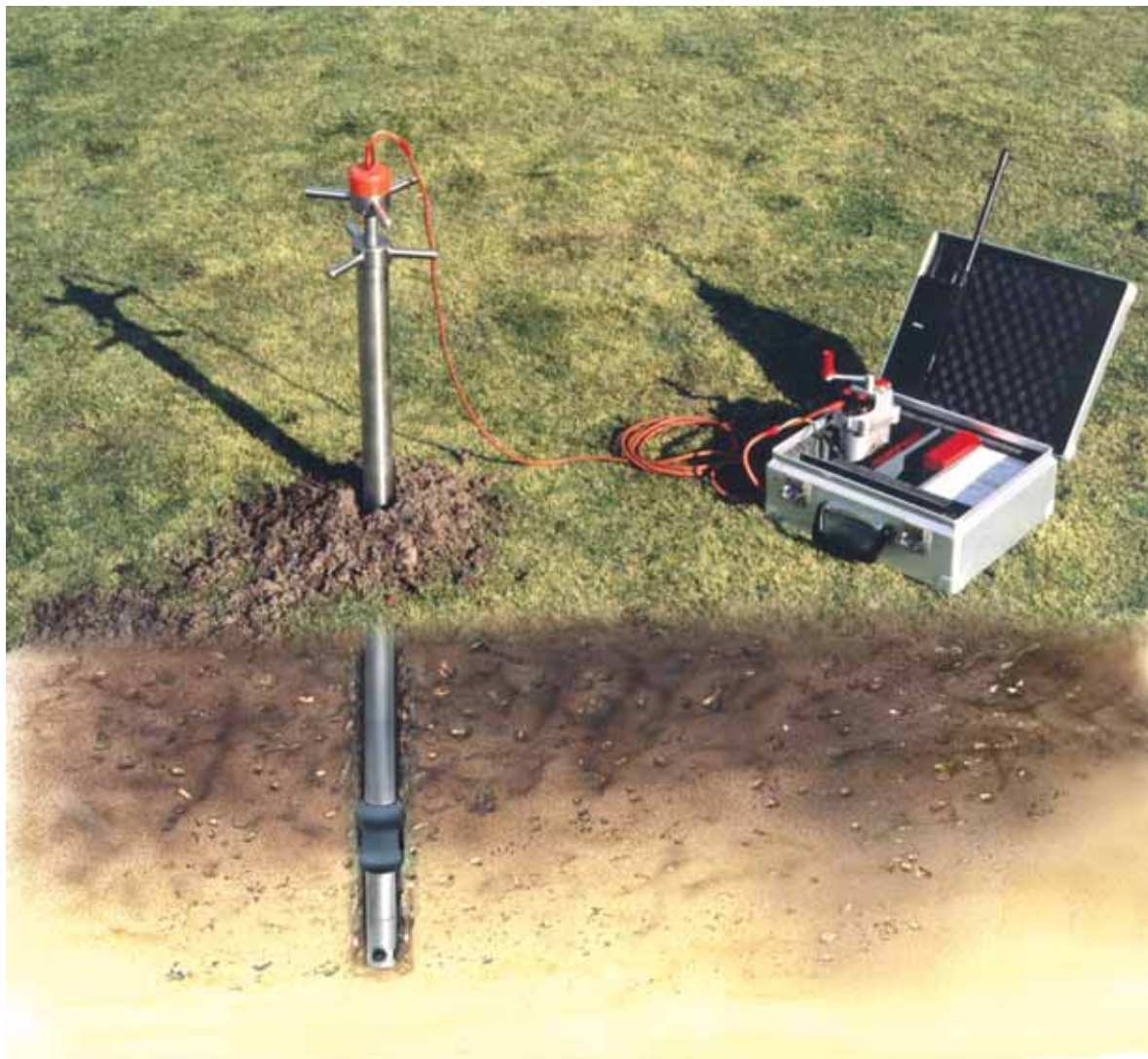


SISSY – Seismic Impulse Source System

A portable energy source for shallow refraction and reflection surveys



Preparing shotholes

Appropriate drilling tools for shothole diameters of 55 mm and about 1 m depth

- Edelmann gimlet
- motor driven 'Stiehl' driller with drillbits for various subsoils



Loading SISSY

The cartridge holder with inserted cartridge is screwed into the cartridge lock.



Clamping the packer

The packer gets clamped by turning the handle wheel. Thus, SISSY is fixed in the shothole and offers optimum energy coupling.



Firing

An electric wire connects SISSY to a firing device. A solenoid attached to the wire provides the trigger impuls.



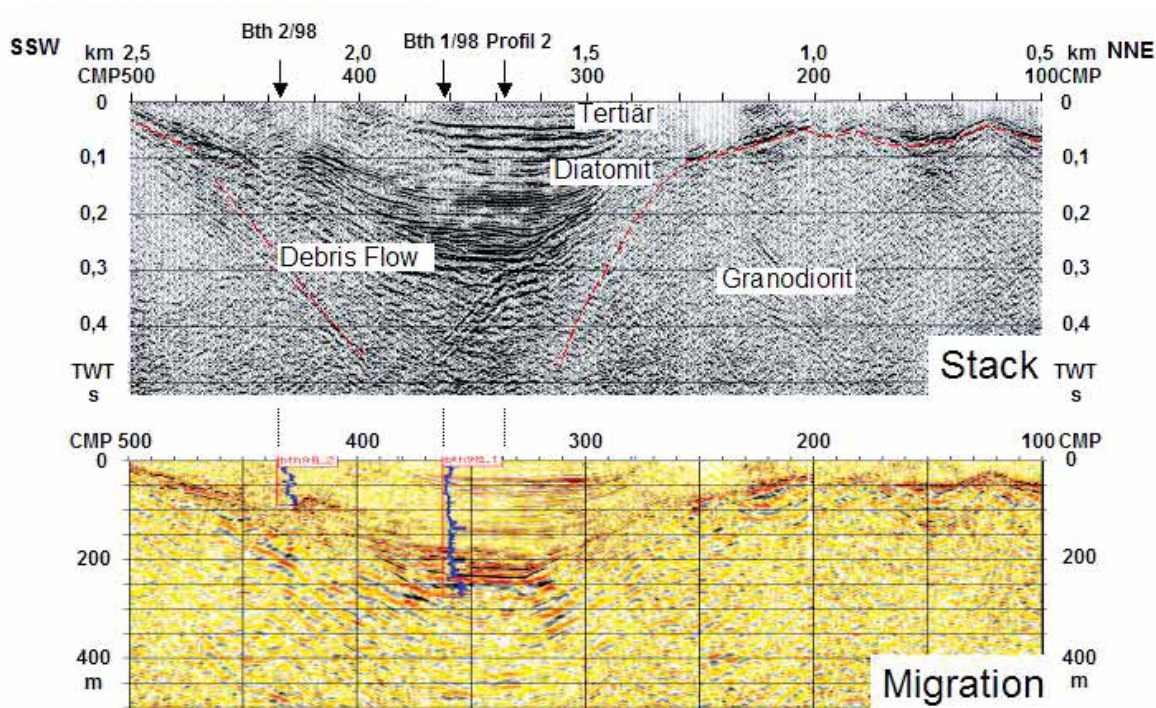
Handling

- Secure in application
- Energy source 'Technical cartridge' (classified as 1.4 S ZI 47 UN 0323)
- Environmentally compatible because no contaminating residues remain in the ground
- Low weight
- Low operating expense
- Easy decomposability for the cleaning and maintenance

Advantages

- High seismic energy
- Electric triggering – controle of the electric circuit before firing
- Precise trigger time, digital stacking of repeated shots
- Good mechanical coupling
- Low airborne sound
- Low-cost method with regard to shallow seismics

Example: Reflection seismics: the hidden maar of Baruth

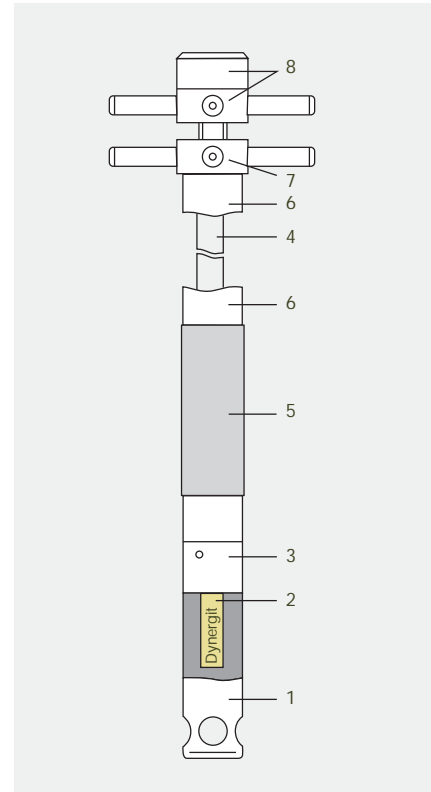


SISSY

Total length:	ca. 1.260 mm
Diameter:	50 mm
Weight:	ca. 10 kg
Material:	rostfreier Stahl
Construction approval:	PTB 673 (Physikalisch-Technische Bundesanstalt Braunschweig)
Patent number:	195 09 122.1 GGA – Institut Hannover

Modular construction

- 1 Cartridge container with exhausters
- 2 Cartridge DYNERGIT
- 3 Cartridge lock with electric contacts
- 4 Pipe
- 5 Packer
- 6 Distance pipe
- 7 Hand wheel 1 to tighten the packer
- 8 Handwheel 2 with electric contacts and female connectors to the firing device



DYNERGIT

Caliper:	20 x 67 mm
Mass:	ca. 28 g NC-Basis
Classification:	1.4 S
Electric trigger signal:	3 A/1 ms
Resistance:	1,2 bis 2,2 Ohm
Current:	>_ 10 mA
Approval:	Beschussamt München

