



# *Premier Compact 110 Series Percussive Soil Sampling Rig*



**The Premier Compact 110 Series Percussive driven sampling rig, specifically designed for soil sampling and testing for geotechnical and environmental applications.**

**Premier  
Compact  
110 Series**



The rig is now in its operating position with the mast set vertical and the foot plate positioned on the ground using the powered vertical slide. A window sampler is now placed in position and the drive carriage anvil is lowered onto the sampler. The drop weight is now activated and the sampler is driven in automatically one metre and stopped.





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The carriage is raised and swung to the side which now allows removal of the sampler from 4 mts down, the bore hole is staying open which makes it possible for the drill rods to be left coupled together and extracted up into the upper rod guide. With the sampler fully extracted it can be disconnected, the next sampler connected and lowered back down using the extractor cylinder or by allowing the sampler/rods to free fall. This method greatly speeds up the sampler changing process. Where the bore hole is not staying open it can be cased and sampled simultaneously and the above process used again.



**Drilling can be achieved on gradients of upto 30 degrees using the hydraulic tilting and vertical slide action of the mast assembly.**





**Optional hydraulic clamps can be fitted to assist in both raising and lowering samplers/rods in the bore hole**



Above is a range of samplers, casing and rods that are used in the drill operation  
1. SPT sampler 2. Window sampler 3. Windowless sampler  
4. U 100 sampler 5. Casing 6. Various drill rods



## **110 series Features**

- ◆ Hydraulic rod clamps can be fitted as an optional extra.
- ◆ Due to proximity of the hydraulic controls to the mast assembly all the functions can be controlled, allowing the machine to be safely operated by one person.
- ◆ Gradient drilling is made possible due to hydraulic tilting and vertical sliding actions on the mast assembly. ( Max 30 deg.)
- ◆ Quick extraction of the rods can be achieved by the use of the two speed jacking facility.
- ◆ Samplers up to a length of two metres can be installed.
- ◆ Safety is greatly increased by the drop weight being fully enclosed.
- ◆ Complete hydraulic operation results in the rig being far less physically demanding on the operator.
- ◆ Three storage compartments, capable of storing rods, samplers and tools.
- ◆ Tracks are remote controlled for effortless manoeuvres and safety.
- ◆ The undercarriage motion is achieved by hydraulic track drives each fitted with negative brakes, each track is independantly controlled allowing counter track rotation (one track in forward the other in reverse simultaneously), which enables the rig to turn on the spot.
- ◆ A rotary head can be supplied for coring concrete prior to drilling.
- ◆ In situ testing by various standards (DPH, DPSH and SPT testing).
- ◆ Various engine options ranging from 10 hp - 13 hp including diesel engines. All of which feature electric start and a 12-volt charge coil allowing attachments to be fitted.
- ◆ Variable width tracks can be fitted as an optional extra. (750 mm - 1050 mm)
- ◆ The 110 series can be finished in your company colours.

*\* Some of the features listed above are optional extras.*

# Premier Compact 110 Series Specifications

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## Drop Weight Carriage

The carriage is constructed from steel box section which doubles up as the hammer guide and machine guarding. Capable of DPSH, DPH and SPT testing.

Trip Hammer rate:	0 to 40 bpm
Trip Hammer height:	500 to 750 mm
Trip Hammer weight:	50 or 63.5 kg

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## Mast Assembly

Height:	2150 mm
Pull back force:	7000 kg
Stroke:	1300 mm
Vertical slide stroke:	300 mm

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## Power Pack

### Engine

Standard: Honda 13 hp GX 390 petrol electric start

Optional: Yanmar 10 hp LA100 diesel electric start

### Hydraulic output

2 no. gear pumps. 15 l/min @ 180 bar

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## Hydraulic clamps

Diameter range:	30 - 155 mm
Clamp force:	18 KN

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## Crawlers

Speed:	3 km/h
Max gradient:	30 deg.
Ground pressure:	0.25 kg/cm <sup>2</sup>
Track width:	180 mm
Track length:	1240mm

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## Min. Dimensions and weights

Width:	750 mm	
Height:	1350 mm *	2200 mm #
Length:	2000 mm *	2100 mm #

\* (Mast tilted down, side basket and upper rod guide removed)

# (Mast set vertical, side basket and upper rod guide removed)

Weight:	850 kg
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