RURAL ELECTRIFICATION AGENCY

SPECIFICATION FOR STRAIN CLAMP G/TYPE 375/0.680 SCA/Cu HOT DIP GALVANISED

1.0 TECHNICAL REQUIREMENTS/ SPECIFICATIONS

INTRODUCTION

This Specification covers the manufacture, supply and delivery of STRAIN CLAMP G/TYPE 375/0.680 SCA/Cu for REF's electrical distribution system. The type of STRAIN CLAMP G/TYPE 375/0.680 SCA/Cu required under this Specification are as detailed in this Specification in the corresponding clauses.

Standards

Except where otherwise specified or implied, IEC Recommendation or British Standards (BS) where they amplify IEC, shall apply throughout.

Any other standard provided the Tenderer can provide documentary evidence that the standard is equal to or better than the above standards.

All tenderer's correspondence and all descriptions upon drawings, illustrations or instructions shall be in the English language.

SI unit of measurements shall be used throughout. The STRAIN CLAMP G/TYPE 375/0.680 SCA/Cu shall be manufactured to high quality standards. The companies manufacturing the units shall have ISO 9001 or 2 or Standard Association of Zimbabwe Certification and shall submit documentary proof thereof.

DETAILED SPECIFICATION

All materials shall be inspected and tested in full to prove compliance with the requirements of this Specification to the satisfaction of the REF. The testing shall be carried out according to the relevant standards approved by the REF, like:

ASTM A 153 Zinc coating (hot-dip) on Iron and Steel Hardware, and ISO 1461

Type test certification shall be submitted for all major components certified by an internationally recognised test institute or laboratory. If the Supplier fails to submit such test certificates, the bid is liable to be rejected.

Any other standard provided the Tenderer can provide documentary evidence that the standard is equal to or better than the above standards.

All tenderer's correspondence and all descriptions upon drawings, illustrations or instructions shall be in the English language.

SI unit of measurements shall be used throughout. The eye bolt shall be manufactured to high quality standards. The companies manufacturing the units shall have ISO 9001 or 9002 or Standard Association of Zimbabwe Certification and shall submit documentary proof thereof.

The strain clamps shall be manufactured from malleable cast iron. The clamps shall generally be suitable for conductor diameter sizes ranging from 5mm to 22mm. They shall be suitable for aluminium alloy and ACSR conductors. The weight of each unit shall not exceed 3.1kg.

The clamps shall be provided with a clevis for attachment to the disc insulators. Stainless steel pins and split pins and galvanised washers are to be provided for securing the clamp to the insulator. The clamps shall be rated for a minimum failing load of 70kN.

The clamps shall unless otherwise specified in the Schedule of Requirements preferably be of the wedge type with 3 sets of bolt clamps for securing the conductor.

Due consideration shall be given to cold flow characteristics and contact area requirements of connectors and conductors.

Bolts shall be used as clamping devices only and not as current carrying parts. All bolts nuts and washers shall be of high strength stainless steel.

When installed, the assembly shall develop a holding force not less than 95% of the ultimate strength of the conductor without causing clipping, or damage to the conductor or any part thereof in accordance with BS 3288.

The current carrying capacity of the tension clamp shall be equal to, or better than that of the conductor.

The clamps shall be greased to prevent damages to the conductor against corrosion.

The clamps shall preferably be suitable for a range of conductor sizes, in order to minimise the number of different varieties.

'Where necessary, documentation to evaluate whether the equipment offered is in accordance with this specification shall be submitted with the Bid'.

Tenderer's Signature: _____Date _____