete. After just 3 weeks the dolphins were swimming and playing in the pool again – and looked as though they were happy with their new home, with a big "smile" around their mouth line.



# Water purification

Water purification is the process of removing undesirable chemicals, biological contaminants, suspended solids and gases from contaminated water. The goal is to produce water fit for a specific purpose. The standards for drinking water quality are typically set by governments or by international standards. These standards will normally set minimum and maximum concentrations of contaminants for the use that is to be made of the water.

It is not possible to tell whether water is of an appropriate quality by visual examination. Simple procedures such as boiling or the use of a household activated carbon filter are not sufficient for treating all the possible contaminants that may be present in water from an unknown source.

For the construction of the Water Purification Plant in the northside of Buenos Aires, the capital of Argentina, it was necessary to complete the infrastructure for raw water supply, its purification and subsequent distribution to consumption outlets. The water purification plant will be placed within 16 ha of land in the Tigre neighborhood, which will process a water flow of 1'200'000 m<sup>3</sup>/day (equivalent to 80'000 tankers), sufficient to meet the demand of 2.5 million inhabitants.

Raw water is to be transported to the plant through a 3.60 m<sup>3</sup>-diameter, 15 km-long underground tunnel. Drinking water will be distributed to consumption outlets through 3 aqueducts which will be made out of 1200 mm-diameter, 40 km-long cast iron.

The plant was built to divide the supply required for the project to construct the 15 km tunnel that will link the river Paraná with the water treatment plant. Besides product support, Sika Argentina performs lab tests, enables users to use products successfully and develops products for special needs. Sika ViscoCrete was used the most, with over 70'000 m<sup>3</sup> being applied. Furthermore over 14 tons of steel were used.

The works are part of the "Northern Area Purification System" which seeks to solve the problems of water supply in the north of Buenos Aires, and is therefore of vital importance to the sustainable development of the region. In recent years, this area has undergone major real estate development and has strong future prospects – a development that severely limits the supply of groundwater, which is already on the edge of the known parameters for drinking water.









### **Company News**

# Tailored to any need

All customer requirements can be fulfilled through experience, competence and a strong customer focus. Each customer has different and specific needs. That's why Sika is now strengthening its specific professional specializations even further to support customers with what they need to complete their projects and business in the most successful way possible.

The Sika Strategy focuses on 7 defined target markets: Concrete, Waterproofing, Roofing, Flooring, Sealing & Bonding, Refurbishment and Industry. These Target Markets are representing the application fields of customers, the R&D organization and the Sika production facilities. This concept will enable Sika to strengthen its customer focus throughout the growing, global organization and to ensure customer satisfaction by providing best solutions, best service and highly competitive innovations to them. Sales and technical service teams cooperate closely and professionally to provide direct customer support throughout every project phase, ensuring top quality and carefully thought-out solutions. High levels of expertise are combined with future-oriented quality and optimized processes for customers. Contractors, specifiers, owners, and concrete, cement and gypsum producers, as well as distributors, DIY enthusiasts and craftsmen, and industrial producers receive the solution which best suit their needs.

### ambitions-direct no. 10

Sika' international newsletter to customers

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