

SU72DP ULTRA-FINE DESILTER



The SU72DP is a compact ultra-fine desilter. The name derives from **S**upplementary **U**nit with **72** No. 44mm hydrocyclones and a **D**ischarge **P**ump. The unit normally works downstream of a desander, a desilter or mud cleaner, but can operate on its own. The machine is used to remove fine sands and silts from low or high viscosity fluids and will separate much smaller sized solids than conventional desilters.

The SU72DP comprises two modules, a shaker module and a pump tank module. For transport the two parts fix together to form a unit that is the same size as a standard 20 foot freight container with an overall size of 6058x2438x2591mm high. The unit is fitted with twistlocks. The weight of the complete machine is 12 tonnes. The shaker module weighs 5 tonnes and the pump tank module weighs 7 tonnes. In use, the shaker module is mounted above the pump tank module and the working footprint is then 3.5m by 2.5m with a height of 5.2m. The solids discharge is on the front 3.5m face. Access to the pumps, pipework and stores is at the rear 3.5m face. No side clearance is required.

The shaker module contains a two deck VSM 100 linear motion shaker and 2 No. clusters of 36 No. 2" high performance

hydrocyclones. The full fluidflow is supplied to and screened by the upper deck of the shaker, which normally carries a 30 mesh screen. The lower deck of the shaker uses 4 No. pre-tensioned screen panels. The aperture size of these is determined by site conditions, but the panels are normally of 105 to 300 mesh size and are used for de-watering the hydrocyclone underflow. The shaker module has a fold-down platform that provides access to the front of the shaker for screen changing and maintenance.

The pump tank module houses a Svedala 150x100 centrifugal pump with 45kW overhead motor used to supply pre-screened fluid to the hydrocyclones. Another Svedala 150x100 pump with a 30kW overhead motor and mechanically variable speed drive is mounted within this module and is used to discharge the cleaned fluid from the machine. Both these pump motors have star-delta starting. A lockable, walk-in stores is built into the pump tank module. This holds a small compressor and the electrical control equipment for the whole machine as well as providing secure storage space.

TECHNICAL DATA

Fluid throughput capacity:	Up to 150m ³ /hr with low viscosity fluids. Fluid to have a Marsh Funnel viscosity of less than 180 seconds per U.S. Quart. Flowrate will be substantially reduced with high fluid viscosity.
Solids removal rate:	Up to 15 tonnes/hr of sand. Reduced solids removal rates may be achieved when the unit is fitted with fine mesh screens for silt removal.
Transport size:	6058x2438x2591mm high and can be transported as a 20' type 1CC freight container.
Weight:	12 tonnes, complete with twistlock fasteners at standard dimensions.
Shaker module weight:	5 tonnes.
Pump tank module weight:	7 tonnes.
Operating size:	3500x2500x5200mm high.
Operating weight:	18 tonnes (including fluid in the tanks).
Power:	415V, 50Hz, 3 phase and earth; no neutral is required. Normally a 180KVA generator would be required.
Running current:	Up to 150A.
Starting current:	279A per phase.
Hydrocyclone feed pump:	Svedala 150x100 centrifugal pump with 45kW motor with star-delta starting.
Discharge pump:	Svedala 150x100 centrifugal pump with 30kW motor with star-delta starting.
Shaker:	2 No. 2kW motors with direct-on-line starting.
Compressor:	3kW motor with direct on line starting.
Lighting & small tools:	1 No. 220V, 3kW, single phase transformer.
Other:	2 No. 32A, 3 phase auxiliary sockets.