

# Application Case Study

**Product** 

Hermetically-Sealed Mechanical Pressure Switches

Application

**Coal-Fired Power Plant - Coal Handling** 

# The Application

The majority of the world's electric energy is generated by coal-fired power plants. These plants convert the heat energy latent in coal into electrical energy by heating water into steam which turns the turbines. When the coal is delivered to the plant it is brought by train, truck or barge, depending on the transportation facilities available. Coal is unloaded and placed into large storage piles on the ground. Raw Coal is typically delivered in 4-6" pieces. The coal goes from these coal storage piles to the coal-crusher, which reduces the pieces into 1-1/4" to 1-1/2" for use by the pulverizers. The pulverizers then crush the coal into dust, mix it with primary air, and send the mixture to the boiler which helps product the steam.

# The Solution

SOR® provided a whole line of hermetically sealed Mechanical Pressure products to many of these coal-fired power plants. Hermetically sealed means there is a design that protects all of the sensitive components from the environment, in order to satisfy one of the customer's primary needs.

These hermetically sealed products are perfectly suited for the hazardous environment in any coal-fired steam power plant. They are dust tight and carry explosion proof listing. Also, it never loses these ratings even when the set point is being adjusted.



**Big Hermet** 

Mini-Hermet

## The Results

The customer is satisfied with SOR's hermetically sealed mechanical pressure line because they have quality products that prevent catastrophic accidents from taking place in the plant. The switches have proven to be a reliable and a rugged solution for the coal industry.

# **Ordering Information**

Ask your local SOR representative for models that meet your specifications.