

Drilling Services

Joy 4 Drilling Rig: Technical Specification



Ecologia's Joy 4 Hybrid Rig is fitted with two fixed drilling heads which are fully equipped for coring, sampling and in-situ geotechnical testing.

The **TR1200** Rotary Head provides conventional drilling and sampling capabilities including:

- Continuous Flight Augering
- Open Hole Rotary (Tricone and Dragbit)
- Single Tube coring
- Dual Tube and Triplex Coring

For Environmental applications in sediments and alluvium the **S2x7.5** Sonic Head can be used for rapid penetration / sampling. Our Aqualock™ sampling system allows optimal retrieval of undisturbed soil core samples .

Hydra™ Joy 4 Hybrid Technical Specification			
Chassis Dimensions (with guard)		Mast and Stroke	
Length	5150 mm	Effective Stroke	3500 mm
Width	2000 mm	Pull Down / Pull Up	6000 kg
Carriage (folded) Height	2900 mm	Mast Yaw	25 degrees
Track width	1800 mm	Displacement Dump	1000 mm
Powerplant		Clamp Effective Diameter	450 mm OD Tool
Power Output	89 kW (118 BHP)	Poclain TR1200 Rotary Drilling Head	
Plant	PERKINS super-silenced	Drive	2 3/8 API Std Pin Down
Helical Screw Drilling Pump		Maximum Torque	20 KNm (14760 lbf-ft)
Flow Rate Qmax	350 L/min	Maximum Speed	320 rpm
Max Pressure O/P	40 Bar	Eijkelkamp S2x7.5 Sonic Head	
Hydraulic Circuit		Frequency	145 Hz
2 x Hydraulic Pump	L/S 120 L@ 300 Bar	Max. Motor Torque	1.2KNm
2 x Hydraulic Pump	L/S 40 L@ 160 Bar	Output Force	140 KN
		Maximum Pulldown Force	25 KN

