



How Our Equipment Operates

Our equipment is normally set-up on location and used to mix the Bentonite Slurry solution used to float the cuttings out of the tunnel and cool the drilling surface while cutting.

The fluid is collected at a central point from the tunnel and transferred to the mud system for processing. The mud system will process the fluid in stages.

The returned fluid is pumped over the "Scalping Shaker" removing all the large and mid-sized particles from the system.

Next (depending of the size of the recycler) the fluid is collected by a centrifugal pump and processed thru either a DeSander cone bank (large units) or a straight to a DeSilter cone bank (small to mid-size).

Note: on the larger systems the fluid is processed thru a DeSander cone bank first due to the sheer amount of volume then is sent to a DeSilter cone bank. On the "mid-sized to small" units the DeSander cone bank is eliminated and the DeSilter cone banks are increased in capacity to compensate.

We normally use 10" DeSander cones and 5" DeSilter cones on our units. Other sizes are available for different applications.

The size of the cones will dictate the "cut-point" (size) of the solid that the cone will remove along with the volume the cone will process. The cones can be mounted over a shaker to further "dry" the cuttings prior to depositing for removal.

The "Cleaned" fluid is collected in the final tank where it can be thickened or thinned as necessary to meet the contractors' requirements. This is accomplished by using a venturi style mud hopper and submersible jet stirring guns to "Shear the fluid".

Finally a centrifugal pump can be used to pressure feed the cleaned and processed fluid back to the tunneling operation for reuse.

I hope this helps to explain some of the workings of our units.