

Miscellaneous

Rotary Sieve for Wood Shavings

Overview

To manufacture a rotary sieve to remove sawdust and fine flour from wood shavings. The machine was to be capable of handling 4 m³ per/minute. The dust free product was used for horse bedding.

Activity

The rotary sieve included aspiration to remove the airborne particles from within the body of the sieve, via a fan and cyclone system into tote bags. The product was fed into the centre of the cylindrical rotating screen and the tumbling action of the product within the screen segregated the product, as it moved along the length of the screen discharging at the end outlet.

The dust and under sized product passed through the screen and fell through the fines outlet. The sieve was angled to maintain product flow with helper bars within the machine to carry product towards the clean end outlet. The drum was mounted on rolling rings and carried on drive rollers and positioning rollers to maintain stability. The sawdust removed was carried out of the screen via a screw conveyor mounted along the bottom of the machine. Once cleaned the shavings left the cleaner up a chevron belt conveyor and were deposited into a collecting bunker prior to packing.

