

HS3400DP CENTRIFUGE



The HS3400DP centrifuge with pump tank is a combined unit used for the fine cleaning of drilling muds and other water based fluids having Marsh Funnel viscosities of less than 100 seconds per U.S. Quart and for the flocculation of waste muds.

The machine comprises two modules, the centrifuge module and the pump tank module. The two parts fit together for transport and form a unit that is the same size as a standard 20 foot freight container; the overall size being 6058x2438x2591mm high. The unit is fitted with twistlocks for ease of transport and handling on site. The weight of the complete unit is 11 tonnes. The centrifuge module weighs 5 tonnes and the pump tank module weighs 6 tonnes. For operation the centrifuge module mounts above the pump tank module on a cantilever frame that extends from the tank unit. The working footprint is 3.5 metres by 3.5 metres by 5.2 metres high. The solids discharge is on the front 3.5 metre face of the tank. Access to the pumps, stores and pipework is at the rear 3.5 metre face. No side clearance is required.

The HS3400DP centrifuge is a long bowl, high speed decanting centrifuge with stainless steel bowl and scroll. The wear parts at the

tips of the scroll are protected with tungsten carbide tiles. The bowl is driven by belts from a fixed speed electric motor. Starting is through a soft start fluid coupling. The machine is fitted with a variable speed, hydraulically driven backdrive for altering the scroll speed. This enables the centrifuge to be used for a variety of purposes including fluid recovery, de-sanding, desilting and flocculant dewatering. The centrifuge, drive motor, backdrive and electrical control panel are mounted within a strong hollow section frame fitted with a panelled roof and side tarpaulins.

The pump tank module houses a Bredel peristaltic pump with variable speed drive which is used for supplying a controlled flow of fluid to the centrifuge, a Denver 75/50 centrifugal pump for centrate discharge, a stores compartment that houses the main electrical control panel and a storage tank for wash water.

TECHNICAL DATA

Centrifuge module:	Dimensions:	2600x2438x2591mm high.	Weight:	6 tonnes.
	Bowl diameter:	356mm.	Bowl length:	1245mm.
	Bowl drive power:	22kW 6 pole motor with inverter control.		
	Scroll drive power:	Backdrive powered by 5.5 Kw motor with direct on line starting.		
Pump tank module:	Dimensions:	3458x2438x2591mm high.	Weight:	5 tonnes.
	Feed pump:	Bredel SP65 feed pump driven by 4 Kw motor with direct on line starting.		
	Discharge pump:	Denver 75/50 transfer pump powered by a 7.5 Kw motor with direct on line starting.		
Overall size:	For transit:	6058x2438x2591mm high.	For work:	3500x3500x5200mm high.
Weight:	For transit:	11 tonnes.	For work:	17 tonnes including fluid.
Total Power:	Total installed power 39kW. Running current, including feed pump, of approximately 60A, short term starting current of up to 120A. Supply cable is 3 phase & earth. No neutral is required. No earth leakage protection is provided.			
	1 No. 220 volt single phase 3kW transformer for lights and small tools.			
	2 No. 3 phase and earth sockets, each of 32 amp capacity.			
	Normally a 150 KVA generator would be sufficient to operate the equipment.			
Process capacity:	Up to 9m ³ /hr of mud or 6m ³ /hr of flocculated sludge.			
Solids capacity:	Up to 4 tonnes/hr.			
G Force:	Variable by inverter controlled bowl drive, up to 2500 'G'.			
Cut point:	About 12µm at 1000G. Smaller particles may be removed at increased G and lower throughput rates.			
Solids discharge:	Solids discharge is at the driven end of the bowl, beneath cantilever onto the ground or into a skip of client's supply.			
Fluids discharge:	Fluids discharge is to the pump tank for transfer by the Denver pump.			
Noise emissions:	65dB at 5m.			