# Gas Corrosion Tester





From our experience, of the four electric parts tests (defect analysis, standard test, deterioration accelerate test and gas corrosion test), we believe that the Gas Corrosion Test is the most essential one.

As for the standard tests, various methods exist as listed below. In fact, the gas corrosion test has complicated factors for reproducibility in comparison with common environmental tests. Besides, it is said that the procedure for the tester itself is quite troublesome.

However, as a result of our long years of development of our Gas Corrosion Tester by carrying out actual numerous tests, we are confident that our Gas Corrosion Tester has

remained low-cost, eas<mark>y to use, cost effective, s</mark>afe, and some other characteristics. And we can carried out most of the following

standard tests listed below.

Example of Corrosion of Gold SO2 10ppm 40°C 75% 240h

#### Main Gas Corrosion Tests of Electric Parts currently being carried out are:

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S02 25, or 1000ppm, 40°C, 90%RH
      JIS H8502
                                                                                                                  13. Battel Saboratory
                                                                                                                                            H2S 10ppb+CL2 10ppb+N02 200ppb, 30°C, 70%RH
H2S 100ppb+CL2 20ppb+N02 200ppb, 30°C, 75%RH
H2S 200ppb+CL2 50ppb+N02 200ppb, 50°C, 75%RH
                                             3, or 10ppm, 40°C, 90%RH
3ppm, 40°C, 85%RH
10ppm, 40°C, 85%RH
                                     H2S
H2S
      JIS H8620
                                                                                                                        Class 2
                                                                                                                        Class 3
      JE1DA25, 40
       JEIDA32, 41
                                     S02
                                                                                                                        Class 4
                                                                                                                                                     200ppb+6L2 30ppb+N02 200ppb, 50 C,
S02 0.5ppm, 25°C, 75%RH
H2S 0.1ppm, 25°C, 75%RH
S02 0.5ppm+H2S 0.1ppm, 25°C, 75%RH
                                    H2S
                                              1ppm, 40or 25°C, 75%RH
                                                                                                                 14. ISO 10062-A
       E1AJ-RC-5608
                                             25ppm, 40°C, 90%RH
25ppm, 25°C, 75%RH
      E1AJ-CP-5102
                                     S02
   7. IEC 68-2-42
                                     S02
7. TEC 68-2-42 SOZ 23ppm, 25 °C, 75%RH C SOZ 0. 3ppm+P2S 0. 1ppm, 25 °C 8. IEC 68-2-43 H2S 10ppm, 25 °C, 75%RH D H2S 0. 1ppm+SO2 0. 2ppm+CL2 9. DIN 40046-36 SOZ 10ppm, 25 °C, 75%RH 25 °C, 75%RH 10. DIN 40046-37 H2S 1ppm, 25 °C, 75%RH 11. Corporate Standard H2S 3ppm+SOZ 10ppm, 40 °C, 75%RH 15. Bellcore Low concentration 4 kinds 12. Corporate Standard H2S 0. 5ppm+SOZ 1ppm+NOZ 1ppm, 35 °C, 75%RH
                                                                                                                                                      H2S 0. 1ppm+S02 0. 2ppm+CL2 0. 02ppm
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## KG200 Formation Diagram

KG200 Gas Corrosion Tester is designed to be carried out low concentration mixed gas corrosion test and other tests simply and specifically, which enables to control the concentration below 0.01ppm.

Also, this tester is designed to have a Teflon coated double layered chamber in order to cope with nitrogen dioxide and chlorine stably and it has a function to control the humidity which is the significant cause of corrosion.

Gas Analyzer

Test chamber

Te



# Safety

This tester is designed to be negative pressure in the test chamber with gas leakage main cock shut down equipment(OP)!

# Temp/Hum

Easy setting of the temperature from 25°C65% up to 55°C98%! (OP85°C90%)

Gas Concentration

Easy to set up the concentration by just turning the dial!

Standard Conformance

Corresponds to IEC Standard IE ISO10062

Cost Effectiveness

Optional programs can be added based on your purpose.

Control of Test Record Record and monitor the test results on Web-site by connecting LAN(OP).

# **Defective Analysis**

#### Standard Test

Corrosion-Resistance Test

Deterioration Acceleration Test



Internal chamber

It does'nt condense in complete double layered chamber.



AC100V Operation (Certain value control type)

- Not necessary to have a drainage and water supply equipment
- Easy to move
- The back of the tester is very plain.
  (If the tester is not equipped with cooling device)
- Saves electricity and standard gas

This Tester Can be Moved Even After Installation and it Can Be Operated by 100VAC for Home Use (Certain value control type)



#### Entrusted Gas Corrosion Guide

Various environmental tests exist to conduct duration test, defect analysis of the functional parts, the contact mechanism parts reliability of electronic parts; such as switches, connectors, etc. Of these tests.

Gas Corrosion Test for the environmental test is the most suitable one for the evaluation analysis of the electric parts.

This including International Standard (IEC) and individual Corporate Standard, special four kinds of mixed gas test is currently being carried out.

Since we have been mainly focusing on conducting the evaluation analysis since our company was founded in 1977,

we can offer you the best service with our expertise and a know-how we have for the Gas Corrosion Test.

We will be looking forward to serving you as we are able to offer you quick and accurate work that you will be satisfied.

High Reliability Gas Corrosion Tester KG200ST

Bomb (Cylinder) Main Cock Shut Down Equipment can be installed.

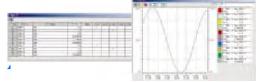




# Test behavior and data can be cllected through 10BASE-T/Erthernet



www



Network can be connected so that collecting and controling data, suspending the test, starting the operation and suspending the operation for emergencies can be done from remote area. Also, Bomb (Cylinder) main cock shut down can be controlled.

### ■ Specification

Name : Flow Gas Corrosion Tester Stainless and Alminum Structure

Model : KG200ST (Possible to add up to four kinds mix gas)

Chamber Capacity: Approximately 200 Liter

Chamber Material : Heat-resistance Plyvinyl chloride Teflon seal treatment

Indicator : Digital Temperature and humidity indication,

Digital Indication Gas Flow, Concentration, Recorder

Temp Set-Up : 25 ~ 60°C Digital Set-Up (Cycle Test can be added as an

Optional test at 85°C)

Humidity :  $60 \sim 95\%$  RH Digital Set-Up (Cycle Test can be added as an

Optional test)

Gas Flow :  $0 \sim 200$ CCM/max (Electronic mass flow controller with

Shut off function)

Gas Concentration: 10ppb ~ 500ppm (the type, concentration, indication and

Automatic concentration set-up functions are optional.)

Total Flow : 300 liter/h Chamber Illumination: Below 300 lux

Relative Speed :  $0.2 \sim 0.3$ m/sec (adjustable)

Indication Accuracy: Temperature ±0.2°C, Humidity±3%RH

Deviation in : Temperature ±0.5°C, Humidity±5%RH (within 5cm Chamber

from the inside wall of Chamber)

Recorder : Paperless 5.7inch TFT color liquid crystal

Communication : 10BASE-T Controlling and Monitoring of Erthernet Data is optional.

Electricity : AC100V/50 ~ 60Hz (Three-phase,200V)

Electricity Consumption : Maximum: 1300W , Normal: 800W (at AC100V)

Dimension : 1850HI-950WI-650D (Unit:cm)(This doesn't include bomb tank.)

Weight : 180Kg (without bomb tank)

Cooler : Contained a cooler for dehumidification (300W)
Contained a cooler for test chamber (700W)

Earthquake Sensor: 100 ~ 170 gal (1 gal/1cm/sec2) In case the earthquake Ifs horizontal vibration increases

at 0.3 ~ 0.7sec cycle, the operation will be stopped.

Fire : In case of fire, the controller of the tester will come to stop at the temperature

above 60 ~ 70°C

Others : Purge System is contained. Exhaustion Gas Treatment Equipment, Supply Warning, Drainage Warning Apparatus, Earthquake Emergency Apparatus, Fire Emergency Bomb main cock shut- off Apparatus(OP), Remote Control Emergency Suspension Apparatus(OP), Gas Leakage Treatment Apparatus with Bomb (Cylinder) Tank can be added as optional.

As for further details on Options, Contuct us.

■ Please note that the specification of this tester is subject to change due to improve the performance.

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