## Scale *watcher* application for steam boiler at Hanoi Construction & Concrete Co.

Two 1.5 tons/h steam boilers in Hanoi Construction and Concrete Company have to operate 16 hour per day to supply steam for concrete processing.

These boilers take sand filtered water from a well containing high amounts of Calcium and Magnesium minerals.

After four to five months of operation thick scale layers ranging from four to five millimeter thickness have been deposited, as hard and very difficult to get rid off scale. Chemicals were used to clean but this caused much inconvenience for the company because of shutdown for maintenance. Not to mention the invisible corrosion.

Attending a seminar presented by **Scale***watcher* Vietnam in Hanoi, the management decided to buy a **Scale***watcher* for their two boilers and a **Scale***watcher* unit for the main water feeder for these boilers.

After six months of **Scale** *watcher* operation, supplier and customer together opened the boilers to check the result. The management board of Hanoi Construction and Concrete Co. were surprised when they saw the inside of the boiler. A light gray, soft, thin scale layer adhered on the surface of the flame pipes, easily removable by a high-pressure jet.

Although the **Scale** *watcher* units were installed after the boilers operated for three months and had already hard scale layers on the flame pipes, four months later the scale was removed or made softer. This proved that **Scale** *watcher* can prevent scale build up and remove existing scale. Photos of existing scale layers taken inside boiler after five months of **Scale***watcher* operation



A light grey, soft scale layer adheres on the surface of the flame pipes



A light grey, soft scale layer was formed in boiler side



Scale on flame pipes is soft and easy to clean



Scale in boiler side is soft and easy to clean