Testing forms an important phase of transformer manufacturing, ensuring that the product complies with the customer specifications and guaranteed technical particulars.

ABSTRACT
Testing forms an important phase of transformer manufacturing, ensuring that the product complies with the customer specifications and guaranteed technical particulars. Transformer engineers must have a thorough knowledge of testing procedures as per national standards.

KEYWORDS
Standards, testing, IEC, Cigre, IEEE
1. Introduction

In Part VI of this column, we covered national standards for different types of transformers used for various applications. In this part, we have compiled transformer testing standards available to power engineers. In addition to standards for various transformer tests, tests used for thermal evaluation of insulation systems and painting are also covered. However, transformer oil and diagnostic tests are not included as they will be covered in the forthcoming parts of this column.

2. Standards

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**Painting**

**ASTM B117-90:** “Standard test method of salt spray (fog) testing”

**ASTM D1735-87:** “Standard practice for testing water resistance of coatings using water fog apparatus”

**ASTM D523-89:** “Standard test method for specular gloss”

**ASTM D3363-74:** “Standard test method for film hardness by pencil test”
### 3. Conclusion

Testing forms an important phase of transformer manufacturing. This ensures that the product complies with the customer specifications and the technical particulars guaranteed by the manufacturer. Transformer engineers must have a thorough knowledge of testing procedures as stipulated in the national standards. In-process, tests are also relevant for assuring product quality and reliability.

### Authors

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