

## CASE STUDY

### Jecheon City, South Korea



#### OVERVIEW

Jecheon is a city in Chungcheongbuk-do province, South Korea. The city is a major railway junction, served by the Jungang, Chungbuk and Taebaek Lines. Jecheon has scenic surroundings and several tourist spots like the Uirimji Reservoir, Cheongpung Lake and Cheongpung Cultural Properties Complex. It is also the home of Semyung University. The city's name derives from the Korean words Je (堤), which means Dam, and cheon (川) which means River.

#### WATER SYSTEM CHALLENGES

Residents avoided drinking city-water as to rusty (red, brown) water for many years. The engineering department started looking for a technology which would enable them to deal with the old water piping network which resulted in leaks and many breakdowns, causing disruptions in water supply to the residents of the city.



before the installation

after the installation

before the installation

after the installation

turning in to magnetite with a light structure



on-the-spot inspection

#### Additional installation



cheongpoong filtration plant (SB100)

Songak-myeon (SB200)

Youngcheon-dong (SB150)

Haso-dong (SB150)

#### SOLUTION

ScaleBuster® conditioners installed in 2 locations as a pilot (May 2005 and Nov. 2005).

#### RESULTS

Filters in buildings where ScaleBuster® water conditioners were installed were cleaner, and pressure gauges in sections with ScaleBuster conditioners showed higher pressure than in other sections.

Following the success of the installation of ScaleBuster water conditioning technology, replacement of old pipes was limited (and saved a lot of money to the city). Additional 5 projects took place (July and November 2006, May and August 2007, March 2008) installing dozens of ScaleBuster water conditioners in various sizes (from 5" SB125 to 12" SB300 units).

#### ABOUT THE TECHNOLOGY

The patented ScaleBuster technology completely replaces traditional chemical treatment; providing control of scale and corrosion in various water process systems to create an exceptionally clean system. This dramatically reduces energy and water consumption, while reducing or, in certain cases, eliminating toxic water discharge to the environment.