

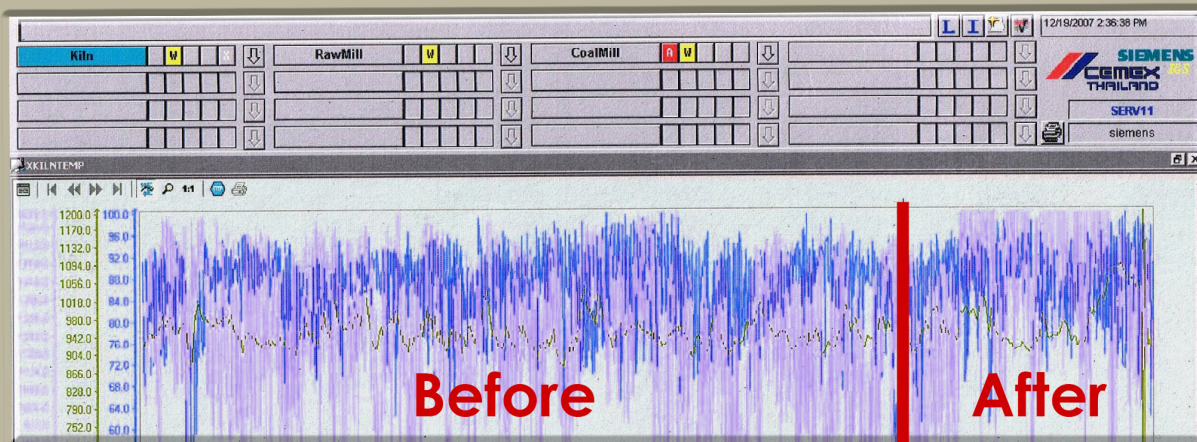
Energy Saving Project Cemex (Thailand)



The Trial Conditions

The XPlate™ was used as part of an energy saving project performed at Cemex (Thailand) Co. Ltd., Saraburi Province. XPlate™ sheets were installed on location at both the air combustion pipe lines and the coal conveyors. The molecular clusters of air (both oxygen and nitrogen) and coal, after passing through the XPlate™ were expected to be broken, enabling single molecules of oxygen, nitrogen, and coal to be more efficiently burnt due to the dissipation of electrostatic forces. The XPlate™ was installed at the burner compartment section. Improvements in combustion efficiency, identified through an increase in temperature, was expected.

The Results



Conclusions

The kiln feed rate (blue line) was maintained at constant at normal operating conditions. The main effects observed after installation of the XPlate™ were predominantly a dramatic rise in burner temperature (purple line - K1-T00 pyrometer) and an increase in the trend of the kiln inlet temperature (black line - K1-T07). Furthermore, the change in flame that was observed by all in attendance and recorded on video is noteworthy as it demonstrates the improved combustion efficiency that the XPlate™ generated.