FOR A CAR, REGULAR SERVICING PAYS OFF. AND THE SAME APPLIES TO TRANSFORMERS.

In order to guarantee the reliable operation of your power transformer, the on-load tap-changer (OLTC) must function properly. To ensure this, every OLTC requires professional maintenance.

The crucial maintenance criteria for on-load tap-changers using conventional oil technology are the number of tap change operations and the time in service.

YOUR CHALLENGES

1. Avoid unplanned and costly transformer outages
2. Optimize asset management costs and service budget
3. Update transformer equipment to state of the art technology
4. Fulfill quality, safety and environmental requirements for transformer and OLTC service
5. Ensure maintenance of main transformer components

OUR SOLUTIONS

1. Increase transformer availability and trouble-free OLTC operation by Premium OLTC service from MR
2. Raise transformer equipment life-time by regular MR OLTC service
3. Upgrade OLTC to state of the art material and use of original OEM spare parts
4. Provide OLTC service according to DIN ISO 9001 Quality Management and DIN ISO 14001 Environmental Management
5. Get your customized service recommendation and Premium OLTC service by MR
ON-LOAD TAP-CHANGER MAINTENANCE BY MR.

MR Premium Service
- Replacement of worn parts
- Precautionary replacement of highly stressed materials
- Update of materials to latest technology and innovation standards
- Calculation of absolute values and differences in contact wear
- Measurement of transition resistors
- Visual check of insulation sections
- Cleaning of insulating materials and all components
- Replacement of insulating oil
- Inspection of motor drive unit, drive shafts and protective relay
- Commissioning, incl. visual, mechanical and electrical function tests of the complete OLTC
- Provision of detailed maintenance reports

Influences
- Material/type
- Load current
- Voltage stress
- Number of tap change operations
- Year of manufacture

Maintenance triggers
Due to fast tap change operations, mechanical stress and switching arcs occur which leads to:
- Wear of components
- Contact wear
- Oil carbonization

Criteria
Number of tap change operations or time interval, see example.

<table>
<thead>
<tr>
<th>OLTC type (OLiTAP®)</th>
<th>No. of tap change operations without oil filter</th>
<th>No. of tap change operations with oil filter</th>
<th>Time interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>V III 250 Y</td>
<td>70,000</td>
<td>140,000</td>
<td>6-7 years</td>
</tr>
<tr>
<td>M III 500 Y</td>
<td>80,000</td>
<td>150,000</td>
<td>7 years</td>
</tr>
</tbody>
</table>

For more details please see operating instruction on www.reinhausen.com

Please send us your OLTC serial number and number of tap change operations. We'll send you a customized OLTC service recommendation. We can also service any third-party OLTCs!

CLIENT-FOCUSED SOLUTIONS
For optimal performance throughout the entire transformer lifetime.

HEALTH MANAGEMENT     sustained solutions
LIFE MANAGEMENT        acute solutions
PERFORMANCE MANAGEMENT all-in solutions

6,000+ service jobs pa, worldwide
280 qualified service technicians
60+ years' service history
24/7 ready for onsite support
24 months warranty on our services
100+ years experience in the design of crucial transformer components
5 certified training centers

CONTACT US AT:
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THE POWER BEHIND POWER.