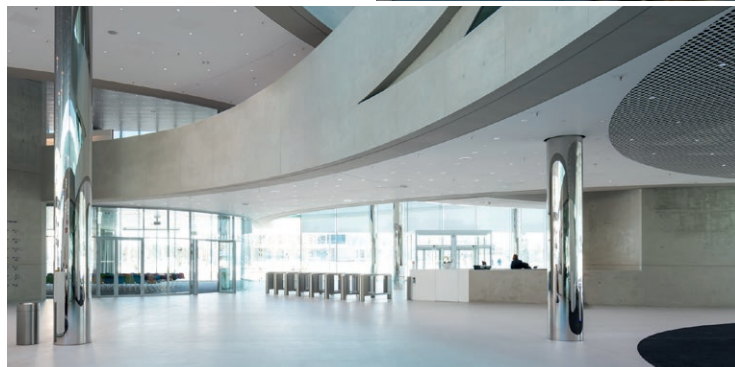
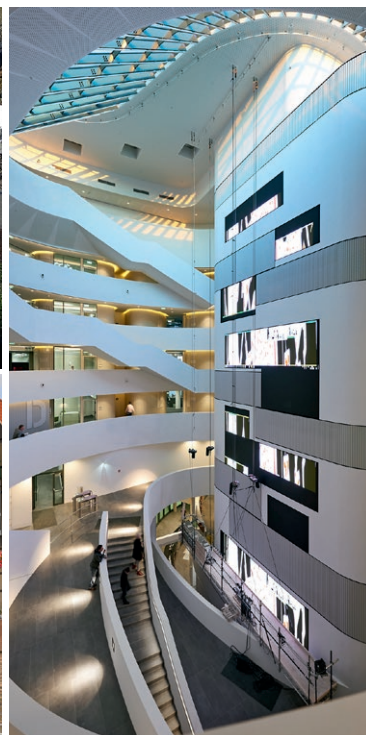




European Concrete Societies Network



EUROPEAN CONCRETE AWARD 2018

www.ecsn.net

Sweden



Netherlands

THE EUROPEAN CONCRETE SOCIETIES NETWORK (ECSN)



Members of the ECSN (f. l. t. r.): Richard Mc Cathy (S), Vlastimil Sruma (CZ), Morten Bjerke (N), Frens Pries (NL), Michael Pauser (A), Juha Valjus (Fin), Anja Muschelknautz (D), Lars Meyer (D), Brian O'Rourke (Irl), Jef Apers (B)



Italy

The object of the network is to encourage cooperation between the 11 European member countries and thereby promote the development of concrete technology and use of concrete in Europe. The network will not interfere with the work of individual societies and other international organisations. Membership is open to all Concrete Societies of Europe. The Secretariat is currently managed by Austria: www.bautechnik.pro

www.ecsn.net



Finland



Austria



Sweden

IMPRINT

Published & edited by: Austrian Society for Construction Technology, Karlsgasse 5, 1040 Vienna, T +43 (1) 504 15 95, office@bautechnik.pro, www.bautechnik.pro
Executive Editor: Daniela Mößler **Graphic Design:** TOIFL Grafik | Design | Werbung, Patrick Toifl, Rösslergasse 4/2/9, 1230 Wien, www.patricktoifl.com **Photos:** Austrian Society for Construction Technology, Nadine Studeny (P. 3); Toni Rappersberger (Cover, P. 5/6/7/22); Pekka Hannila (P. 4);) Petr Jehlik (Cover, P. 9); Henning Kreft (Cover, P. 8); Jan Eldegard Hjelle (P. 2/10); Eldegard (P. 11); Petra Appelhof (P. 11); Timo Kiukkola (P. 12);) Kuvatoimisto Kuvio Oy (P. 3/13); Petter Cohen (P. 3/13); Alice Clancy (P. 14); Kees Hummel (Cover, P. 15/16/17/22); Jiri Havran (P. 18); Per Ritzler (Cover, P. 18); Jorrit Lousberg (P. 2/20); Kasper Dudzik (P. 22); Pieter Kers (P. 22); Erich Wurst (P. 22); diephotodesigner.de (P. 22); shutterstock (P. 2/10/back cover).

European Concrete Award 2018

2018 again is a strong year for concrete as building material and the concrete award. The ECSN's call for the submission of attractive projects both in buildings and civil engineering resulted in 18 submissions – 12 for the building category and 6 for the civil engineering category. The participants this year came from Austria, the Czech Republic, Finland, Germany, Ireland, Italy, the Netherlands, Norway and Sweden.

Their projects were evaluated against a set of criterias by an international ECSN jury. Among those criteria are: design, construction, visual appearance and harmony of the structure with its surroundings, properties of concrete exploited in the design, innovative use of concrete in composition, structure or form, workmanship and finish.

For me it was a great honour to hand out the prize at the Finnish Concrete Days 2018 on the 1st of november in Helsinki, to the representatives of owner, architect- and engineering offices and the contractors of the winner projects, which met these criterias best. All the buildings- and civil engineering projects on the following pages are an impressive demonstration of the many possibilities of concrete as a building material.

Enjoy the nominations!
 Yours sincerely

Michael Pauser
 Chairman of ECSN



AWARD CEREMONY HELSINKI 01/11/2018



WINNER



01

THE AWARD CEREMONY

During the Finnish Concrete Days plenty of award winners from owners, architects, structural engineers and contractors came to Helsinki for the EUROPEAN CONCRETE AWARD 2018 ceremony.

CATEGORY BUILDING

The new ÖAMTC headquarters is a remarkable, strongly expressive icon on Austria's busiest road (the A23) in the centre of Vienna.

Winner: ÖAMTC-Headquarter in Vienna, Austria (01)

F.I.t.r.: Harald Preinsberger & Patrick Ritz (Granit), Hannes Traupmann & Christoph Pichler (Pichler&Traupmann Architekten), Wolf-Dietrich Denk & Christian Nüssel & Christian Eckerstorfer & Dieter Pichler (FCP ZT), Michael Pauser (ECSN)

Honorable mention: Innovation Center Merck in Darmstadt, Germany (02)

F.I.t.r.: Holger Alpermann (B+G Ingenieure), Georg Pichler (Henn Architects), Oliver Reuter & Michael Weber (Ed. Züblin), Dietmar Möller (Merck), Michael Pauser (ECSN)

Honorable mention: DRN / Palace Narodni in Prague, Czech Republic (03)

F.I.t.r.: Michael Pauser (ECSN), Milan Vrána (Fiala+Nemec), Jana Čepková (Hinton), Michal Klíma (SEBRE), Milan Polák (Nemec Polak), Alena Procházková (TBG Metrostav), Miroslav Mrázek & Milan Vávra (Terracon)



02



03



BUILDINGS

ÖAMTC Mobility Centre Austria

Innovation Center Merck Germany

DRN / Palac Narodni, Prague Czech Republic

Generali Tower in Milano Italy

Holmestrand Station Norway

Knapphullet Norway

The World's Biggest Bicycle Parking Netherlands

Kruunuvuorenranta waste transfer station Finland)

New Terminal Amerigo Vespucci Italy

Housing Management Company As Oy Helsingin Viuhka Finland

Kvarteret Forsknigen, student housing at KTH Campus Sweden

St. Angela's College Ireland

ÖAMTC MOBILITY CENTRE AUSTRIA

WINNER

EXPRESSIVE ICON

The new ÖAMTC headquarters is a remarkable, strongly expressive icon on Austria's busiest road (the A23) in the centre of Vienna. The building is characterized by generously sized service areas for members of this automobile association and a technical service facility. The ÖAMTC headquarters is the workplace for approx. 800 staff members, and all the club services are combined in this new mobility building. On the roof there is a heliport, that serves as the new location for the rescue service helicopter "Christophorus 9".

STRUCTURAL CONCEPT

The load-bearing structure of the building has a number of specific features rarely encountered in such a density or combined in such a way. The complex and above all very different contents in the brief called for a response to the positioning of these contents in the overall system and to their geometrical demands. Efficient office grids had to be combined with wide-spanning structures in the workshops with their car lanes and in the event spaces, which differ in size and are laid out differently.

The application of displacers was provided for the floor ceilings so that a noteworthy reduction of the concrete volume and therefore of the net weight of the ceiling could be achieved. This resulted in a light construction which led to cost reductions for the floor ceilings, the walls and the supports as well as the foundations.

THE STEEL AND GLASS RING

Due to its presence above the motorway the ring of glass and steel, visible from far away, attracts attention. However, as well as its representative impact this ring also meets a number of strictly functional requirements. The outer glass skin protects the office façade against the noise coming from the nearby streams of traffic. On each floor, from each of the fingers, an emergency door opens directly to the escape ramps that are embedded in the construction, which lead in turn to a wide external staircase.

ENERGY CONCEPT

Like in a living organism the load-bearing structure and the building services are closely woven together. While the load-bearing structure can be seen as an organic "skeleton", the building services fulfil the functions of "airways", a "bloodstream", and a "nervous system". Due to the complexity of the project neither columns nor shafts could be run vertically through all floors. Instead they were developed three-dimensionally, according to the flow of functions and of spaces, and integrated into architecture.

BIM (BUILDING INFORMATION MODELING)

In this project, the architects, structural designers, and experts in building physics all worked with the BIM system, allowing the existing data to be processed in an optimal way for specialized planning, cost estimates, and bidding documents.



PROJECT & CONSTRUCTION DETAILS

Owner ÖAMTC, Vienna

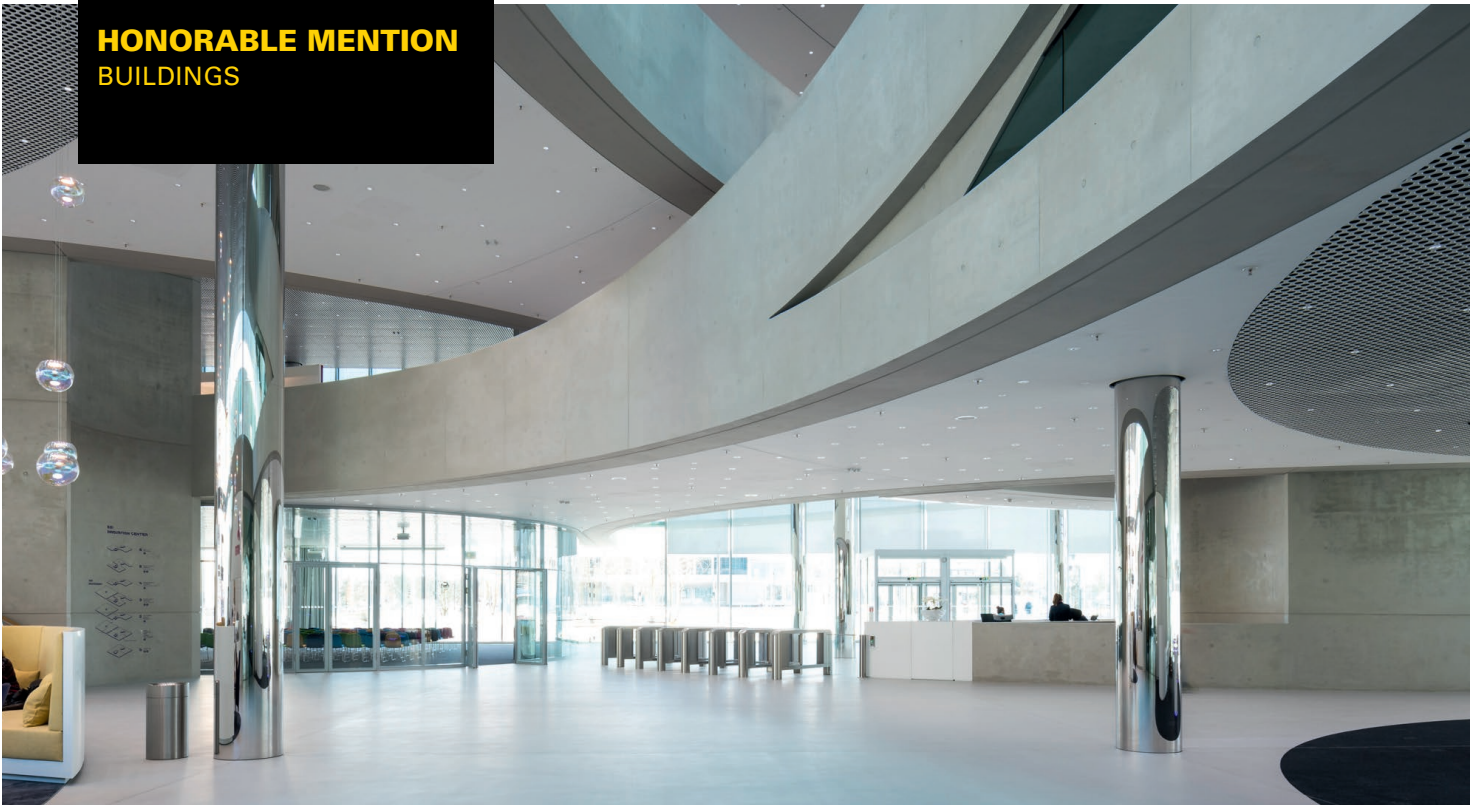
Architect Pichler&Traupmann Architekten ZT GmbH, Vienna

Structural Engineer FCP Fritsch, Chiari & Partner ZT GmbH, Vienna

Contractor Bauunternehmung Granit Gesellschaft m.b.H., Graz



The atrium of the winner project remains the contact point for orientation and communication.



INNOVATION CENTER MERCK GERMANY

Ed. Züblin AG realised the Merck Innovation Center, located in Darmstadt, which will be a best practice example for fairfaced concrete in perfection. Both the building as an example for a complex structure using a high amount of reinforcement, rounded geometry and fairfaced concrete requirements, as well as the supersurface as a place of representation for Merck, built using a white, burnished and polished concrete surface in a three-dimensional geometry, required a big effort of concrete structural knowledge, concrete technology knowledge and a manufacturing experience. The three-dimensional geometry of the innovation center was a big challenge for the engineers to realise the struc-

tural necessity of a big amount of reinforcement in slender beam elements. Even more the construction method to pour concrete inside the formwork to create a fairfaced concrete was a big challenge. The fairfaced concrete elements of the innovation center are an impressive example showcasing the excellent potential of the concrete as a structural material which carries high loads and at the same time highlighting fairfaced concrete as an architectural element. Concrete allows for the possibility to create complex geometric structures which can carry loads to stabilize the structure. The concrete had to be poured without any cracks, the white colour gives an elegant view for the pedestrians. The area where the supersurface is located is divided into two parts by a tramway and a motorway. It is a public area of convenience for the pedestrians to rest and enjoy the moment and the impressions of the surrounded buildings. The technology to pour, burnish and polish the concrete were accompanied by a highly sophisticated construction method and design procedure. The supersurface area represents a masterstroke for concrete technology and is excellent example of concrete as the most important building material in this age.

PROJECT & CONSTRUCTION DETAILS

Owner Merck KGaA, Darmstadt

Architect Henn Architects, Berlin

Structural Engineer Brunnsteiner ZT GmbH, Natters & Bollinger + Grohmann Ingenieure, Berlin

Contractor Ed. Züblin AG, Frankfurt





DRN / PALAC NARODNI CZECH REPUBLIC

DRN building, formerly known as Palac Narodni, is located in the heart of the city centre on Narodni trida – one of the busiest and most diverse boulevards in the city Prague. The genius loci, the baroque Schönkirch palace and its yard wings, issued building permit for the old project of a hotel it all played role in the new architectural design of DRN that was based on meticulous approach to original buildings.

Traditional workmanship techniques and the usage of materials compatible with the historic elements had been emphasized. The integration of the old and the new dictates the aesthetics of the whole project. Structural engineers had to deal not only with the design of the new structure but also with the securing of original buildings and approximately 15m deep excavation in the city centre of Prague. Series of measures to ensure excavation safety, prevent water related problems, protect surrounding buildings and infrastructure as well as historic buildings on the site had to be taken. The structural system of the building is designed as combined reinforced concrete system of walls, columns and two-way flat slabs with reversed drop panels, locally combined with beams and steel tension rods. As mentioned in the introduction, both structural function and visual impression of concrete is the cornerstone of DRN.



PROJECT & CONSTRUCTION DETAILS

Owner SEBRE a.s.

Architect: Fiala + Nemec s.r.o.

Structural Engineer NEMEC POLAK spol. s r. o.

Contractor Hinton a.s.



GENERALI TOWER IN MILANO ITALY

The form is generated by a variation of each floor plan, and by its rotation around the centre, greater at the lower storeys and decreasing towards the top; because of the functional requirements of the internal spaces, the perimeter columns are aligned with the pattern of the facade, thus requiring them to slope, each with a different inclination in order to match the enveloping curvature. The whole geometry is determined by polynomial functions which define the rotation of the stories around a vertical axis, and the variation of the radii of the curves that define the edges of the floors. From the initial phases, the design of the structures was developed by using advanced 3-D design programs, with particular reference to the specific reinforcement zones.

PROJECT & CONSTRUCTION DETAILS

Owner Citylife Spa

Architect Zaha Hadid Architects

Structural Engineer Redesco Progetti srl

Contractor CMB Cooperativa Muratori e Cementisti

HOLME- STRAND STATION NORWAY

PROJECT & CONSTRUCTION DETAILS

Owner Bane Nor SF, Oslo

Architect Gottlieb Paludan Architects, Copenhagen

Structural Engineer Rambøll Norge as, Oslo

Contractor Skanska Norge as, Oslo



Holmestrand Station is a huge, spectacular train station, situated 150 meters inside the Holmestrand mountain. The design of the station has been rather challenging as it had to take into account the effect of two passing trains traveling at a speed of 250 km/hr creating huge pressure and suction forces. The construction of Holmestrand Station has been very challenging, particularly relating to the effect of pressure thrust, wind velocities, acoustics and fire-proofing. Since this has been a pilot project it has not been possible to collect experience data from similar projects. Holmestrand Station is a structure where concrete is used in an environmentally, aesthetically and technically excellent way.



KNAPPHULLET NORWAY

Knapphullet is a small annex to a family holiday home situated in Sandefjord, a coastal town 120km South of Oslo. Instead of placing the house on the spot with the best view, it is situated in a way that is tailored to the specific terrain, and gives prominence to the views from the outdoor room. Knapphullet is only 30 square meters, but contains an open living space with a small bathroom and a mezzanine bed that sleeps two people. Although the building occupies such a small footprint, the space expands vertically over four levels including a roof terrace. The house offers a sheltered atrium formed by the building and the cliffs.

PROJECT & CONSTRUCTION DETAILS

Owner Svein Lund

Architect Lund Hagem Arkitekter as

Structural Engineer eStatikk as

Contractor Straks as



THE WORLD'S BIGGEST BICYCLE PARKING NETHERLANDS

Historically, the Dutch have always been fervent cyclists. The Utrecht Central station area is currently undergoing a major makeover. The three storey bicycle parking is situated underneath the square. It has been designed with three aims in mind: convenience, speed and safety. Stairwells and tunnels create direct connections to the elevated square, the main terminal building and the platforms. Ensuring good orientation and plenty of daylight, the stairwells are located inside atria covered by glass roofs. The building is more than just infrastructure. It adds an exciting and surprising architectural dimension to the city. Cycling through the garage has become a unique experience.

PROJECT & CONSTRUCTION DETAILS

Owner Gemeente Utrecht

Architect Ector Hoogstad Architecten

Structural Engineer Royal Haskoning DHV

Contractor BAM Group

KRUUNUVUO- REN RANTA WASTE TRANSFER STATION FINLAND

Kruunuvuorenranta waste transfer station in Helsinki combines architectural design with an innovative three-dimensional facade solution. 3D modelling has provided a means to implement a new formwork technique for cost-efficient implementation of industrially produced precast concrete units.

The diversity of the appearance of the facade is based on only four different rectangles which are placed in different positions to create an impression of a complex complete picture. The rusty patination of the facades as well as the innovative architecture link the building to the shades of the rough rock cutting and forest landscape.



PROJECT & CONSTRUCTION DETAILS

Owner Kruunuvuorenrannan Jätteen Putkikeräys Oy
Architect Arkkitehtitoimisto B&M Oy
Structural Engineer FCG Suunnittelu ja tekniikka Oy
Contractor Rakennuspartio Oy

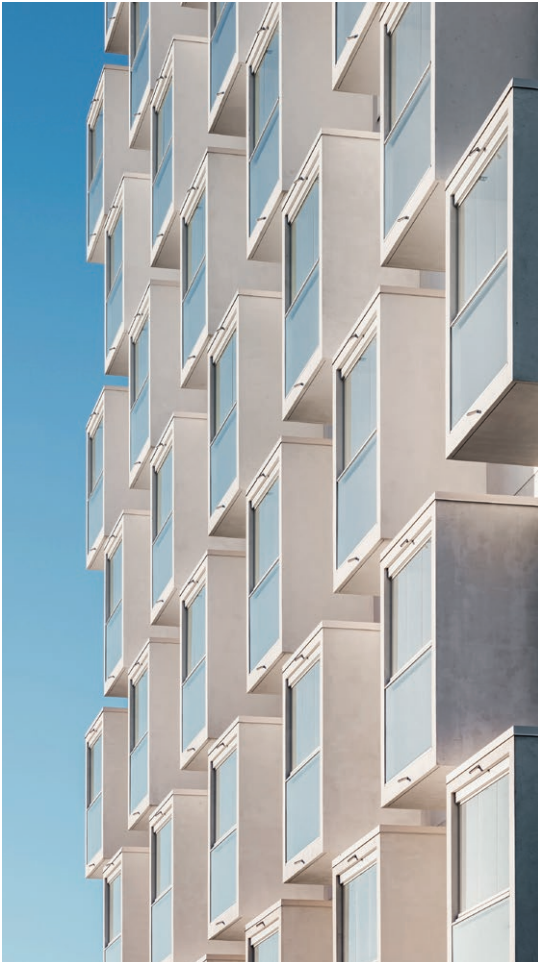


NEW TERMINAL AMERIGO VESPUCCI ITALY

PROJECT & CONSTRUCTION DETAILS

Owner RCT Roma Cruise Terminal srl
Architect Studio VICINI Architetti
Structural Engineer SBG&Partners Spa
Contractor Consorzio ITINERA-AZA
Aghito Zambonini

The building is destined to realize the new cruise terminal in the port of Civita-vecchia. This is therefore of great importance in the first impact for international touristic arrivals to Rome and Italy. From the structural point of view there was need also to combine the peculiarities of the concrete elements prefabricated in the factory, concrete and steel with those cast in-situ obtaining a structure of great rigidity and realized in a short time. A careful study of the connections of different materials (concrete, steel, glass) has allowed to combine the prefabricated concrete part of building, the steel roof and the large glazed facades. The new terminal has an extension of about 10.000 sqmt suitable to face a flux of 4500 passengers and 9000 baggages at each boarding and disembarking operation.



HOUSING MANAGE- MENT COMPANY AS OY HELSINGIN VIUHKA FINLAND

Housing Management Company Helsingin Viuhka in the Vuosaari area of Helsinki is a concrete building with complexity and innovation in architecture and structural design and the high quality of implementation. The design of Helsingin Viuhka utilised database modelling and use of building parts with a high degree of prefabrication. The dice-like balconies are cast from white concrete in one piece. Waterproofing, drain pipes and flashings are installed to the balcony at the factory. In structural terms, the balcony is a cantilevered balcony. The surfaces of the external sandwich walls of the precast building are smooth white concrete, graphic concrete and coated surfaces.

PROJECT & CONSTRUCTION DETAILS

Owner WO Vuokra-asunnot Oy

Architect Arkkitehtitoimisto Konkret Oy

Structural Engineer Sweco Rakennustekniikka

Contractor Fira Oy

KVARTERET FORSKNINGEN, STUDENT HOUSING AT KTH CAMPUS SWEDEN



Kvarteret Forsknigen, the Science Block, comprises more than 300 student apartments located at KTH Campus in Stockholm. Built completely out of concrete inspired by the surrounding bare rocks, the three buildings give an almost sculptural impression. The concrete is elegant, precise and sharply cut with few and well-studied details, together with quality workmanship. Totally there are three different shades of grey and the facades of each building consist of concrete elements with two shades of gray that are mixed thoroughly and the elements are stacked like an old stone wall to create an interesting pattern and expression.

PROJECT & CONSTRUCTION DETAILS

Owner Einar Mattsson Projekt AB

Architect Semrén & Månsson arkitekter AB

Structural Engineer Structor Värmland AB

Contractor Strängbetong AB



ST. ANGELA'S COLLEGE IRELAND

St Angela's College is situated on a steeply sloping mid-block site on Patrick's Hill in Cork city centre. The biggest architectural challenge was to incorporate a full-size sports hall on this confined hillside. A clear-span concrete structure is located on the lowest part of the site. For all internal concrete a bright grey and smooth concrete finish was achieved by using a light grey Cork limestone mix. The exposed concrete has been hand sanded and sealed. In-situ concrete was used to form a wide range of internal and external elements including the walls and soffits, suspended stairs and landings, external terraces, roof top pitch and courtyards, planters and stairs and even sinks.

PROJECT & CONSTRUCTION DETAILS

Owner St. Angela's College
Architect O'Donnell + Tuomey
Structural Engineer Malachy Walsh & Partners
Contractor L&M Keating Ltd.



CATEGORY CIVIL ENGINEERING

The very slender and fluent appearance of the new Catharina Bridge deck in the historical city centre of Leiden in the Netherlands makes the bridge extraordinary.

Winner: Catharina Bridge, the Netherlands (01)

F.l.t.r.: Leen Van Belen & Gerard Tuin (Gebr. Schouls), Maikel Jagroep (Betonvereniging Nederland), Jan Versteegen (Pieters Bouwtechniek), Bruun Nissen (Hi-Con), Jimmy van der Aa (DP6 architectuurstudio), Michael Pauser (ECSN)

Honorable mention: Utsikten-The Viewpoint, Norway (02)

F.l.t.r.: Bjarne Ringstad & Eivind Nygaard (CODE:arkitektur as), Steinar Bjercke (B-consult AS), Morten Bjerke (Norwegian Concrete Ass.), Hans-Aksle Fjellidal (Veidekke Entreprenør AS, Sogn og Fjordane avd. Sandane), Michael Pauser (ECSN)

Honorable mention: Reconstruction Intersection Prater, Austria (03)

F.l.t.r.: Brigitte Müllneritsch (ASFINAG), Erwin Stangl (ste.p ZT), Michael Pauser (ECSN)



AWARD CEREMONY
HELSINKI 01/11/2018



CIVIL ENGINEERING

Catharina bridge Netherlands
Utsikten (The Viewpoint) Norway
Reconstruction Intersection Prater Austria
Project City Line Sweden
Parking garage Lammermarkt Netherlands
Ponte Ennio Flaiano sul Fiume Pescara Italy

CATHARINA BRIDGE NETHERLANDS

WINNER

BACKGROUND

The Aalmarkt area in the historical city centre of Leiden is undergoing a metamorphosis. The new Catharinabridge, a 6-meter-wide pedestrian bridge in line with the new Catharina Alley, creates a new circular shopping route. The very slender and fluent appearance of the bridge deck makes the bridge extraordinary. Seen from above the bridge is shaped like an S and the deck is double curved in order to connect well to the street pattern and optimize the smooth traffic flow both on land and on water.

ULTRA HIGH PERFORMANCE CONCRETE (UHPC)

With a slenderness ratio of 1:81 the Catharinabridge is the longest and most slender Ultra High Performance Concrete (UHPC) bridge in the Netherlands. The bridge, consisting of a bridge deck and two V-shaped supports, is built up from prefabricated double curved elements. To reduce weight the bridge deck elements are filled with EPS blocks. A special aspect of the execution is that the prefabricated curved elements are cast together on site with very small sized wet joints of UHPC. To achieve an invisible connection the elements have a recess at the end. A thin prefab concrete layer at the bottom and the sides creates a mould for the wet joint and hides it from view.

CHALLENGES IN BUILDING THE BRIDGE

Building the bridge was a piece of art on its own because the traffic, both on land and on water had to proceed unhindered during execution. By using a smart, adjustable supporting steel structure for assembly, all elements could be placed and aligned to the right position, directly from the truck. The tour boats could still pass through the provided opening in the structure. The engineers went to the limit to realise a bridge as slender as possible. By combining an optimal design with the best concrete mixture available, a new record is set. This elegant bridge fits perfectly well in between the historic buildings and is a gain for the inner city of Leiden.

PROJECT & CONSTRUCTION DETAILS

Owner Gemeente Leiden

Architect DP6 architectuurstudio

Structural Engineer Pieters Bouwtechniek

Contractor Gebr. Schouls





The double curved deck of the winner project makes the bridge extraordinary.

HONORABLE MENTION
CIVIL ENGINEERING



UTSIKTEN "THE VIEW"

A NEW LANDMARK OF CONCRETE AND GEOMETRY NORWAY

The site is known as Utsikten ("The View") and is a natural place to stop when driving over the Gaular mountain along the Western coast of Norway. It is a part of the Norwegian Road Administration's project: Norwegian Tourist Routes.

Utsikten is a large, triangular concrete platform with sides stretching up to 49 meters (160 ft) situated right next to the road. The platform is 80 cm (32 inches) thick but appears to rest lightly atop the terrain with raised, wing like corners that protrude upwards into the air.



The platform is a cast-in-place structure and has with its very special geometry been quite challenging in engineering, design and construction. The concrete work is of very high quality and shows excellent craftsmanship. The steep terrain caused a special challenge, particularly for the formwork, while the cantilevering corners demanded extraordinary large amounts of reinforcement. A full-scale test was carried out before construction for quality assurance of casting methods.

The concrete surfaces have a variety of finishes varying from timber shuttered surfaces, grinded surfaces, polished and sandblasted surfaces. The platform is an unusual piece of construction in the middle of the wilderness, and must be experienced in person in to appreciate the fascination of the structure. Due to the unique properties of concrete, no other building material could have been selected. Over time the concrete will acquire natural vegetation and its color will approximate that of the surrounding mountainsides.

PROJECT & CONSTRUCTION DETAILS

Owner Norwegian Public Roads Administration

Architect code: arkitektur as

Structural Engineer B-consult AS and Dipl.-Ing. Florian Kosche AS

Contractor Veidekke Entreprenør AS, Sogn og Fjordane avd. Sandane



RECONSTRUCTION INTERSECTION PRATER AUSTRIA

The intersection Prater is an essential connection of urban motorways in the eastern part of Austria. The high volume of approx. 190.000 vehicles per day causes capacity overload at peak times. The Erdberger Bridge, erected 1970 and 1972, has been significantly distressed by high traffic volumes and a high percentage of heavy vehicles.

One of the key factors in the context of the planning process was the architectural design of the bypass bridges and the Erdberger Bridge. Logistic was a challenge for the building company, up to 120 construction workers were operating at approximately 30 places at the same time. First phase was the erection of two bypass bridges eastwards and westwards of the Erdberger Bridge.

During the first phase, as well as the two bridges, there were adjustments on twelve motorway ramps, eight new retaining walls and two extra bridges over the tracks and the station Erdberg of the Underground line U3 were erected. The great challenge for this part of the works was the necessity to work without any disturbance to the underground line.

The second main phase was planned to demolish and subsequently reconstruct in each stage one half of the original Erdberger Bridge. They fixed up the old bridge above river Donaukanal with a construction of shipping containers on a carriage pontoon and

demolished it within two days, the parts of the Erdberger bridge with passed the motorway A4 were demolished during one week-end. So the site could be finished 12 months ahead of schedule.

PROJECT & CONSTRUCTION DETAILS

Owner ASFINAG BMG

Architect Wallmann Architekten

Structural Engineer ARGE Step/Öhlinger/PCD

Contractor ARGE Porr/Habau





The City Line is a six km long two-track commuter train tunnel and the project also included two new underground stations and a 1500 meter one track bridge south of the tunnel. The civil construction works were divided in eight contracts and together with the installations in stations and railway there were all together about 25 contracts. The main design works were divided in five contracts. The project has been very challenging as it has been constructed in the middle of the City of Stockholm where there are a lot of people living and working, a lot of old cultural and historical buildings and also a lot of other existing tunnels and underground constructions.

PROJECT CITY LINE SWEDEN

PROJECT & CONSTRUCTION DETAILS

Owner Trafikverket

Architect Ahlqvist & Almqvist arkitekter AB

Structural Engineer Several

Contractor Peab, Strabag, Zublin, Implenla, NCC

PARKING GARAGE LAMMERMARKT NETHERLANDS

A low-traffic inner city with sufficient parking facilities and good accessibility is essential for a future-proof Leiden. This is why the city is being provided with two underground car parks on the edge of the city centre. The garage under the Lammermarkt has 525 parking spaces spread over seven underground storeys, and goes down to a depth of approximately 24 metres. This makes it the deepest underground car park in the Netherlands, and a project in which the technical boundaries were pushed.

Besides its technical highlights, the underground car park is also characterised by high quality finishing work. The construction design is made up of prefabricated elements in which all cables and pipework, including the sprinkler installation, are cast in.

PROJECT & CONSTRUCTION DETAILS

Owner Gemeente Leiden

Architect JHK Architecten

Structural Engineer Royal Haskoning DHV

Contractor Combinatie Parkeergarages Leiden Dura Vermeer-Besix



PONTE ENNIO FLAIANO SUL FIUME PESCARA ITALY

The works consisted of constructing a bridge across the Pescara River. The most important part is the cable-stayed bridge itself, which is supported by a single pylon placed at the centre of the North roundabout, on the opposite bank of the river with respect to the "Asse Attrezzato" (urban highway). The bridge deck consists of two steel box beams connected centrally by a gridded structure to which the cables supporting the bridge are attached. The bridge has a significant aesthetic value of its own that is unusual for an engineered structure, especially where the pylon is concerned. Finally, the roundabouts that connect with the existing roads have considerably improved the fluidity of urban traffic in the area and enhanced the entry for traffic arriving from outside the city.



PROJECT & CONSTRUCTION DETAILS

Owner Comune di Pescara

Architect Mele Consulting Associates-Advanced Engineering SRL

Structural Engineer Mele Consulting Associates-Advanced Engineering SRL

Contractor Di Vincenzo Dino & C.S.p.A. – FIP Industriale S.p.A.

EUROPEAN CONCRETE AWARDS HALL OF FAME

RETROSPECTIVE
WINNERS 2012–2018

2012

Award Ceremony
2012 in Oslo



**REGIONAL EMERGENCY
MANAGEMENT CENTER**
ITALY

**WINNER
BUILDING**



GOOISE BRIDGE
NETHERLANDS

**WINNER
CIVIL**

2014

Award Ceremony
2014 in Vienna



TROLLSTIGEN PLATEAU
NORWAY

WINNER
BUILDING



**LEHEN RIVERBED
SILL POWER PLANT**
AUSTRIA

WINNER
CIVIL

2016

Award Ceremony
2016 in Rome



OV TERMINAL ARNHEM
NETHERLANDS

WINNER
BUILDING



TÄBY C ROUNDABOUTS
SWEDEN

WINNER
CIVIL

2018

Award Ceremony
2018 in Helsinki



ÖAMTC MOBILITY CENTRE
AUSTRIA

WINNER
BUILDING



CATHARINA BRIDGE
NETHERLANDS

WINNER
CIVIL

THE EUROPEAN CONCRETE SOCIETIES NETWORK (ECSN)

The object of the network is to encourage cooperation between the members and thereby promote the development of concrete technology and use of concrete in Europe. The network will not interfere with the work of individual societies and other international organisations. Membership is open to all Concrete Societies of Europe. The Secretariat is currently managed by Austria: www.bautechnik.pro

AUSTRIAN SOCIETY FOR CONSTRUCTION TECHNOLOGY

Managing Director: Michael Pauser

ÖSTERREICHISCHE BAUTECHNIK VEREINIGUNG

Karlsgasse 5
1040 Vienna

Austria

www.bautechnik.pro



BELGIAN CONCRETE GROUP

Managing Director: Luc Taerwe

BELGISCHE BETONGROEPERIG

Voltastraat 8
1050 Brussels

Belgium

www.gbb-bbg.be



Groupement Belge du Béton

CZECH CONCRETE SOCIETY

Managing Director: Vladimír Veselý

CZECH CONCRETE SOCIETY

Samcova str. 1
11000 Prague 1

Czech Republic

www.cbsbeton.eu



CONCRETE ASSOCIATION OF FINLAND

Managing Director: Tarja Merikallio

SUOMEN BETONIYHDISTYS

P.O. Box 381
Unioninkatu 14
00131 Helsinki

Finland

www.betoniyhdistys.fi



GERMAN SOCIETY FOR CONCRETE AND CONSTRUCTION TECHNOLOGY

Managing director: Lars Meyer

DEUTSCHER BETON-UND BAUTECHNIK-VEREIN E.V.

Kurfürstenstraße 129
10785 Berlin

Germany

www.betonverein.de



IRISH CONCRETE SOCIETY

Managing director: Henry Kerr

IRISH CONCRETE SOCIETY

Platin
Drogheda Co. Louth
Ireland

www.concrete.ie



THE IRISH
CONCRETE
SOCIETY

CONCRETE ASSOCIATION OF ITALY

Managing director: Marco Menegotto

AICAP

Via Piemento 32
00187 Roma

Italy

www.associazioneaicap.it



CONCRETE ASSOCIATION OF THE NETHERLANDS

Managing director: Maikel Jagroep

BETONVERENIGING

Postbus 411
Büchnerweg 3

2803 GR Gouda

Netherlands

www.betonvereniging.nl



Betonvereniging
Kennispartner om op te bouwen

NORWEGIAN CONCRETE ASSOCIATION

Managing director: Morten Bjerke

NORWEGIAN CONCRETE ASSOCIATION

c/o Tekna Postbox 2312 Solli
0201 Oslo

Norway

www.betong.net



Norsk
betongforening

SWEDISH CONCRETE ASSOCIATION

Managing director: Richard McCarthy

SVENSKA BETONGFÖRENINGEN

Drottning Kristinas väg 26
10044 Stockholm

Sweden

www.betongforeningen.se



Swedish Concrete Association
Betongföreningen

CONCRETE SOCIETY UK

Managing director: Kathy Calverley

CONCRETE SOCIETY UK

Riverside House 4 Meadows Business Park
Camberley Surrey, GU17 9AB

United Kingdom

www.concrete.org.uk



