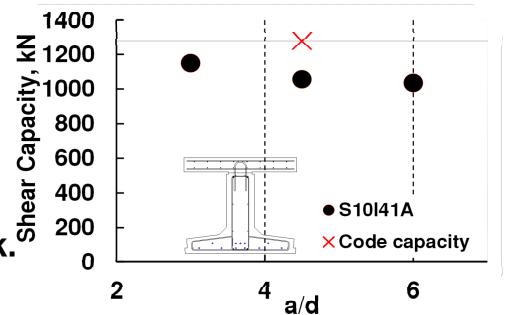


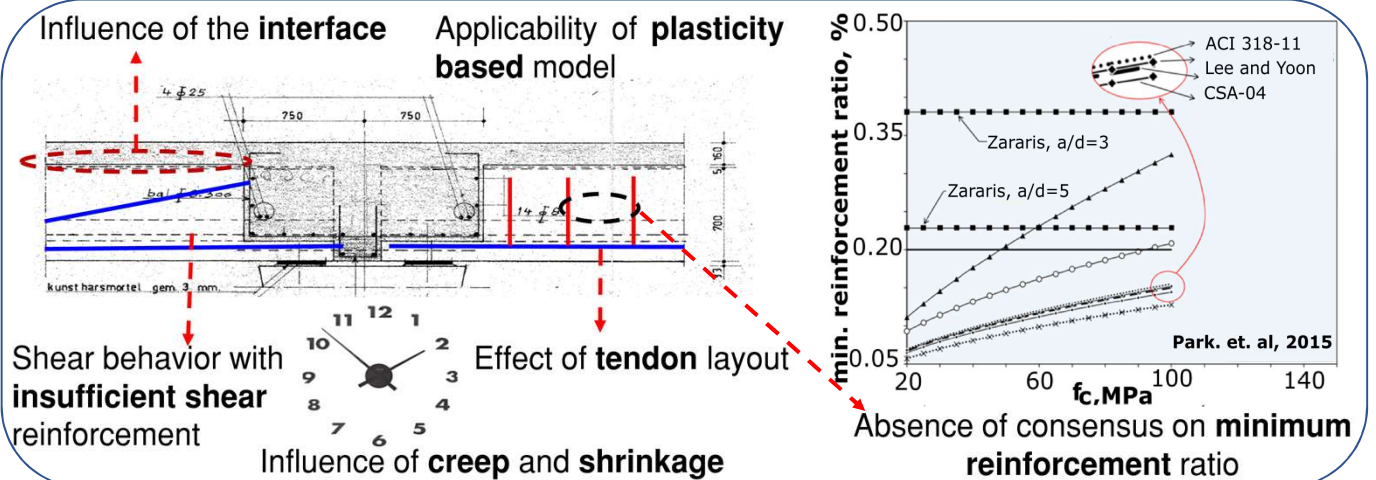
Analytical and numerical models for the shear behaviour of precast concrete bridges at intermediate support

Introduction

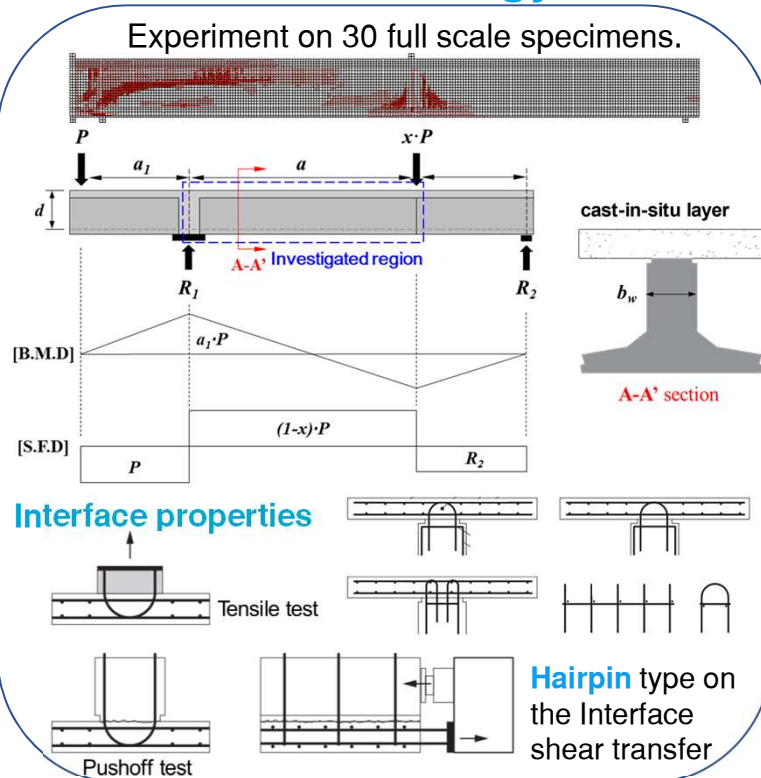
- More than 1000 precast prestressed continuous bridges with cast in-situ slab exist in the Netherlands.
- Shear capacity of the bridges raised attention.
- Hocht-Lakerveld bridge and Oud-Dijk bridge are considered to be **unsafe** from the **preliminary unit check**.



Critical issues and research gaps



Methodology



Expected research outputs

- Stage 1**
 - Plasticity based analytical model
 - Expression for $\rho_{w,min}$
- Stage 2**
 - A physical model based on CSDT for members with $\rho_w < \rho_{w,min}$
- Stage 3**
 - Understand the stress conditions of the interface and develop a full **shear stress-slip** model