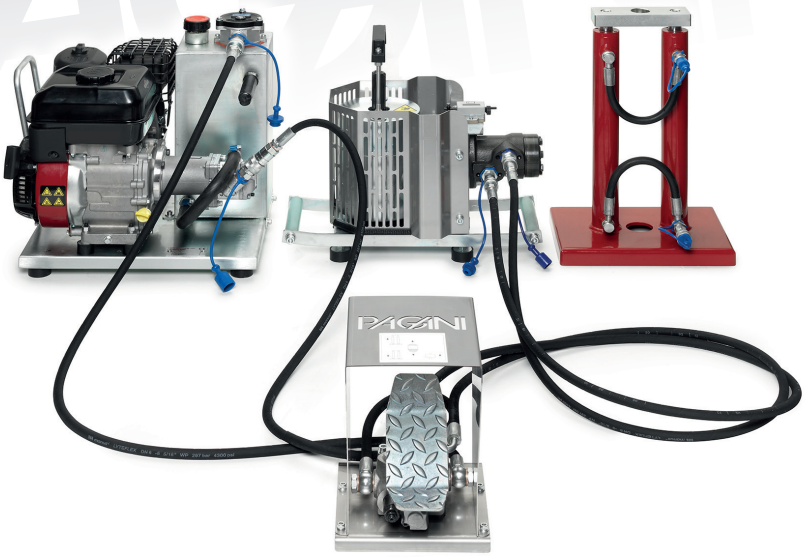
PAGANI®

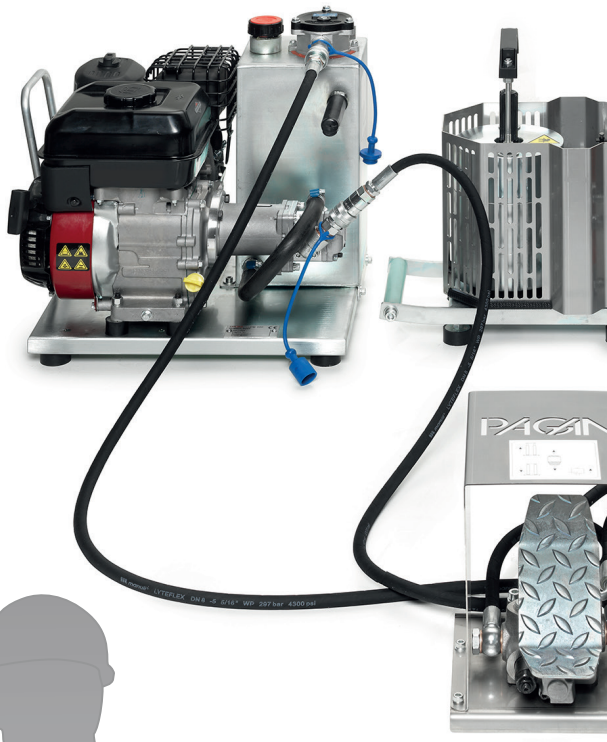
GEOTECHNICAL EQUIPMENT



MGS DPM30

PAGANI®
GEOTECHNICAL EQUIPMENT

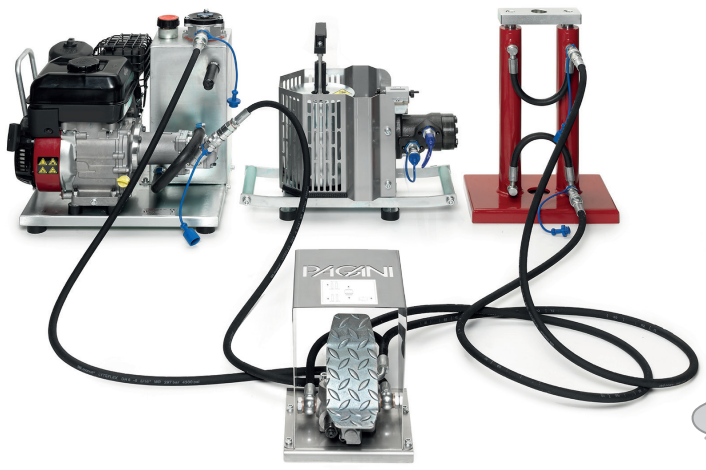
DYNAMIC PENETROMETRIC TESTS IN A PORTABLE DEVICE



The 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.



MGS

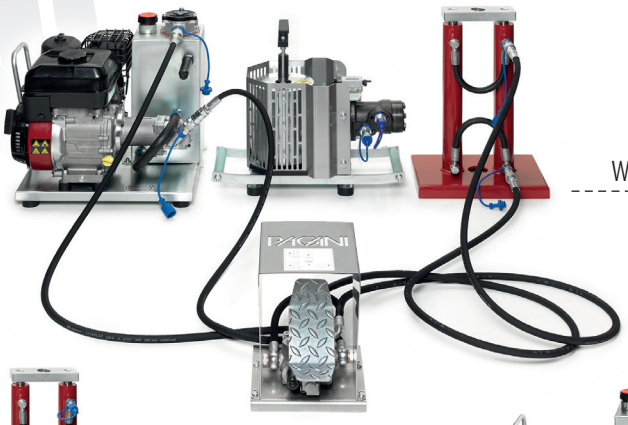
A POWER SUPPLY **SUITED** TO ANY SITUATION

For the dynamic tests, the penetrometer is equipped with a 30 kg (66 pound) hammer with a 200 mm (7.87 inch) stroke, operated by a hydraulic motor. It is driven by a motor-pump unit, where the motor can be either electric (230Vac or 115Vac) or a petrol 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.

With petrol engine

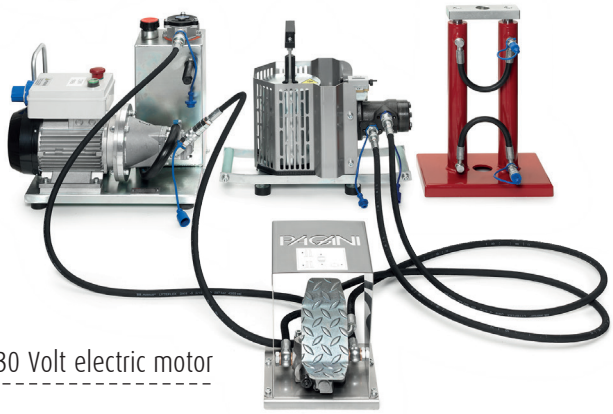
SAMPLER

AVAILABLE VERSIONS



With petrol engine

With 115 Volt electric motor



With 230 Volt electric motor

DP TESTS

The dynamic test can be carried out with the following values:

Hammer		Fall height		Rods		Cone		
30 kg	66 pound	200 mm	7.87 inch	Ø20 mm	0.79 inch	10 cm^2	1.6 $inch^2$	60°

PETROL ENGINE

Type	single-cylinder, 4-stroke, unleaded petrol, forced air-cooling whit muffler
Starter	Hand starter
Power (Hp) – (kW)	4 – 2.94 @ 3060 rpm
Displacement (cm^3) – (in^3)	127 – 7.74
Torque (kgm) – (inch pound) – (Nm)	0.76 – 66 – 7.5 @ 3060 rpm
Air filter	Pre-filter and cartridge filter
Consumption (litres/hour) - (US gallons/hour)	Variable from 0.54 - 0.14 and 1.22 - 0.32 depending on power requested

ELECTRIC MOTOR 230Vac

Type	Asynchronous single-phase engine
Absorbed watts (W)	1800
Current used	230Vac AC 50 Hz
Power (Hp) – (kW)	2.5 – 1.8 @ 2800 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 16A and 250V 2-pole plug is always supplied (plus ground)

ELECTRIC MOTOR 115Vac

Type	Asynchronous single-phase engine
Absorbed watts (W)	1700
Current used	115Vac AC 60 Hz
Power (Hp) – (kW)	2.3 – 1.7 @ 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)

HYDRAULIC SYSTEM

Circuit capacity (litres) – (US gallons)	1 – 0.26
Maximum operating pressure (bar) – (psi) – (kPa)	150 – 2176 - 15000
Pumps	No. 1
Filter	Cartridge filter with 25µm filtering capacity

HYDRAULIC EXTRACTOR

Maximum extraction speed (cm/s) – (foot/s)	0/4 – 0/0.132
Hydraulic extractor piston stroke (mm) – (inch)	290 – 11.42

NOISE OF PETROL ENGINE CONFIGURATION

L_{wac} (dB)	108 (ISO 3744)

NOISE OF ELECTRIC MOTOR CONFIGURATION

L_{wac} (dB)	107 (ISO 3744)

REFUELLING

Fuel tank capacity (litres) – (US gallons)	3.8 – 1
Hydraulic oil tank capacity (litres) – (US gallons)	7.8 – 2.1

COLOURS AND TREATMENTS

Standard colour	Ruby red RAL 3003
Pump-motor unit frame treatment	Galvanisation

DOCUMENTATION

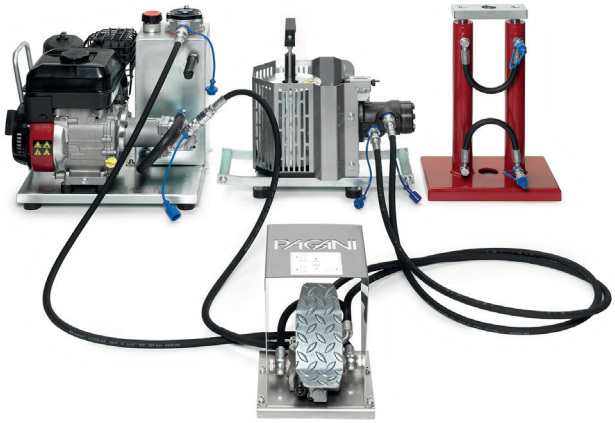
Penetrometer user's manual, motor user's manual and certificate booklet

PLATES

In order to identify the functions of the pedal that operates the hydraulic distributor, there is an engraved aluminium plate riveted for its protection.

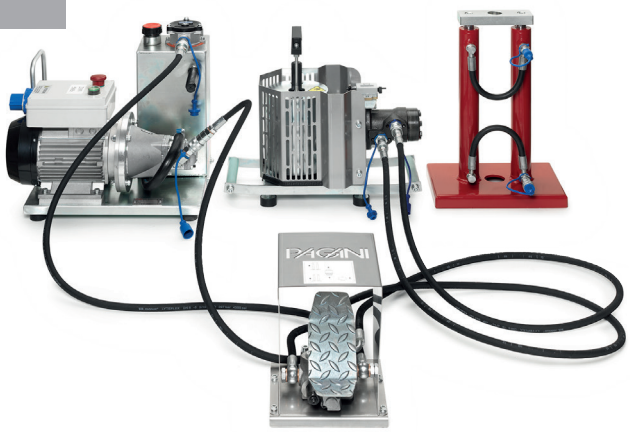
WEIGHTS WITH PETROL ENGINE-PUMP UNIT

	Weight	
Petrol engine-pump unit	32.3 kg	71.2 pound
Percussion system	47.5 kg	104.7 pound
Hydraulic extractor	16 kg	35.3 pound
Pedal-operated distributor	9.7 kg	21.4 pound
Total	105.5 kg	232.6 pound



WEIGHTS WITH ELECTRIC MOTOR-PUMP UNIT

	Weight	
Electric motor-pump unit	38.5 kg	84.9 pound
Percussion system	47.5 kg	104.7 pound
Hydraulic extractor	16 kg	35.3 pound
Pedal-operated distributor	9.7 kg	21.4 pound
Total	111.7 kg	264.3 pound



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Non-binding data, with right to make changes.
The diagrams may differ from the standard version.
The equipment may differ depending on which country it is being shipped to.