API-Cecomp Group n'fo Technical & Application Note A118

Application:Split signals for separate monitoring and controlType of Company:Plastics ManufacturerLocation:Texas

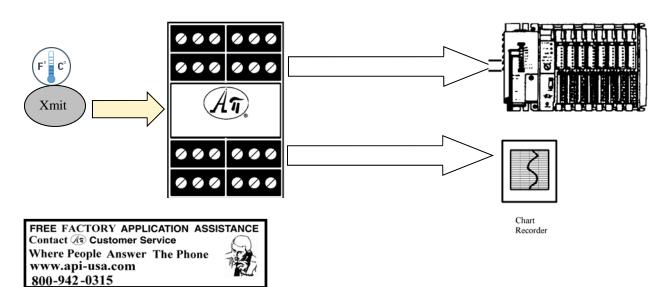
Problem: The company is using loop powered temperature transmitter as to control the plant manufacturing system. The QC engineer and the plant manager want to monitor these temperatures using both a chart recorder and a DCS system. The process engineers want to ensure that if the QC engineers take either the DCS or the chart recorders out off line for any reason it does not affect production. The company cannot add another set of sensors.

Solution: API furnished the customer an APD 4393 Iso-Splitter. The APD 4393 is placed in series with the loop powered transmitter and the PLC to accept the 4-20 mA signal and provides two optically isolated outputs that are linearly related to the input. The input signal is filtered, amplified, split, and then passed through an opto-coupler to both output stages. The two isolated output channels provide an economical solution where more than one output device needs to be connected to the same input signal.



DC to DC Signal Splitter/Isolator





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