The ISC Approach

The cornerstone of ISC’s competences derives from the ability to undertake the complete range of tasks associated with the development of complex structural and mechanical installations and customizing them to meet the client’s demands from the description of the functional requirements to design, execution and completion of the specification.

ISC assures that the job is carried out according to the time schedule, the technical specifications and within the budget.

We allocate a project manager and a project group with professional skill in the various engineering disciplines to perform the assignment which typically will include the following phases:

ISC applies the most modern and updated computer calculation- and simulation software tools required to achieve safe and optimized solutions.

- Working with the client to identify the demands
- Conceptual design and cost estimate
- Detailed design and tender documents
- Tender and tender evaluation
- Contract management
- Inspection and quality assurance
- Commissioning and handover to client
- Maintenance and operation procedures

The Company

ISC Consulting Engineers A/S was founded in 1967 by Kjeld Thomsen M.Sc. (struct. Eng.) former associate professor at the Technical University of Denmark.

Our 235 employees are located at our headquarters in Copenhagen and at our offices in Kalundborg, Esbjerg, Kolding, Viborg and Aalborg.

ISC provides comprehensive independent consulting services within all fields of planning, feasibility studies, civil, structural, mechanical, process, and electrical engineering on a worldwide basis.

ISC has special experience and knowledge in the field of planning and design of advanced civil works such as the “The Øresund Fixed Link” which connects Denmark and Sweden and with its 490 m main span is the longest cable stayed railway bridge in the world. ISC also has special experience in the design and planning of other civil works such as industrial plants, power stations, port facilities, oil & gas installations, wind farm installations, airports and railways.

ISC has gained profound experience throughout the past more than 45 years on numerous projects carried out in more than 70 countries.

The Staff

The combined staff of the company comprises 235 employees (2014) of which approximately 70 % are graduates in civil, structural, electrical or mechanical engineering and related disciplines.

The company’s expertise also covers management, planning, computer applications, information and maintenance systems, client consulting, site management and inspection.

Furthermore, ISC maintains standing agreements of cooperation with individual experts and public scientific institutions, thereby supplementing the company’s know-how in connection with assignments requiring multi professional teams of specialists.

For further information about the products and services ISC Consulting Engineers A/S can provide, please visit www.isc.dk

ISC Consulting Engineers A/S
Øster Alle 31
DK 2100 København Ø
Tel.: 35278800
Email: info@isc.dk
The combined rail- and motorway bridge across the Øresund joins Sweden via the artificial island Peberholmen and further to Denmark with a tunnel. The total length is 15.8 km of which 7.8 km is the bridge. The navigation span is 490 m and the free height is 57 m. The bridge was inaugurated in 2000 and was built in the record time off only 4 years.

TP30 is the new railway bridge for the high speed rail line Copenhagen – Ringsted. It is a composite structure crossing a highway. The innovative design assures that obstructions to the traffic is minimized. Construction will take place in 2015-2016.

Odins bridge is Europe’s longest double swing bridge and has now closed the missing link in the Odense ring motor way. It stands as a symbol to the entrance from the sea to Odense blending beautifully into the environmental protected area. It rotates on two foundations on a hydraulic gliding bearing system. The bridge was awarded the Danish IABSE Steel Structure Award 2013 and was inaugurated in June 2014.

TP30

The Teglværks Bridge is a bascule bridge in the new residential area in Southern Copenhagen. It connects Stuseholmen and Tegholmen with the rest of the city. It stands as a natural part of the architectural frames and provides maritime associations to the area. It is an unconventional triangular structure. The anchor stays are hydraulic cylinders pulling the span up to an upright position allowing the ships to pass.

The Sundsvall Bridge is situated in Northern Sweden. It is designed as a continuous girder bridge with a modern closed box girder cross section. A special feature for the Sundsvall Bridge is a very complex geometry, due to the curved alignment horizontally as well as vertically. The bridge was inaugurated in the fall 2014.

The Øresund Bridge

The swing bridge has been the largest movable bridge in operation in Denmark since it was built in 1997. It consists of two equal rotating sections carrying the two lane highway and a twin bike lane crossing the 44 m wide navigation canal. The steel superstructure consists of two 49 m long box girder sections rotating counter clockwise.

Sundsvall Bridge

The arctic climate in Thule was one of the challenges in the design of The Thule North River Bridge which is a 64 m long bridge running parallel with the runway of Thule Airport. The bridge structure consists of two Warren type 5 m tall trusses carrying the 8.4 m wide bridge deck consisting of oak timber beams transversely prestressed with dywidag bars.

Thule North River

A record was set building this bridge. In only 41 days and nights the old bridge was demolished and the mounting of the new steel bridge was finished. The bridge is a motorway bridge which needed replacement. A motorway runs on two parallel bridges where the East bridge only needed renovation and the west bridge needed to be totally replaced. The 220 m long bridge was manufactured in 30 sections each weighing up to 90 tons. The sections were transported from Tallin and assembled on site.

Skovdigt

As the Opera House in Copenhagen is surrounded by water it was necessary to establish 6 bridges connecting the North Island with the South Island. The bridges are all constructed to carry heavy traffic. Four of the bridges are single spanned and 18 m long. Two of the bridges are bascule bridges allowing ships to pass. The bascule spans are solely operated via hydraulic activators hidden under the bridge.

Odins Bridge

The design of a bridge is usually generated in cooperation with competent architects to assure that an aesthetic, environmental and economic satisfactory solution is achieved.

Planning and Design

ISC has designed bridges ever since the early start of the company - large and small, long and short, wide and narrow, high and low, over land and over water - for motor traffic, railway traffic - for bicycles and for pedestrians. The design of a bridge is usually generated in cooperation with competent architects to assure that an aesthetic, environmental and economic satisfactory solution is achieved.

Nothing too big - Nothing too small

At ISC we are always ready to come up with a solution - whether it is a large motor and railway bridge or just a pedestrian bridge of a few meters. We have the general know-how of specific technical solution regarding the actual construction or transportation of the structures to include all aspects in our projects regarding fabrication, transport, and erection to achieve feasible and optimal solutions.