

# Equipment



## DYNAMIC CONE PENETROMETER

Portable Device For Dynamic Penetrometric Tests

### Product Identifier

*Product Name*

DYNAMIC CONE  
PENETROMETER

*The Pagani DPM30  
penetrometer allows  
continuous dynamic  
penetrometric tests to be  
performed. The fact that it is  
exceptionally small means  
it can be used on sites that  
are inaccessible to normal  
machines.*

### Supplier Details

Alchatek  
4508 Bibb Blvd  
Tucker, GA 30084  
T: (404) 618-0438

### Emergency Phone Numbers

Call CHEMTREC  
Day or Night

1-800-424-9300  
+1 703-527-3887

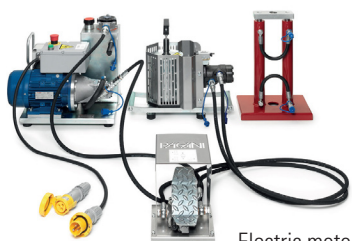
### Description

The Pagani DPM30 penetrometer allows continuous dynamic penetrometric tests to be performed. The fact that it is exceptionally small means it can be used on sites that are inaccessible to normal machines. A hydraulic extractor is used to extract rods, casing tubes and samplers. The penetrometer is controlled via a pedal-operated distributor. The hydraulic connections on the various components use quick connectors. Reliability proven by hundreds of units operational around the world.

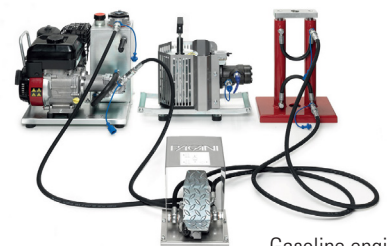
### Advantages

#### A POWER SUPPLY SUITED TO ANY APPLICATION

For the dynamic tests, the penetrometer is equipped with a 66 pound (30 kg) hammer with a 7.87 inch (200 mm) stroke, operated by a hydraulic motor. It is driven by a motor-pump unit, where the motor can be either electric or a gasoline engine.



Electric motor



Gasoline engine

The DPM30 can be used not only for dynamic tests, but also for soil sampling with limited disturbance, which guarantees improved ability to interpret the penetrometric data.



Soil sampler

# DYNAMIC CONE PENETROMETER

PORTABLE DEVICE FOR DYNAMIC PENETROMETRIC TESTS

## Technical Data

### GASOLINE ENGINE

Part	Weight
Gasoline Engine-Pump Unit	71.2 lbs (32.3 kg)
Percussion System	104.7 lbs (47.5 kg)
Hydraulic Extractor	35.3 lbs (16 kg)
Pedal-Operated Distributor	21.4 lbs (9.7 kg)
TOTAL	232.6 lbs (105.5 kg)

### ELECTRIC MOTOR

Part	Weight
Electric Motor-Pump Unit	84.9 lbs (38.5 kg)
Percussion System	104.7 lbs (47.5 kg)
Hydraulic Extractor	35.3 lbs (16 kg)
Pedal-Operated Distributor	21.4 lbs (9.7 kg)
TOTAL	264.3 lbs (111.7 kg)

### DP TESTS

Hammer		Fall Height		Rods		Cone	
66 lbs	30 kg	7.87 inches	200 mm	0.79 inches	20 mm	1.6 <sup>2</sup> inches 10cm <sup>2</sup>	60 °

### GASOLINE ENGINE

Type	Single-Cylinder, 4-stroke, Unleaded Gas, Forced Air-Cooling with Muffler
Starter	Hand Starter
Power	2.94 kW (4 Hp) @ 3060 rpm
Displacement	7.74 in <sup>3</sup> (127 cm <sup>3</sup> )
Torque	66 inch/pound (0.76 kgm, 7.5Nm) @ 3060 rpm
Air Filter	Pre-Filter and Cartridge Filter
Consumption	Variable from 1.22 - 0.32 gallons per hour (0.54 - 0.14 liters per hour) depending on power requested.

### ELECTRIC MOTOR

Type	Asynchronous Single-Phase Engine
Absorbed Watts	1700
Current Used	115Vac AC 60 Hz
Power	1.7 kW (2.3 Hp) @ 3420 rpm
Ignition Controls	Integrated Electrical Box with Emergency Push-Buttons
Connection to the Mains	The box has a built-in 2-pole plug (plus ground). A 20A and 130V 2-pole plug is always supplied (plus ground).

# DYNAMIC CONE PENETROMETER

PORTABLE DEVICE FOR DYNAMIC PENETROMETRIC TESTS

## HYDRAULIC SYSTEM

Circuit Capacity	0.26 Gallons (1 Liter)
Maximum Operating Pressure	2176 psi (150 bar, 15000 kPa)
Pumps	No. 1
Filter	Cartridge Filter with 25µm Filtering Capacity

## HYDRAULIC EXTRACTOR

Maximum Extraction Speed	0/1.584 Inches Per Second (0/4 Centimeters Per Second)
Hydraulic Extractor Piston Stroke	11.42 Inches (290 Millimeters)

## REFUELING

Fuel Tank Capacity	1 Gallon (3.8 Liters)
Hydraulic Oil Tank Capacity	2.1 Gallons (7.8 Liters)