

CR4-grade Reference Specimens for Salt Spray Tests

For a salt spray test, the corrosivity speed of test specimen not only depend on the apparatus itself, such as salt fog uniformity, working-room temperature uniformity, but also depend on all kinds of paramters set by operator, such as volume of the collected solution, pH value of salt spray etc. In order to ensure the comparability of salt spray tests, operator should use reference specimens to verify these influencing factors regularly.

Both ISO 9227 and ISO 7253 recommend use CR4-grade steel as reference specimens. These specimens are in accordance with ISO 3574 with an essentially faultless surface and a matt finish (arithmetical mean deviation of the profile $R_a=0.8\mu\text{m}\pm 0.3\mu\text{m}$). For the three salt spray tests, the allowed range of mass loss of the steel reference specimens during verification of the corrosivity of the cabinet are as below:

A. Neutral Salt Spray (NSS) : After 48h test, the allowed range of mass loss should be $70\text{g}/\text{m}^2\pm 20\text{g}/\text{m}^2$

B. Acetic acid Salt Spray (AASS) : After 24h test, the allowed range of mass loss should be $40\text{g}/\text{m}^2\pm 10\text{g}/\text{m}^2$

C. Copper-accelerated Acetic acid Salt Spray (CASS) : After 24h test, the allowed range of mass loss should be $55\text{g}/\text{m}^2\pm 15\text{g}/\text{m}^2$

For ISO 7253 《Paints and varnishes -- Determination of resistance to neutral salt spray (fog) 》, use six CR4-grade sepciments, after 96 hours exposure, the allowed range of mass loss should be $130\text{g}/\text{m}^2\pm 20\text{g}/\text{m}^2$ and no individual panel has a mass loss greater or less than $25\text{g}/\text{m}^2$ from the mean or from a value agreed by the interested parties.

BGD 2309 CR4-grade Reference Specimens for Salt Spray Tests are according with ISO 3574: Carbon content $\leq 0.06\%$ 、manganese content $\leq 0.45\%$ 、phosphorus content $\leq 0.03\%$ 、sulfur content $\leq 0.03\%$ 、Surface roughness R_a is $0.8\mu\text{m}\pm 0.3\mu\text{m}$, and size is $150\text{mm}\times 70\text{mm}\times 1.0\text{mm}$

Ordering Information:

BGD 2309---CR4-grade Reference Specimens for Salt Spray Tests
(20 pcs/package)

