

GMX Model 8000 Study Report

Installation

Magnetic fluid conditioners are known for their enhanced outcomes in various fields for decades now. Since the main consumers of natural gas in Bangladesh are power plants, industrial generators and boilers, we decided to begin our study with the boilers.

Two sets of GMX8000s products were installed onto the connections of two separate boilers in a Washing & Dyeing plant just outside of Dhaka city, Bangladesh (one of the boilers shown in Figure 1). The GMX8000 was chosen for this installation due to the diameters of the pipes. The first set was installed on November 2nd, 2015 and the second set was installed on the 10th of the same month.

Initially both boilers were connected to the natural gas source using Mild Steel (MS) pipes with a diameter of 2 inches. As the penetrating efficiency of magnetic field through mild steel (or any other ferrous material) is very low, a section of the fuel line was replaced with Stainless Steel (SS), as shown in the following Figure 4.



Figure 1: Boiler in the washing & dyeing plant

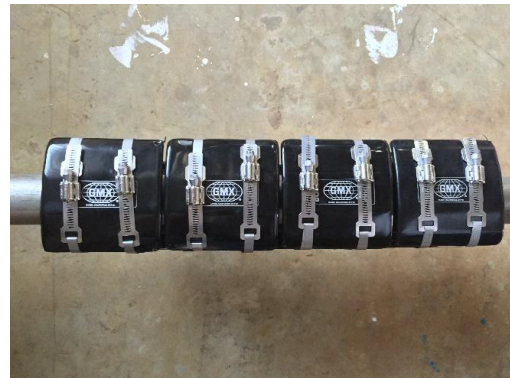


Figure 2: GMX8000 installed on a boiler gas line (top view)



Figure 3: GMX8000 installed on a boiler gas line (side view)



Figure 4: MS pipe replacement with SS pipe

According to the instructions provided by GMX International, 4 pairs of GMX8000 were mounted on the 2" SS sections of the gas inlet pipes, as shown in the Figure 2 and 3. The gap between each set was kept a little less than an inch and all other instructions were followed.

The overall length of the pipe between the installation and the mouth of the boiler could not be kept less than 24" due to the site limitations, yet the results were quite satisfactory.



Results

The typical volume of natural gas consumed by these boilers is approximately 257,461 cubic meters. Although the production volumes of the plant remained at full capacity after the installation of the GMX8000s, the average consumption of gas after magnetic conditioning came down to 239,539 cubic meters. This shows an instant saving of around 7.5%.

The Managing Director of the company was extremely impressed to see these results willing to use GMX products for their generator gas connections as well.

Now, along with the installations in the fuel lines, we will also be installing them on water lines to prevent scaling and other negative effects of hard water.

Conclusion

Based on this study results and feedback from clients, Helio Tech Services, Bangladesh and Stalwart Ltd, Canada are projecting a significant opportunity for GMX products in Bangladesh, and planning forward to work in association towards nationwide distribution and installation of the GMX products. On a longer time scale, successful implementation of GMX products in Bangladesh market will add to a more efficient industrial environment, as well as will play a role in fighting the challenges against global warming and environmental changes.