

## **New Structures - Expansion joints**

# **NEW JAPEK HIGHWAY IN JAKARTA**

### Indonesia



#### **General contractor**

#### **Customer/Owner**

Bukaka

#### **Engineer**

#### **Freyssinet subsidiary**

Freyssinet Products Company Italia S.p.A

#### Others subsidiaries

PT Freyssinet Total Technology lakarta

#### Works period

Start date: February 2019 End date: July 2019



# PROJECT DESCRIPTION

After supplying the seismic devices type LRB for the construction of the new highway Jakarta-Cikampek (JaPek), PT Freyssinet Indonesia with the co.operation of FPC Italia has even got the order for the supply of seismic expansion joints type ISOSISM SFX.

The technical characteristics of the supplied expansion joints are as follows:

**EXPANSION JOINT TYPE SFX300/250** SERVICE MOVEMENT: 250 mm (±125) SEISMIC MOVEMENT: 300 mm (±150)

**EXPANSION JOINT TYPE SFX400/320** SERVICE MOVEMENT 320 mm (±160) SEISMIC MOVEMENT 400 mm (±200)



Two pieces of expansion joints (one for each type), randomly chosen by the customer, have been tested at ISOLAB laboratory with the witnessing of SGS (as independent 3rd party) and representatives of LAPI Ganeshatama Consulting and JJC, representatives of the final client Bukaka and PT Freyssinet Indonesia ones.

In addition to the movement tests at SLS and ULS (in longitudinal, transversal and combined directions), the joint type SFX400/320 has even been tested with a longitudinal/transversal movement combination 60% higher than the design one without any damage.

FREYSSINET MISSION

The total quantity of expansion joints to be produced and shipped within 6 months from the order is more than 4900 linear meters. The supply has been shared between SFX300/250 and order to optimize the output cycle and respect the delivery time of the optimize the output cycle and respect the delivery time of the optimize the output cycle and respect the delivery time of the optimize the output cycle and respect the delivery time of the optimize the output cycle and respect the delivery time of the optimize the output cycle and respect the delivery time of the optimized the opt job site. On this project, PT Freyssinet Indonesia in close cooperation of FPC Italia supplied: 1362 LRB (273 tested) and 4900 lm of SFX expansion joints. It illustrates the success of integrated approach together, between Freyssinet BU and FPC with internal design manufacturing - testing capacities.