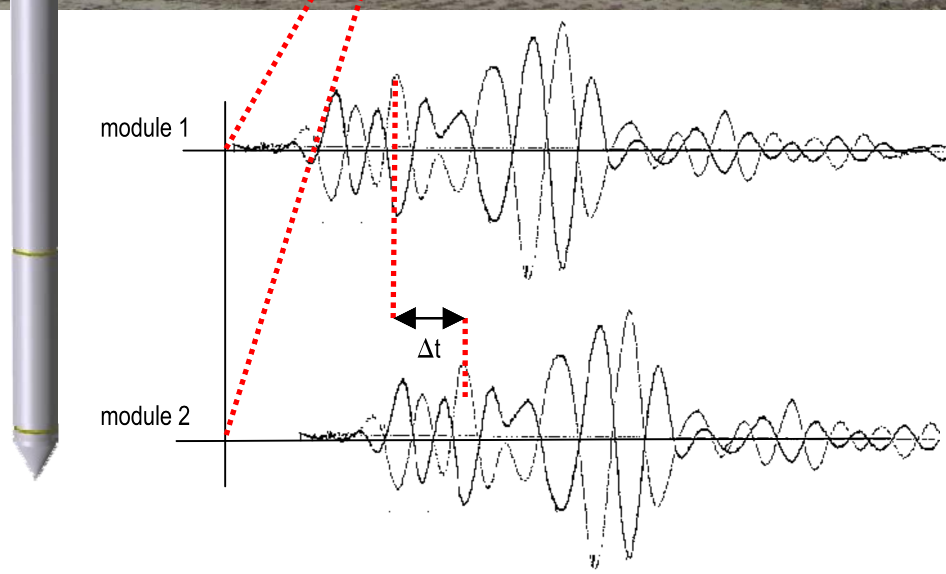


$$M_o = \rho \cdot \upsilon_p^2 (kN/m^2)$$

$$G_o = \rho \cdot \upsilon_s^2 (kN/m^2)$$

ICONE SEISMIC MODULE

Unique features of the Icone seismic module:

- Triaxial seismic module: shear wave left/right and compression wave
- Modular extension of the standard Icone system (plug&play)
- Easy to upgrade to test 2 depths simultaneously
- Easy to stack modules on top of each other in CPT string

Icone Seismic Module: a new application for the digital Icone

Icone extended

Seismic CPT's are carried out to determine dynamic moduli (shear modulus G, elasticity modulus E and Poisson's ratio). These moduli are calculated as a function of the seismic data and the soil density ρ, usually already known.

Another important use of estimated shear wave velocities in geotechnical design is in the liquefaction assessment of soils. Since the shear wave velocity is influenced by many of the variables that influence liquefaction, it is an excellent index of liquefaction.

With the Icone seismic module the digital Icone is turned into a seismic or SCPT cone. The standard single Icone seismic module contains 3 accelerometers to receive shear wave left, right and compression wave.

"Van den Berg in every field"

Modular concept (plug & play)

The modular set-up allows the use of the seismic module only when it is required. The seismic module is simply connected directly behind the standard Icone in an adapter. To increase the overall accuracy and the reproduction of equal waves the system can be extended with multiple modules simultaneously. The standard geotechnical parameters and the seismic signals can be acquired in one test.

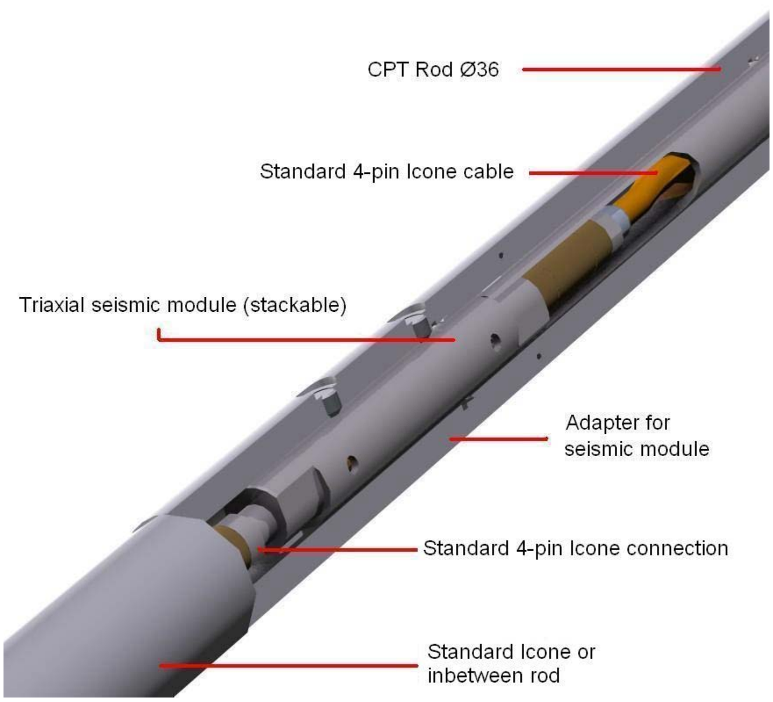
Stacking

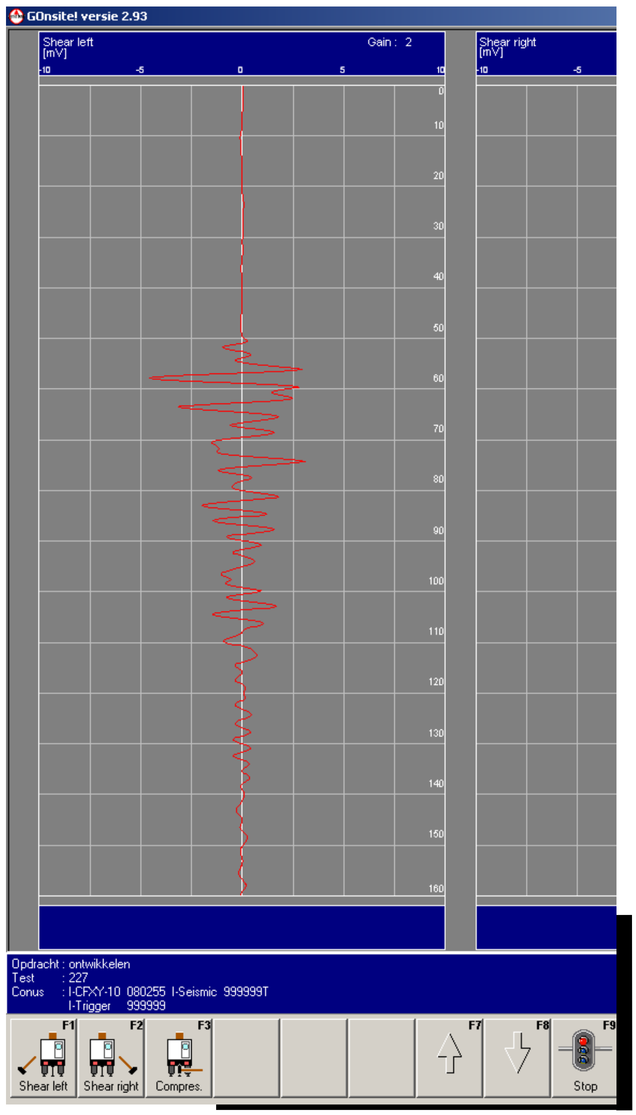
To simplify testing procedures, the seismic signals can be stacked to adjust the gains to required levels.

Automatic cone recognition

The standard Icontrol and Gonsite! software will recognize the seismic module automatically when it is connected to the system.

Specifications	
Resolution	16 bit
Sample frequency	5000 Hz
Sample time	600 ms
Gain	max. 200x
Accelerometers	1 Hz - 350 Hz
Number of components	3: shear wave left / right and compression





We reserve the right to change specifications without prior notice.

A.P. van den Berg Machinefabriek
IJzerweg 4, P.O. Box 68
8440 AB Heerenveen, The Netherlands
Phone +31 (0)513 63 13 55
Fax +31 (0)513 63 12 12
E-mail info@apvdberg.nl
http://www.apvdberg.com

A.P. Van den Berg, Inc.
P.O. Box 654, 109 Greenwood Circle
Milford, PA 18337 USA
Phone +1 570 296 8224
Fax +1 570 296 4886
E-mail apvdberg@ptd.net

V.0605-50..dp