



## BLOCK FOUNDATIONS

A block foundation is a rigid block, that is either placed directly on the load bearing ground or if this is encountered deeper, supported on piles. In these cases, the block foundation is being separated from the rest of the structure by means of a joint. If the block foundation is supported on springs or elastomeric materials, these can be placed directly on the bottom slab of the hall.

convex ZT GmbH prepares the statical and dynamical analysis of block foundations in close cooperation with the turbine/generator manufacturers. The analysis includes the calculation and evaluation of the foundation eigenfrequencies, the dynamic velocities- and amplitudes in operation and the dynamical stiffness of the foundation. The subject was discussed in detail in papers, published in prestigious journals (see below).

„Static and Dynamic Analysis of Concrete Turbine Foundations“ Uzunoglu, T. et al. in  
Structural Engineering International 3/2008, Zürich  
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„Statische und dynamische Berechnung von Turbinenfundamenten aus Stahlbeton“ Uzunoglu, T. et al. in: Beton- und Stahlbetonbau 100, Heft 10, 2005, Ernst & Sohn, Berlin  
download [paper](#)

### Current reference projects

Paper Mill Albayrak, Turkey (2016)

### Machinery:

Turbine with Generator, Compressor, Extruder, Booster Fan, etc.

### Type:



Block foundation in reinforced concrete

**Tuning:**

low tuned

**Support type:**

direct or elastic support