# REFERENCES

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INNOVATIVE PIPE SYSTEMS MADE OF PLASTIC





Dear cus tomers since ancient times, mankind has been thinking of ef fective ways of transporting and using "aqua" (lat. for water) and "therm" (lat. for warmth).

Applied technologies have been developed and changed considerably over the ages, but the motivation has remained the same: Hygiene, health and well-being.

aquatherm has par ticipated in t his development over the past 34 years and in some areas has been able to make decisive contributions. An example is the fusiotherm®-system produced by aquatherm.

By constantly adapting its products to the needs of the market and de veloping the relevant know-how, aquatherm has achieved worldwide success and prestige within the last 34 years: a fact which we are proud of, but at the same time giving us the motivation to continue making constant improvements

This documentation is to give you a first idea of our products and services - and to make you curious to gain more information.

In case of further questions and of course also suggestions, we and our team will be pleased to be at your disposal!

Gerhard Rosenberg

President of the Advisory Board

Dirk Rosenberg

Managing director of **aquatherm** GmbH

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Maik Rosenberg

Managing director of aquatherm GmbH Managing director of aquatherm GmbH

Christof Rosenberg

Christof Hosenberg

Managing director of aquatherm GmbH



(Maik Rosenberg, Gerhard Rosenberg, Christof Rosenberg and Dirk Rosenberg)

#### More than 38 years aquatherm:

38 yea	ars aquatherm:
1973	Founding of aquatherm
	by Gerhard Rosenberg
1978	Transfer to the first factory
	in Biggen / D-Attendorn
1985	Completion of factory 1
	in Biggen / D-Attendorn
1992	Founding of the branch
	in Radeberg near D-Dresden
1996	Founding of the metal processing company
	aquatherm metal, D-Attendorn
1998	Founding of a subsidiary in Carrara / I-Italy
1999	Completion of the main site in D-Attendorn
	as one complex (Factories 1+2, Production
	and Store, Laboratory and Training Centre)
2001	Completion of the extension Factory 2
	in D-Attendorn
2001	Opening of the new training centre
	in D-Radeberg
2002	Completion of the logistics centre
0000	in D-Attendorn
2003	Completion of rebuilding and finishing of the
0000	training centre in D-Attendorn
2003	30 year celebration of the company aquatherm
2003	Plant 8, hall refurbishment
2003	aquatherm metall, new office building
2004	Plant 2, increase of external storage area
2004	Multifunction building under construction in Attendorn
2005	
2005	Adding of 2 storeys on the administration building
2005/08	Completion of the 4-storey hall on the premises
2003/00	in Attendorn
	Basement: Store
	Ground floor: Assembly / Packing
	or burid fibble. Assertibly / Fackling

1st Floor: Laboratory and Technical department 2 nd Floor: Special manifold construction

accomodates the room of the plant maintenace.

Aquisition of the former storehouse of the forwarding agent Kost, which also

Opening of the new expert center of building service engineering

2008

2009

4



# SUCCESSFUL WORLD-WIDE

# Facts and figures: all about aquatherm and its individual facilities

Certified according to DIN/ISO 9001 aquatherm is a world-wide successful manufacturer of plastic pipe systems for potable water application, climate technology and for the heating sector.

aquatherm was founded 1973 for the development, production and installation of hot-water underfloor heating. At that time aquatherm was one of the three first suppliers of underfloor heating on the European market.

In 1980 aquatherm developed the plastic pipe system fusiotherm® from polypropylene for sanitary and heating installations. Up to now this innovation is the foundation stone for a steady growth.

The total workforce at all sites numbers over 450. Each day well over 150 kilometres of pipe and 230,000 fittings are produced, stored and dispatched.

Presently aquatherm is located at 3 sites in Germany totally covering more than 68.000 square metres for offices, production and warehouse:

- 1. aquatherm main site D-Attendorn (Biggen)
- 2. aquatherm branch D-Radeberg near D-Dresden
- 3. aquatherm-metall D-Attendorn (Ennest)

The aquatherm-pipe systems are produced 24 hours everyday at 6 days a week to meet the constantly increasing demands at home and abroad and to guarantee impeccable and punctual delivery.

Today, aquatherm is a globally acting company, present in 80 countries of t he world, undisputed market leader in man y fields and last but not least a flexible middle-sized company, which is able to compete with big groups.





#### **SPORT**

Stadiums, sport complexes and racing tracks are the modern arenas of our time. This is wher e contests are held, records made, victories celebrated, or they are used simply for leisure pursuits.

Some of these sporting events bring together more people in one place than live in some small towns: are nas with capacities for 60.000 spectators are the rule rather than the exception today. Most new sporting facilities are also multifunctional and used equally for World Cup football games, athletics competitions, large concerts, festivals, musicals or opera performances.

In recent years, aquatherm has repeatedly attracted positive attention with its cooperation in the context of the largest and newest arenas of our time.

For example, aquatherm has been involved in projects such as the VELTINS arena, Real Madrid's football stadium or the Central Stadium in Leipzig.

Whatever the need, whether for sanitary amenities, air-conditioning systems, cooling surfaces or, as in the case of the VELTINS arena, for a spect acular under soilheating project, aquatherm pipe systems have proven their worth in every single project.



Spa racing track, Belgium



Ice rink, Passau, Germany



Ice rink, Usti, Czech Republic



Conti Rome, Italy



#### SPORT

Pipe systems made by aquatherm are put to good use for example in the following sports complexes:

LANE COVE Aquatic Center (Australia)

Olympic Stadium FC Bruges (Belgium)

Racing track Nürburgring (Germany)

Spa racing track (Belgium)

Leisure pool AQUA MARIEN (Germany)

Stadium VELTINS arena (Germany)

Training facility FC Schalke 04 (Germany)

World Cup Stadium Leipzig (Germany)

Ice rink Orienburg (Germany)

Ice rink Passau (Germany)

Ice rink Sonneberg (Germany)

Central sports ground Reykjavik City (Iceland)

Training facility Reykjavik City (Iceland)

Àsgardur stadium (Iceland)

Training facility Asgardur (Iceland)

Millennium Stadium (Malta)

Randaberg stadium (Norway)

Millenium stadium swimming and fitness centre (Malta)

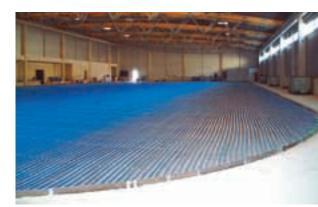
Stadium Randaberg (Norway)

Ice rink Usti (Czech Republic)

...



Ice rink Moscow, Russia



Ice rink Sonneberg (cooling surface laid with climatherm pipes), Germany





#### LEIPZIGER CENTRAL STADIUM

In 2000, the foundation stone was laid for the Central Stadium, Leipzig during the celebrations for the 100th anniversary of the DFB.

The stadium is designed f or 45.000 spect ators, and its in novative shape and multifunctional concept is right in line with a futur istic, exciting sports complex. The key characteristic feature of the new arena which can be seen from afar is the curved mobile roof which covers the stands without any supports using a 17 m high suspension solution.

aquatherm has made a key contribution to this major project by installing an aquatherm under soil heating system to give the necessary warmth to the heart of the stadium - the grass playing surface. This results in shorter regeneration phases for the turf so that matches can take place continuously, reliably and without any problems even when the weather is cold and wet.

Object: Central Stadium, Leipzig

Capacity of spectators: 45.000
Completion: 17. July 2004

Product: aquatherm-undersoil heating

Material: fusiolen® PP-R C





Leipzig's Central Stadium, with the climatherm pipe system by aquathermfor air-conditioning, heating and installation systems.





## WERSE STADIUM, ROT WEISS Ah LEN

After advancing up to the regional league in 1996 and after the merger between TuS Ahlen and Blau-Weiß Ahlen, also the construction of a new stadium was decided.

In 1997 on the grounds of the former Glück-Auf-arenathe brand new Werse stadium was built. The football stadium will seat about 10.500 spectators in the pure football stadium. The main grandstand provides 2.000 seats, all canopied. On the backs traight there is a girandstands for about 3.500 spectators. On t he grandstands behind t he goals t here is place for about 2.500 spectators.

The stadium is designed in a way that an extension up to

15.000 spectators, required by the DFB, can be realized without any technical problems. 20 km drainage pipes have been laid for the lawn, which was established in ground-biological degradation.

#### Project data:

Werse stadium

10.500 Capacity of spectators: Completion: 1997

Product:

aquatherm-undersoil heating

Material: fusiolen® PP-R C







The Werse stadium in Ahlen - equipped with the climatherm-pipe system for chilled, hot fluid and various industrial applications made by aquatherm.



## STADIUM EDEN, SK SLAVIA PRAG

From 1897 to 1945 Slavia played in their own stadium in the northwestern suburb Kroübel (Letná) in the neighbourhood of its biggest rival Sparta.

After the stadium was burnt down by the Nazis, Slavia spent three years in asylum, before in 1948 in the southeast of the city in the suburb of Eden a new home was found.

In 2000 the Eden's tadium was no longer suitable for the 1. League. Slavia had to find a new stadium and moved into the stadium Evzena Rosickeho owned by the football assocation, which the fans never accepted.

The expansion of the Eden was already planned in 1 984. In 2004, the Eden was demolished. At the same place in 2005 the news tadium shoulds tay. But the construction finally started in October 2006 – the opening was in May 2008. The stadium has 21.000 seats for spectators.











# MILLERNTOR STADIUM, FC ST. PAULI 1910 E.v.

















# BRITA-ARENA, Sv WEh EN WIESBADEN

#### Project data:

Object: Brita-Arena, Wiesbaden

Capacity: 13.144 canopied places for spectators

Completion: October 2007

Product: aquatherm-under soil heating













## SPORTS-PARK KLAGENFURT, KLAGENFURT

#### Project data:

Object: Sports-Park Klagenfurt, Klagenfurt

Capacity: 32000 spectators
Completion: September 2007

Product: aquatherm-under soil heating



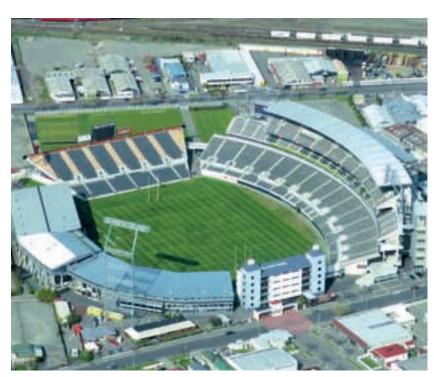




# **STADIUMS**



"Estadio Santiago Bernabéu", Real Madrid football stadium, Spain



Jade Stadium, Christchurch, New Zealand (outdated illustration)



Eden Park, Aukland, New Zealand (outdated illustration)



#### SPORT

Pipe systems made by aquatherm are put to good use for example in the following sports complexes:

Ice rink Moscow (Russia)
LUZHNIKI-MOSKWA Stadium (Russia)
Königsberg Stadium (Russia)
Sport park Saturn-Moskwa (Russia)
Ice hockey Stadium St. Petersburg (Russia)
Ice rink ASTANA (Kazakhstan)

Ice rink SEREBRJANNIJ (Russia)

Ice rink MARJINO (Russia)

Ice rink BIRULOVO-SAPADNIJ (Russia)

Ice rink BESTUGEVSKI (Russia)

Ice rink KRILATSKI (Russia)

Stadium SC Woronesch (Russia)

REAL MADRID Stadium (Spain)

Betis CF Stadium Seville (Spain)

Olympic Stadium Seville (Spain)

Uherske Hradiste Stadium (Czech Republic)

Stadion FC St. Pauli 1910 e.V. (Germany)

Stadion Rot Weiss Ahlen (Germany)

SK Slavia Prag (Czech Republic)

SV Wehen Wiesbaden (Germany)

...



Uherske Hradiste sport stadium, Czech Republic



The VELTINS ARENA, Gelsenkirchen, Germany



## NUEVA CIUDAD DEPORTIVA, REAL MADRID

#### Nueva Ciudad Deportiva - REAL MADRID´S new training centre

At the outskirts of Madrid a very impressive training centre was be completed in 2006.

It consists of the new sporting arena of the traditional club "Real Madrid", which is called by Florentino Perez, the president of the club, only "Complex of Madridism". The total centre with its well thought through interior and its modern training facilities will set worldwide new standards after its completion! A large team of technicians, architects and managers work close together to give especially the winning team Real Madrid with this new sports facility a large, efficient and attractive foundation for best performance.

aquatherm has a not insignificant influence on this large project. So aquatherm has planned and installed the undersoil heating for several of the lawn fields. Also, decided by the project management, to equip the complete drinking water pipe system as well as the complete heating pipe system with the aquatherm-pipe-systems.

aquatherm pipe systems, due to its excellent quality and innovation in distributing of water and heating techniques, will set a world leading statement with this sporting facilities



Team apartments, training centre and one of  $t\ \ he$  soccertraining fields as a model...



... and just before completion.



Look at the special architecture of the interior: clear lines, large glass areas, soft colourings and the special combination be tween light and landscaping will create a work



#### SPORT

The new training centre is split into 6 parts, which together are approximately 1.200.000 square meter. Each of t hese areas will have one of the following facilities:

**Professional Area**: A place for the first team and training area. A large terrain with best training conditions.

**Lower Teams Area:** A place for smaller teams of Real Madrid with a lot of small training fields.

**Social Area:** An area for the fans of Real, equipped with a soccer field and swimming pools. There is everything a fan could wish for.

**Equipment Ar ea:** The t echnical staff of the "officials", the medical department and the "high performance centre".

**Public Area:** The entrance of the complex, the main soccer field, the multi sport field and a parking area.

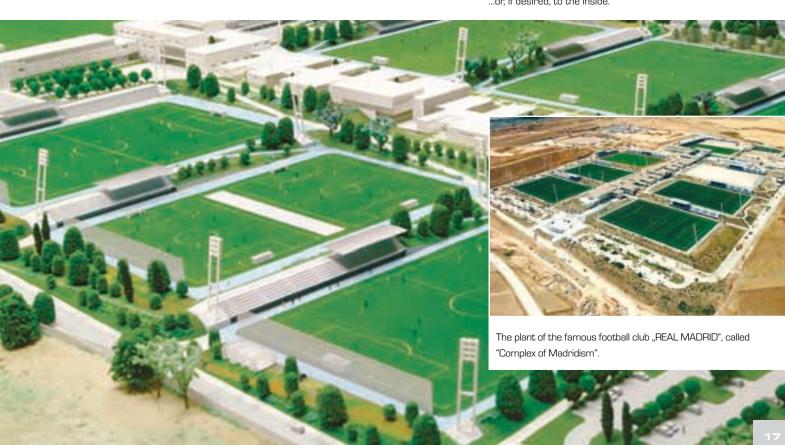
**Theme Park:** Entertainment for everyone! Week after week millions of people are expected and there will be several exhibition rooms and of course parking spaces.



The so called "Gym", a training facility with view to the lawn areas...



...or, if desired, to the inside.





#### SPORTS FLOOR h EATING SYSTEMS

aquatherm sports floor heating systems use clever technology and low energy consumption levels to create excellent general conditions and a pleasant climate for hobby and professional sportsmen and w omen in indoor locations. In r ecent years in particular, the proven aquatherm sports floor heating systems have been used incr easingly for sports halls, sports centres, rehabilitation clinics and training facilities.

The operators can rely on a maturely developed system with a world-wide reputation which produces the most pleasant training conditions in combination with low operating costs.

In the frequently futuristically designed buildings, the aquatherm sports floor heating system generates a pleasant war-mth just where the sports men and women and patients need it: up to  $2.5\ m$  above the floor.



Sports hall Rönkhausen, Germany



Sports hall Lichtringhausen, Attendorn, Germany



HARDY's sports centre, Munich, Germany



Sports hall Lichtringhausen, Attendorn, Germany



#### SPORT

Sports floor heating systems made by aquatherm are put to good use for example in the following sports buildings:

Fire and disaster protection / Frankfurt (Germany)

Primary school south / Radeberg (Germany)

Hardy's sports hall / Munich (Germany)

Lippe hospital / Bad Salzufflen (Germany)

Nordeney hospital,

Westphalia state social insurance / Nordeney (Germany)

State riot police / Hamburg (Germany)

MAX Fitness Center / Attendorn (Germany)

Sports hall Hessenkolleg / Frankfurt (Germany)

Sports hall Lichtringhausen / Attendorn (Germany)

Sports hall neighbourhood school / Leipzig (Germany)

Sports hall Dvorana / Bjelovar / Croatia (Germany)

Sports hall Ursulinenstift / Werl (Germany)

Gymnasium Rönkhausen / Finnentrop (Germany)

Gymnasium Eidinghausen / Plettenberg (Germany)

Gymnasium Fichte school / Bautzen (Germany)

Gymnasium 15th middle school / Dresden (Germany)

Gymnasium Gonsenheim / Mainz (Germany)

Gymnasium vocational college 12 / Nürnberg (Germany)

Sports club premises SV Burgweinting / Regensburg (Germany)

...



MAX FITNESS CENTRE, installing the sports floor heating, without...



... and with the floor covering





#### **SWIMMING POOLS**

"Once you're in t he water, you'll learn to swim", said Johann Wolfgang von Goethe...

...and if you had to plan the complete plumbing for a swimming pool, you'd learn to appreciate the benefits of aquatherm, the water and heating specialist!

Only impeccable water can guar antee public swimming pool operators the reliability they need to provide their guests with consistently good bathing. And only dependable heating ensures them of problem free, energy-efficient operation 52 weeks a year.

The fusiotherm® pipe system by aquatherm delivers comprehensive and reliable function for both water management and the associated heating applications based on o ver 30 years of experience.

aquatherm has clearly displayed the ability of the aquatherm system to provide high-quality solutions to the greatest satisfaction of customers, including the Aqua Marien in Germany, Lane Cove Aquatic Centre in Australia and the Millennium Stadium in Malta...



Adventure bath AQUA MARIEN, Marienberg, Germany



Adventure bath AQUA MARIEN, Wave basin







Heating system



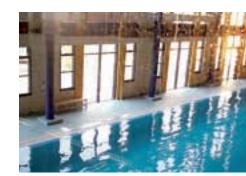
#### SPORT

aquatherm pipe systems are in use in the following swimming pools:

LANE COVE Aquatic Centre (Australia)
Erlebnisbad AQUA MARIEN (Germany)
Turm ErlebnisCity (Germany)
Millennium Stadium Swim and Fitness Centre (Malta)



Millennium Stadium Swimming Pool, Valetta, Malta





Millennium Stadium, Ceiling Installation



LANE COVE Aquatic Centre, Sydney, Australia





#### Sh IPS

Ever since history began, man has set sail in fragile ships to discover the incalculable oceans.

And ever since Columbus, there has been no more fear that the risky journey could come to an abrupt end by falling off the end of the earth. Mankind made the positive experience primarily through shipping - that the earth is round.

For t housands of y ears, ships were the fastest means of transporting goods and passengers round the globe, and loyal companions for discoverers and adventurers.

They were used for all kinds of research, every corner of the coast w as sur veyed. New w orlds w ere disco vered, battles fought, continents conquered. In the long ages before mobile phones and e-mails, ships were the key means of communication, bringing messages from one continent to the next.

In this high-tech day and age, shipping is now faced by an additional major challenge: modern tourism. Today ships are frequently floating palaces, rightly called luxur y liners, used for recreation, recuperation and for the love of travelling.

aquatherm pipe systems are used on the largest and loveliest passenger ships all over the world, where their reliability, corrosion resistance, minimum weight and environment compatibility are key elements contributing to safety and maximum comfort in the sanitary amenities, air-conditioning and heating systems on board.



Club ship AIDA AURA, Germany



Cruise ship "COSTA VICTORIA", Italy



Royal yacht DANNEBROG, Denmark



# ((2)) aquatherm





Tijuca



Almizan Star



C M A C G M

Mariloula



Cha Com Vela







Golden Alaska, Seattle, USA fishing fleet - global market leader in the field of frozen fishery products



#### Some examples of ships equipped with aquatherm pipe technology:

Royal yacht DANNEBROG (Denmark)

Cruise ship AIDA AURA (Germany)

Ferry SCANDLINES MECKLENBURG-VORPOMMERN (Germany)

Excursion ship "RIVER DREAM" (Germany)

Excursion ship "HERRSCHING" (Germany)

Excursion ship "MS STARNBERG" (Germany)

Luxury liner STATENDAM (United Kingdom)

Luxury liner CARNIVAL CONQUEST (Italy)

Luxury liner CARNIVAL VALOR (Italy)

Cruise ship LA SUPERBA (Italy)

Cruise ship COSTA CLASSICA (Italy)

Cruise ship COSTA MARINA (Italy)

Cruise ship COSTA VICTORIA (Italy)

Cruise ship NORWEGIAN SKY (Norway)

Cruise ship PRIDE OF ALOA (Norway)

Luxury liner SAGAFJORD (Norway)

Luxury liner SAGA ROSE (Norway)



Cruise ship CARNIVAL VALOR, sister ship of the "CARNIVAL CONQUEST", Italy



#### HOTELS



#### h OTELS

aquatherm has enjo yed special success in applications for hotels in the superior and luxury category where aquatherm pipe systems have been installed all over the world.

Particularly where stringent drinking water standards have to be met, where reliable heating systems have to create a pleasant room climate and where durability is a must, more and more top hotels opt for the proven aquatherm pipe systems.

For example, the corrosionresistant polypropylene pipe climatherm is the ideal pipe for well functioning, corrosion-proof air-conditioning systems, while the fire-fighting pipe indupipe is increasingly being used in sprinkler systems in hotels.

It goes without saying that the fusiotherm® pipe system also deserve a mention, with its tasteneutral properties fully satisfying the requirements made of dr inking water supply systems for discerning ho tel guests, suitably rounding of f the standard of comfort in every good hotel.

aquatherm - successful in ho tels in more than 78 countries of the world...



Hotel Saint Vincent de Paule, Malta



Hyatt Hotel, Turkey



Radisson SAS Hotel, Riyadh, Saudi Arabia



## hOTEL MELLITON, GREECE

From 20 to 23 June 2003, the principal statesmen of the European Union met for one of the most important summit meetings during Greece's period of office as Council President.

The main issues were the common security and immigration policy. In or der to be protected from external disturbances, the venue for the meeting was Hotel Melliton in a beautiful location in Porto Carras on the Greek peninsula Chalkidiki.

It is thanks to the climatherm pipe system specially developed by aquatherm for air-conditioning systems and installations as used in Hotel Melliton, that statesmen such as Tony Blair, Romano Prodi or Gerhard Schröder were able to enjoy pleasant room temperatures during this strenuous conference.

Together with the climatherm innovation, the drinking water system in the 5-star hotel also uses the world-wide proven and esteemed fusio therm® pipe system - an optimum, reliable solution thanks to the joint connecting parts!



Hotel Melliton, Porto Carras, Greece



Hotel Melliton in Porto Carrai, Greece. The top class hotel equipped with aquatherm pipe technology, has now secured itself a place in future European history books.



#### HOTELS

# aquatherm pipe systems are used for example in the following international hotels:

Raouf Hotels International (Egypt)

Breidenbacher Hof (Germany)

Radisson Hotel in the DomAquarée (Germany)

Hotel am Schloss (Germany)

Hotel Krone (Germany)

Grange City Hotel (England)

Hilton Hotel (England)

Marriot Hotel London (England)

Marriot Hotel Tiflis (Georgia)

Egnatia Palace (Greece)

Grand Hotel Saloniki (Greece)

Hotel Elektra (Greece)

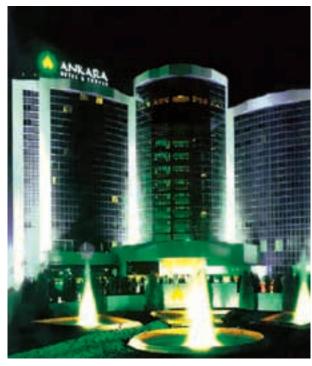
Kempinski Hotel Nikopolis Thessaloniki (Greece)

Hotel President (Greece)

Hotel Meliton (Greece)

Hotel Grand Bretagne (Greece)

...



Hotel Ankara, Ankara, Turkey





## **RAOUF hOTELS INTERNATIONAL**

Against the backdrop of Egypt's Red Sea, aquatherm's Egyptian representative Hamza was involved in the project to produce a luxurious hotel complex with 2000 beds.

Right in t he middle of t he three main buildings, t here is an astounding man-made lake covering  $15,000~\text{m}^2$  in size. This

unique project uses aq uatherm pipes on a lar ge scale f or sanitary, heating and air -conditioning sy stems, per forming their duties reliably ever since, to the satisfaction of everyone concerned.











#### HOTELS

aquatherm pipe systems are used for example in the following international hotels:

Hotel Nordica (Iceland)

Hotel Esplanade (Croatia)

Hotel Adriatik Umag (Croatia)

Hotel Katarina Rovinj (Croatia)

Hotel Viktoria (Lebanon)

Holiday Inn Tower (Lebanon)

Hotel Mercure (Luxembourg)

Hotel Casa Antonia (Malta)

Hotel Sea Bank (Malta)

Hotel Solana (Malta)

Hotel Saint Vincent de Paul (Malta)

Hotel Eberwein (Namibia)

Hotel Dornbirn (Austria)

Hotel Astoria Plaza (Philippines)

Hotel The Bellevue (Philippines)

Hotel Pan Pacific (Philippines)

...



Hotel Marriott, London, England



Hotel Pan Pacific, Manila, Philippines





# **EXAMPLES h OTELS (INTERNATIONAL)**

Hotel Alexandros Busteni (Romania)

Hotel Anda Sinaia (Romania)

Marriott Hotel (Romania)

Hotel Premier Predeal (Romania)

Hotel Anda Sinaia (Romania)

Hotel Mezhdunarodnaja (Russia)

Radisson SAS Hotel (Saudi Arabia)

Heidiland motorway services (Switzerland)

Hotel Bali 2+3 Benidorm (Spain)

Hotel Corallo (Spain)

Hotel Crystal Palace (Spain)

Hotel La Primula (Spain)

Hotel Svevo (Spain)

Hotel Riu Arecas (Spain)

...



Hotel Mercure, Luxembourg City, Luxembourg







#### firestop-pipe systems in hotel construction

The corrosion-resistant aquatherm pipe sy stem firestop is used particularly in hotels in England for the construction of sprinkler systems.

One of the special properties of the firestop pipe system is that it is hardly inflammable according to DIN 4102-1, materials class B1, making it ideal for applications particularly concerned with protecting people from the devastating effects of an unexpected fire.

When used in spr inkler systems, firestop provides increased safety and a good feeling in every building where it has been installed, in the interests of fire protection which is so important.



Hotel Bali II and III, Benidorm, Spain



The Grange City Hotel is a spectacular new luxury 5 star hotel. The Grange City Ho tel in London, England, is equipped with a sprinkler system made by aquatherm



The Bellevue Hotel, Manila, Philippines



# h OTELS



Hotel complex Pebble Beach, Namibia



Motel Damascus, Damascus, Syria



Holiday Inn Hotel, Beirut, Lebanon



Laguna Beach Resort, Thailand



#### HOTELS

aquatherm and its pipe systems can be found in many countries of the earth where adverse weather conditions prevail.

In these hotels all o ver the world, great trust is placed on the corrosion resistance and durability of the aquatherm pipe system even under extreme weather conditions in or der to provide the guests with a constantly good supply of drinking water, with a pleasant room temperature and well functioning sanitary amenities.

Whether skiing in Russia's Carpathian Mountains, relaxing in

a hotel complex in Namibia, taking it easy in a motel in Syria or on an adventure holiday in the jungles of Brazil, aquatherm pipe systems do their job well and eliably everywhere.

In places wher e even the hardest materials normally succumb to corrosion, aquatherm pipe systems offer a pioneering alternative to conventional materials.

aquatherm pipe sy stems - successful w orld-wide in 78 countries!



Rui Palace Adeje Tenerife, Spain



Hotel Premier, Predeal, Romania



# h OTELS



Marriott Hotel, Bucharest, Romania



Astoria Plaza Hotel, Manila, Philippines



The St. Regist Hotel Towers, Doha, Qatar







Movenpick Hotel, Dubai, U.A.E



Opryland Hotel, Nashville, USA



#### **hOTEL THE REGENT ESPLANADE**

Since the early 20th century - to be more precise, since 1925 - the hotel "The Regent Esplanade" is one of the most splendid buildings right in the heart of Zagreb, Croatia's capital.

The hotel looks back on a long, exciting history and is famous for its constantly high standard and outstanding service.

Right from its official opening, "The Regent Esplanade" was the living heart and focal centre of social life in Zagreb, welcoming presidents, politicians and natur ally stars from film, television and the music industry among its man y satisfied quests since then.

The hotel combines Ar t Nouveau architecture har moniously with the comfort and high t echnical standard of the  $21^{\rm st}$  century. The r eliability and outs tanding functionality of the aquatherm pipe systems used for the air conditioning, sanitary and heating installations of "The Regent Esplanade" make a contribution to giving the high standard and good name of the company a proverbialworld-wide reputation in future too.



"The Regent Esplanade", Zagreb, Croatia

### HOTELS

## hOTEL YAS MARINA, ABU Dh ABI

The Yas-Hotel is a 5-s tars-hotel on the Yas Island in A bu Dhabi. It is integrated in the race track Yas Marian Circuit where the first F 1 race in A bu Dhabi took place on 1s tof November 2009.

The hotel, designed by Asymptote Architecture, is partly constructed over water and partly over land. The two hotel towers, one being set within the race circuit and another placed in the Marina itself, ar e physically linked by a br idge. Hotel guests can watch the race from the community rooms or from the balustrades.

The buildings are spanned by a  $16.000~\text{m}^2$  curved and self-supporting roof. The roof is constructed of glass panels and steel connections, equipped with a LED lighting sy stem with changing colors.

On over 85.000 m<sup>2</sup> the hotel has 499 rooms, 8 restaurants, conference rooms and diverse entertainment facilities. The 2 Presidential Suites are furnished with furniture of the Museum of Modern Art in New York.







Yas Marina Hotel, Abu Dhabi



## h OTELS



Hotel Albatros, Cavtat, Croatia



Alec Arms Hotel, Lethbridge, Canada



Park Vista Sherwood Park, Alberta, Canada



Hotel Croatia, Cavtat, Croatia



Holiday Inn Strathmore, Strathmore, Canada







Hotel Casa Antonia, Malta



Hotel Villapadierna, Marbella, Spain



Grand Hotel Imperial, Dubrovnik, Croatia



### **hOTEL SCh NEPPER**

After extensive home r emodelling the jewel of the "Haus Schnepper" – the barn floor – gleams in new splendor. Roomy, with a high-quality sanitary area and equipped with many stylish details now parties make much more fun.

The barn floor is a detached building for up to 200 persons.

The lovingly decorated, rustic ambience, the view to the neighbouring golf site and the wonderful nature are a classy frame for each kind of festivities.

A big bar, the dance floor and sitting areas for up to 200 persons offer best premises for your events.



Hotel Schnepper, Mecklinghausen, Germany







Stage of assembly



Finished rooms



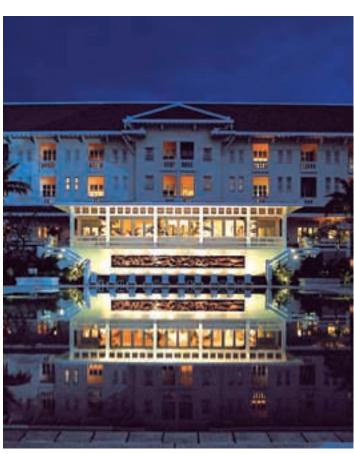




Sheraton Hotel, Tunis, Tunisia



Kings Canyon, Australia



Raffles Grand Hotel, Siam Reap, Cambodia



# aquatherm pipe systems are used for example in the following international hotels:

Motel Damascus (Syria)
Hotel Steigenberger (Turkey)
Hotel Sirene (Turkey)
Hotel Akteon Palace (Turkey)
Hotel AYTUR (Turkey)
Ankara Hotel (Turkey)
Arcadia (Turkey)
Grand Hyatt (Turkey)
Kaya Otel (Turkey)
Kemer Resort (Turkey)
Titanic Genel (Turkey)
Metrocity, Istanbul (Turkey)
Al Safa Plaza (United Arab Emirates)





Hotel Mariott, Tbilissi (Tiflis), Georgia



Crown Casino Hotel, Melbourne, Australia



Hotel Riu Atlantico, Huelva - Isla Canela, Spain



### aquatherm

# HOSPITALS

### fusiolen® PP-R

Good water is the key to all bodily functions and is rightly considered to be the No. 1 food.

The quality of daily drinking water is crucial for human health. A high quality of water is all the more important for everyday business in hospitals, where it is frequently important to help the sick and infirm frequently suffering from a weak immune system to recover and find healing among others with good drinking water.

In many cases, even in new hospital buildings, problems have been encountered after only a short period of time: the water coming out of the new pipes is not conducive to good health. The causes are usually to be found in corroded pipes combined with aggressive water quality.

In or der to a void these problems, an incr easing number of hospitals all over the world have started to install pipe sy stems which remain resistant to corrosion even when subject to aggressive water, so that they do not pose any health hazard:

**furiotherm** -pipe system made of the material **furiolen** PP-R.

For the sake of health!





Hospital Doctor Negrin, Gran Canaria, Spain



Children´s cancer hospital, Athen, Greece



Heart clinic, Turkey



## fusiolen® PP-R

The fusiotherm pipe system is free from heavy metals hazardous to healt h (e.g. nic kel, mer cury, etc.), corrosion resistant, recyclable, and therefore especially suitable for the application in hospitals and laboratories.



Concorde Hospital, Sydney, Australia



Auckland Hospital, New Zealand



Park Klinik, Bad Dürkheim, Germany



St. Vincent Hospital, Sydney, Australia



Rehabilitation clinic "Enclos de 7 Fontaines", Belgium



Oncology Centre, Poland



## aquatherm

# HOSPITALS

# aquatherm pipe systems are used for example in the following international clinics and laboratories:

Concorde Hospital (Australia)

CSIRO Laboratory (Australia)

St. Vincent Hospital (Australia)

Clinique Dr. Derscheid (Belgium)

Rehabilitation clinic "Enclos de 7 Fontaines" (Belgium)

AWO youth disabled home (Germany)

Dresden district hospital (Germany)

Park Klinik, Bad Dürkheim (Germany)

Rheumatism clinic (Germany)

Sanatorium "Sissi Palast" (Greece)

Auckland Hospital (New Zealand)

Mental Health Clinic (New Zealand)

Home for the deaf (Austria)

Oncology Centre (Poland)

Heart Clinic (Turkey)

Hospital Doctor Negrin (Spain)

...

fusiotherm" made of the material fusiolen" PP-R



Rheumatism clinic Bad Rappenau, Germany





## fusiolen® PP-R

Environment protection is a k ey issue in an incr easing number of countries in the world.

Increasing importance is being att ached to the use of en vironment-friendly products in or der to save nature and protect resources - products which do not pose any burden on the environment when being used but which can be recycled again later on and processed without any problems into other items of daily use.

The fusiotherm® pipe system made of the material fusiolen® PP-R is free of harmful heavy metals (e.g. copper, nickel, mercury, etc.), corrosion-resistant, recyclable and therefore simply ideal for use in hospitals and laboratories.



City Hospital, Dubai, U.A.E.



Vanderbilt University Medical Center Children's Hospital, Nashville, USA



AWO youth disabled home, Cologne, Germany



## aquatherm

# HOSPITALS

## fusiolen® PP-R

aquatherm drinking water technology is used not only in hospitals but also in external laboratories world-wide.

Without any pollution in the water, resulting for example from pipe corrosion, the fusiotherm  $^{\tiny \textcircled{\tiny 0}}$  drinking water pipe sy stem

made of fusiolen® PP-R is simply deal for applications with the highest standards of hygiene and in the interests of precise research results and analysis.



Mental Health Clinic, Auckland, New Zealand



CSIRO Laboratory Sydney, Australia



Home for the deaf, Zell, Austria

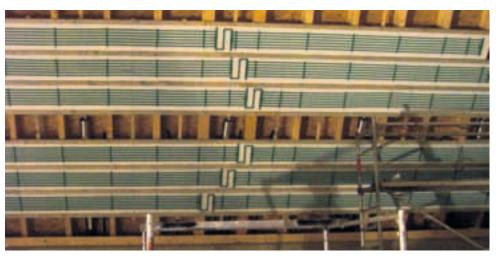


Dresden district hospital, Dresden, Germany



# RAYONEX, LENNESTADT









# THERAPY CENTRE

## Th ERAFIT, LENNESTADT

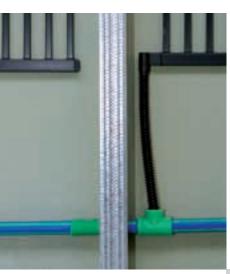


Therafit, Lennestadt, Germany











### RESIDENTIAL



Kings Palace, Bangkok, Thailand

Residential houses and buildings constitute our most private sphere. Here we live alone or wit h the family, play hosts to our friends and enjoy the most important celebrations of our lives.

In many cases we live in the same place all our lives. Our home means protection and safety, well-being and security. This is where we can let our per sonality develop. All the more important then for us to be able to rely completely on what is most important, apart from stable walls and a roof that does not leak: on good, reliable sanitary amenities, air-conditioning systems and heating installations.

Healthy w ater, coming from the fusio therm® pipe system. Pleasant cool temperatures in summer thanks to state-of the-art air-conditioning technology, and reliable, cosy warmth in the colder days of the year thanks to wellfunctioning, modern heating systems, when the temperatures outside may easily fall to well below freezing.

aquatherm has set itself the target of making its well-known high standard of quality a vailable to its customers world-wide - in 78 countries on earth. Whether in Singapore, China, France, Siber ia or New Zealand, wherever people are building houses, aquatherm is on the spot with mature, reliable pipe technology. Always at the ready to improve even further, go new ways and implement new ideas and visions.



Residential complex in Moscow, Russia



Private house of a famous football player, Georgia



Modern residential buildings in Kiew, Ukraina



## aquatherm

# RESIDENTIAL



Residential building Parkstadt, Unterliedenbach, Germany



Appartement blocks, Perth, Australia



Navy Base, USA (exterior view)



Residential building in Madrid, Spain



Modern residential building, USA



US Navy Base: Lilac pipe system for recycled water



## **DAv INCI-h AUS**

DAv INCI-h AUS - Synt hesis of classic Bauhaus style and modern half-timbering.

Each house is designed as a synt hesis of the arts. Being unique, each house is a reference for the DAVINCI-HOUSE philosophy. For the designers, quality is more important than growth. A high standard, wich is fulfilled today by 140 employees, who produce 70 houses per year at Elben/Germany.

For more information: www.davinci-haus.de



Residential building, Unterliedenbach, Germany



Residential building, Unterliedenbach, Germany





## aquatherm

## RESIDENTIAL

The typical f eatures of a D AVINCI HOUSE include t he open architecture with flowing transitions between house and garden. Black and white wooden beams in their natural texture give the house a filigree structure, while large glazed areas bring a feeling of vastness and transparency.

For managing dir ectors Ant on Hammes and Ulr ich Stühn, perfect design means a consistently high standard of quality and execution from the initial idea through to the completed product. The guidelines for full service from DAVINCI HOUSE include reliable technology, economic production, self-explanatory ergonomic features and an aesthetic approach geared specifically to the target group.

In terms of technology, DAVINCI HOUSE attaches great importance to quality and safety. Only the very latest technology is used for interior and exterior architecture, while at the same time taking considerable account of the ecological aspect.

In aquatherm, DAVINCI HOUSE has found a partner who fulfils these high demands perfectly. This resulted in close cooperation which has mean while lasted for decades. For this reason, in 2004 aquatherm installed the very latest innovative potable water and heating technology in the 1000th DAVINCI HOUSE...



Underfloor heating, ...



... central heating system and...



... potable water technology – the proven aquatherm pipe systems are used all over the DAVINCI HOUSE.



## **RESIDENTIAL**



Villas Calagary, Alberta, Canada



Park Vista Sherwood Park, Alberta, Canada



Copperwood, Calgary, Canada



Pandion Vista, Cologne, Germany



Solara Canmore, Alberta, Canada



## aquatherm

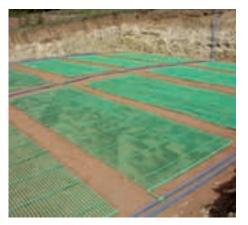
# RESIDENTIAL



Villa Arentz, Zagreb, Croatia



Calvana Village, Okotoks, Canada



One-family house, Germany



One-family house, Würzburg, Germany







## GALLILEO TOWER, FRANKFURT A. MAIN

One of the most interesting buildings to be completed with aquatherm pipe systems in recent years must surely be the "Gallileo Tower" in Frankfurt.

With the construction of this 136 m high office tower, Dresdner Bank has declar ed its allegiance to Frankfurt as a financial centre. Six under ground and 38 o verground floors provide the traditional bank with altogether 57,450 m² surface area and a total volume of 230,000 m³. The 1800 employees working here since January 2003 use 14 lifts to get to their offices. A multi-level hall in the pedestal building links the neighbouring Kaiserstraße with the Gallusanlage and accommodates a public pedestrian precinct.

The concept of the building which cost US\$ 180,000,000 is dictated by transparency, communication, encount ers and vitality. Along the whole height of the façade there is a light installation which adds new accents to Frankfurt's skyline by night.

Altogether 243.780 m aquatherm polybutene pipe measuring  $10 \times 1.25$  mm were installed in the intermediate ceilings of the Gallileo Tower. The pipes are placed directly in the concrete core and simply ideal for the application "concrete core activation" thanks to their material properties.





Many residential buildings are also used for business and vice versa.

Particularly in the combination residential/business building, with its higher wear factor and dail y comings and goings of many people depending on the sanitary, air-conditioning and heating systems to work perfectly and reliably round the clock, aquatherm is finding increasing use all over the world.

Projects suc h as t he Gallileo T ower in F rankfurt and t he DomAquarée in Berlin have been completed with aquatherm pipe systems without any problems and to the complete sat-

isfaction of everyone involved. Miles and miles of pipes were installed and new technologies developed for specific requirements in next-to-no time.

No problem was so difficult that it could not be solved using aquatherm pipe systems.

Whether for residential buildings in the mountains of Georgia or skyscrapers in Dubai, aquatherm always finds exactly the right innovative and reliable solution in next-to-no time for every requirement.



Residential and business building (AOK), Attendorn, Germany



Residential and business building, Leutkirchen, Germany



Aggrippina insurance building, Kornwestheim, Germany



## **DOMAQUARÉE**

The city quarter "DomAquarée" is located directly on Berlin's magnificent boulevard "Unter den Linden". You could almos t say it is located at the heart of the centre, right in the middle of historical Berlin, just a few metres from the place where the city was founded nearly 800 years ago.

In a visible radius of just a few hundred meters, you can see the museum island, Ber lin's cat hedral, Ale xanderplatz, the Red Town Hall, Schloßplatz, the opera house, "Unter den Linden", Humboldt University and the "Hackeschen Höfe".

Inside the city quarter, extraordinary spaces and areas have been created, impressively high and on a large scale, each in a world of its own!

Generous atriums and f oyers, where the spectacular "Aqua-Dom" fits in quite naturally, cafés, restaurants, galleries and shopping precincts. And the curved glass roofs over the equally integrated Radisson Hotel and the adjacent office and residential building give a wide panoramic view over the whole city.

The entire building complex has an intricate, state-of-the-art network of air-conditioning, sanitary and ventilation installations which was implemented reliably and without any problems using aquatherm pipe technology ...



The glass reef (AQUA DOM), the heart of the "DomAquarée", Berlin



#### Dom Aquarée, Berlin

The heart of Ber lin's new city quarter "DomAquarée" is the so-called "Aqua Dom". It is 25 m high and 11.5 m in diameter. A continuous column of 14 m in height accommodates nearly one million litr es of water and resembles a reef with many different underwater creatures. This makes the "Aqua Dom" the largest aquarium of its kind world-wide.

In order to put t his project into practice, a com pletely new method of adhering acrylic glass was used for adhering the 16 to 22 cm thick acrylic glass components without any visible seams. Future visitors will be taken up to the roof through the inside of the aquarium in a glass two-storey lift, submerging them in the world of the coral reef and its inhabitants during this period. The lift cabin can accommodate 30 people at a time ...



DomAquarée - the main entrance





## Rö MISCh ER hOF®, BERLIN

## Römischer hof®, Berlin - modern interior behind classical facade!

The Römischer Hof® was the last major historical building to be refurbished on Berlin's magnificent avenue "Unter den Linden" as premises for offices and businesses.

The world-famous avenue is one of Berlin's most popular tourist attractions, with classical buildings from every era: the Crown Prince Palace, the Opera House, the Armoury and last but not least, the time-honoured Humbold University. Today the scene is dominated by government buildings, embassies, television companies and banks.

In or der to preserve the classical façades tructure of the Römischer Hof® and yet make the building suitable for contemporary use, it was completely stripped on the inside and then

reconstructed bit by bit, according to modern standards. The result is a state-of-the-art office and business building offering 9000 m<sup>2</sup> effective surface area which satisfies all current requirements for buildings to the full.

In order to protect this special building from the worst enemy of all pr operties - fire - t he owners have placed their trust in the aquatherm firestop sprinkler piping system which in this project was embedded directly in the concrete ceilings. The firestop sprinkler piping system will provide ultra-reliable protection to ensure that in the case of a fire, immediate effective countermeasures are activated straight away to prevent any major damage...



The firestop pipes are embedded in  ${\tt t}$  he new interim ceilings of  ${\tt t}$  he stripped building...





... and used as sprinkler system in the finished Römischer  $\operatorname{\mathsf{Hof}}^{\scriptscriptstyle{\otimes}}$ 









The aquatherm firestop sprinkler piping offers the user a system consisting of pipes and connection elements to create fire sprinkler systems. The system is based on a polypropylene pipe (composite fibre pipe) produced by multi-layer extrusion. The material fusiolen® PP-R FS used to produce the pipes is a plastic with characteristics are specially tailored to the specific requirements of this particular application. firestop is processed quickly, easily and absolutely reliably using a fusion technique...

The Römischer Hof® is a classical building whose outer façade is under a preservation order. It was built in 1865-67 as "Hôtel de Rome" and reconstructed as an office building under the name of "Römischer Hof"in 1910 by the architects Berndt & Lange.

Monumental pilasters and pillars decorate the façade, which fits harmoniously in the legendary line of buildings on Linter day Linday."







### LIVING & BUSINESS

In office building "126 Phillips S treet" in the Australian metropolis of Sydney, star designer Sir Norman Foster has created a prototype for a whole new generation of high-rise buildings. The  $360^\circ$  glass façade with glass lifts on the outside to bring people to their offices, turns the whole building concept inside out, with flowing transitions between the working world

and the outside world. On completion, 126 Phillips Street will be the most modern office building on earth and also, thanks to its extraordinary design concept, one of the most innovative buildings of its kind.

A vision becomes reality, and aquatherm is also involved!



126 PHILLIPS STREET the world's most modern business building, Sydney, Australia



WILLIAMS STREET office and business building, Melbourne, Australia



#### Examples of residential and business buildings equipped with aquatherm pipe technology:

Williams Street (office and business house) (Australia)

126 Phillips Street (office and business house) (Australia)

Quick burger restaurant (Belgium)

Aggrippina insurance building (Germany)

DomAquarée (Germany)

Römischer Hof (Germany)

Gallileo Tower, Dresdner Bank (Germany)

Hagebau DIY store (Germany)

Residential and business house (AOK) (Germany)

Residential and business house Leutkirchen (Germany)

Al Khaili Tower (Dubai)

Glaesibaer shopping centre (Iceland)

Smaralind shopping centre (Iceland)

KIA Autocenter C.J.I Zagreb (Croatia)

Different office and business houses in Manila (Philippines)



GLAESIBAER-shopping centre, Iceland



SMARALIND - Iceland's largest shopping centre (63.000 m²)



## AGBAR-TOWER, BARCELONA

The unusual shape of t he Agbar Tower was inspired by the rock outer ops of t he Montser rat Mount ain of Cat alonia, referred to as t he "hol y mount ain", whose uniq ue, almos t bizarre form is no tunlike a g roup of hug e saw teeth. This mountain and its monas tery are shrouded in ear ly Middle Age legends and myths and the area is one of Spain's oldest and most important sacred places.

Built on a f ormer industrial site, the Agbar Tower, now surrounded by lush green gardens, is the work of French architect Jean Nouvel. More than 142 metres high with over 35 stories and four underground levels, it was erected between 2001 and 2003. The f oundation is constructed 30 metres deep into the ground providing the building with the necessary stability. The building's structure is constructed of steel reinforced concrete and permeated by over 4,400 windows, which are enclosed by a glass façade with thousands of narrow louver glass panels that open outwards.

At nights, the Agbar Tower's extraordinary lighting installation transforms it int o an explosion of colours that is visible f ar beyond the city's boundaries.

The whole sy stem for drinking water of this extraordinary Spanish building has been provided with fusiotherm®-and fusiotherm®-Faser composite pipes made by aquatherm.



The Agbar-Tower of Barcelona



Impressive design by day...



... colourful aesthetic illumination at night.



#### About Jean Nouvel, the Agbar Tower architect:

Born in 1945, Jean Nouvel is considered one of the most innovative and productive architects in the world. Graduate of the École Supér ieure des Beaux Ar ts and co-f ounder of the French ar chitectural mo vement Mars, Jean Nouvel transforms landscape into urbane vents in his projects. He has realised countless distinguished projects, including the Arab World Institute (1987) and the Cartier Foundation (1994) in Paris, EXPO 2000 in Hano ver as well as Gasometer A in Vienna (2001) and the Agbar Tower (2003). In addition, he has received many awards and prizes for his architectural works, such as the Golden Lion (Biennale Venice), the Borromini Award and the Aga Khan Prize.

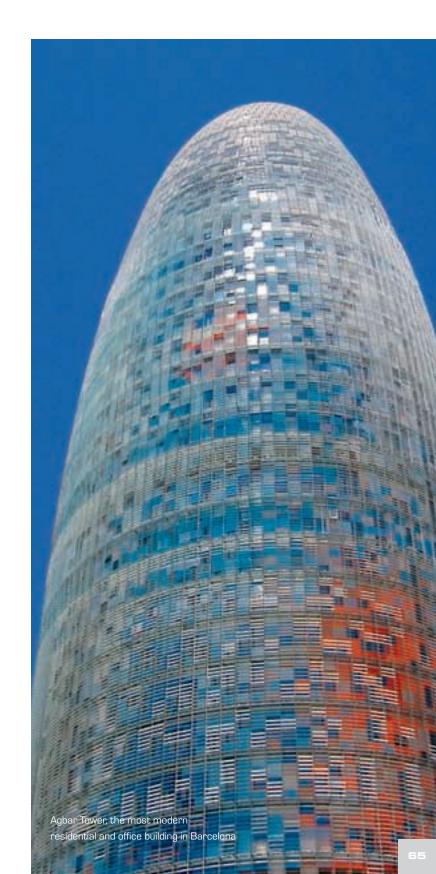
Established in 1994, Jean Nouvel's atelier is one of the largest architectural projects in France. Over 140 personnel active in diverse areas are currently working on more than 40 international projects. Besides his main office in Paris, Jean Nouvel also oper ates from ateliers in London, Copenhag en, Minneapolis, Rome, Madrid and Barcelona.



The distinctive naturally sculptured rock form at Montserrat, basis for the Agbar Tower



Thousands of narrow, louver glass panels enclose the reinforced steel façade of the Agbar Tower. They open outwards and provide shade.





## LIVING & BUSINESS



Flex Tower, Ras Al Khaimah, United Arab Emirates



Hufvudstaden, Stockholm, Sweden



Europa Press Holding, Zagreb, Croatia



Al Khaili Tower, Dubai





Oval Offices, Cologne, Germany



Quick burger restaurants, Belgium



Eurotower, Zagreb, Croatia



Antunovic centre, Zagreb, Croatia



## LIVING & BUSINESS



Alpinum Bank, Valduz, Switzerland



Al Husen Tower, Sharjah, United Arab Emirates



Macquarie HQ Bank, Sydney, Australia



# Examples of residential and business buildings equipped with aquatherm pipe technology:

Different apartment and office buildings (Philippines)
Curtis office building (Poland)

AUDI sales centre Moscow (Russia) Chidlom Place apartment building (Thailand)

Hufvudstaden Shopping center (Sweden) Richmond Park condominium complex (Singapore)

Agere Systems hardware and software house (Singapore) Standardisation and meteorology centre (Ukraine)

Al Husn Tower (United Arab Emirates)



KIA Autocenter C.J.I Zagreb, Croatia



PBZ Group, Zagreb, Croatia



In recent years, aquatherm has reinforced its position on the expanding Asian market.

Thanks to the combination of corrosion resistance with minimum weight, the aquatherm pipe systems are simply ideal for sanitary amenities, air-conditioning and heating ins tallations particularly in high-r ise buildings and sky scrapers in the upand-coming metropolis cities such as Manila and Singapore.

Many large-scale projects, such as the apartment and company buildings shown here, have already been executed with great success using proven aquatherm technology ...



Property residences / appartments in Wak-Wak, San Juan, Manila, Philippines



Chidlom Place apartment building, Bangkok, Thailand



Residential and business buildings in Manila, Philippines



Agere Systems (hardware and software house), Kallang, Singapore



Reflections at Keppel Bay, Singapore



# RESIDENTIAL & aquatherm BUSINESS BUILDINGS





Apartment building in Manila, Philippines



## ION ORCH ARD, SINGAPOR



#### Project data:

Object: ION Orchard, Orchard Road, Singapor

Opening date: July 2009

No. of stores

and services: 400

Total retail

100

floor area: 663 000 square feet (Net Lettable Area)

941 700 square feet (Gross Floor Area)

Parking: appro. 650 parking lots
No. of floors: 8, including 4 basement floors



ION Orchard, Singapor



## RESIDENTIAL & BUSINESS BUILDINGS



Harbor, Gijón, Spain





Cliveden at Grange Project, Singapor



Sentinnel Tower, New Zealand



Al Saygh Tower, Sharjah, United Arab Emirates





ALEE Scheffer, Luxembourg



AUDI sales centre, Moscow, Russia



Covent Garden, Brussels, Belgium



Central Plaza, Brussels, Belgium



Dexia Tower, Brussels, Belgium





Hagebau DIY store, Attendorn, Germany



Vision Plaza, Baar, Switzerland



#### COFFEE PLAZA, h AMBURG

For decades the area around the Sandtorkai in the port city of Hamburg is a centre for global coffee trade and for coffee processing. There DS-Bauconcept develops directly next to the Hamburg-America-Centre the International Coffee Plaza.

The high-class office building offers a new location for the important actors of the German and international coffee industry and becomes the outstanding coffee competence centre in Europe. The Neumann Group

Hamburg, one of the biggest multinational enterprises in the coffee sector, will have its headquarter in the this building complex. The design of the star architect Richard Meier from New York includes a quarters planning with two buildings and a twelve-storied oval office tower.

#### Project data:

Object: International Coffee Plaza

Size of plot: circa 4.668 m²
GBS: circa 16.875 m²
Product: firestop pipe system







Centre International Rogier, Brussels, Belgium



Torre de Christal, Madrid, Spain

#### Project data:

Object: Torre de Christal

- 44.000 m<sup>2</sup> glass (windows)
- 40.000 m³ concrete
- 250 m height
- 54 stories
- 3 technical floors
- 90.000 m<sup>3</sup> sand has been removed for the foundation
- more than 650 workers
- 4,5 millions bricks



# RESIDENTIAL & BUSINESS BUILDINGS



Curtis office building, Warsaw, Poland



WIRKSTOFFGRUPPE IMAGEPRODUKTION, Attendorn, Germany





## KFW BANC, FRANKFURT







KFW Banc, Frankfurt, Germany (climasystem ceiling heating and cooling)



# RESIDENTIAL & BUSINESS BUILDINGS

#### **RESIDENTIAL & BUSINESS**







ATB Banc, Tunisia



Legal Advice Legislation, Kuwait





### **RESIDENTIAL & BUSINESS**



Qatar National Convention Centre, Qatar



Emirates Airlines Crew Residence - Dubai, U.A.E.



Al Sadd Devlopment Complex New, Doha, Qatar



Al Nakheel Tower, Riyadh









Residential Building Complex, Dubai, U.A.E.



Ali Mousa Tower, Sharjah, U.A.E



Kuwait Business Town, Kuwait



Tamkeen Tower, Riyadh



### **RESIDENTIAL & BUSINESS**



Al sour Tower, Kuwait



Juman Complex, Kuwait



Al Munajem Tower, Riyadh





Kaust Jeddah, K.S.A



CITC-HQ, Riyadh



#### Th E ENGEL COMPANY, AUSTRIA

ENGEL injection moulding mac hines, robots, tools and complete production facilities come from the company's nine production facilities in Europe, North America and Asia. Each factory has specialised in a certain production programme.

The resulting high expertise on the corresponding sector demands the ability to react rapidly and exactly to new market demands.

The ENGEL group sees its task not only in the production of injection moulding mac hines, but is one of t he world's leading plastics engineering companies which offers all t echnology.

ogy modules such as injection moulding mac hines, tools and automation from one single source. The family company with an outstanding reputation at home and abroad was founded back in 1945 and mean while has a w orkforce of 3281 employees world-wide generating annual turnover of 538 million.

aquatherm installed the proven aquatherm pipe technology in the company's facility in Austria ...

#### Project data:

Object: Company Engel in St. Valentin, Austria

Completion: 17th of July 2004
Product: aquatherm-pipe systems





#### aquatherm

## INDUSTRY & TRADE



NOKIA production facility, Komárom, Hungary



Pharmaceutical facility Hoechst AG (administration), Frankfurt am Main, Germany



Muhr & Bender, technology centre Attendorn, Germany



Triumph, Bad Zurzach, Switzerland

transporting w ater, com pressed air , liq uid food products and aggressive media such as acids, lyes and varnishes.

resistance.

fusiotherm® brings all t hese different media reliably and in flawless, unadulterated state to their destination.

The special mat erial properties give fusiotherm® pipes and fittings outstanding chemical

Resistant to corrosion from a wide r ange of aggressive media and w ater with low pH v alues, the fusiotherm® pipe system is versatile and ideal for use in industrial applications.

In the production process, fusio therm® pipe networks are used f or cleaning, cooling and

Given the outstanding qualities of fusiotherm® made of fusiolen ® PP -R in r ecent y ears many int ernationally r enowned indus trial complexes have been equipped successfully with aquatherm pipe sy stems at home and abroad...



Creamary High Desert Milk, Burley, USA



#### Th E h &R-FEDERN COMPANY, GERMANY

H&R Federn was founded in 1980 by the proprietors Werner Heine and Heinz R emmen and is t oday one of t he leading developers and producers of sporty suspension systems. H&R's core business is t he development and production of springs, shock absorbers, stabilisers, wheel spacers and sporty chassis for road vehicles. This includes thread chassis, cup-kit sporty chassis, sport suspension kits, stabilisers and wheel spacers.

"Made by H&R" enjo ys the very best reputation among the international press and discerning customers all around the globe. The automotive industry also trusts in the quality and know-how of the company from the Sauerland, Germany.

Today H&R has a workforce of around 100 highly motivated, excellently trained employees who design, de velop, produce and sell suspension parts, shock absorbers, wheel spacers and other chassis parts.

aquatherm eq uipped t he com pany f acility in Lennes tadt, Germany, with the proven aquatherm pipe technology and a large-scale industrial underfloor heating system . . .



H&R-Federn, Lennestadt, Germany



#### aquatherm

# INDUSTRY & TRADE



Cockeril Sambre Sidérugie, Belgium

Goa Linda sweets factory, Hafnarfjördur, Iceland



NOVAK factory, Makarska, Serbia Montenegro



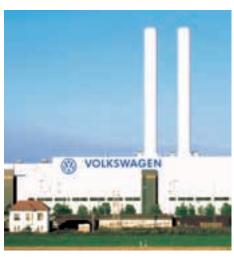
PUMA factory, Schlüsselfeld, Germany



Milchhuus, Brunnen, Switzerland



Telekurs Group, Zürich, Switzerland



VW, Zwickau, Germany



#### SAW MILL JOSEF SCh MELTER, LENNESTADT-OEDINGEN, GERMANY

Since 1955 the Josef Schmelter GmbH carries on a softwood saw mill for spruce wood in Lennestadt-Saalhausen and since 2005 an improvement company in Lennestadt-Oedingen. The timber company supplies construction timber to carpentries, to timber trading and timber packing industry in Germany.

The processing company is sited on a former barracks area in Lennes tadt-Oedingen. Construction and sa wn timber ar e dried and also cons truction timber and plank timber ar e there produced.



Saw mill, Josef Schmelter, Lennestadt-Oedingen, Germany



Underground service pipe with aquatherm ISO



# INDUSTRY & TRADE

#### **INDUSTRY & TRADE**



TPS Teleprocessing, Cadolzberg, Germany



Brothers Kemmerich GmbH, Metal forming + Machine construction, Attendorn, Germany



CHANNOINE COSMETICS AG, Triesen, Switzerland



### TRACTO-TECHNIK, LENNESTADT-OEDINGEN

The mec hanical engineer ing f actory TRA CTO-TECHNIK, located in Lennes tadt-Saalhausen de velops and constructs machineries for underground laying and trench-free replacement of pipe systems. The customers for this constantly growing market are the gas-, water-, electricity- and district heat provider, telecommunications and wastewater disposal companies.

Furthermore TRACTO-TECHNIK produces machineries, manufacturing systems and sof tware solutions for pipe transformation and processing technology. Companies from different sectors – from locksmith 's shops up to the "global players" of the motor industry, shipbuilding and plant engineer ing – assure their success with products from TRACTO-TECHNIK.







TRACTO-TECHNIK, Lennestadt-Oedingen, Germany



## PUBLIC BUILDINGS

### PUBLIC BUILDINGS (INTERNATIONAL)

aquatherm has also made a name f or itself wit h municipal authorities thanks to its innovative, top quality pipe systems.

Whether museums, theatres, universities, town halls or court buildings - aquatherm pipe systems reliably provide water and heat wher ever it is im portant for sanit ary, air -conditioning and heating systems to function perfectly even after years of constant public use, thanks to the robust, hardwearing properties of the concept.

In sanitary amenities, air-conditioning systems and heating installations for public buildings all over the world ...



Moscow Theatre, Russia



Tyringham Hall - Congress Centre, Museum, Theatre a.m., Newport Pagnell, Buckinghamshire, England



## **PUBLIC BUILDINGS (INTERNATIONAL)**



University of Tokyo, Japan



AKLD university, Auckland, New Zealand





Uni, Christchurch, New Zealand





## PUBLIC BUILDINGS



Le Conchiglie Congress Centre, Belgium



Movie Space Centre, Leida, Spain



## **PUBLIC BUILDINGS (INTERNATIONAL)**







University of Bologna, Italy



Business school, Barcelona, Spain



Utah State University, Utah, USA



## PUBLIC BUILDINGS



University of Lübeck, Germany



National university library, Zagreb, Croatia



## **PUBLIC BUILDINGS (INTERNATIONAL)**



Dornier museum, Friedrichhafen, Germany



Hans-Sachs-Haus, Gelsenkirchen, Germany (firestop-sprinkler-system)



Museum "Sissi Palace", Corfu, Greece



## PUBLIC BUILDINGS

### MDR, LEIPZIG



MDR, Leipzig, Germany (aquatherm ISO)



Underground service pipe with aquatherm ISO



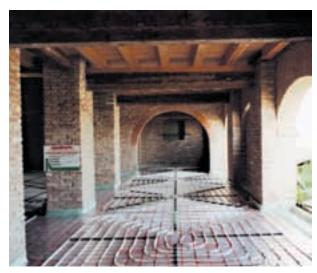
### PUBLIC BUILDINGS (INTERNATIONAL)

When it comes to drinking water, the fusiotherm® pipe system offers all possibilities for uncompromising installation of cold and hot water systems from the house connection point through to the last tap in the bathroom and kitchen.

In the heating sect or too, corrosion-free, ageing resistant fusiolen® PP-R is used for the connection of underfloor heating systems or installation of radiator circuit pipes through to the tap block. Flange connections and screwed unions make it possible to connect all elements up to the supply system and also on every floor.

As an alternative or troublefree addition to fusiotherm®, the climatherm pipe sy stem made of fusiolen ® PP-R C is ideal particularly for air-conditioning, heating and ins tallation systems.

aquatherm pipe systems: safety and top standards for life!



Archaeological museum, Carrara, Italy



"Gazprom" building, Moscow, Russia



Kaliningrad savings bank, Russia



## PUBLIC BUILDINGS

## Examples of public buildings equipped with aquatherm pipe technology:

Le Conchiglie Congress Centre (Belgium)
University of Lübeck (Germany)
Herzberg Town Hall (Germany)
Magistrate's court Munich (Germany)
Tyringham Hall (England)
University of Bologna (Italy)
Archaeological museum Carrara (Italy)
Warsaw Palace (Poland)
"Gazprom" authority building, Moscow, Russia
Kaliningrad savings bank, Russia
Moscow theatre, Russia



Magistrate's court, Munich, Germany



Herzberg Town Hall, Germany





#### SACRED BUILDINGS

The renovation, refurbishment and ongoing maint enance of old buildings, particularly old churches and monas tery buildings, demands a wealth of experience and great sensitivity.

The tiniest mistake can have fatal consequences and cause permanent damage to items of cultural heritage and priceless works of art which can be hundreds of years old.

To rule out these risks completely, a wealth of experience is needed particularly when it comes to sanitary and heating installations, with a pipe system that can be relied on 100%.

The aquatherm pipe system enjoys the world-wide reputation of combining reliability and safety with a high level of technical knowhow.

Reason enough for those responsible for sacred buildings to place all their trust in aquatherm when it comes to making their places of worship fit for the coming centuries and to offer visitors state-ofthe-art sanitary amenities and heating systems in an unadulterated historical context.



St. Ursula monastery, Attendorn, Germany



Prospekt Mira church, Moscow, Russia



Oppeln monastery church, Poland



## SACRED BUILDINGS

#### Chur Ch of P arabia go

The c hurch San Ger vaso e Pr otaso dominat est he main square in the Italian town of Parabiago. It was built in 1610 by command of Karl Borromeus, Archbishop of Milan, who had already expressed his desire for a church in Parabiao during earlier visits.

The planning activities were entrusted to the respected architect Pellegrino Pellegrini. Although it is Parabiago's oldest historical building, it has wit hstood the passage of time. The current façade is not the original one but dates back to 1780 and was built according to the plans of the great architect G. Piermarini (born 1703 in Foligno, died 1808), who also designed the façade of Milan's opera house, the Scala.

In 1951, the brick façade was covered with marble, and statutes of ang els blowing trumpets, the two patron saints and the Virgin Maria were fitted on the lintel. The vaults and side walls of the church are decorated with stucco, paintings and significant frescoes conveying an impression of the splendour of this place of worship.

aquatherm pipe systems inside the building provide modern sanitary amenities and heating installations and, at the same time, blend unobtrusively in the historical context.



Church of the Mother, Pisticci, Italy



#### aquatherm GmbH

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