

152DP CENTRIFUGE

The '152DP' centrifuge is a high speed decanting centrifuge with a 500mm diameter variable speed hydraulically driven bowl and a variable speed hydraulic drive double decanter scroll. It is capable of developing up to 1600 'G' Force and can process fluids at rates of up to 25m³/hr, depending upon fluid properties and solids content and will separate solids down to approximately 10 microns in size. The unit may also be used in conjunction with a flocculation system to partially dewater flocculated solids and with the appropriate treatment remove virtually all of the solids from active or waste water-based muds. The centrifuge may be used for many applications ranging from desanding of muds through silt removal to waste mud clean-up.

The centrifuge and power pack is mounted within a heavy-duty hollow section steel frame measuring 3175x2160x2000mm high. The unit is complete with an electrical control panel with motor starters, ammeters and start-stop operating buttons, also fitted are easily read hydraulic oil flow meters used to determine the speed of the bowl and the relative speed of the scroll. For transport, the '152DP' centrifuge and its two cantilever mounting beams are placed inside a special tank; when in use the centrifuge is mounted upon the cantilever beams which are set on top of the tank. Folding work platforms with tarpaulins provide weather protection for the equipment and personnel. A pump module attaches to the tank making the combined unit the same size as a standard type 1CC, 20 foot freight container complete with twistlock corner castings. The pump module houses a mechanically variable speed peristaltic pump used to feed fluid to the centrifuge, and a centrifugal pump used to discharge the fluid centrate from the centrifuge. The pump module also contains a tank for the storage of water used for flushing out the centrifuge at the end of each work period and a stores compartment housing the main electrical controls.



The special features of infinitely variable speed control for the bowl and independent speed control of the scroll enable the performance of the centrifuge to be accurately matched to the task in hand. For the removal of relatively coarse solids, a low bowl speed would be used and an increase in discharge rate can be achieved by running the scroll at a high differential speed. For the separation of very fine solids, a high bowl speed would be needed and the retention time for solids within the centrifuge can be increased by running the scroll at a low differential speed. The pond depth within the centrifuge can be altered by the factory fitting of different height weir dams. The pond depth controls the length of the beach within the centrifuge and the dryness of the discharged solids. The rate of feed to the unit is controlled by altering the speed of the peristaltic feed pump.

TECHNICAL DATA:

Centrifuge:	Dimensions:	3175x2160x2000mm high.	Weight:	5 tonnes.
	Power:	37kW exproof electric motor with Direct-On-Line starting and exproof controls.		
	Running current:	Not to exceed 58A at 380 to 415V, 50 Hz.		
Centrifuge Tank:	Dimensions:	3458x2438x2591mm high.	Weight:	4 tonnes.
	Power:	NIL.		
Pump Module:	Dimensions:	2600x2438x2591mm high.	Weight:	4 tonnes.
	Power:	15kW electric motor for peristaltic pump with Direct-on-Line starting. 15kW motor for discharge pump with Direct-On-Line starting. Supplied with 15m of wire armoured 3-phase and earth power cable.		
	Running current:	Combined maximum of 54A at 380 to 415V, 50 Hz.		
Overall size:	For transit:	6058x2438x2591mm high.	For work:	6600x3438x4800mm high.
Weight:	For transit:	13 Tonnes.	For work:	26 Tonnes.
Total power:	380-415V, 50Hz, 3-phase & earth.			
Running current:	112A, short term.			
Starting current:	Up to 440A.			
Process capacity:	Up to 25m ³ /hr with low viscosity fluids but more typically 15m ³ /hr.			
Solids removal rate:	Up to 4 tonnes/hr.			
G Force:	Variable up to 1600 'G'.			
Solids discharge:	Beneath cantilever onto ground or into skip of client's supply.			
Fluids discharge:	To the centrifuge tank through in-built pipework. Built-in Svedala 100x75 centrifugal discharge pump with 15kW overhead motor.			
Noise emissions:	65dB at 5m.			