

# Mini seminar

## New Storstrøm Bridge, Batching Plant and Prefabrication Yard

Wednesday 9<sup>th</sup> October 2019, 15:00-19:00

Storstrøm Bridge Construction Site and Visitor Center, Brovejen 16, 4760 Vordingborg



The seminar will present current construction activities for the ongoing large bridge project in Denmark – The Storstrøm Bridge. The aim is to give a technical introduction to the Contractors work with the concrete batching plant and the prefabrication yard, which is the backbone of the bridge construction.

The seminar will include a site visit to the construction site, where the batching plant and prefabrication yard is taking shape.

Please note the presentations will be in English.

### Programme

- 15:00 – 15:15 Welcome and Introduction to IABSE  
Lars Fuhr Pedersen, IABSE Denmark
- 15:15 – 16:15 “Prefabrication Yard” by Andrea Biagi,  
Technical Manager – SBJV  
“Concrete Batching Plant” by Severino Farina, Laboratory  
Manager – SBJV
- 16:15 – 17:45 Site Visit (Please bring PPE)
- 17:45 – 18:00 Closing remarks  
Lars Fuhr Pedersen, IABSE Denmark
- 18:00 – 19:00 Drinks and snacks

New Storstrøm Bridge (visualization)



### Registration

Please register before  
October 2<sup>nd</sup> 2019 by e-mail to:  
sga@sbf.dk

Please include name, affiliation  
and whether you are a personal  
member of IABSE.

### Registration fee

The mini seminar is free for  
personal members of IABSE,  
DSBy, NVF and for students.

There is a registration fee of 500  
DKK for all other participants.

### Payment

Please transfer the fee at the time of  
registration to the following account:

**Dansk Forening for Brobygning og  
Bærende Konstruktioner**

**Branch:** Danske Bank

**Reg. number:** 1551

**Account number:** 7020694

### Mark:

Please mark transfer with your name  
and “Mini seminar”.

**Participants from Norway, Sweden  
and Finland:**

IBAN: DK84 3000 0007 0206 94

SWIFT – BIC: DABADKKK



## Prefabrication Yard

For the construction of the New Storstrøm Bridge, the prefabrication yard is the core of the bridge construction process. The “factory” where the reinforced concrete elements, that compose the structure of the bridge, are manufactured and loaded on the transportation equipment, to be eventually delivered and assembled on site.

It covers a total area of approximately 170,000 m<sup>2</sup>, with a total built-up area of around 26,000 m<sup>2</sup>.

**Essentially, the project consists of two phases:**

1. The construction of the Prefabrication Yard “factory”
2. The construction of the bridge

Despite the fact that a two-stage process may lead one to presume a longer total construction time, the prefabrication system of all the main typical structural elements (foundation, piers, pier heads, deck box girder) allows for a quicker sequence of work during the assembly in place of the structures. It also allows for a better quality of the final product, in terms of dimensional tolerances, durability and visible surfaces.



## Batching Plant

The nerve centre of the prefabrication yard is the concrete batching plants that represent the main part of the “concrete production station” where the concrete is produced and distributed to the different prefabrication stations.

The concrete production station consists of two wet concrete batching plants and a stationary pumping system that runs the distribution of concrete to the three casting stations.

The proper batching plant setting, as well as the quality control plan of concrete production, are defined through a pretesting program divided in three phases:

1. Concrete pretesting at the batching plant
2. 1 m<sup>3</sup> block trial casting
3. Full-Scale Trial Casting

These activities, as well as the study of concrete mix in the laboratory and the quality control activities during the running production, will be discussed during the presentation.

