

SPT SERIES SOIL INVESTIGATION MACHINE

▶ HIGH QUALITY ▶ GOOD SERVICE ▶ PERFECT AFTER-SALE



SINCE 2006

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■ SPT

STANDARD: DIN EN ISO 22476-14 EN ISO 22476-14 ISO 22476-14

The SPT series dynamic probing rig is a highly functional soil investigation machine that can be used for soil-bearing capacity tests, compaction tests and for soil sampling.

Adjustable dropping height and weight quality allow it to carry out multiple standards of dynamic probing tests. Because of the equipped rod extraction unit, taking out the probe rod or sampler becomes easy. Furthermore, it is versatilely suitable for working in confined spaces, and easy to transport due to the folding mast feature. These make it very helpful for the work on site.

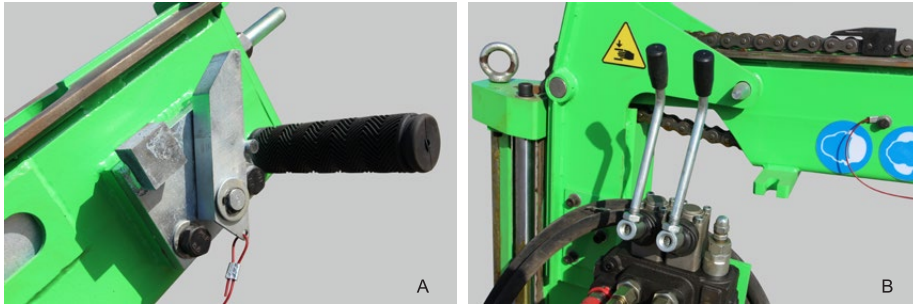
Feature

- Folding mast, easy to move;
- Adaptable to a variety of terrain, wide use;
- Drop weight can be adjusted as needed;
- A variety of dynamic probing testing standards can be carried out.
- Drop height can be varied between 50 and 750 mm;
- Mechanical blow counter;
- Hydraulic rod extraction unit;

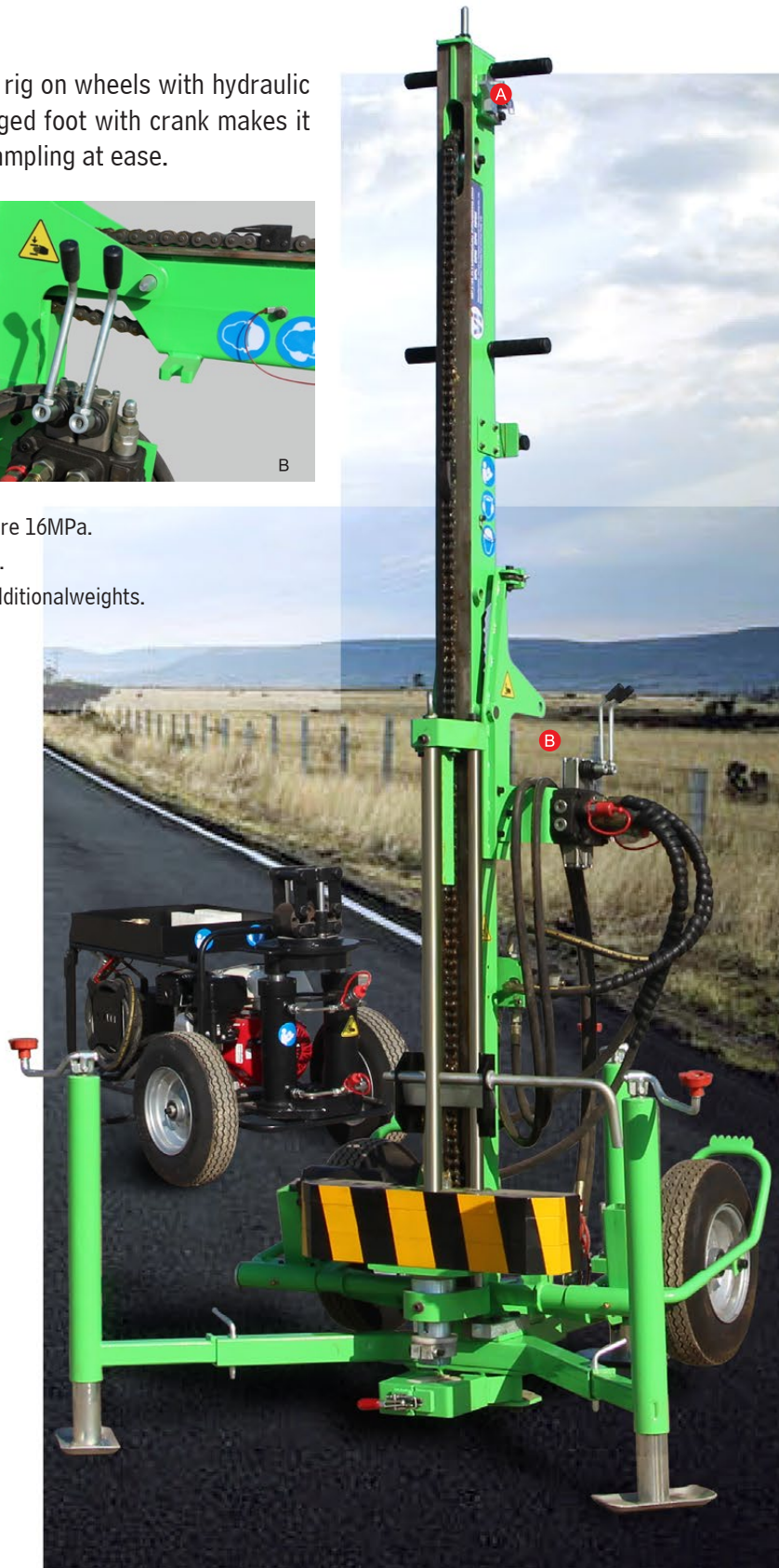
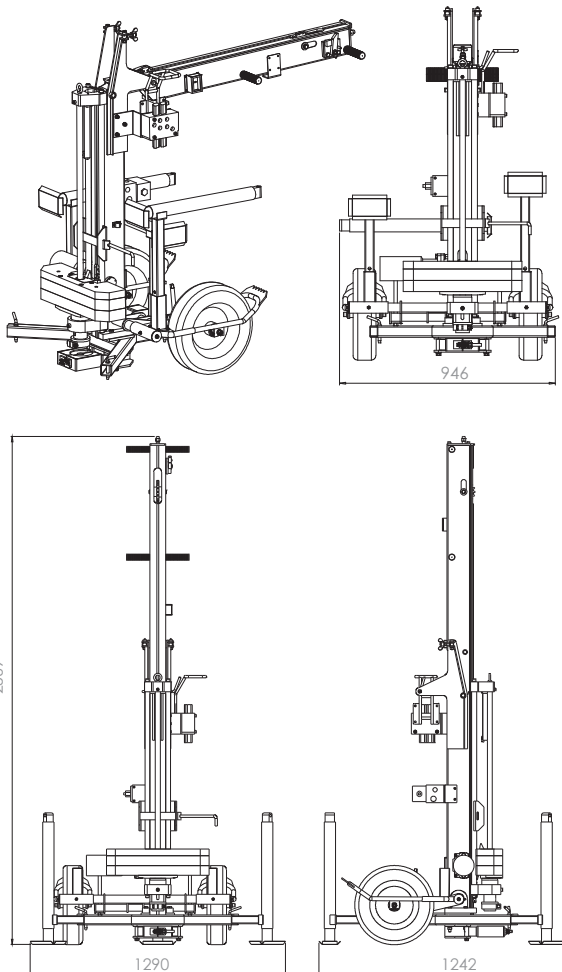


■ SPT-H200

SPT-H is a manually transported dynamic probing rig on wheels with hydraulic motor and folding mast. The integrated three-legged foot with crank makes it can be erected firmly on site and allows for soil sampling at ease.



- 6.5hp, 4-stroke Honda motor, flow 15L/min, rate pressure 16MPa.
- Three-leg foot for perpendicular working in all positions.
- 10 kg basic drop weight and 20 kg + 20 kg + 13.5 kg additional weights.
- Dynamic probing DPL, DPM, DPH, DPHS and SPT.



■ SPT-C390

SPT-C390 is a fully hydraulic soil investigation machine mounted on a self-propelled rubber chain crawler and extremely suitable for rough terrains. The crawler movement system makes it easy to transport. It can control the lifting of the mast by the oil cylinder, adjust the lateral rotation, adjust the front and back, and fold the upper part of the mast.



Honda engine GX390, maximum power 8.7kw, electric start, with hour meter and voltmeter.



Worktable with vice and large capacity storage boxes on both sides.



10 kg basic drop weight and 20 kg + 20 kg + 13.5 kg additional weights.



Dynamic probing DPL, DPM, DPH, DPSH and SPT.



■ SPT-C690

SPT-C690 is an upgraded version of SPT-C390. SPT-C690 is also a soil investigation machine with a self-propelled rubber chain crawler but more powerful. It is equipped with a Honda engine GX690, 2 cylinders 22HP. In addition to the functions of SPT-C390, the SPT-C690 can be equipped with other components to achieve

fully hydraulic soil investigation machine. It is equipped with the functions of SPT-C390, more functions.

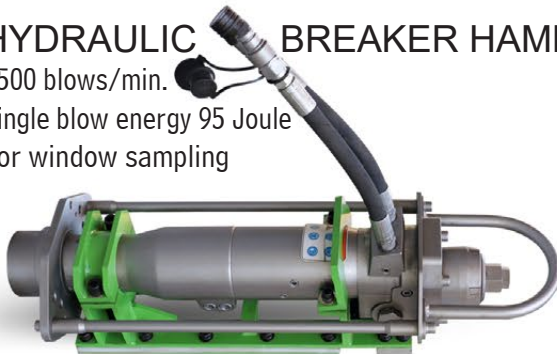
Optional accessories

▼ DROP WEIGHT AFNOR A 128KG

- Drop height 750mm
- Weight levels 32kg/64kg/96kg/128kg
- For undisturbed sampling (RAMBO)

▼ HYDRAULIC BREAKER HAMMER

- 1500 blows/min.
- Single blow energy 95 Joule
- For window sampling



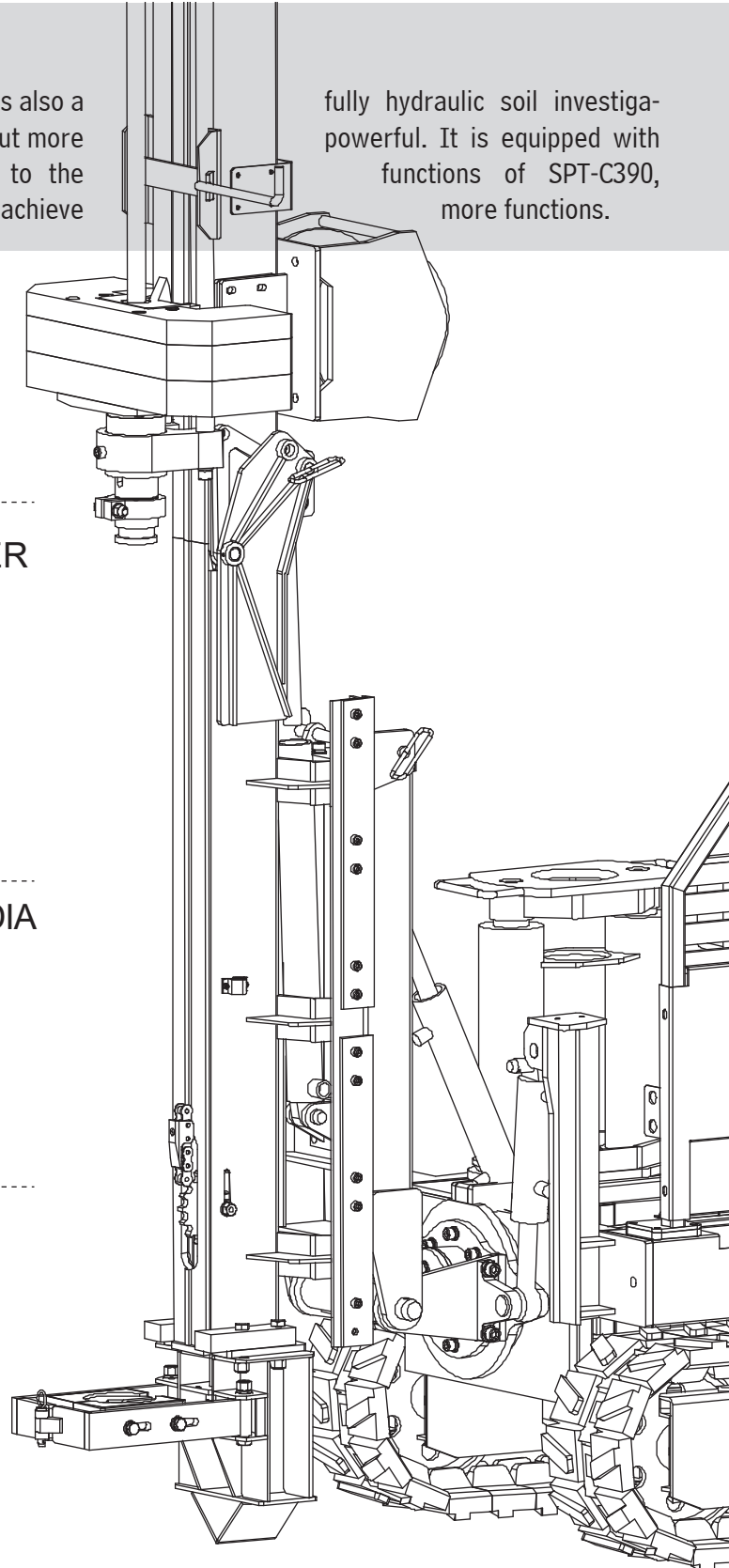
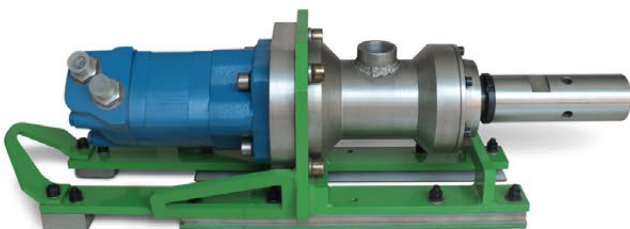
▼ SURFACE CORE DRILLING ≤150MM DIA

- For asphalt, concrete, hard rock layers



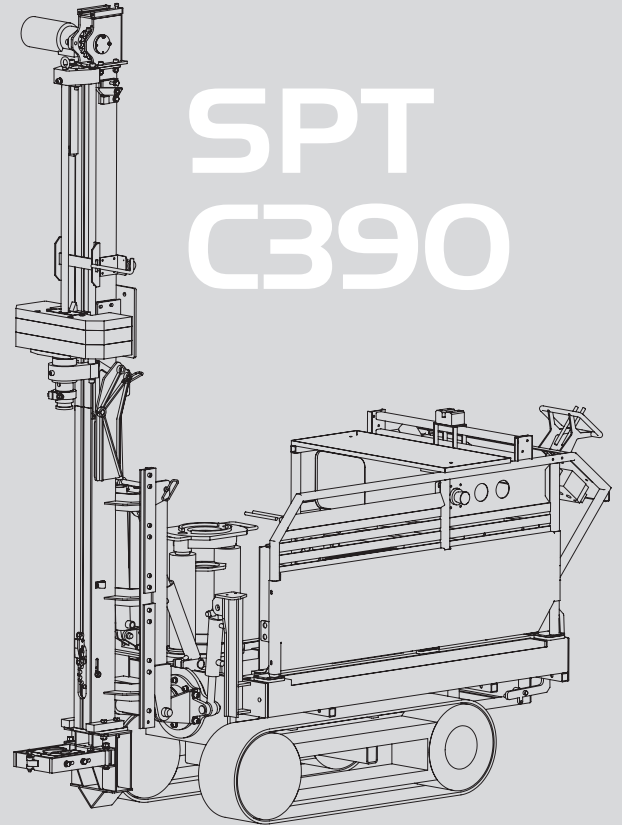
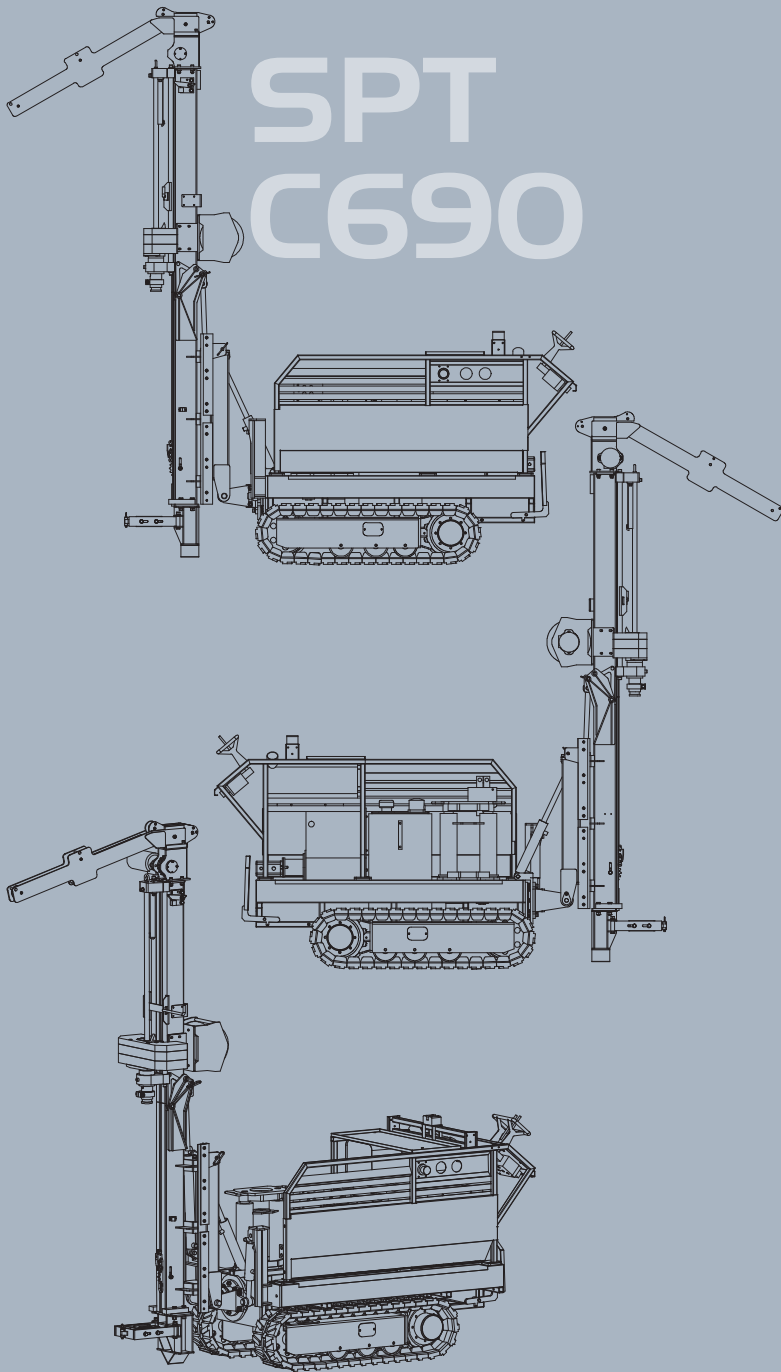
▼ ROTARY DRILL HEAD

- SPT-C390 Maximum torque 700N
- SPT-C690 Maximum torque 1200N



■ DRAWINGS AND DETAILS

▼ SPT-C690

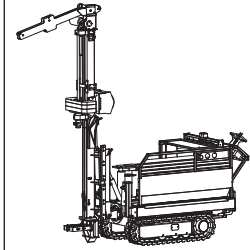
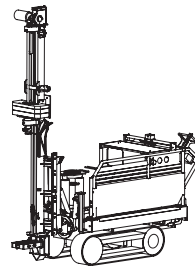
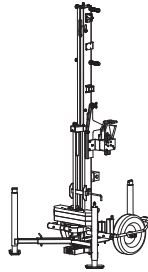


▲ SPT-C390



■ STANDARD CONFIGURATION

Item \ Mode	SPT-H	SPT-C
Hammer mass	DPL 10kg, DPM 30kg, DPH 50kg, DPSH & SPT 63.5kg	
Number of blows	15-30 blows per minute	
Dropping height	500 / 750mm adjustable	
Window sampling	With 51mm outer diameter, 1m length split sampler (Optional)	Double-layer sampling tube, With 51mm outer diameter, (57/71/89 can be customized) 10m
Size / Weight	1600x940x1540mm 230kgs	820x1500x2400 mm (Crawler/ Full size) / 845kgs
Max speed		2.5km/hour
Rod	Dia. 22mm x 1m, 2 pcs; Dia. 32mm x 1m, 10 pcs	
Brass cap	One is suitable for dia. 22mm rod, the other is for dia. 32mm rod	
Cone	90° cones, nominal base areas are 10cm ² , 15cm ² , 16cm ² , and 20cm ² respectively	
Rod clamp	Suitable for dia. 22mm and dia. 32mm rod and dia. 51mm window sampler	
Rod extraction unit	Including oil cylinder and clamp (suitable for 20~65mm)	
Tools	~	



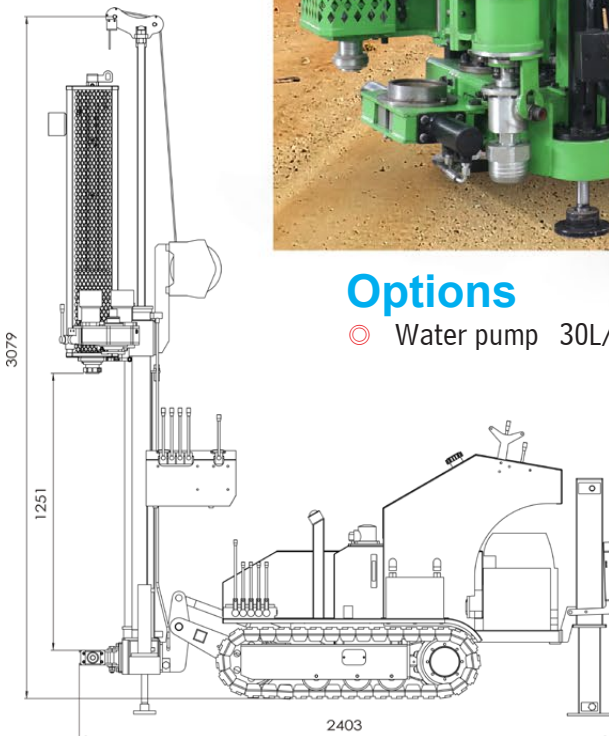
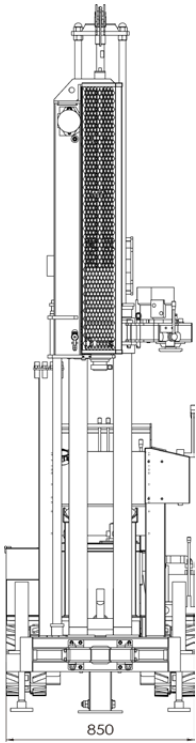
	SPT-H200	SPT-C390	SPT-C690
ENGINE	Honda GX 200	Honda GX 390	Honda GX 690
ADD-ON DEVICES			
Drop weight system 128 kg / 750 mm drop -Dynamic probing ISO/DIS 22476-2:2002	—	—	✓
Hydraulic breaker hammer -Soil sampling -1.500 blows @ 95 Joule per minute		✓	✓
Rotary drill head -SPT-C390 Maximum torque700N -SPT-C690 Maximum torque1200N	—	✓	✓
Surface core drilling ≤150 mm dia -For asphalt,concrete,hard rock layers	—	✓	✓
BASIC CONFIGURATION			
Drop weight system -SPT 63.5 kg / 750mm 50kg / 500mm 30 kg / 500mm 10kg / 500mm	✓	✓	✓
SPT Drop weight system	✓	✓	✓
Battery	—	✓	✓
Electric starter	—	✓	✓
Battery power display meter	—	✓	✓
Engine hour meter	—	✓	✓
Emergency stop switch		✓	✓
Hydraulic lateral mast adjustment		✓	✓
Hydraulic erection of top mast part		✓	✓
Tube vice / work bench		✓	✓
Mechanical blow counter	✓	✓	✓
Hydraulic rope winch	—	✓	✓
LED Working light	—	✓	✓
Toolkit	✓	✓	✓
Guide block 22/32/51	✓	✓	✓
Auxiliary tank 25L	✓	✓	✓
Lifting cylinder 100mm/16t with roller type chuck	✓	✓	✓
Lifting cantilever (Accessories for replacement)	—	✓	✓
ACCESSORIES/OPTIONS			
Hand truck for add-on devices	—	✓	✓

■ SPT-LC

SPT-LC is a crawler-type self-propelled multifunctional soil investigation machine. It can perform sample weighing and rotary/auger functions on the same drilling rig, and can also carry out the standard penetration test SPT. It is lightweight, cost-effective, fast and economical, making it an ideal tool for environmental soil sampling.

Feature

- Can be transported on standard vans;
- Rubber tracks, Three-leg foot for proper levelling at site;
- SPT-rotary head and mast rod extractor;
- Equipped with hydraulic winch;
- Highly integrated industrial design;
- Easy to switch between different functions.

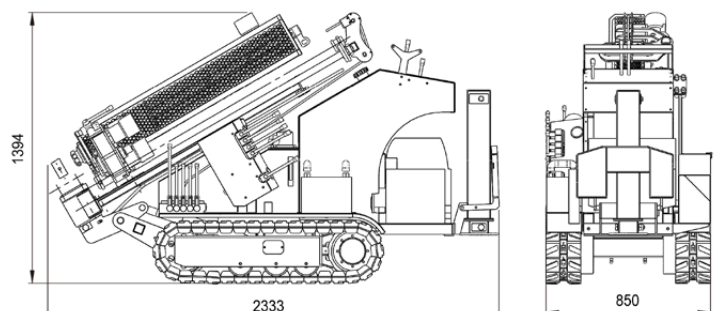


Options

- Water pump 30L/min 20bar

Applications

- Standard penetration test-SPT.
- Soil sampling with percussive core barrels.
- Rotary drilling, auger drilling.



■ TECHNICAL PARAMETERS

SPT-LC			
ENGINE	HONDA GX690		
Power	16.5Kw (22HP)		
Cylinders	2		
Speed	3600r/min		
Voltage	12V		
Starting mode	Electric start		
Flow of hydraulic pump	60L		
Operating pressure	170Bar		
Tank capacity	70L		
MAST			
Pull up	13T		
Pul down	9T		
Stroke	1200mm		
CRAWLERS			
Width	820mm		
Length	1200mm		
Shoes	Rubber		
Approach angle/Departure angle	24°/19°		
Speed	3Km/h		
Legs	2+1		
SPT SYSTEM			
drop weight	10kg/30kg/50kg/63.5kg		
Stroke	500mm/750mm 760mm (optional)		
Speed	0-30gpm		
Counter	Automatic		
ROTARY HEAD	OPTION A	OPTION B	OPTION C
Torque Nm	420/840	510/1000	650/1300
Speed	130-260	100-210	70-140
HYDRAULIC ROPE WINCH			
Wire rope	6mm		
Pull up	0.8T		
WATER PUMP(OPTIONAL)			
	30L/MIN 20BAR		