

Question

Which gives you the most accurate reading?

A direct RTD signal into a controller? or an RTD signal converted to 4 to 20 mA via a transmitter and then fed into a controller?

Wiring the RTD directly to the controller will give slightly better accuracy if the wire length is short. But, the best accuracy can be obtained by having the RTD and transmitter fine tuned in a calibration bath. Most of the permissible deviations can be adjusted out, and the accuracy of the RTD / transmitter unit will be better than that of the individual components.