



Case Study

Tunnel Mud Exhaust Pump

Civil Engineering Company, Japan

The Challenge

Mud is 50% sand, with up to 2" solids and up to 70,000 cPs

Existing conveyor system is large, inefficient

The Discflo Solution

Laminar flow, 'boundary layer effect' ideal for solids to 80%

Open, no close tolerance design allows solids to 4" to pass

No wear, no breakdown during months of Disc pump testing

One of the top civil engineering and contracting companies in Japan has tested the Disc pump for tunnel mud drilling and found it "perfect" for this tough application. The company plans to incorporate the Discflo technology into its automated tunnel-digging machine, which it uses for digging tunnels into mountains for railroad and highways, and digging under cities for waterways and sewage lines. The tunnel-digging machine has a 15 ft in diameter rotary cutter, and currently uses a spiral conveyor to carry out the drilling mud. This system, however, is cumbersome and inefficient.

Before replacing the conveyor with a Discflo pump, the customer tested the pump in their laboratory in Japan. The test has been carried out over several months and under many conditions that would be encountered in the tunnel during digging. The pump handled liquids containing 50% sand content and cracked stones up to 2 inches in size. The fluid viscosities varied from 45,000 to 70,000 cPs.

In a report from Mr Kubota of Tokki K.K., Discflo's Japanese distributor: "The test was completed recently (July 2001) and the results were perfect. The Disc pump far exceeded all expectations. Of course, no wear was found on the casing or the Discpac." The first order is expected soon.

Call Discflo now to find out how our pumps can solve your problems.



Discflo Corporation

10850 Hartley Rd
Santee, CA 92071
Phone: (619) 596-3181
Fax: (619) 449-1990
Sales@Discflo.com
www.Discflo.com