

**BILZ insulating plates are ideally suited for vibration suppression of foundations and baseplates**

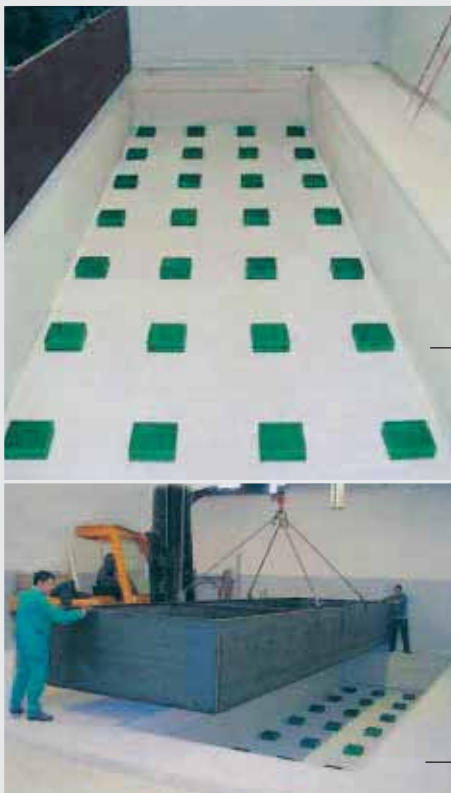
The main purpose of the foundation is to stabilize the machine as well as to increase the moment of inertia. The foundation thus positively influences machine vibration by reducing the amplitude of oscillation. It is wrong, however, to assume that any foundation large enough would eliminate all vibration problems. It is important that as much information as possible be supplied regarding the machine to be isolated, this will include machine size and weights, any dynamic features of its operation, location including ground type, condition where optimal performance is required and a vibration analysis of the machine and site conditions. A correct isolation between machine foundation and the surrounding area will result in trouble free operation.

As a result of years of experience we have the necessary experience in this field. At your request we can offer all other related services including measuring of vibrations, planning and construction design.



Illustration 1, 2, 3: Depositing of BILZ insulation plates (green) and padding of the spaces with mineral fibre insulation plates (sacrifice formwork). Illustration 4: Covering of the entire area first with PVC sheeting as used for construction work, and then with mineral fibre cover plates. All joints must be pasted/glued together. Illustration 5, 6: Mounting of reinforcement. Illustration 7, 8: Filling in of concrete.

Application example in the plant of a major automobile manufacturer. Passive insulation protection of a Waldrich-Coburg portal milling machine from the pressing mechanism sector. Total mass: approx. 1200 to.



“Lost form working technology”

Precast form, steel mould



**Example: Stamping Machine Type PIVATIC PCC80 TTI + HT**

Machine weight incl. work piece app. 23 to. Dynamic vertical forces app. 60 KN, horizontal forces app. 30 KN, Foundation block: app. 5,1 x 3,5 x 1 m, weight app 40 to.

**Equipment:** 8 x Bilz FAEBI type 580-HD with mechanic level control system LCV and following services:

- foundation design
- static foundation calculation
- formwork plans
- steel- and bending schedule list

**Special request:**

Target: loss of production not longer as 3 weeks. Small space from the revision channel trough to foundation block.  
Very low horizontal movement of the machine was expected. Efficiency of the isolation of more than 80 % was requested.



Example: Grinding machine Type GLEASON PFAUDER P 1200 G

**Equipment:**

Vibration isolated Inertia Block app. 20 to. On Bilz Membrane – Airspring System BiAir4 – ED with mechanic pneumatic level control system MPN-LCV-HF

**Special request:**

Because of surrounding machines, crane runaway etc. installation of an isolation system is difficult. Workpieces with app. 10 to. Creates a large change in loading on the isolation system. To compensate this, a high flow level control system with level accuracy of 0,1 mm is needed.

