

SWAGELOK HELPS BRING POWER TO THE PEOPLE

If you want to see something truly impressive, just look toward central China where you will have little trouble seeing the massive Three Gorges Dam. Swagelok is there already, helping to provide key operational data.

It stands more than 600 feet (185 meters) high, spans the Yangtze River for about 1.5 miles (2.4 kilometers), and is the largest concrete project in the world.

Welcome to Three Gorges Dam, conceived as one giant way to stop area flooding, increase river shipping, and generate clean hydroelectric power. The dam is operating, and should be fully operational by 2011.

Swagelok Plays Major Role

A project this large requires a precise, highly reliable measurement system. Swagelok was (and still is) pleased to play a significant role, providing fluid system solutions for the extremely important water measurement system that delivers timely data on water level and water flow speed.

To ensure proper dam function, the Nanjing Automation Research Institute (NARI) developed the dam's critical measurement system, which relies on highly compressed air for its measurements. Even the smallest leak can impact accuracy. Swagelok® tubing, valves, and fittings were chosen for their leak-tight design, flexibility, and easy installation.

"For us, even the smallest amount of air leakage was not an option – we needed a 100 percent air tight solution," said Wang Zhenghuang of NARI. "I am impressed with Swagelok. Their products deliver great performance and their technical team has worked closely with us ensuring the system's success."

Service Has a Part, Too

Early in the process, Swagelok (Shanghai) provided NARI with integrated services to help with system layout and deployment, from client demand analysis and design prototype 3D rendering to system assembly and testing. And Swagelok (Shanghai) continues to work closely with NARI to ensure optimal performance.



Model overview of the Yangtze Three Gorges Project, the largest concrete structure in the world and the biggest construction project undertaken in China since the Great Wall and the Grand Canal.



Birds-eye view of Three Gorges Dam: able to store up to 22 cubic kilometers of water.