



ASSOCIATION OF ELECTRIC CABLE MANUFACTURERS OF SOUTH AFRICA
VERENIGING VAN ELEKTRIESE KABELVERVAARDIGERS VAN SUID-AFRIKA
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Proposal to amend SANS 1507-2 to clarify the issue of spark testing

Proposal

In SANS 1507-2 clause 6.1 *General*, add the following sentence:

For single core cables with no outer metallic layer, the Spark Test is accepted as being equivalent to subjecting samples of those cables to an HV test in water

Background

SANS 1507-2 covers both single core and multi-core designs.

SANS 1507-2 Table 4 does not list tests for each product type. It just states that HV and spark test are both routine tests.

Bulk HV testing in water of single cores does not allow water to fully surround all layers.

Rusting of steel drums tarnishes the insulation.

The applicable Spark Test Method SANS/IEC 62230 -2015 clause 1 Scope states "For single core cables with no outer metallic layer, the general process is accepted as being equivalent to subjecting samples of those cables to a voltage test in water"

Also clause 3 Procedure 3rd paragraph " When used as an alternative to a voltage test in water, it is recommended that the test is restricted to layer thicknesses not greater than 2,0mm and to a.c. and d.c. test voltages."

Coiling machines with spark test equipment ensure that the section with a spark failure is cut out and scrapped.