

IDS-1 Pile Testing Device

FUNCTION

- Measuring the pile length and localization of pile defects (e.g. cross-section deformations and cracks)
- Determination of foundation bed occurrence depth
- Application as a dual-channel seismic station with separate timing channel
- Application as a sonar

PILE LENGTH MEASURING METHOD

The method is based on measuring the response time for the signal reflected from the other end of pile or from obstacles inside the pile that emerge due to its inhomogeneity. The length is calculated based on the known speed of primary wave for various types of piles and measured response time. The source of primary waves is a special hammer; the seismic pick up serves as a pick up of elastic vibration.

The IDS-1 set includes:

- ◆ Electronic module
- ◆ Seismic pick-ups
- ◆ Charging unit
- ◆ Set of cables
- ◆ Set of documentation
- ◆ Transportation bag



SOFTWARE

Built-in software allows for quick pile length measuring and detection of pile defects

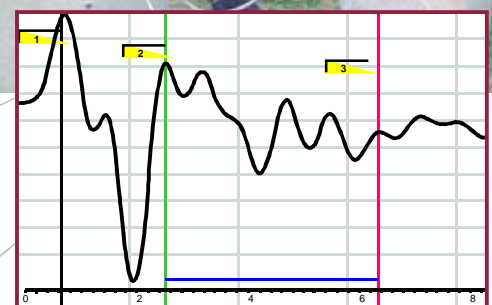
Setting parameters allow for a wide variety of measurements in various environments (pile of different length, different types of soil, external disturbance)

The unit file system allows for recording, erasing and viewing up to 4000 files with the measured data. Build-in memory with capacity up to 256 MB

External software compatible with Windows 98, Windows 2000 and Windows XP allows for copying files to PC, further data processing, and printing out reports. Standard Ethernet and RS-232 based interface to facilitate data exchange with PC

SPECIFICATIONS

Pile Length Range, m	up to 30
Number of Channels	2 + timing channel
Channel Bandpass, KHz	8; 4; 2; 1; 0; 0.5
Discretization Interval, KHz	96; 32; 16; 8; 4; 2
Scale Numbering per Recording per Channel	2048
Dynamic Range, dB	95
Effective Noise Voltage, microV	0.2
Complete Dynamic Range, dB	140
Coefficient of Harmonic Distortion, %	no more than 0.1
Memory Capacity, MB	256
Weight of Electronic Unit with Built-in Battery, kg	2.8
Work Time (without battery recharging), hr	10
Working Temperatures Range	-30°C ... +50°C
Screen Resolution, pixels	320 x 240
Indicator Screen Dimensions, mm	120 x 92



WARRANTY PERIOD OF 2 YEARS. POST-WARRANTY SERVICE