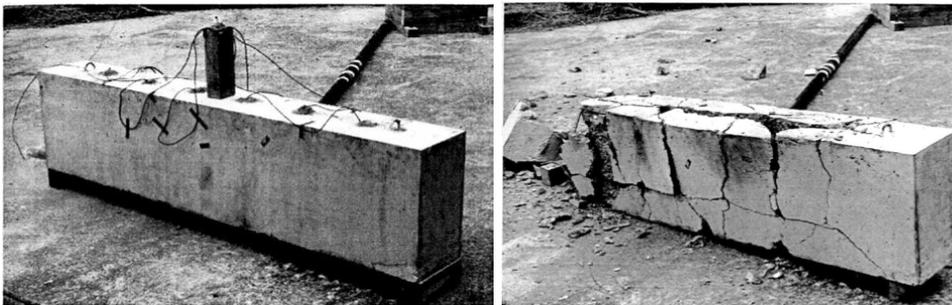




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## **Numerical Studies on the Structural Behavior of Reinforced Concrete Beams Exposed to Explosion Pressures**

Extraordinary actions like explosion pressures have increasingly to be regarded for buildings of infrastructures and public buildings whereby their structural integrity has to be ensured. Explosion pressures are characterized by extremely high amplitudes with an extremely short duration. Thus, inertial effects and structural dynamic behavior have to be considered. At the same time relations between shearing actions and bending actions may considerably change compared to the quasistatic case and this in turn may the failure behavior of structure. This study aims to investigate this particular effect for reinforced concrete beams. This is to be performed with numerical parameter studies using ConFem and Abaqus.



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