Generator outlet temperature measurement point

How to test a generator output terminal?
The generator generator output terminal is shorted suddenly. The test would be acceptable if the obtained value to be in specified design value. The test is done in the rated speed, rated gas pressure and rated voltage at no load. The sound pressure level is measured at 1 meter from the surface of generator.

What is generator armature and field windings resistance test?
Generator Armature and field Windings Resistance Test is done before running test. Each phase winding of stator and rotor is tested by Kelvin Double Bridge instrument. It is necessary the measured values to be corrected by using appropriate formula to obtain the resistance values in specified temperature.

How to test a generator generator?
It is necessary the third party inspector review the manufacture calculation sheet. The test is done in the rated speed and rated gas pressure. The generator generator output terminal is shorted suddenly. The test would be acceptable if the obtained value to be in specified design value.

What is generator field winding temperature?
Generator Field Winding Temperature can be obtained by combining two independent basic measurements consisting of the resistanceof a conductor as a function of temperature and the resistance of a conductor as a function of the voltage and current through the conductor.

What is the generator field?
The generator field is the rotating magnet of the generator. This rotating magnetic field induces a voltage in the stationary stator winding of the field converting the shaft mechanical work from the steam turbine or other prime mover into AC electrical power.

How to determine the resistance of the field at the operating temperature?
The resistance of the field at the operating temperature can be determined by measuring the voltageimpressed on the field by the generator exciter and the resulting DC current through the field as a result of the exciter voltage.

cause different value evaporator outlet gas temperature and economizer outlet water temperature as saturation temperature related to the pinch and approach point. HRSG inlet flue gas temperature also can affect the performance of HRSG. For example, the use of different type of gas turbine or supplementary firing can change this parameter value.

When testing a new car or undergoing major repairs, it is necessary to measure and record the water temperature at the inlet and outlet of the cooler, the inlet and outlet of the machine, and the temperature of

each lubrication point under various load conditions, so as to facilitate the comparison of parameters and timely investigation of abnormal points in case of machine ...

A K-type point thermocouple was used to measure the temperature values. As a hot water input source in the system, a Baymak brand thermosiphon was preferred. The device increased the water temperature to about 90 C. The temperature value of the hot water was taken from the temperature indicator on the thermosiphon.

the generator outlet temperature. ... point), the temperature dependence of conduc- ... A new algorithm is derived and compared with accepted measurements. Instrumental temperature compensation ...

Point temperature sensors for rotor windings have been developed for research purposes. These sensors tend to use a thermocouple, where the output voltage is converted to a digital signal and broadcast off the ...

The DXAdvanced paperless recorder computes the Field Temperature based on generator inputs from Juxta DC to DC isolation amps mounted near the generator for the exciter voltage and shunt amps. Operators can view amps, DC field ...

Include at least one generator calibration data point. Yokogawa"s DXAdvanced Paperless Recorder solution using field mounted Juxta isolators is a replacement for all manufacturers" generator field temperature units including Leeds & Northrup Generator Field Temperature Measurement models for both the control room recorder and the field mounted ...

For the validation the flow through the dew-point generator was varied up to 10 l min -1 (at 23 °C and 1013 hPa) and the dew point of the gas entering the generator was varied up to 15 °C above the dew point exiting the generator. The validation results showed that the new generator, over the tested temperature and pressure range, can be used with a standard ...

The design should be adequate enough to heat or cool the gas stream to the desired outlet temperature, while fully saturating the gas stream with water vapor at that temperature condition. ... The difference between dew and frost point ...

The dew point measurement relates to the absolute amount of water vapor contained in the air. ... Here"s a practical example of this relationship in a compressed air network: The air at the compressor outlet is at 50°C (122°F) and is fully saturated. ... the air has a dew point temperature Td = 50°C (122°F) and the relative humidity RH ...

Channel Outlet Temperature Measurement for Various Flow at Different Core flow ... boiling point i.e.300 deg C at PHT pressure of 87Kg/Cm2. On safety considerations the boiling point is 300 Deg.C is so ... Thermo siphoning By placing the steam generator and inlet and outlet header above the elevation of reactor core. iv ...

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The comparison measurements revealed dew-point temperature differences of 0.02 °C and 0.07 °C with expanded pair uncertainties of ±0.09 °C and ±0.15 °C. ... An additional tube of 6.4 mm outer diameter with thickness 1 mm is connected to the saturator outlet to control the water level ... 2.1.2 One temperature dew-point generator (1-T)

The G2 computes the resulting %RH at each of these three chambers based on the three external temperature measurements. Alternatively, install up to three temperature probes in one chamber to measure uniformity of temperature and ...

This challenge is further aggravated, as one measure to achieve fast light-off during cold start is to place the catalyst in close proximity to the turbine outlet. The turbine outlet temperature (T 4) is decisive for catalyst function and aging. Therefore, the charging system and in particular the turbine stage becomes essential in limiting ...

For the purposes of this study, an alternating current generator (0~40 A) was used. It is adjustable at intervals of 1 A. ... the application range of 10.12~10.25 A was given for 10 A. Fig. 5 A shows the AC generator and electrical socket outlet temperature measurement point. ... the electrical socket outlet temperature rose as the applied ...

temperature dew/frost-point generator and its characterization are presented in detail. The outcomes of the characterization show that when operating in a single-pressure ... tube for pressure measurements and an outlet tube. The heat exchanger is a bended tube with external diameter of 12 mm. The relatively large tube size is chosen to

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