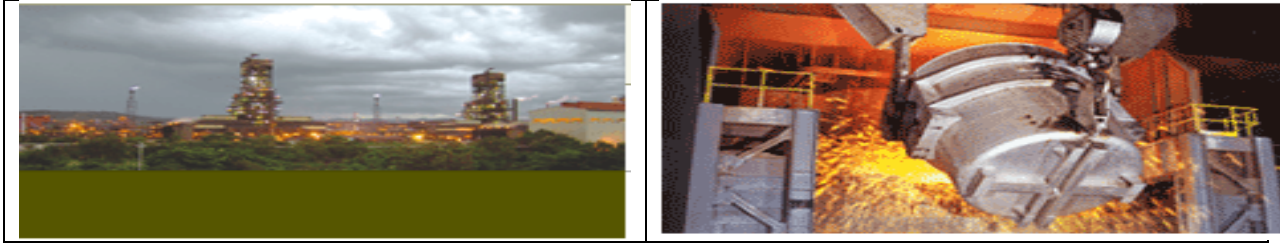


Adding Asset Monitoring via an Existing Industrial PLC



The Challenge

Industrial customers often want to leverage the power of predictive maintenance to maximize uptime and cut operating costs. These customers see a clear justification for the capital equipment purchase or maintenance upgrade costs to add temperature monitoring; however, they often do not have the high end SCADA systems that are seen in public utilities. Instead they typically have more insular PLC systems with customized HMI's in the control room.

The Opportunity

In one such example, Jindal Steel's Salem Works wanted to measure temperature at critical switchgear in their on-site power generation plant. The customer was able to leverage an existing RS-485 MODBUS master port on the PLC and add the temperature points to their PC-based HMI.



SM's installed on bus bars



System Details

The IntelliSAW IS-485 systems were outfitted into switchgear cabinets. A MODBUS-RTU network connected the IS-485 devices to an existing PLC, which allowed HMI access from the control room Windows based PC.

Similar PLC integration has been performed with various HMI software platforms, including Citect and Kingview. These platforms offer simple import of MODBUS register data, graphical presentation of process values, and archiving of historical data.

The Result

With the IntelliSAW system integrated into their control room HMI, the substation engineer at JSW is able to make informed decisions on predictive maintenance and to receive fault condition alarms in real time based on continuous process monitoring. This approach to retrofitting condition based monitoring into an industrial substation leads to operational savings as well as failure avoidance.