

Mirror Dew Point Measuring System with High Accuracy

As a result of permanent improvement and optimization measures the company MESA Electronic GmbH located in Geretsried presents the further development of their dew point measuring device Dewchecker 1.0. The



measurement principle of the new Dewchecker 1.1 stays the same. The furnace gas is passed through a measuring chamber on the surface of a mirror. The mirror is cooled by a thermoelectric Peltier element until dew forms on the surface of the mirror. Using a temperature sensor the temperature of the mirror surface can be detected. As soon as condensation starts the temperature of the mirror is directly read out.

The mirror dew point checker Dewchecker 1.1. is mainly characterized by the fact that the temperature of the mirror can be permanently adjusted to a constant value. Therefore the required mirror temperature is defined as a fixed set point. The electronic controls the Peltier element in such a way that the predetermined set point temperature of the mirror is kept. This allows an accurate approach of the dew point and thus a very accurate measurement of the dew point independent of the operator.