High the cleaner can be directly mounted on

Business, Industries

High consistancy (Hc) cleaner is made ready according to foreign products and relevent technical information. It is used for removing high density particles like sand, metalic pieces (staples, paper clips) etc., from pulp in pulping and paper industry. These particles may cause wear or damage to subsequent machinery and therefore they must be removed from pulp.

It is one of the main equipment in wastepaper recycling and pulping industry. It is placed vertically, it can takes up less area. The cleaner can be directly mounted on floor and fixed on rigid support as well. It is very easy to operate and maintain the cleaner. Basic Parts: The cleaner mainly consists of; inflow pulp chamber, cone, support, dregs tank. The pulp inlet line is present at the top of the cleaner in tangancial direction, accepted pulp outlet line is present at the centre of the top of the inflow pulp chamber with an inserted wear resisting sleeve. The cone is devided into two parts as upper section and lower section.

Upper part is pulp section and lower part is dregs section. The balancing water inlet line is present at the top of dregs section and washing water inlet line is present in dregs section. Sight glass is also present in the dregs tank for observation.(Source: Voith)Working Mechanism: Pulp goes into the cleaner along a tangent line at a pressure 0.

2 to 0. 6 MPa. When the pulp moves in spirals along the internalwalls, accelerative centrifugalisation occurs. Because of this centrifugalisation, heavy particles present in the pulp are thrown towards the internalwalls and move downwards in spirals. At the center of the area near the smaller diameter end of the top cone, the accepted pulp in spiral motion forms eddy

under the interaction of speed and the motion area. Simulatniously the accepted pulp forms an up screw-column motion and flow outwards through the outlet present at the top of the cleaner. Heavy particles go downwards to the bottom of the cone and settle in the dregs tank. This is connected to a high pressure water line, for washing the heavy particles and recovering the fibre.

Under low consistancy and high-pressure difference, effeciency of cleaner to remove heavy particles is high. Main specifications and technical parameters: We are giving what are the specifications and technical parameters we have to consider before implementing the cleaner. Model Flow rate : L/min Consistancy % of inflow pulp Pulp inflow pressure: MPa Difference of inflow and outflow pulp pressure: MPa Pressure of equilibrating water: MPa Flow of equilibrating water : L/Min Pressure of compressed air: Mpa Rejects discharge methodAutomatically/ManuallyWeight of equipment Operation: 1. Open the valve of the accepted pulp outlet, close the upper and under gate valves of the dregs chamber. 2. Open the balancing and washing water valves and fill water into the drehs tank. 3.

Open the upper valve of dregs tank, then the washing water raises continously. 4. Start to supply pulp, and ensure the pressure difference between the inlet and outlet flow pulp. 5. Balancing water pressure must be above the inlet pulp flow pressure, if the pressure is low adjustment should be done. 6. After settledown of dregs in dregs chamber we have to discharge them periodically.

To do this we have to close the washing water valve and upper valve of dregs tank, and then open the the lower valve of dregs tank to discharge the dregs.