

## Moisture measurement in chlorine

When the chlorine comes in contact with moisture , even under very low concentrations , this gas becomes extremely corrosive and the hydrochloric acid formed attacks quickly the transportation components and lines .

In chlorine production plants , the chlorine gas drying is achieved by sulfuric acid spray and it is recommended to proceed with on line moisture measurement upstream of compression and liquefaction .

In other way , as the main part of process stream operates at vacuum , the risk of moisture intrusion into the circuit dictates this measurement .

The Moisture Monitor OEM COR is based on electrolytic analysis for water traces measurement in chlorine .

The chlorine Moisture Monitor system controls all conditioning functions for analysis such as pressure and flow controls , measuring sensor validation device and inert gas purging .

The chlorine Moisture Monitor is housed in Polyester enclosure rated IP 65 ( NEMA 4X ) compatible with corrosive environments and temperature controlled usually at 40°C +/- 1°C .

The chlorine Moisture Monitor measuring principle is based on Faraday's law of electrolysis and does not require calibration , however the cell reactivity can be validated by internal device .

The sample wetted materials of the chlorine Moisture Monitor are in Monel 400 , PTFE , glass and platinum in full compatibility with chlorine gas .

The chlorine Moisture Monitor measurement range is programmable from 0-50 PPB to 1 000 PPM and can be expressed in dew point when required .

Usually installed in non corrosive area or in control room , the chlorine Moisture Monitor control unit is linked to the analyzer sensor by a standard two wires cable , maximum loop length is 2 Km.

The chlorine Moisture Monitor range , alarm threshold points and other parameters are programmed via integrated key-board with digital read-out .

The outlet signal is available as 4-20 mA analogue or digital serial 432 C / 485 bi-directional .

