



Credit: Ivy Canada

Monster Solutions

Model 70000 Macho Monsters Secretly Chew-up Sewer Clogging Waste Beneath Shanghai Park

The Suzhou River near Shanghai winds peacefully through beautiful gardens, parks, and flows alongside elegant temples and pagodas. The river has a rich cultural heritage in the region including several elaborate stone arch bridges that cross it. However, as Shanghai has expanded, the river faced serious challenges from pollution.

In 2007 Shanghai urban construction officials made protecting the river a top priority. As part of the Suzhou River Wastewater Works Phase II the Chang Ping Road pumping station was designed and built to collect wastewater and stormwater from the region and send it to a wastewater treatment plant for purification.

The pump station is surrounded by residential neighborhoods and sits on the shore of the Suzhou River. Through several discussions between the project owner and Ivy Canada, a Hangzhou based wastewater equipment consultant, together with designers from JWC Environmental, the owner decided to accept JWC's proposal and construct the entire pumping station underground. A beautiful park for residents could then be built right on top.

This meant the pump station could not have wastewater screening debris collected inside the building – material must be ground up and pumped to the wastewater treatment plant. This ensures foul, malodorous sewage screenings will not disturb the neighborhood or the beautiful park. Odors would be a nuisance

PROJECT: Chang Ping Pump Station
Shanghai, China

PRODUCT: Macho Monsters model 70000

CONSULTANT: Ivy Canada, Hangzhou, China

sance for local residents. In addition, pumping debris to a treatment plant eliminates the need for a weekly or daily trash pick-up – saving the project owner money and keeping big garbage trucks out of the park.

The project owner purchased two of JWC's largest sewage grinders – the 70000 Macho Monster. This massive grinder stands over 10' (3m) tall and has two rows of sharp steel cutter teeth which shred debris into small particles allowing them to easily pass through pumps and pipelines. The debris is then removed at the headworks of the treatment plant by fine screens. The Macho Monster uses a 25 HP motor (18 kW) to generate slow speed, high torque grinding power so it can slice through even the toughest wastewater solids.

The capacity of the pump station is 500 million gallons per day (2 million m³/day). A trash rack with a grabber bucket lifts debris into two massive hoppers where the grinders turn material into small particles and drops it back into the wastewater channel. Material is ground so small the pumps will never be blocked.

The project owner is very satisfied with the pumping station – the Macho Monster model 70000 grinders protect the pumps, the river is protected from pollution and local residents get a beautiful new park to play in. Local residents don't even know two massive Macho Monsters are lurking right under their feet, quietly chewing up sewer clogging debris everyday!

Ivy Canada and JWC Environmental are proud to be part of this innovative wastewater solution to protect the beautiful Suzhou River of Shanghai.



Massive Monsters live beneath this neighborhood park.

