SPECIALIZED TESTING SERVICES

SERVICES

- SPT Energy Calibration/Efficiency
- Hammer Efficiency/Performance
  - Energy transferred to system
  - Hammer speed
- Vane Shear Test
- Pressuremeter Testing

SPT ENERGY CALIBRATION

An instrumented section of NWJ or AWJ rod measures strain and acceleration with each hammer blow. The PDA then calculates the amount of energy transferred to the rod by the force-velocity approach. Different SPT rigs and hammers are widely variable; therefore it is important to know the amount of potential energy transferred to the rod from the hammer. From this it is possible to adjust the measured N value to the normalized N60 for standard 60% energy transfer into the rods.

VANE SHEAR TEST

Gregg’s H-10 Geonor vane can evaluate the in-place undrained shear strength \( s_{uv} \) of soft to stiff clays and silts. Various vane sizes can be used depending on the soils encountered. A description of the vane shear test is provided in the diagram. All measurement and storage of shear strength data takes place down hole by a small computer chip located immediately above the vane. This allows for high precision measurements and reliable shear strength readings.

PRESSUREMETER TESTING

The Menard Pressuremeter measures in situ strength and deformation properties of all types of soil and soft rock as well as ice and permafrost. Well established correlations enable bearing capacity and settlement calculations.

The dynamic measurements provided during SPT calibration determines the energy ratio or efficiency of the SPT system.

Vane shear test description

Gregg Drilling's Menard Pressuremeter can be used in conjunction with drilling to gain information about soil compressibility.