



Transnet SOC Limited
Transnet RME

REQUEST FOR QUOTATION

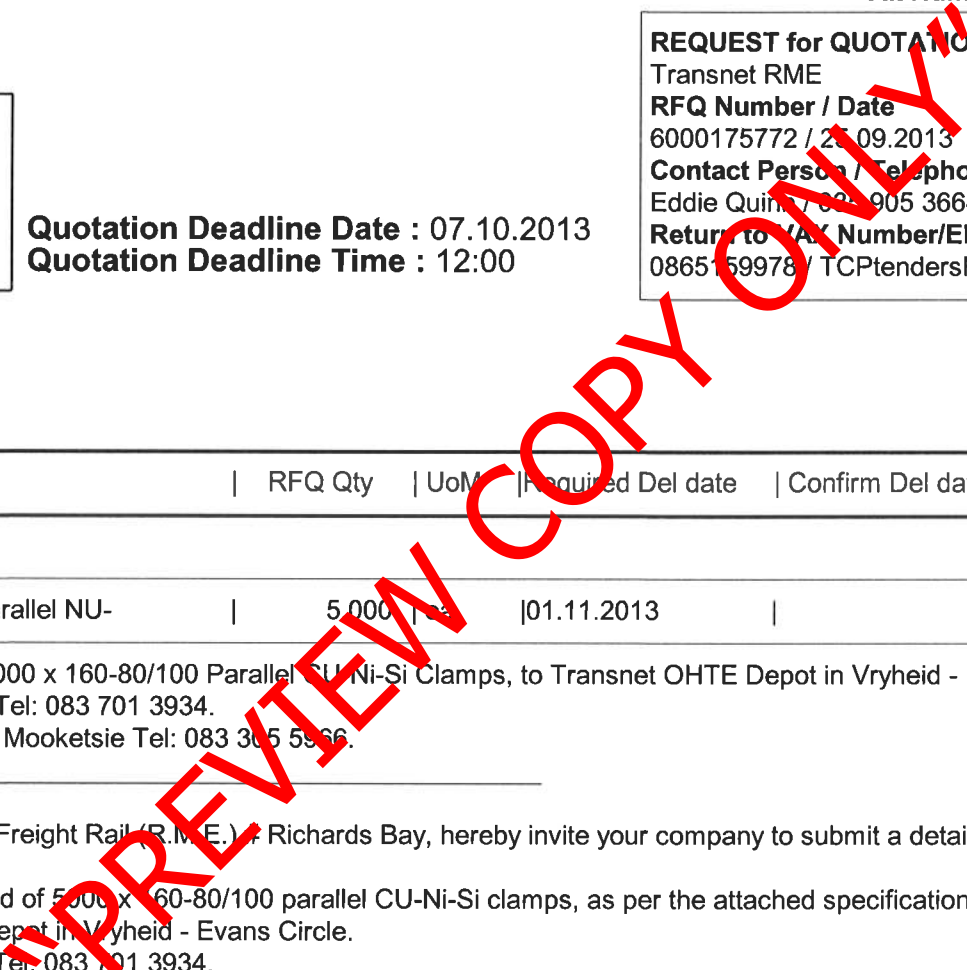
TFR Official Tender Board.
TFR Tender Board
Johannesburg.
2000

Registration Number: 1990/000900/06
Vat Number : 4720103177

Attention:
TFR Official Tender Board.
Telephone Number :
Fax Number :
Vendor Number :500000

Quotation Deadline Date : 07.10.2013
Quotation Deadline Time : 12:00

REQUEST for QUOTATION
Transnet RME
RFQ Number / Date
6000175772 / 25.09.2013
Contact Person / Telephone
Eddie Quinn / 035 905 3664
Return to FAX Number/EMAIL
0865 59978 / TCPtendersRichardsBay@Transnet.net



Item	Material	Description	RFQ Qty	UoM	Required Del date	Confirm Del date	Unit Price Excl	Total Price Excl
00010		160-80/100 Parallel NU-	5 000	pcs	01.11.2013			

Supply, Deliver and Offload, 5000 x 160-80/100 Parallel CU-Ni-Si Clamps, to Transnet OHTE Depot in Vryheid - Evans Circle.
Site Contact: Mr Koen Viljoen Tel: 083 701 3934.
Contract Manager: Mr Tebogo Mooketsie Tel: 083 305 5966.

Transnet Limited t/a Transnet Freight Rail (R.M.E.) of Richards Bay, hereby invite your company to submit a detailed quotation for:

The Supply, Deliver and Offload of 5000 x 160-80/100 parallel CU-Ni-Si clamps, as per the attached specifications and drawings NO ALTERNATIVES PLEASE!!!!,
delivered to Transnet OHTE Depot in Vryheid - Evans Circle.
Site Contact: Mr Koen Viljoen Tel: 083 701 3934.
Project Manager: Mr Tebogo Mooketsie Tel: 083 305 5966.

All technical queries relating to this invitation may be addressed to;
Mr. Tebogo Mooketsie Tel: 083 305 5966.

All tender related queries pertaining to this invitation may be addressed to;
Mr. Eddie Quinn, Tel: 035 # 905 3664.



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 Johannesburg.
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Contact Person / Telephone
 Eddie Quinn / 031-905 3664
Return to FAX Number/EMAIL
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"PREVIEW COPY"

Item	Material	Description	RFQ Qty	UoM	Required Del date	Confirm Del date	Unit Price Excl	Total Price Excl
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The closing time for receipt of your official quotations is 12:00 hours on Monday, 07 October 2013.

Telephonic and late quotes will not be accepted.
 All quotations should be clearly marked, and may be dropped in our tender box, or alternatively forwarded to:
 Me Yogeshnie Gengan, Tender & Fax Assistant,
 Fax No: 086 515 9978 or 031-830 0000, and / or
 e-mailed to: TCPtendersRichardsBay@transnet.net

Physical address for delivering quotations, if required, is:

Transnet Capital Projects Richards Bay
 Tender Box in Main Foyer
 Old Naval Base,
 Commodores Close,
 Meerensee,

The contractor's address and identification details have to be shown on each quotation submitted.

Please supply the following documents with your quotation submitted;

- Valid Tax Clearance certificate.
- Copy of your latest B.B.B.E.E. Certificate.
- Certificate of good standing with the Workman's Compensation Commissioner.



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Transnet RME
 Company
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 TFR Tender Board
 Johannesburg.
 2000

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Registration Number: 1990/000900/06
Vat Number : 4720103177

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Quotation Deadline Date : 07.10.2013
Quotation Deadline Time : 12:00

REQUEST for QUOTATION
 Transnet RME
RFQ Number / Date
 6000175772 / 27.09.2013
Contact Person / Telephone
 Eddie Quinn / 082 905 3664
Return to / FAX Number/EMAIL
 0865 59978 / TCPtendersRichardsBay@Transnet.net

Item	Material	Description	RFQ Qty	UoM	Required Del date	Confirm Del date	Unit Price Excl	Total Price Excl
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Failing to submit any of the documents mentioned above, could result in your quotation to be disqualified / not accepted.

Note: #Transnet may not necessarily accept the lowest or any other offer and reserves the right to select in its favor any or, a portion of any offer made"

If you are unable to quote for this RFQ, please submit a NO QUOTE

Otherwise we look forward to receive your detailed quote by the date and time stated.

Yours faithfully,

"PREVIEW COPY ONLY"



Transnet SOC Limited
Transnet RME
 Company
 TFR Official Tender Board.
 TFR Tender Board
 Johannesburg.
 2000

REQUEST FOR QUOTATION

Registration Number: 1990/000900/06
 Vat Number : 4720103177

Attention:

TFR Official Tender Board.
 Telephone Number :
 Fax Number :
 Vendor Number :500000

Quotation Deadline Date : 07.10.2013
Quotation Deadline Time : 12:00

REQUEST for QUOTATION

Transnet RME

RFQ Number / Date

6000175772 / 20.09.2013

Contact Person / Telephone

Eddie Quinn / 085 905 3664

Return to / FAX Number/EMAIL

0865159978 / TCPtendersRichardsBay@Transnet.net

Delivery Address

TFR RME Richards Bay
 Old Naval Base, Commodores Clo
 Meerensee, Richards Bay
 3900

This RFQ is subject to the following conditions:

1. Price/s : The price/s quoted in SA currency and is excluding of V.A.T.
2. Delivery : The price/s quoted should include delivery cost to the delivery address stated on the RFQ
3. Returnables : A valid tax clearance certificate and BBBEE certificate from a SANAS accredited verification agency attached to quotation for all quotes above R30 000.
Please note that only the official Transnet RFQ will be accepted and all other correspondence to be attached to the original
4. Safety : To confirm to Transnet Capital Projects Health & Safety plan and specification; HAS-std-0001, copy available on request.
5. Confirmation: To confirm your participation in this tender process please sign and return this document as immediate effect prior to the quotation deadline.
6. Negotiations: The Employer may elect to negotiate the final terms of the contract/order with the preferred tenderer in accordance with Clauses F.2.17 and F.3.13 of the CIDB Standard Conditions of Tender. A copy of which is available upon request.

 Signature

 Date






TECHNOLOGY MANAGEMENT

SPECIFICATION

SPECIFICATION FOR NON-FERROUS COPPER— NICKEL—SILICON ITEMS FOR USE ON OVERHEAD TRACK EQUIPMENT

PREVIEW COPY ONLY

Author:	Engineer in Training Technology Management	 S van der Merwe
Approved:	Senior Engineer Technology Management	 L.O. Borchard
Authorised:	Principal Engineer Technology Management	 S Sibande

Date: 15 August 2013

Circulation Restricted To: Transnet Freight Rail – Chief Engineer Infrastructure
- Technology Management

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PREVIEW COPY ONLY

1.0 SCOPE

This specification covers Transnet Freight Rail requirements for non-ferrous Copper-Nickel-Silicon items such as

- i. Contact wire splicers,
 - ii. Contact wire swivel clips,
 - iii. Parallel clamps,
 - iv. Feeder clamps,
 - v. Runner clamps,
 - vi. Dropper clips,
 - vii. Dropper clips,
 - viii. Bolts and screws,
- for use on overhead track equipment.

2.0 REFERENCES

Unless otherwise specified all materials and equipment supplied shall comply with the applicable and latest editions of SANS, IEC, British Standards and Transnet's publications.

The following publications are referred to in this specification:

2.1 British Standards Specification

BS EN 50149:2001	Railway applications - Grooved installations. Electric traction. Copper and copper alloy grooved contact wires and copper alloy grooved contact.
BS EN 12163:2011	Copper and copper alloys. Rod for general purposes.
BS EN 12164:2011	Copper and copper alloys. Rod for free machining purposes
BS EN 12167:2011	Copper and copper alloys. Profiles and rectangular bar for general purposes

2.2 ISO

ISO 9001	Quality Management System
ISO 2859	Sampling procedures for inspection by attributes
ISO 261	ISO general purpose metric screw threads -- General plan

2.3 South African National Standards (SANS)

SANS 6892-1	Metallic materials - Tensile testing
SANS 6506	Metallic materials - Brinell hardness test
SANS 6507	Metallic materials - Vickers hardness test
SANS 136	ISO metric precision hexagon-head bolts and screws, and hexagon nuts (Coarse thread medium fit series)

2.4 Transnet Freight Specifications

- CEE-0241 Specification for hard drawn, grooved, copper contact wire, for electrical traction purposes.
- BBD-7267 Specification for grooved, copper-magnesium contact wire, for electrical traction purposes.

2.5 Transnet Freight Rail Drawings

The current drawings for parts are listed in Appendix 1.

3.0 METHOD OF TENDERING

- 3.1 Tenderers shall indicate clause-by-clause compliance with the specifications. This shall take the form of a separate document listing all the specification clause numbers indicating the individual statement of compliance or non-compliance.
- 3.2 A statement of non-compliance shall be motivated by the tenderer.
- 3.3 Tenderers shall submit descriptive literature consisting of detailed technical specifications, general constructional details and principal dimensions, together with clear illustrations of the equipment offered.
- 3.4 Should this document contain any appendices they are to be completed by the tenderer and submitted with the tender.
- 3.5 Failure to comply with clauses 3.1, 3.2, 3.3 and 3.4 shall preclude a tender from consideration.

4.0 QUALITY CONTROL

- 4.1 The successful tenderer shall establish a quality control system, the requirements of which shall be in accordance with ISO 9001, to assure conformance to requirements of this specification.

5.0 MATERIAL

- 5.1 The material used in the manufacture of all the above mentioned fittings of a Copper-Nickel-Silicon alloy (Cu-Ni-Si) shall have the chemical composition and mechanical properties specified hereunder:
- 5.1.1 Chemical Composition and Mechanical properties

Table 1. Composition

Composition	All Cu-Ni-Si items except bolts, screws, dropper clips, dropper loops.	All Cu-Ni-Si bolts, screws, dropper clips and dropper loops.
Nickel	1,7 - 2,1%	1,0 - 1,6%
Silicon	0,5 - 0,7%	0,4 - 0,6%
Other	0,3 % (max)	0,3 % (max)
Copper	Remainder	Remainder

Table 2. Mechanical Properties

Mechanical Properties	All Cu-Ni-Si items except bolts, screws, dropper clips, dropper loops.	All Cu-Ni-Si bolts, screws, dropper clips and dropper loops
Hardness	150 (min) all items except splicers 170 (min) for splicers HB 10/1000	150 (min) HB 10/1000
Yield stress	370 MN/m ²	540 MN/m ²
Ultimate tensile strength	490 MN/m ²	587 MN/m ²
Elongation	12 % (min)	12 % (min)

5.1.2 Under microscopic examination; transverse and longitudinal sections taken through the finished product shall show a clean material. In the etched condition both transverse and longitudinal sections shall exhibit a medium size recrystallised grains; characteristic of satisfactory processing of the alloy.

5.1.3 The material shall be free from cuprous oxide as determined by microscopic examination at x 75 magnification.

5.1.4 In order to obtain the mechanical properties specified in clauses 5.1.1 above, the alloy specified requires heat treatment which shall be determined by the manufacturer.

5.1.4.1 The manufacturer shall arrange for six control test pieces (see clauses 9.2.1 hereof) of the Cu-Ni-Si alloy representing the contents of each furnace charge, to be included with each batch of material being subjected to heat treatment.

Each batch shall be marked for identification and recorded on related records as per ISO 9001.

5.1.4.2 The dimensions of the test pieces shall be in accordance with SANS 6892 specification.

5.1.4.3 The control test pieces representing the finished product in the fully heat-treated condition shall have the mechanical properties as stipulated in clause 5.1.1.

5.1.5 The tenderer shall be entirely responsible for verifying the quality of each batch of material before commencing manufacturing.

5.2 The material used in the manufacture of all items of stainless steel (drawings as per 2.4 will indicate alternate material possible) shall be in accordance with the American Iron and Steel Institute, grade AISI 304.

5.4 Where stainless steel bolts and nuts are used, a different grade of stainless steel nuts must be used to prevent the bolt and nut to cease up.

6.0 DESIGN

6.1 The various items as called for in the enquiry shall be designed in accordance with the relevant drawings as listed in Appendix 1.

6.1.1 The items shall be designed to the dimensions given on the drawings.

6.2 Furthermore, the contact wire splicer shall be suitable for joining two contact wires (to BS EN 50149 and CEE-0241) in such a manner to achieve an ultimate tensile strength of 52,4 kN in the case of 161 mm² contact wire and 38,5 kN in the case of 107 mm² contact wire when fully assembled with two short pieces of contact wire.

6.3 The hexagon headed bolts and screws shall comply with the requirements of SANS 136, ISO 7045 and ISO 1580 respectively.

6.3.1 The bolts supplied with the 161 mm² and 107 mm² contact wire splicer shall be able to withstand a torque of 67 N.m. and 46 N.m. respectively, plus a safety factor of 1,5.

7.0 DETAILS OF REQUIREMENTS

7.1 Details of the type, size and quantity of the various items required will be furnished in the enquiry.

8.0 ADDITIONAL INFORMATION

8.1 Tenderers shall provide the following information at the tendering stage:

- 8.1.1 Source of supply of the alloy material.
- 8.1.2 Name of the manufacturer of the items as asked for in the enquiry.
- 8.1.3 Manufacturer's production process.
- 8.1.4 Heat treatment that the material will undergo.
- 8.1.5 Economic production quantity; irrespective of the quantity called for.

9.0 TESTS AND INSPECTIONS

9.1 GENERAL

- 9.1.1 Transnet Freight Rail reserves the right to be present at all tests and inspections as called for in clause 9.2 and 9.3.
- 9.1.2 The responsibility for arranging the tests called for in clause 9.2.1 and 9.2.2 rests with the successful tenderer.

9.2 TESTS

9.2.1 Three of the control test pieces of each batch referred to in clause 5.1.4.1 hereof, shall be tested as detailed in SANS 6892; SANS 6506 and SANS 6507 to verify the mechanical properties, referred to in clause 5.1.1, of the material of the finished product.

9.2.1.1 Test certificates in respect of these tests, shall be submitted to Transnet Freight Rail's Technology Management Electrical Quality Assurance Section and shall state the following:

- Chemical composition,
- Mechanical properties,
- Batch identification number.

9.2.2 At least 1% of each batch of the splicers will be assembled and torque tested in accordance to the value in clause 6.3.1 and tested to clause 6.2.

9.2.3 In addition, Transnet Freight Rail reserves the right to call for samples of the completed products as well as a further three control test pieces to be submitted to the Transnet Freight Rail Technology Management Electrical Quality Assurance Section.

These samples and test pieces, when called for, shall be specifically marked for positive identification with their associated heat-treatment batches and test certificates and shall be subjected to all tests called for in this specification.

9.2.3.1 All samples submitted for test purposes shall be excluded from those supplied in terms of the contract quantities.

9.3 INSPECTION

9.3.1 The samples as called for in clause 9.4 shall be inspected for compliance with their relevant drawings in appendix 1. Special attention shall be given to the correctness of all dimensions and threads.

9.4 SAMPLING

9.4.1 The sampling of the items shall be carried out in accordance with the ISO 9001 methodology. Additional sampling requirements will be included in the enquiry if required.

10.0 MARKING

10.1 The items shall be stamped, where one item consist of more than one article each article must be stamped, with the following (except for bolts and screws).

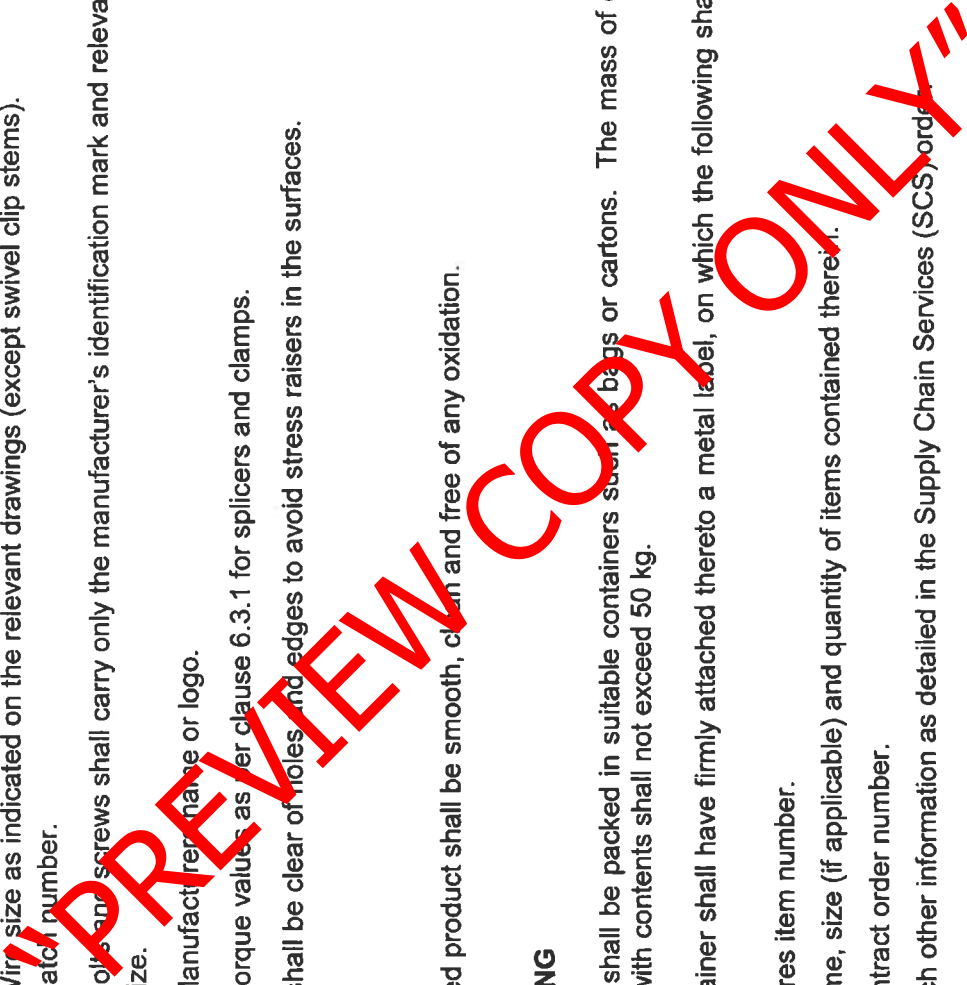
- 10.1.1 TRANSNET or the Transnet logo.
 - 10.1.2 Wire size as indicated on the relevant drawings (except swivel clip stems).
 - 10.1.3 Batch number.
 - 10.1.4 Bolts and screws shall carry only the manufacturer's identification mark and relevant size.
 - 10.1.5 Manufacturer name or logo.
 - 10.1.6 Torque values as per clause 6.3.1 for splicers and clamps.
- 10.2 Markings shall be clear of holes and edges to avoid stress raisers in the surfaces.

11.0 FINISH

11.1 The finished product shall be smooth, clean and free of any oxidation.

12.0 PACKAGING

- 12.1 The items shall be packed in suitable containers such as bags or cartons. The mass of each container with contents shall not exceed 50 kg.
- 12.2 Each container shall have firmly attached thereto a metal label, on which the following shall be stamped:
 - 12.2.1 Stores item number.
 - 12.2.2 Name, size (if applicable) and quantity of items contained therein.
 - 12.2.3 Contract order number.
 - 12.2.4 Such other information as detailed in the Supply Chain Services (SCS) order.



ATTACHMENT 1

This attachment contains the drawings and store number of each component.

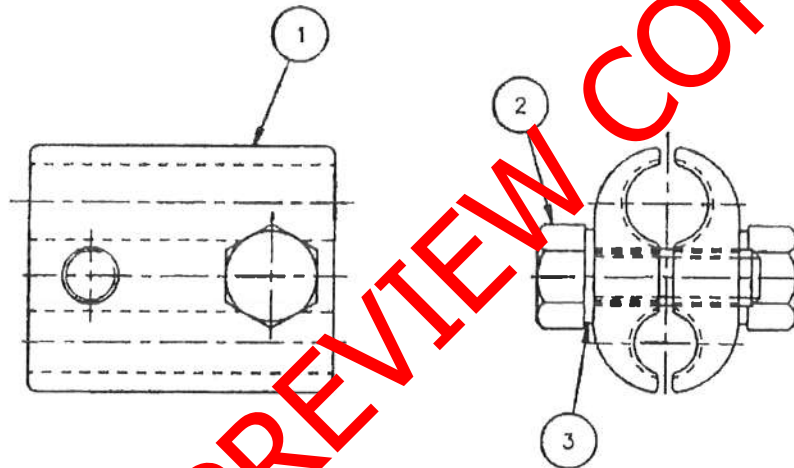
Item description	Drawing Description	Drawing number
Contact wire Splicers.	Splice, Conductor, 161mm ² SQ Cu Contact wire – Electrification TYPES A, B, F, G, H and Coal line deviations	CEE-TNB-0021
	CHEEK, SPLICER, 161mm Cu CONTACT WIRE (FORGED) – ELEC TYPES A, B, F, G, H AND COAL LINE DEVIATIONS	CEE-TNB-0022
	WORKING PLATE FOR SPLIT TYPE CONTACT WIRE SPLICERS	CEE-TNB-0022
	CONDUCTOR SPLICE PROFILE 107mm SQ Cu CONTACT WIRE	CEE-TN-0404
	CONDUCTOR SPLICE ASSEMBLY 107mm SQ Cu CONTACT WIRE	CEE-TN-0405
	CONDUCTOR SPLICE CHEEK 107mm SQ Cu CONTACT WIRE	CEE-TN-0406
	CONDUCTOR SPLICE LOCK PLATE 107mm SQ Cu CONTACT WIRE	CEE-TN-0407
Contact wire swivel clips	SWIVEL CLIP STEM FOR HOCKEY STICK/STEADY ARM	CEE-TND-0029
	SWIVEL CLIP: CONTACT WIRE: STEADY ARM: MECHANICAL TESTS	CEE-TN-0049
	CONE, CLAMP, ELECTRICAL CONTACTOR, STRAIN 107/161MM SQ CU CONTACT WIRE.	CEE-TNB-0037
	SWIVEL CLIP ASSEMBLY: 80 - 100mm SQ CATENARY	CEE-TN-0242
Parallel Clamps	PARALLEL HALF CLAMP FOR VARIOUS CONDUCTOR SIZES	CEE-TNB-0054
	PARALLEL HALF CLAMP FOR VARIOUS CONDUCTOR SIZES	CEE-TNB-0055
Feeder Clamps	PARALLEL HALF CLAMP FOR 161mm SQ Cu CONTACT WIRE	CEE-TNB-0056
	PARALLEL CLAMP FOR 161mm SQ Cu CONTACT WIRE	CEE-TNB-0057
	CLAMP, ELECTRICAL: FEEDER HALF CLAMP 107mm SQ CONTACT WIRE - 25kV AC	CEE-TNB-0060
	CLAMP, ELECTRICAL: FEEDER CLAMP 107mm SQ CONTACT WIRE	CEE-TNB-0081
Runner Clamps	CLAMP, RUNNER, ASSEMBLY: 161mm SQ & 107mm SQ Cu CONTACT WIRE	CEE-TNB-0086
Dropper Clips	DROPPER CLIP (PLATE TYPE) 80/100mm SQ CATENARY	CEE-TND-0036
Dropper Saddle	SADDLE: DROPPERS: COAL LINE DEVIATIONS: 160mm SQ CATENARY: 25 KV AC.	CEE-TMHF-0212
Dropper Loops	LOOP DROPPER ASSEMBLY FOR BRIDGE SPANS: 3kV DC & 25kV AC AUTO TENSIONED CONSTRUCTION	CEE-TN-0261
Bolts and Screws	SCREW CHEESE HEAD	CEE-1S-4
Terminal Lug	TERMINAL LUG CABLE SIZE 500 SQ MM CLEARANCE HOLE FOR STUD	CEE-TNB-45 CEE-TU-0136

ITEM	DESCRIPTION	QTY	STORES ITEM NO	DRG NO CEE-	AMENDMENTS		
1	CONDUCTOR SPLICE, PARALLEL HALF CLAMP	2	---	TNB-54	NO	NAME	DATE
2	SCREW, MACHINE, Cu-Ni-Si, HEX. HEAD, M12x6g-35LG. (SPEC. CEE.0063)	2	54/3670	---	1	L E WOOD	96-08-01
3	WASHER, LOCK, PHOSPHOR BRONZE, INTERNALLY TOOTHED, M12 (SPEC. BS.407)	2	54/2714	---	REDRAWN. DRG NO WAS CEE-TN-74.		
4	CONDUCTOR SPLICE LINER, 162mm ² ACSR CATENERY WIRE (SEE NOTE)	2	---	TNB-90	DO REF: T96/009		

ITEM 3 ALTERNATIVE MATERIAL: STAINLESS STEEL TO SPEC AISI GRADE 304

STORES ITEM NO	CONDUCTOR SIZES
54/766	100mm ² /80mm ² - 50mm ²
54/791	100mm ² /80mm ² - 100mm ² /80mm ²
54/2728	160mm ² - 80mm ²
54/2753	160mm ² - 100mm ² /80mm ²
54/2777	160mm ² - 160mm ²
54/843	250mm ² - 50mm ²
54/867	250mm ² - 100mm ² /80mm ²
54/88	250mm ² - 160mm ²
54/907	250mm ² - 250mm ²

2 HA SLIER 98-02-25
ITEM 4 AND NOTE ADDED.
DO REF: T98/011



NOTE
USE ITEM 4 ON THE 250mm² SIDE WHEN THIS CLAMP IS USED FOR THE 162mm² ACSR (TIGER) CATENERY

DIMENSIONS: mm
SCALE: 1:1

DO REF: M119/70	GEN TOL: LN± — ANG± —
DRN: E LOUW	CKD: G W MALONE DATE: 70-11-19
ENG: F PIENAAR	T C BROOKS for CHIEF ENG

CONDUCTOR SPLICE PARALLEL CLAMP

INFRASTRUCTURE
(ELECTRICAL)

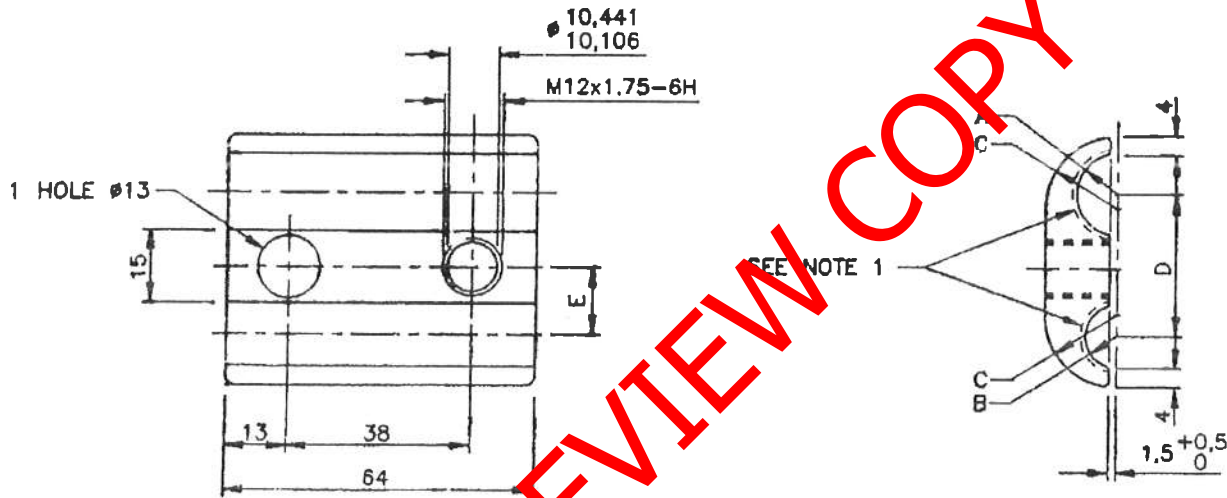


A3
 DRAWING NO CEE-
TNB-55
 SHEET — OF —

NOTES

1. THESE SURFACES TO BE SERRATED. PITCH: 1 x 0,3.
2. TOLERANCE ON RADII A & B : $-\frac{0}{0,5}$.
3. ALL UNSPECIFIED RADII R2.
4. FOR Cu-Ni-Si ALLOY TO BE READ IN CONJUNCTION WITH SPEC. CEE.0063.
5. FOR DEZINCIFICATION RESISTANT BRASS (DZR BRASS), GR CZ132 TO BE READ IN CONJUNCTION WITH BS 2874.

STORES NO	CONDUCTOR SIZES	DIMENSIONS					AMENDMENTS		
		A	B	C	D	E	NO	NAME	DATE
54/766	100mm ² /80mm ² - 50mm ²	6,5	4,5	15	26	12	1	L E WOOD	96-08-01
54/791	100mm ² /80mm ² - 100mm ² /80mm ²	6,5	6,5	15	28	14	REDRAWN. DRG NO WAS CEE-TN-73. DO REF: T96/009		
54/2728	160mm ² - 50mm ²	8,5	4,5	15	28	12	2 L BORCHARD 97-04-18		
54/2753	160mm ² - 100mm ² /80mm ²	8,5	6,5	15	30	14			
54/2777	160mm ² - 160mm ²	8,5	8,5	15	32	16	NOTES, STORES ITEM NUMBERS AND MATERIAL REVISED. DO REF: T97/007		
54/843	250mm ² - 50mm ²	10,5	4,5	18	30	12			
54/867	250mm ² - 100mm ² /80mm ²	10,5	6,5	18	32	14			
54/880	250mm ² - 160mm ²	10,5	8,5	18	34	16			
54/907	250mm ² - 250mm ²	10,5	10,5	18	36	18			



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DIMENSIONS: mm
SCALE: 1:1

MATERIAL: Cu-Ni-Si ALLOY, SPEC. CEE.0063 OR ALTERNATIVELY DEZINCIFICATION RESISTANT BRASS (DZR BRASS), GR CZ132 TO BS 2874.

DO REF: M119/70 GEN TOL: LIN ± 0,5 ANG ± —
 DRN: E LOUW CKD: G W MALONE DATE: 70-11-19
 ENG: F PIENAAR T C BROOKS for CHIEF ENG

CONDUCTOR SPLICE
PARALLEL HALF CLAMP

INFRASTRUCTURE
(ELECTRICAL)



A3
DRAWING NO CEE-TNB-54
SHEET — OF —