



# LOBEPRO

## ROTARY PUMPS

### Application Report

### Vacuum Toilets in Subway Application

**Equipment:**

One set of SM100 rotary lobe pumps works in the largest Subway station of China, Shanghai People Square Subway Station and is used for vacuum toilet application.

**Application:**

To create vacuum requirement and transport waste water from toilets. The pump is required to help a water and gas tank of 200 L create minus 0.6 bar in 20-30 second. Two pumps work together in one vacuum toilet unit.

**Job description:**

Shandong Huateng Environment is the vacuum toilets supplier and contractor. In 2009, they purchased 50 sets Rotary Lobe Pumps from Boerger. However, they found that almost of Boerger pumps could not work well after 3 months operation period. In most cases, their pump case without inner was worn out worse, and these pumps still not work well after changing new lobes.

As Shanghai People square station is the largest subway station in China, the station was taking on a very import role in EXPO 2010. The contractor could not get a satisfactory solution from Boerger so they turned to LobePro China. We sign agreement to supply one trial pump and to guaranty that the pump would operate for a three month period before adjust housing segment. If LobePro's pump was able to meet this requirement it would mean that our pump can work for 9 months before changing spares.

**Problem Solution:**

LobePro China supplied one SM100 to replace one of existent two Boerger PL400. Our S-series range is rated for abrasive

application design. The pump has currently worked for 10 months

without adjust housing segment. The contractor is very extremely satisfied with LobePro China and has given us a contract for 26 sets of S-series range pump this year for another vacuum toilets project in Subway.

**Other Applications:**

Subway toilets are not the only place where rotary lobe pumps can be utilized in a vacuum application. Other location include: institutions, pump out stations at marines and train stations, air transport, prisons, and ships.

