



A Division of Transnet SOC Limited

## INFRASTRUCTURE ENGINEERING

### ELECTRICAL DEPARTMENT SPECIFICATION

#### SPECIFICATION FOR COME ALONG FOR OHTE CABLE

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Two handwritten signatures are shown, each on a dotted line. The top signature is for Rotondwa Ludzulu and the bottom signature is for Molefi Moeketsane.

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Transnet Freight Rail - Infrastructure

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## 1. Scope

This specification stipulates Transnet Freight Rail's requirements for the supply and delivery come along wiring grippers for Overhead Track-Equipment (OHE). The carbon steel wire clamps are designed for tensioning, securing, and adjusting cables and wires railway Overhead power cables.

## 2. Tenderers

Tenderers shall indicate compliance or non-compliance with the specification. To elaborate their reason for non-compliance of a clause a separate sheet may be used to clarify the extent of non-compliance to specific clause.

## 3. Operating Conditions

Equipment to be supplied against this specification shall be suitable for satisfactory operation under the following conditions

### 3.1. Atmospheric condition

- 3.1.1. Altitude : 0 – 1800m above sea level
- 3.1.2. Ambient Temperature : -10 ° C to 40° C
- 3.1.3. Relative Humidity : As high as 90 percent
- 3.1.4. Ambient Storage Temperature : -10° C to 50° C

### 3.2. Construction

- 3.2.1. The equipment shall be constructed using high-grade carbon steel, ensuring superior strength, durability, resistant to deformation and reliability for Overhead power lines.
- 3.2.2. The clamps shall feature an electroplated surface to provide corrosion resistance, extending its life span in the railway environment.
- 3.2.3. The clamp shall have non slip surface grip to ensure a secure grip without causing damage

## 4. Come-Along Clamp for Catenary wires - Technical Requirements

- 4.1 The clamp shall be designed to accommodate cables with an outer diameter ranging from approximately 4mm to 22mm.
- 4.2 The clamp shall have a maximum tension force of approximately 2 ton or 20KN.

## 5. Come-Along Clamp for contact wire – Technical Requirements

- 5.1 The clamp shall be designed to accommodate cables with an outer diameter ranging from approximately 16mm to 33mm.
- 5.2 The clamp shall have a maximum tension force of approximately 3 ton or 30KN.

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## **6. Come-Along Clamp for Feeder wire – Technical Requirements**

- 6.1. The clamp shall be designed to accommodate cables with an outer diameter ranging from approximately 3mm to 13mm.
- 6.2. The clamp shall have a maximum tension force of approximately 1 ton or 10KN.

## **7. General Requirements**

- 7.1 The clamps shall provide consistent gripping force without slippage and damaging the cable under maximum tension.
- 7.2 The design of the clamp shall facilitate easy installation and removal without the need of excessive force
- 7.3 The clamps shall comply with industry safety standards for load bearing and cable handling equipment
- 7.4 The supplier shall provide test certification verifying the clamp's load capacity.
- 7.5 Sufficient training must be provided to all operators of the clamps
- 7.6 The manuals will be provided on the day of the delivery of the clamps