

APPLICATIONS

- Seismic refraction
- Shallow seismic reflection
- Determination of "elastic-dynamic" parameters

OPERATING PRINCIPLE AND METHODS

When the use of the mallet for energizing will no longer be sufficient to reach the required exploration depth, and it will not be possible to employ explosives, the seismic energizer could turn out to be the winning solution. This equipment, classified by the Italian Ministry of the Interior as a "work-tool", is exempted from the regulations which are governing the possession and use of firearms and may thus be employed without the need to apply for the licence to carry weapons.

Essentially made up of a stainless steel cylindric body of tubular shape, the energizer has a front section that maybe unscrewed (cartridge chamber), apt to contain 8-bore blank cartridge, or of industry type (easily found in every gunshop). This cartridge chamber is without barrel, thus permitting the axial ejection of the energy wave, caused by the explosion of the cartridge, generating waves of type "p" (longitudinal) and type "s" (transversal). For a correct and safe use of the instrument, it will be necessary to make a borehole in the ground to a depth of 30-40 cm using the hand-operated auger which is supplied together with the instrument. Thereafter you proceed with the charging of the energizer: two safety lock systems are to be inserted (plug lock and plug), the cartridge chamber unscrewed, the cartridge inserted and the chamber itself finally tightened. The cylindrical body shall then be fit to the anchor plate without being looked, the energizer inserted to a depth of about 35 cm in the borehole made in the ground, without bringing the opening of the cartridge chamber in contact with the bottom of the borehole. Finally, operating on the special lever, the energizer clamp shall be locked.

The two lock systems may now be removed; both the feet are to be put on only one of the clamp arms and, turning the back towards the energizer, you shall strike on the rubber defonation terminal. Remove everything from the ground after the energization, unscrew the cartridge chamber, expel the cartridge case, insert the two safety locks, and you may then go on inserting another cartridge preparing yourself to repeat every operation from the beginning when moving to the next shot point.

TECHNICAL FEATURES

Classification	Work-tool
Barrel material	Stainless steel
Cartridge type	8-bore cartridges for industry use
Accessories supplied	Auger for pre-hole Anchor plate Transport bag
Generated waves	P (longitudinal), S (transversal)

