

# **Storage Depot Breuninger** **Sachsenheim (DE)**

## **Building site report Gravel columns »SYSTEM TERRA-MIX«<sup>TM</sup>**

### **\_Building site report**

- \_Execution: **June 2017 to September 2017**
- \_Project: **New construction of a logistics centre**
- \_Prime contractor: **Ten Brinke Industrie- und Gewerbebau GmbH & Co. KG**
- \_Impulse compaction: **some 2400m<sup>2</sup> and 340 individual foundations**



### **Job description:**

For the erection of a new storage depot a ground improvement was necessary. The ground consisted of an artificial filling, a non-sustainable layer of decalcified loess and below a sustainable layer of residual soil. For the baseplate of the high bay warehouse a maximum admissible angular displacement of 1:2000 had to be guaranteed.

### **Solution:**

The layers of decalcified loess was bridged by pre-drilled „Gravel columns System TERRA-MIX“ down to the sustainable layer of residual soil below the individual as well as the strip foundations. Below the baseplate of the high bay warehouse the hybrid foundation „System TERRA-Mix“ was implemented. Here the settling funnels were filled with grain graded material of 0/90mm; followed by 3 layers (of 45cm each) with binding agent stabilized material. The company TERRA-MIX Bodenstabilisierungs GmbH was here acting as prime contractor for the total earth works; this concerning the building ground improvements below the building areas as well as the outside layout.

### **Results:**

The high stress, as a result of the individual supports and the high bay warehouse, could successfully be diverted into the subsoil using the above described systems.

