Architecture and Motor Sports
Projects from Atelier VIII, von Gerkan, Marg and Partners, Kay Kläning, Lamm Weber Donath and Josef Schmeing
CONTENTS

3

EDITORIAL

4 / 5 / 6 / 7

FROM THE RACING TRACK TO THE PIT LANE
Interviews about the key venues on the motor racing scene with Peter Wahl/Tilke Engineers and Architects and Thomas Biermaier/Audi Dept.

8 / 9 / 10 / 11 / 12 / 13 / 14 / 15 / 16 / 17

THREE CAR SHOWROOMS GRANT AN INSIGHT:
TAMSEN AUTOHAUS, TOYOTA-AUTOWELT,
MERCEDES-WELT AM SALZUFER
Trend in the building of car showrooms towards greater transparency also in the workshop area
Designs: Kay Kläning, Stuhr; Josef Schmeing, Ahaus; Lamm Weber Donath, Stuttgart

18 / 19 / 20 / 21 / 22 / 23 / 24 / 25

PORSCHE WORKS AND CUSTOMER CENTRE IN LEIPZIG
Celebration of a sports car – Design: von Gerkan, Marg and Partners, Hamburg

26 / 27 / 28 / 29 / 30 / 31

“SAI KUNG JOCKEY CLUB” YOUTH CENTRE IN HONG KONG
Sports and leisure complex in the New Territories – Design: Atelier VIII, Hong Kong

32 / 33

HÖRMANN CORPORATE NEWS
– History of HÖRMANN from 1935 to the present day
– ProLogis Park Frankfurt: doors and loading equipment from a single source
– Decotherm® rolling shutters

34 / 35

PREVIEW / IMPRINT
Ladies and Gentlemen,

In this first issue of PORTAL, our information for architects which in terms of both contents and graphics has been entirely revised, we report on projects and current developments in “Architecture and Motor Sports” as well as on the newly constructed Jockey Club in Hong Kong.

There can be no doubt that the Porsche Works in Leipzig (p. 18 ff.) were designed by the Hamburg architects gmp von Gerkan, Marg and Partners as a synthesis of architecture and motor sports. The focal point of this production facility is the spherical-shaped visitors centre which forms the departure point for visitors wishing to explore the neighbouring production halls and test track. A similar trend towards allowing customers access to areas not usually regarded as prestigious, can be observed at three newly built car showrooms: the Mercedes-Welt am Salzufer in Berlin, the Tamsen Autohaus in Hamburg and the Toyota Autowelt in Saarbrücken where the workshop areas have been deliberately designed to afford customers a full view (p. 8 ff.).

At this point I would like to briefly explain our intention in publishing a journal such as PORTAL: with PORTAL we would like to demonstrate our affinity with architecture and by means of the case studies presented in it, underline our technical competence. Over and above this, we recommend our customer-oriented sales and service network: information about this and our products is available on our website at www.hoermann.com.

I trust you will enjoy reading this first issue of PORTAL as well as benefit from the information contained in it.

Thomas J. Hörmann
Personally liable shareholder
In 2004 two new circuits will play host to Formula 1: Bahrain and Shanghai. Both circuits were designed and built by Tilke Engineers and Architects. For a long time now the office founder, Hermann Tilke, has been respectfully known in the branch as “Lord of the Rings”. He and his office partner, Peter Wahl, employ a staff of 120. The office headquarters are in the Krefelder Straße in Aachen. PORTAL spoke with Peter Wahl about the special requirements involved in designing and building racing circuits and pit lanes – no day-to-day architect’s tasks.

PORTAL: The Formula 1 track at the gates of Shanghai surely presents a major challenge. It is located, after all, right in the middle of the swampland of the Jangtsekiang Delta.

WAHL: That’s exactly right. The ground conditions there are far from ideal. We not only need to build a 5-kilometre long, 14-metre wide stretch of road but also the corresponding infrastructure with spectator stands, pits and artificial mountains: an area of 5.3 sq. km for 200,000 spectators.

PORTAL: So how do you ensure that Formula 1 doesn’t sink into the swamp?

WAHL: The complex stands on around 40,000 concrete columns which were driven as far as 60 metres into the ground.

PORTAL: That explains why the overall construction costs were estimated to be in the region of 240 million euros.

WAHL: No matter what’s built there, if it’s heavy it will sink. Maybe only slowly, but it will sink! The artificial mountains are therefore made of polystyrene with a metre of earth piled on top.

PORTAL: Your office enjoys the absolute trust of Formula 1 boss Bernie Ecclestone and whenever there’s talk of a new racing track being built somewhere in the world, you’re always the first to be consulted. How have you managed to achieve this status?

WAHL: Through our constant commitment. Racing tracks are not just planned in the head but equally with the heart and soul. To date we have collaborated on 21 racing tracks throughout the world, either converting or modernizing them or building them from scratch. These include the Nürburgring, the Hockenheimring, the A1-Ring in Austria, the racing track in Bahrain, Brands Hatch in England, Suchai in China and Sepang in Malaysia. This is a market we ourselves have created.

PORTAL: Alongside Shanghai you are presently working on the tracks at Bahrain and Istanbul. Do you have any further projects in the pipeline?

WAHL: Of course, but these are subject to secrecy.

PORTAL: The track in Shanghai spells out the characters ‘Shang’. It obviously makes sense for your office to get involved in activities in China in addition to the Formula 1 project: In 2008 the Olympic Games will be held in Beijing, followed in 2010 by the world exhibition.
WAHL: There’s no denying it, China is increasingly becoming a nerve centre. In both Shanghai and Bahrain we have tried to make it easy to identify in which country the event is taking place. The philosophy in Bahrain is that at the starting and finishing points we create a kind of oasis with lots of greenery and palms. From here the cars drive out into the desert before returning - figuratively speaking - to the oasis. This is the overriding idea. The architecture incorporates the Arabic use of shapes.

PORTAL: How much creative scope does the architect still have when it comes to functional areas, such as the pit lanes?

WAHL: The size of the pits and the racing lane is mainly predetermined. Everything that the technicians need later on has to be accounted for in our plans. Conduits, lights, permanently installed monitors, everything must be connectable and linked up. The entire infrastructure must be available, so that all the mechanics need to do is to hook up their equipment. The external design of the pits depends first and foremost on the door. In this respect we like to use products that have been tried and tested: here resistance to working stresses, functional safety and aesthetics are the essential criteria that influence our decision.

PORTAL: Are there any planning guidelines or do the individual circuits differ from a design point of view?

WAHL: As far as the design of the remaining building elements is concerned, we have far greater scope. We not only design the pits but also the VIP lounges, the race control and just about everything else that is needed at the racing track. In doing so, we endeavour to give the buildings in each country their own unique appearance so that it’s clear from the outset – above all on the TV – where the race is coming from.

PORTAL: Racing circuits are surely not the only architectural field in which you are involved.

WAHL: No, we also take care of infrastructure projects, in other words, water irrigation and drainage etc. In addition, we also design other sports facilities and hotels as well as administrative and factory buildings. Another area that has since developed in a positive way involves driving safety centres which we are presently constructing throughout Europe – perhaps one day this may even become a worldwide concept. We have helped to develop these centres which have so far been a great success.
It goes without saying that every racing track has its own pit lane. The pit stops – often watched by the spectators and viewers at home with a great deal of excitement and suspense – are crucial moments that can significantly alter the course of the race. In the run-up to the event, the racing teams make sure that the technical conditions are as near perfect as possible. Thomas Biermaier, team coordinator of the DTM TEAM/Audi Dept., explains what goes on behind the often closed and well secured doors.

PORTAL: As far as the spectators are concerned, the focus of their interest is of course the race on the Sunday. You, on the other hand, begin your activities at the race track days before the actual race takes place. When then does the racing weekend start for your team?
BIERMAIER: Before the race gets underway on the Sunday, a lot of work has already been put in at the pits. By the Wednesday we have already set up the pits; in other words installed the partition walls, light boxes ... Then the racing equipment is installed, the entire area for tools and spare parts, also the monitoring equipment and diagnostic instruments.
PORTAL: But the cars are not yet on site?
BIERMAIER: No, they don’t arrive until the Thursday. From then on the cars are fine-tuned to suit the characteristics of the circuit on which they are to race, including training on the following two days. Qualifying then takes place on the Saturday.
PORTAL: We suspected as much: between qualifying on the Saturday and the actual race on the Sunday, there’s a great deal of work to be done.
BIERMAIER: Sure, everything that the rules and regulations allow is fully exploited to ensure optimum performance of the machines. This means, for instance, that the cars are subjected to another full check. In doing so, each time the gearbox is dismantled, taken apart and refitted following maintenance. Then there’s the race setup.
PORTAL: Where are the cars kept between qualifying and the start of the race? Are any special conditions imposed?
BIERMAIER: From the Thursday up to the Sunday the cars always stay in the pits and are guarded at night by special security staff.
PORTAL: Doubtless a necessary measure considering that during a racing weekend the materials and equipment housed in the pits are of considerable value.
BIERMAIER: Precisely. The cost of the materials and equipment required is quite substantial: TV screens, printers, measuring instruments, computers are all items not permanently installed in the pits. We have to bring them with us every time.
PORTAL: This must be extremely costly and time-consuming! Why can’t the technical equipment be permanently installed in the pits?
BIERMAIER: The pits are allocated to teams on the basis of their position in the previous year’s World
Nürburgring Championship. The winners usually choose the first pits at the start of the lane. If, for example, a vehicle with a defect has to enter the pit, a few crucial metres can be gained. Because last year we came second, we are now positioned between Mercedes and Opel.

PORTAL: How many members make up your racing team and how many of them work out of the pit at any one time?
BIERMAIER: We go to a race with a total of 70 team members, including the racing drivers, the team manager and the mechanics. These 70 people ensure the use of six racing cars. Generally around four mechanics will be working on one car and in one pit.

PORTAL: Do the doors stay closed while work is in progress because you wish to protect yourselves against industrial espionage?
BIERMAIER: It goes without saying that a great deal of development work is invested not only in the cars but also in the equipment, so quite understandably we would like to protect this investment from prying eyes.

PORTAL: Are heavy demands placed on the doors in terms of constant opening and closing?
BIERMAIER: The doors always stay open while tests are being carried out. They are only closed when we are actually working on the cars. Despite this fact, the doors are still opened and closed around 20 to 30 times a day.

PORTAL: From the outside it always looks as if work in the pits is carried out within a very confined space.
BIERMAIER: Yes, the majority of pits are fairly small. The best pits are at the Nürburgring. There you have sufficient space to perform good, clean work on the cars and in the pits.

PORTAL: Were the building contractors at the Nürburgring more generous or why are the pits there so much more spacious?
BIERMAIER: Quite simply because truck races are also held there and the traction engines require considerably more space. A stroke of luck for all those en route with smaller-sized vehicles.

PORTAL: Are the pits used during the race?
BIERMAIER: The best part of the action undoubtedly takes place in front of the pits. Two stops per race have to be completed. For these our mechanics need between 4.5 and 5.4 seconds. Provided that everything runs smoothly, they then spend the rest of the time in the pit at the transmission monitors following the course of the race and joining in the fever-pitch excitement.
You could compare purchasing a car to visiting a restaurant: anyone having once taken a look in the kitchen area and discovering less than appetizing conditions, will not be wanting to return in a hurry! This principle can be applied equally well to a car showroom: it’s not just the highly polished end product that interests a discerning client. Whether a luxury car or an economy-class vehicle is involved, one thing is certain; anyone deciding to purchase a car, does not invest such a substantial sum of money lightly. Even if the actual production takes place at some other location, it’s still of great significance to a customer to know what goes on behind the scenes at a car showroom where repairs, inspections and other services are performed. The conditions and degree of accessibility which a future car owner finds here, play a key role in whether he believes his car to be in good hands.

Designing the service areas
A crucial factor in constructing a car showroom in this respect is the positioning of the service areas as well as their architectural design. It is worth noting that in a large number of projects the workshops can be found immediately in the prestigious entrance area so that the customer feels involved in the activities right from the word go. Good examples of this kind of development are provided by three recently completed projects, whose function lies mainly in the presentation and representation of cars.

Tamsen Autohaus in Hamburg
In September 2003 a new showroom of the Tamsen luxury automobile house from Bremen was opened in Hamburg. To be found here in one of the world’s most exclusive automobile houses and in 4000 sq. metres of space is a collection of traditional brands such as Aston Martin, Bentley, Rolls-Royce, Ferrari, Maserati and Lamborghini. The actual building is clear, discreet and reserved in order to present the products in an optimum environment. According to the architect, Kay Klaening, the optical boundary between the outside and the inside has more or less been done away with. The sales areas as well as the offices, the workshops and the staff rooms all appear to be flooded with light. This is achieved by giving the building a facade made almost entirely of glass, incorporating partly opaque and partly transparent panes. Just as the architecture of the car showroom seems unpretentious in relation to the objects on sale, so too is the material chosen by the architect. In the car showroom materials such as glass, aluminium, stainless steel, steel, leather and wood were used and characterize the overall appearance of the building. Likewise, the shape of the building on the outside reflects what is happening on the inside. In this way the adventure worlds of the various automobile brands are reflected in the cubes, varying in size and height, of the overall structure, thereby forming a clearly discernible linear building. The car showroom is approached from two sides: an entrance in the north-east and another on the opposite side where the customer car park is located. Also positioned on this side is the section of the building housing the workshops and car wash.
By using numerous glazed industrial sectional doors, in the luxury Tamsen car showroom in Hamburg even the workshops are bright and flooded with light.
CAR SHOWROOMS

The building cubes of various sizes and heights reflect the spatial layout of the various car brands inside the building [top].

The Tamsen car showroom is encased all round by a glass facade as a post-rail construction. The optical effect is one of a flowing transition between the interior and the exterior [bottom].
As on the outside, also in the interior simple linear shapes dominate in order to draw the attention of the customers to the cars.
The materials used in building cars: glass, aluminium, stainless steel, steel, leather and wood are also used in the actual building of the Tamsen car showroom.
Wicket pass doors integrated into the “display window doors” allow pedestrian traffic to pass through quickly and conveniently without any loss of time or energy [top].

Thanks to the externally sited supports, the interior of the showroom hall of the “Autowelt Saarbrücken” stays support-free and flexible. In the background the open-plan workshop areas of the service section can be clearly seen [bottom].
which in terms of both the shapes and division of the facade is fully in keeping with the structure of the showroom. In contrast to the fully glazed showroom, this building section has been given a curtain wall of aluminium panels, interspersed with a multitude of large-format industrial sectional doors with areas of glazing which instantly catch the eye of visitors driving into the car park, thereby drawing attention to the workshops behind.

**Toyota-Autowelt in Saarbrücken**

In a similar way but on a smaller scale the “Autowelt” in Saarbrücken presents models from Toyota and Lexus in a newly constructed building designed by the architect, Josef Schmeing. Thanks to the location at one of the most important traffic intersections in the Saarland, the Ludwigskreisel in Saarbrücken, it can boast an extremely prestigious position, with the aim of drawing attention to itself and the products being sold. The new building houses a showroom and the service areas such as workshops, direct receipt of goods, a customer centre and a car wash facility. The fully glazed showroom with an almost-square floor plan, is the focal point of the presentation and allows an unrestricted view. Characteristic of, and a determining factor for the design is the steel construction whose outer lying tubular supports clearly underline the shape of the building and afford the interior maximum flexibility. The showroom area is spanned by a metal-clad spherical shell supported by arched open-web girders. Due to a naturally occurring difference in level on the site, the rear showroom area is on an elevated plane. This invites the option of building an additional half-storey in the front area at a later date. The rear side of the building is adjoined by a service area shaped like a horizontal member which due to its generous width emerges to the left and right of the showroom and can be viewed from the front. This area is a steel structure with infilling masonry, covered over by a trapezoided flat roof. Natural light enters the building through skylights and fully glazed sectional doors which in their design and transparency echo the character of the showroom.

**Mercedes-Welt am Salzufer**

Mercedes-Benz operates ten subsidiaries in the Berlin area alone. Following the total demolition of the old centre at the location am Salzufer in Berlin Charlottenburg used since 1915, the new headquarters of the Mercedes Benz subsidiary in Berlin was constructed on 35 000 sq. metres of space.
In contrast to the closed facade of the service building, the showroom building of the Mercedes-Welt is transparent with a well-lit interior that stands out at night.

Prestigiously located – directly next to the main entrance – the car workshops look inviting thanks to their industrial sectional doors with large areas of glazing.

Already the brand name, the “Mercedes-Welt am Salzufer”, gives away the fact that the functionality of the newly constructed building is not likely to restrict itself to the status of an ordinary sales outlet. Here a site was created on which the entire Mercedes-Benz range of vehicles could be experienced in its full diversity. The newly constructed building is divided into two structures which are separate from each other both visually and functionally, a showroom building and a service building which are placed at a right angle to each other and thus form an entrance area with customer car parks.

The main entrance is located at the interface of the two buildings. The transparent showroom building is slightly curved in shape to follow the course of the adjoining Landwehr Canal. The construction is closed off by a glass facade that spans the full height of 22 metres.

The showroom is designed in such a way that the seven main levels (offset against each other) are located on the narrow sides of the building and are connected to each other via flat inclined showroom ramps along the northern and southern facade. Sited between the ramps is a building-high atrium which is flooded with light through a barrel-shaped glazed roof.

The basic idea of the Stuttgart architects, Lamm-Weber-Donath, was to design the showroom building as a kind of small real-life town. On the ground floor the visitor is received at an information counter with adjoining bistro, behind which there is an area for sales and taking delivery of the new car as a kind of “market place” beneath a canopy of trees.

Besides serving as an exhibition space for vehicles – including a revolving presentation stage – the ground level is also used for leisure and entertainment purposes: areas for plants and water landscapes have been created featuring a 15-metre high water curtain, not to mention climbing walls and a 40 sq. metre sized LED wall.

Located on the very top floor is a conference area and along the northern facade a two-hip office appendage for administrative purposes.

In contrast to the extrovert showroom building, the service building has reinforced concrete walls clad with corrugated sheet and featuring variously sized vision panels.

Customers are allowed “to take a look at the cards”

Only the workshop area on the ground floor, situated directly next to the customer car parks and the main entrance, is on full view thanks to large-format doors. In this way the company signals its willingness to show its hand, thereby demonstrating an increased interest in the requirements and wishes of its customers.
Extending along the central axle of the showroom building is a building-high atrium. This is where the vehicles are handed over, but it is also used for car exhibitions and sports events.
After Porsche had reached its spatial limits at its home in Zuffenhausen, the company decided to produce its third series – the sporty all-terrain vehicle, the Porsche Cazenne – at the new location in Leipzig. Located directly next to the Leipzig Airport, the motorway and in the meantime with its own railway siding, the past few years have seen the creation of 370 new jobs here. Last August Porsche launched production of its new Carrera GT, also in Leipzig.

Customer centre as the focal point
In designing the area to the north of the city, nothing was left to chance. After all, the works were to represent an unusually high level of prestige. The overall design, combining a series of production halls, a run-in and test track, an off-the-road track and a customer centre as one single unit, was produced by the Hamburg architects von Gerkan, Marg and Partners. The customer centre, also designed by gmp, is located in the central axle of the complex – visible from afar and a prominent advertisement for the Porsche Works, its shape is often compared to that of a UFO.

This is the place where visitors are received and transported to the world of the racing car. The building serves as a presentation platform and for taking delivery of new cars while also housing workshops and administrative areas. It comprises a solid plinth of exposed concrete and a spherical tower clad with metal panels, designed as a structure entirely of steel. Both elements are horizontally separate, functionally as well as spatially. The lower ground floor is reserved for workshop activities and the handing over of vehicles while the top floor is used for functions and events with a capacity for up to 500 visitors. The open-plan design means that this events area can be put to flexible use. Here Porsche screens films, and presents exhibitions of historic vehicles. In a control station visitors can observe activities on the run-in and test track – provided, of course, that they don’t wish to take part themselves! All four areas are on view to visitors. Events are scheduled, such as a tour of the production halls where production of the Cayenne or even a test run can be experienced first-hand.

A training course in driving safety is also offered. This takes place on the two test tracks designed by Hermann Tilke architects, whereby the circular track of the test circuit is based on ten world-famous racing bends.

More than a production facility
Perfect planning also in the works: To provide the halls with a secure external closure, industrial sectional doors were chosen and for the internal area flexible high-speed doors with a transparent curtain. The Leipzig Porsche Works is much more than simply a production facility. It is a total concept that has been planned right down to the last detail, including both attractive events and stunning architecture, and designed to appeal to car enthusiasts everywhere.
The striking appearance of the customer centre at the heart of the complex makes it primarily a symbol of prestige but it also incorporates administrative areas and workshops.
The customer centre’s reception area is housed within the solid plinth which together with the building core fortifies the entire building structure.
Historic vehicles are displayed in the gallery above the spacially designed level for functions and events.
In contrast to the plinth floor consisting of exposed concrete, the “tower” of the customer centre is conceived as a structure made entirely of steel.
As loading bay doors for the works halls a combination of industrial sectional doors as a secure external closure and high-speed doors with transparent curtain for the interior was chosen [top].

The circular course of the test track designed by the racing track architect Hermann Tilke is based on ten world-famous racing bends [bottom].
Customer centre/floor plans: ground floor, visitor's level, intermediate floor, events level, gallery (from left to right)
“SAI KUNG JOCKEY CLUB”
YOUTH CENTRE
IN HONG KONG

The sports and leisure complex on the Sai Kung peninsula in Hong Kong’s New Territories enjoys a location that in terms of beauty is virtually unrivalled. Situated in a gently curving ocean bay, at the foot of wildly overgrown mountain hills, the complex offers children and young people a myriad of leisure opportunities without overly intruding on the idyllic countryside.

The Sai Kung peninsula, to the far east of the New Territories, is poetically referred to as “Hong Kong’s garden”. It is almost entirely covered by the Sai Kung Country Park spanning an area of almost 7600 hectares. There are a great many areas here which have not yet been explored — despite the close proximity of the metropolis, Hong Kong. Sai Kung can boast an impressive coastal landscape with numerous bays, off-shore islands and spits of land jutting out to sea. The youth centre, designed by the Hong Kong architects’ office Atelier VIII, lies on steeply sloping natural terrain, directly on the bank of the Sai Kung Hoi bay. To the north we have the western part of the Sai Kung Country Park which becomes more popular with tourists every year. Because of this development the architect aimed to produce a structure that would underline the natural landscape of the area while also making it attractive to visitors.

Social orientation
The complex is part of a special program to support the children and youth of the “Hong Kong Federation of Youth Groups”, which alongside education, leisure activities and an advisory service for families also includes the active prevention of drug abuse as one of its key objectives. The organisation funds its program for the most part with the help of sponsors, in this case the social fund of the renowned Hong Kong Jockey Club. Here Hong Kong’s young people not only find possibilities for recreation but also the opportunity to take part in social and sports activities — all against the backdrop of a breathtakingly beautiful landscape.

Leisure activities
The youth centre is divided into four structural components which line up along the coast: a chain of two-storey houses providing accommodation for the young people, a boathouse with sunken swimming pool, the large function building housing a gymnasium and mini-theatre and an old stores building that was converted to a canteen and leisure area. The activities offered in Sai Kung range from canoeing and wind surfing, climbing and various ball sports to natural history exhibitions and multimedia events.

In harmony with the surrounding area
Despite the broad range of activities on offer here, the strung-out complex fits in discreetly and harmoniously with its surroundings as a transition between the mountain landscape and the ocean. The services are sited at the back of the building in order to be able to position these as close to the water as possible. The intention was that the structure should intrude upon the terrain as little as possible, so the architects decided in favour of an elevated pile foundation, from which the buildings rise up over the steep slope, offering fantastic views of the ocean. The footpaths connecting the individual buildings also adapt to the given height level, with their twists and turns providing ever-changing perspectives of the landscape. As a result, despite covering a fairly large area, the complex does not oppress the landscape but rather subordinates itself to it - entirely in keeping with the Asiatic teachings on harmony.
Terraces and outdoor stairs connect the individual buildings to form a coherent overall structure.
In the Sai Kung Jockey Club individually created areas between the various building structures are designed as transitions between the indoor and outdoor areas, as well as between the private sphere and communal activities. Though the four areas of the complex are distinctly separate, they are linked via terraces, footbridges, stairs and other intermediate areas to form one continuous overall structure. Sited between the individual youth hostel buildings, providing accommodation for a total of 224 persons, are terraces overlooking the ocean. For the residents these represent places of communication while giving the curvaceous linearity of the youth hostel area a loose cohesion. The same principle applies to the other buildings. Everywhere there are outdoor areas which the building interiors extend onto via expanses of glazing, making it possible to take full advantage of the magnificent panorama of the Sai Kung Bay. The large forecourt in the entrance area serves as a multi-functional area since the light-flooded reception with its ceiling-high glazing opens onto it.

**Interaction of materials**

Also in its choice of colours the leisure complex in Sai Kung shows itself to be pleasantly reserved. The colours white, grey and terracotta run through the entire complex, giving it both uniformity and consistency. The broad range of materials is cleverly coordinated. Together with natural materials such as wood, terracotta flooring, roof tiles and pebbles, the grey of the arched metal roof, the steel doors and the exposed concrete creates a varied material mix which, however, was not chosen for aesthetic reasons.
alone. Because of their location close to the ocean, the influence of moisture and the corroding effect of sea salt on the buildings had to be taken into account, also the typhoon risk and the extremely strong winds that accompany it, especially with regard to the windows and doors. Diverging from their standard practice of employing only traditional building materials, the architects decided not to use natural materials, opting instead for metal and concrete wherever the durability and stability of the buildings were crucial factors. The Sai Kung Youth Centre impressively demonstrates that when used consciously and selectively non-traditional building materials can blend in with the natural surroundings at the same time as helping to sustain the building structure.

The location close to the ocean places special demands on the wind and weather-resistance of the doors. This is the reason why here traditional materials have been replaced with steel sectional doors to provide a secure closure.
The function building which also houses a large sports hall, is located right at the heart of the complex [bottom left].

The hall opens up to the terrace outside via the ceiling-high aluminium folding doors with maximum glazing [bottom right].

The reception is directly linked to the forecourt, thus making it a multi-functional area.
1 HISTORY OF THE HÖRMMANN GROUP

In 1935 August Hörmann founded the metalworking shop “Bielefeld Steel Doors”. Today the family-run business of Hörmann is known throughout Europe as a leading manufacturer of doors, frames and operators.

We have just made a jump in time of some 65 years! In reality, however, this positive development up to the present day was made possible through the constant growth over decades of a family business against a backdrop of determination, innovation and a keen sense of quality. Hörmann KG is already being run by the fourth generation, namely by the grandchildren and great grandchildren of the company founder. The personally liable shareholder is Thomas J. Hörmann.

Following the war, August Hörmann’s son, Hermann (1912–1994) re-established his father’s business virtually from scratch, choosing as the location Steinhagen in Westphalia, where the company is still based today. In the 50s he gave his company the all-decisive impetus for growth by producing an entirely new kind of up-and-over garage door, the so called “Berry” door, named after its American inventor. This represented a small revolution on the garage door market which up until that time had known nothing but the awkward-to-open side-hinged doors. What could have been more in keeping with the spirit of the booming 50s than the promise of greater comfort and convenience? The “Berry” door has since become Europe’s most popular garage door, with more than 8 million sold worldwide.

But Hörmann did not just conquer the domestic market. In the 60s space-saving, vertically opening sectional doors for garages as well as industrial and commercial buildings initiated a development with a promising future. The company started to expand beyond the headquarters in Steinhagen and also the product range was continuously extended. Today, alongside the well known “classics”, it includes every type of industrial door system, e.g. rolling shutters, folding doors, fire doors, high-speed doors including operators and control systems as well as loading equipment systems, fire-resistant and smoke-tight doors, entrance doors, canopies and frames. In spite of all this innovative thinking, Hörmann have never lost sight of the importance of pleasing aesthetics. Hörmann products offer the customer variable design options, not least through a new product line of design garage doors and entrance doors in the “partner look”.

Since the mid-60s a total of eleven production plants have been established throughout Germany and Belgium. Over and above this, other companies have joined the ranks of the Hörmann Group: Schörghuber GmbH in Ampfing (manufacturer of high-quality timber doors for the non-domestic building sector), Dyna Seal (manufacturer of loading equipment systems), Tubauto SAS, Sens and Garador Holding Ltd., Yeovil, both leading manufacturers of up-and-over garage doors in France and Great Britain respectively. In 2000 the Hörmann Beijing Door Production Co. Ltd. was founded in Beijing, China, where industrial door systems and internal doors for the Asiatic market are manufactured. 2002 saw the launch of production in Vonore, Tennessee/USA of garage doors and operators for the American market.

2 PROLOGIS PARK FRANKFURT – DOORS AND LOADING EQUIPMENT FROM A SINGLE SOURCE

The American investment company ProLogis develops, builds and leases logistics facilities at prime strategic locations throughout the world. In equipping these facilities, quality is a top priority in order to secure favourable long-term operating and maintenance costs. In Germany ProLogis already owns leased centres in Cologne, Krefeld, Munich and Soest. In 2002 the first construction stage of a further centre in Frankfurt/Main covering a storage area of 21500 m² was completed.
The 280 metre long heated hall allows flexible use thanks to a 25.5 metre support grid. 22 loading stations are arranged along one longitudinal side of the hall and are closed off with 3 x 3.25 metre high manually operated Hörmann SPU 40 sectional doors. Since the hall floor lies above the site level, height-adjustable HLS hinged lip dock levellers ensure a smooth transition from the loading decks of the lorries to the hall floor. Hörmann DDF dock seals guarantee wind and weather-proof sealing between the hall and the lorry’s superstructure.

In order to be able to drive directly into the hall, this is additionally equipped with four 4 x 4.5 metre-sized power-operated sectional doors, the compound glazing of which ensures good visual contact. Ramps compensate for the difference in height between the actual site and the level of the hall. The preventive fire protection requirements are met by three single-leaf, 4 x 4.5 metre-sized Hörmann HG-18 steel sliding doors which provide a secure closure for the storage areas of flammable goods.

With this range of equipment comprising door types geared to individual requirements and including dock levellers and fire doors, Hörmann proves itself to be a competent partner for the equipping of prestigious logistics facilities. This is not only demonstrated by the case in hand at Frankfurt and a new ProLogis location in Cologne-Eifeltor but also by further ProLogis subsidiaries in the Czech Republic, Poland, Hungary, the Netherlands, Spain and Great Britain, all equipped by Hörmann.

Project data:
Project: – ProLogis Park Frankfurt:
Location: Riederhofstr. 26, Frankfurt/Germany
Contractor: ProLogis Germany Management GmbH, Cologne
Hörmann products: SPU 40 sectional doors, HLS hinge lip dock levellers (version with DPF-R anchors), DDF dock shelters, HG-18 steel sliding doors
Delivery, fitting, service: Jotec, Josten Tortechnik GmbH.

3 DECOTHERM® ROLLING SHUTTERS

An aesthetically appealing appearance, a particularly high thermal insulation value and permanent stability are the distinguishing features of Hörmann Decotherm® rolling shutters. Thanks to the sandwich elements with a slightly convex cross-section, the Decotherm® rolling shutters roll up easily and compactly and thus require minimum headroom. Decotherm® rolling shutters are a convincing choice thanks to their sandwich elements with CFC-free PU rigid foam insulation and galvanised, coated sheet steel for minimum wear and optimum protection against weathering. Running noise and signs of wear, caused by the frequent use of the doors, has been reduced thanks to improved profile contours. An almost unlimited choice of colour coatings and an array of window shapes make for maximum design options.

4 SPECIFICATIONS PROGRAM FOR DOWNLOADING

The new Hörmann specifications program directs architects and designers quickly and reliably to prepared specifications on Hörmann building materials in WORD and GAEB formats. The program runs under Microsoft Word 97, Word 2000 and Word XP on the Windows 98, NT 4.0, 2000 and XP operating systems.
The software covers internal and external doors as well as frames, garage doors and industrial doors and operator systems as well as fire and smoke-tight doors.
The specifications can be altered or supplemented to meet individual requirements so that a precise as well as comprehensive project-related product description is ensured.
Those interested will find the 2 MB comprehensive specifications program in the Hörmann architects forum at http://www.hoermann.de and can download it directly onto their own computer free of charge.
Effective preventive fire protection and safe escape and rescue routes are the result of competent planning, the use of reliably functioning doors as well as proper installation. As a specialist with more than 40 years’ experience in the fire and smoke-tight doors sector, Hörmann has always invested substantially in its own development program. As a result it has become a strong partner, recognised for its competence and expertise. Hörmann fire and smoke-tight doors offer certified safety and perfect function as well as a coordinated appearance. That’s why there is no compromise between architectural vision and constructional reality. With a complete range of preventive fire and smoke-tight door systems – from the maximum glazed tubular frame construction to the robust steel doors in the T30 and T90 versions – Hörmann offers its customers Europe’s most comprehensive fire and smoke protection program.
State your requirements. And we will offer you the perfect door solution.

Looking for solutions for your ideas? Hörmann has them. We offer doors tailored to every project, e.g. sectional doors, rolling shutters and folding doors with complete solutions including perfectly matched operators and controls. Everything from a single source, developed with the know-how from more than 50 years of door production.

HÖRMANNE
Doors for Home and Industry