ABBREVIATIONS

Å Angstrom
ANOVA Analysis of Variance
AC Alternating Current
AT Ampere-Turns
BRS British Railway Specification
cm. Centimeter
CR Central Railway
CR Contact Resistance
DC Direct Current
DA Drop Away
DOE Design of Experiments
E Elastic Modulus
ER Eastern Railway
ECR East Central Railway
ECoR East Coast Railway
ECR Lamp Checking Relay
EDX Energy Dispersive X-ray Spectroscopy
FMEA Failure Mode and Effects Analysis
$H_a$ Alternative Hypothesis
$H_o$ Null Hypothesis
HCR High Contact Resistance
IPA Iso Propyl Alcohol
IR Indian Railways
IRS Indian Railway Specification
mA Milli-Ampere
mm. Millimeter
MMF Magneto Motive Force
MTBF Mean Time Between Failure
MTTF Mean Time To Failure
NABL National Accreditation Board for Testing and Calibration Laboratories
NR Northern Railway
NCR North Central Railway
NER North Eastern Railway
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>NFR</td>
<td>North Frontier Railway</td>
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<tr>
<td>NWR</td>
<td>North Western Railway</td>
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<tr>
<td>OA</td>
<td>Orthogonal Array</td>
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<tr>
<td>P-value</td>
<td>Probability Value</td>
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<tr>
<td>PU</td>
<td>Pick Up</td>
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<tr>
<td>RDSO</td>
<td>Research Design and Standards Organization</td>
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<tr>
<td>RMS</td>
<td>Root Mean Square</td>
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<td>SR</td>
<td>Southern Railway</td>
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<tr>
<td>SEM</td>
<td>Scanning Electron Microscopy</td>
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<td>TOF-SIMS</td>
<td>Time Of Flight Secondary Ion Mass Spectrometry</td>
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