

Proposal to add to C57.12.23.

2. Normative references

IEEE Std C57.12.53™, IEEE Guide for Mitigating Corrosion on Subsurface Transformers and Network Protectors

7. Construction

7.1 General

The transformer tank, cover, and all external appurtenances shall be of corrosion-resistant material, unless they are otherwise rendered corrosion-resistant. Refer to IEEE Std C57.12.53 for guidance on the proper design, selection of materials and coatings to mitigate corrosion.

Commented [AT1]: Better word, eg, accessories, features, equipment, components, parts?

7.4 Accessories

7.4.1 Mitigation of galvanic corrosion (new clause)

Stainless steel welded flanges and fittings shall be used to reduce the effects of galvanic corrosion with enclosure using anti-seizing and anti-galling lubricants.

Externally screwed on fittings and monitoring devices *e.g. bolts, nuts, valves, pressure relief devices, samplers-schrader valves, liquid level gauges, thermometers, etc.* shall not to be made of copper or aluminum alloy.

Non-metallic molded material (environmentally suited) shall meet requirements of IEEE Std C57.12.32 and suitable for its application.

If there are no alternatives to the stainless steel, user to reference IEEE Std C57.12.53 and ensure the entirety of the component's metal, threads, etc. are coated/painted after assembly to the enclosure.