

Tender No: JHB-12982

Vendor No: 11001386

BOARD LIST BOARD LIST TRANSNET FREIGHT RAIL PROCUREMENT DEPARTMENT 2000 Purchaser: Nobahle Mjoli Telephone: 011 584 0606

Fax Number:

Please quote reference:

K62/6000599020

Deliver to:

TFR Head Office Supply Chain Services 2000 Johannesburg Closing Nate :30.01.2014
Validity Date :29.04.2014
PFQ N :6000599020
End of Validity :28.02.2014

OPTICAL FIBRE SPLICING FOURMENT IN VEREENIGING.

THE RFQ DOCUMENT, ARE OF TAINABLE FROM THE OFFICE OF TRANSNET FREIGHT RAIL, TENDER ADVISE CENTRE, GROUND FLOOR, INYANDA H. US. 1, WELLINGTON ROAD, PARKTOWN, DURING OFFICE HOURS 08:00 TO 15:00 AND RFQ DOCUMENT IS FOR FREE. RFO CLOSING PATE: 30 JANUARY 2014.

QUOTATIONS MAYBE FAXED TO: (011) 774-9129/(011) 774-9186.

FOR ANY TECHNICAL ENQUIRIES WITH REGARD TO THIS RFQ YOU CAN CONTACT :MR PHINDI SIBIYA 011 570 7254.

1.1 QUOTATION/S MUST BE SUBMITTED PUNCTUALLY AT 10:00 ON OR BEFORE CLOSING DATE AND LATE QUOTATIONS WILL NOT BE CONSIDERED.

1.2 IF POSTED:

21 WELLINGTON ROAD INYANDA HOUSE 1 PARKTOWN

2193

1.3 ,IF DELIVERED BY HAND:

TRANSNET FREIGHT RAIL-SUPPLY CHAIN SERVICES 21 WELLINGTON ROAD

INYANDA HOUSE 1 PARKTOWN

DATE:	SIGNATURE OF TENDERER(S):		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	CONTACT PERSON: .		TEL No:		********

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BOARD LIST TRANSNET FREIGHT RAIL PROCUREMENT DEPARTMENT

2. CONDITIONS:

2.2 ANY PURCHASE ORDER PLACED AS A RESULT OF YOUR QUOTATION WILL BE SUBJECT TO THE STANDARD TERMS AND CONDITIONS OF CONTRACT, FORM US7, (LATEST), GENERAL TENDER CONDITIONS, FORM CS55 (LATEST) AND CONDITIONS MENTIONED HEREIN.

2.3 TENDERERS MAY OFFER AN EARLIER VALIDITY DATE, BUT THEIR QUOTATION MAY, IN THAT EVENT, BE DISREGARDED FOR THIS BEASON

- 2.4 TENDERERS ARE REQUIRED TO OFFER ONLY FIRM PRICES. PRICES JUB. TO REVIEW IN TERMS OF CLAUSE 32 OF FORM US7 WILL ONLY BE CONSIDERED SHOULD THE DELIVERY PERIOD REQUIRED E CEED 6 MONTHS.
- 2.5 BEST DELIVERY TIME MUST BE OFFERED.
- 2.6 DISCOUNT (TRADE DISCOUNT) CASH DISCOUNT (COND. TO) AL DISCOUNT) VALUE VALUE ADDED TAX (VAT) MUST BE SHOWN SEPARATELY.
- 2.7 TRANSNET RESERVES THE RIGHT TO NEGOTIATE AND S AND COMMERCIAL ASPECTS AFTER THE CLOSING DATE OF THE QUOTATION.



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- 2.8 DIRECT DELIVERY INTIMATES DELIVERY BEING EFFECTED INTO THE WAREHOUSE OR THE ACTUAL POINT OF SUPPLY AND SHOULD THEREFORE INCLUDE ANY TRANSPORTATION MODE DEEMED NECESSARY IN EXECUTING THIS METHOD OF DELIVERY BASIS IN ORDER TO MEET THE REQUIRED DELIVERY DATE.
- 3. EVALUATION CRITERIA
- 3.1 COMPETITIVE PRICING AND BBBEE.

TAX CLEARANCE CERTIFICATES:

The Regulations in terms of the Public Finance Management Act, 1999: Framework for Supply Chail Management as published in Government Gazette No. 25767 dated 5 December 2003, Clause 9 (1) (d), stipulates that the accounting officer or accounting authority of an institution to which these regulations apply must reject any bid from a supplier who fails to provide written proof from the South African Revenue that the supplier either has no outstanding tax obligations or has made arrangements to meet outstanding tax obligations.

Tenderers will be disqualified if a valid tax clearance certificate or written proof from the South frican Revenue Service that supplier has made arrangements to meet outstanding tax obligations is not submitted with the tender.

COMPANY DETAILS:		
NAME OF COMPANY:		
CONTACT PERSON:		
TEL. NO	FAX NO:	
REG. NO.		
		•

BROAD BASED BLACK ECONOMIC EMPOWERMENT (BB) EE)

Transnet fully endorses and supports the Government's Broad-based Black Economic Empowerment Programme and it is strongly of the opinion that all South African Business Exterprises have an equal obligation to redress the imbalances of the past.

Transnet will therefore prefer to do business we local business enterprises who share these same values. Transnet will endeavour to do

business with local business entrippes at hat possess a BBBEE "recognition level" of at least a level 5. Transnet urges Tenderers (large enterprises and QSE's - see the low, to have themselves accredited by any one of the various Accreditation Agencies available, who do their BBBEE ratings in accordance with the latest Codes (i.e. those promulgated on 9 February 2007) and whose names appear on the present ABVA (Association of JEE Vertication Agencies) - "List of Full Members" as displayed on the ABVA website (www.abva.co.za). Although no agencies have, as yet, been accredited by SANAS (SA National Accreditation System), Transnet will, in the interim, accept rating certificates of to deeps, the nave been verified by any of the listed agencies.

Enterprise will be inted by such agency based on the following:

- 1. Large Exerprises (i.e. annual turnover >R35million:
- " Rating level based on all seven elements of the BBBEE scorecard.
- 2. Qualifying Small Enterprises (QSE) (i.e. annual turnover >R5million but <R35million:
- " Rating based on any four elements of the BBBEE scorecard.

NB:

- 3. Emerging Micro Enterprises (EME) (i.e. annual turnover <R5m) are exempted from being rated/verified:
- " Automatic rating of Level 4 BBBEE irrespective of race of ownership, i.e. 100% BBBEE recognition
- " Black ownership >50% or Black Women ownership >30% automatically qualifies as Level 3 BBBEE, i.e. 110% BBBEE recognition
- " EME's should provide certified documentary proof of annual turnover (i.e. audited financials) plus proof of Black ownership if Black ownership >50% or Black Women ownership >30% from the EME's Auditor/Accounting Officer.
- 4. In addition to the above, Tenderers who wish to enter into a Joint Venture or subcontract portions of the contract to BBBEE companies, must state in their tenders the percentage of the total contract value that will be allocated to such BBBEE companies, should they be successful

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in being awarded any business. A rating certificate in respect of such BBBEE JV-partners and / or sub-contractor/s, as well as a breakdown of the distribution of the aforementioned percentage must also be furnished

In view of the high emphasis which Transnet places on Broad-based Black Economic Empowerment, Transnet will allow certain preference points for BBBEE in the evaluation of all responses. Depending upon the value of the ensuing business award (i.e. below or in excess of R2m), the 80/20 or 90/10 point preference systems will be utilized where BBBEE will count out of 20 or 10 respectively in the evaluation process.

EACH RESPONDENT IS REQUIRED TO FURNISH PROOF OF THE ABOVE TO TRANSNET. FAILURE TO DO SO WILL RESULT IN A SCORE OF ZERO BEING ALLOCATED FOR BBBEE.

Turnover: Kindly indicate your company's annual turnover for the past year R

- " If annual turnover <R5m, please attach certified confirmation from yod Audito ⊶ounting Officer
- " If annual turnover >R5m please attach original or certified copy of accleditation certificate and detailed scorecard by an ABVA accreditation agency (registered as a "Full Member")

PAYMENT TERMS

The following payment terms will apply as from 1 ctobe 2008.

" All suppliers will be paid 30 days from re eipt of month end statement, i.e. payment term F055.

CONDITIONS:

This quotation is subject to the provisors of the Standard Terms and Conditions of Contract, Form US7, (Latest) and the General Tender Conditions, Form CSS5 (Latest) and any oner standard or special conditions mentioned and/or embodied in the quotation request.

SCHEDULE OF REQUIREMENTS

PRICES TENDERED ART TO BE "DIRECT" AND EXCLUDE VAT.

IN THIS REGALD IN ETENDERER'S ATTENTION IS DIRECTED TO PARAGRAPH 16 OF FORM CSS5 (LATEST).

DATE: SIGN	ATURE OF TENDERER(\$):	
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Date

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TRANSNET FREIGHT RAIL PROCUREMENT DEPARTMENT

TRANSNET INSISTS ON HONESTY AND INTEGRITY BEYOND REPROACH AT ALL TIMES AND WILL NOT TOLERATE ANY FORM OF IMPROPER INFLUENCING, BRIBERY, CORRUPTION, FRAUD, OR ANY OTHER UNETHICAL CONDUCT ON THE PART OF BIDDERS/ TRANSNET EMPLOYEES. IF, IN THE OPINION OF TRANSNET'S CHIEF OPERATING OFFICER, A TENDERER / CONTRACTOR / SUPPLIER HAS OR HAS CAUSED TO BE PROMISED, OFFERED OR GIVEN TO ANY TRANSNET EMPLOYEE, ANY BRIBE, COMMISSION, GIFT, LOAN, ADVANTAGE OR OTHER COSIDERATION, TRANSNET SHALL BE ENTITLED TO REVOKE THE TENDER / CONTRACT BY FOLLOWING ITS INTERNAL POLICIES THAT GOVERN THE ECLUSION PROCESS. IN SUCH AN EVENT TRANSNET WILL BE ENTITLED TO PLACE ANY TENDERER / CONTRACTOR / SUPPLIER WHO HAS CONTRAVENED THE PROVISIONS OF TRANSNET'S BUSINESS ETHICS ON ITS LIST OF EXCLUDED TENDERERS. THIS LIST WILL A SO BE DISTRIBUTED TO ALL OTHER STATE OWNED ENTERPRISES AND GOVERNMENT DEPARTMENTS.

TRANSNET INVITES ITS VALUED SUPPLIERS TO REPORT ANY ALLEGATIONS OF TRANSNET TIP-OFFS ANONYMOUS, AT ANY OF THE FOLLOWING A DDRESSES / CONTACT NUMBERS:-

TOLL-FREE ANONYMOUS HOTLINE - 0800 003 056 EMAIL - Transnet@tip-offs.com FAX NUMBER - 0800 007 788 FREEPOST DN 298, UMHLANGA ROCKS, 4320

CONFIDENTIALITY IS QUARANTEED

Item	Qty	Material	Description
00010	1	OP WAL FIBRE	SPLICING EQUIPMENT R Each

Delivery Date: 28,02,214

FULL DETAILS OF DESCRIPTION

DATE:	CIONIATURE OF	TEMPEDED(O)	
DATE	SIGNATURE OF	TENDERER(\$):	

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DATE:

3. ADDITIONAL INFORMATION REQUIRED: (WHERE APPLICABLE)
3.1 THE FOLLOWING ADDITIONAL INFORMATION IS REQUIRED: (A) DISCOUNT:
(A) DISCOUNT: (B) SETTLEMENT DISCOUNT:
(C) PRICE/S FIRM:
(D) PRICE/S FIRM UNTIL THEREAFTER SUBJECT TO REVIEW.
(E) PRICE/S NOT FIRM:
(F) SABS MARK:
(G) SABS PERMIT NO:
(H) BRAND/MAKE/TYPE:
(I) FULL NAME AND ADDRESS OF MANUFACTURER.:
IN OLE WHILE YELD YOU AND YOU
(J) FULL NAME AND ADDRESS OF INSPECTION POINT:
(3) FOLE NAME AND ADDRESS OF INSPECTION POINT.
(K) COUNTRY OF ORIGIN:
Comply : Does not Comply : Not applicable :
Justification:
(L) SURPLUS MATERIAL:
TENDERERS MUST INDICATE IF THEY WILL BE PREPARED TO PURCHASE BACK FROM TRANSNET ANY SURPLUS
MATERIAL WHICH MAY BECOME AVAILABLE FROM ANY RESULTING PURCHASE ORDER/CONTRACT ORIGINATED
FROM THE GNOW TICK SUBMITTED:
(M) PA ME T C VERSEAS:
TRANSNET LIMITED IS REQUESTED BY THE TENDERER TO EFFECT PAYMENT OVERSEAS DIRECT TO TH
TENDERLR'S PRINCIPAL/SUPPLIER THE FOLLOWING INFORMATION IS REQUIRED:
* EXCHANGE RATE ON WHICH THE QUOTATION PRICE IS BASED: R1,00 (S.A. CURRENCY) BEING EQUAL
TO (FOREIGN CURRENCY)
* PERCENTAGE IN RELATION TO THE QUOTATION PRICE TO BE REMITTED OVERSEAS:
* NAME OF COUNTRY TO WHICH PAYMENT IS TO BE MADE:
* APPLICABLE DATE OF EXCHANGE RATE:
* BENEFICIARY'S NAME AND FULL ADDRESS:

SIGNATURE OF TENDERER(S):

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	RY'S BANKERS AN	D FULL ADDRESS:			

* APPLICABL	E ACCOUNT NUME	BER:			
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3. PEF	RIOD TO TRANSPO	RT MATERIAL TO DES	ST NATION(DAYS	i)	
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SIGNATURE OF TENDERER(S):

DATE:



SPECIFICATION

OPTICAL FIBRE SLICING EQUIPMENT

SPECIFICATION FOR OPTICAL FIBRE SPLICING EQUIPMENT

- 1. Fusion Splicer
- 2. Precision Cleaver
- 3. Preparation Tool Kit
- Splicing Training

SPC-00568 OCTOBER 2006

Revision 2.00

NON-DISCLOSURE OF INFORMATION

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Doc. No.: SPC-00568

Author: BG Nel

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I DOCUMENT AUTHORISATION

FUNCTION	NAME	TITLE & DIVISION	SIGNATURE	DATE
Compiled by:	BG Nel	Technologist Quality Assurance	Signed BG Nel	07/03/2008
Reviewed by :	F Nel	Programme Manger, Project Services	Signed F Nel	07/03/2008
Authorised by:	M Nuttall	Divisional Manager, Transmission Services	Signe i M Nuc. (1	11/03/2008

II DISTRIBUTION

Once updated, a copy of the latest revision will be published in the document management system in use. E-mail to this effect will be sent to the relevant personnel or heads of department.

III DOCUMENT CHANGE HISTORY

ISSUE NO.	DATE ISSUED	INSUED BY	HISTORY DESCRIPTION
1.00	June 2001	Trans nission	Old format
2.00	October 2006	Project Services	Converted to ISO standard and made minor technical changes

IV CHANGES SINCE LAST REVISION

CLAUSE	DESCRIPTION	
All clauses	onverted to ISO standard	
2.12	Change values	
3.6	Change subclause	
	Change specification reference number	

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V ABBREVIATIONS, ACRONYMS AND DEFINITIONS

ABBREVIATIONS AND ACRONYMS	DESCRIPTION	
AC	Alternating Current	
CD	Compact Disc	
dB	Decibel	
DC	Direct Current	
LCD	Liquid Crystal Display	
MM	Multi-mode 1	
PC	Personal Computer	
PCMCIA	PC Interface Slot	
RCA	Trade Name Connector	
RH	Relative Humidity	
SM	Single-mode	

None	SCRIPTION
	17/10/11

VI RELEVANT DOCUMENTATION

APPLICABLE

DOCUMENT NO.	DESCRIPTION	LOCATION
SCAA-14	Training of Transnet Freight Rail Personnel on ew Equipment	Document Control Centre
SCLA-59	Specification for Documentation	Document Control Centre

RELEV NT

DO LUMANT NO.	DESCRIPTION	LOCATION
CAA-14	Has changed to SPC-00003	Document Control Centre
SCLA-59	Has changed to SPC-00004	Document Control Centre

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1. GENERAL

- 1.1 This specification describes the requirements for a Fully Automatic Fusion Splicer to be used for splicing single-mode and multi-mode fibre systems in use by Transnet Freight Rail.
- 1.2 The Fusion Splicer must be portable and rugged and designed for field usage.
- 1.3 The Fusion Splicer must be capable of splicing both Single-mode (SM) 9/125 μm and Multi-mode (MM) 50 and 62,5 / 125 μm fibres with coating diameters from 250 μm up to and including 900 μm .
- 1.4 Preference will be given to units capable of splicing within a total splice cycle time of less than 20 seconds.
- 1.5 Single-mode fibres shall be aligned and spliced via core alignment principle (local light injection) and the alignment performance shall be independent of fibre coating colour and/or buffering.
- 1.6 Multi-mode fibre alignment shall be via a profile/cladding principle and the alignment performance shall be independent of fibre coating colour and/or buffering.
- 1.7 All points of divergence from his specification must be clearly stated.

2. SPLICING PROCEDURE

- 2.1 Automatic alignment of bres in x, y and z axes with manual override.
- 2.2 Viewing of the bre alternately in both the x and y axes.
- 2.3 Automatic pre-fusion to clear fibre end faces of foreign objects.
- 2.4 Automatic cleave quality inspection to user defined limits with abort/warning for unacceptable cleave angles.
- 2.5 Automatic compensation of fusion parameters for atmospheric, fibre, temperature and electrode conditions.
- 2.6 Pre arc test, to test arc conditions and display results.
- 2.7 Core alignment method must be used for splicing single-mode and dispersion shifted fibres.
- 2.8 Splicer must be able to splice non-similar fibres like dispersion shifted to SMF-28.

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- 2.9 Adjustment to splice non-similar fibres must be done automatically through measurements made during the pre-fusion stage mentioned in subclause 2.3.
- 2.10 Automatic minimum tensile test of 450 grams must be done on fibre after splice has been completed.
- 2.11 Automatic splice loss estimation after fusion.
- Constant low loss splices must be achieved an average estimation loss of 0,01 dB or better for identical single-mode fibres, 0,02 dB or even better for multi-mode fibres and 0,05 dB for dispersion shifted fibres must be achieved.

3. MEMORY AND SOFTWARE REQUIREMENTS

- 3.1 The Fusion Splicer shall be capable of storing a regimum of 10 pre-defined factory-splicing programs in internal non-volatile memory for recall.
- 3.2 The Fusion Splicer shall be capable of storing, minimum of 20 user-defined splicing programs in internal non-volatile memory for recall. The splicer settings must be automatically (self-learning) as per subclause 2.5.
- The Fusion Splicer shall be capable d storing data of 1000 splice results in built in memory.
- 3.4 The Fusion Splicer shall be capable of automatically calculate and set fusion parameters for various fibre grees as well as altitude correction. This data must be stored as a user-defined splicing program.
- 3.5 The Fusion Splicer hast be supplied with PC communication software package to facilitate the editing of splicing parameters, loading/downloading of splice programs and to enable print out and storage of splice results and splicer settings.
- The software must operate with Windows 2000 and Windows XP type operating systems.
- The option for a further 14 000 to 30 000 splices data, or 100 splice images, must be ored on a PCMCIA memory card.

4. ISPLAY REQUIREMENTS

4.1 The Fusion Splicer shall be equipped with high-resolution LCD monitor, which forms an integral part of the equipment. The image on the LCD monitor must be clearly visible in the field with bright sunlight.

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- 4.2 The display shall facilitate viewing of the fibres as follows:
 - 4.2.1 X and Y axes of both fibre ends prior to fusion.
 - 4.2.2 Fibre end face angle prior to fusion.
 - 4.2.3 The fibres during arc cleaning and fusion process.
 - 4.2.4 Fibre splice in both the x and y axes after fusion preferable without moving parts.
 - 4.2.5 Estimated splice loss value in dB.
 - 4.2.6 Splice abnormalities or acceptability.
 - 4.2.7 The "hot images" of the splice taken daring fusion in both x and y axes.
 - 4.2.8 Estimated splice loss value.
 - 4.2.9 Splicing abnormalities.
- 4.3 The display shall furthermore facilitate viewing of splicing programs, splicing parameters and other set-ups or editing purposes. User dropdown menus to be incorporated in user interface.
- 5. POWER SUPPLY REQUIREMEN'S
- 5.1 AC Operation : 90 to 260 volts, 50 to 60 Hz.
- 5.2 DC Operation 0,5 to 14 volts.
- A 3 metre LC tower cord terminated in crocodile clamps must be included with the unit.
- 6. REMOTE INTERACTIVE MAINTENANCE SYSTEM
- 6.1 If what he possible to remotely upload and download new software versions.
- 6.2 must be possible to transmit video camera images via the build-in modem card.
- 6.3 It must be possible to remotely adjust the operating parameters or locate and identify problems in the field.
- Remote communication to the splicer via a dial-up connection must be possible.

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- 4.2 The display shall facilitate viewing of the fibres as follows:
 - 4.2.1 X and Y axes of both fibre ends prior to fusion.
 - 4.2.2 Fibre end face angle prior to fusion.
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 - 4.2.7 The "hot images" of the splice taken during fusion in both x and y axes.
 - 4.2.8 Estimated splice loss value.
 - 4.2.9 Splicing abnormalities.
- 4.3 The display shall furthermore facilities viewing of splicing programs, splicing parameters and other set-ups for editing purposes. User dropdown menus to be incorporated in user interface.

5. POWER SUPPLY REQUIREMENTS

- 5.1 AC Operation : 30 to 260 volts, 50 to 60 Hz.
- 5.2 DC Operation 1.5 to 14 volts.
- A 3 metre DC power cord terminated in crocodile clamps must be included with the unit.

6. REMOVINTERACTIVE MAINTENANCE SYSTEM

- 6.1 It have be possible to remotely upload and download new software versions.
- 6.2 must be possible to transmit video camera images via the build-in modem card.
- 6.3 It must be possible to remotely adjust the operating parameters or locate and identify problems in the field.
- Remote communication to the splicer via a dial-up connection must be possible.

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7. **ENVIRONMENTAL CONDITIONS**

7.1 Operating Temperature -10 °C to 50 °C

7.2 Operating Humidity Maximum 95% RH (non-condensing) :

7.3 Altitude 0 - 3600 m

7.4 Storage Temperature -40 °C to 70 °C

EXTERNAL CONNECTIONS 8.

- 8.1 Data communication RS323 interface for the down leading of splice data to a PC, printing of splice data, updating of splice software and performing diagnostics.
- 8.2 RCA video output.
- 8.3 AC input 220 volt AC 50 Hz.
- 8.4 DC input 12 volt DC.
- 8.5 DC output 12 volt DC for poweri er accessories.

9. PROTECTIVE CASING

- The Fusion Splicer must be por able and supplied in a suitable protective (hard) 9.1 case with suitable accommodation for all accessories.
- the type of material the protective case is manufactured 9.2 Tenderers must from.

10. OVEN FOR SHRIPLING OF SPLICE PROTECTORS

- The Fysion Vicer must include a heat oven for shrinking of splice protectors. The 10.1 heat ven temperature and timing must be adjustable to accommodate and men e for varying splice protectors and environmental conditions ely.
- he splicing unit must be available without the heat oven as an option.

11. PRECISION CLEAVER

The Fusion Splicer must be accompanied by a precision cleaver capable of: 11.1

> 11.1.1 Fibre type 250 µm and 900 µm jacketed single fibre.

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11.1.2 Clad diameter

80 μm to 150 μm .

11.1.3 Cleave length

12 mm to 20 mm.

11.1.4 Typical cleave angle

0,5°.

11.1.5 Blade life

> 36 000 fibre cleavings.

11.1.6 Blade type

Circular blade with 12 cutting positions.

12. PREPARATION TOOL KIT

The Fusion Splicer must be supplied with a fibre reparation tool kit which includes the following minimum requirements:

- 12.1.1 250 μm Primary Coat stripper.
- 12.1.2 900 μm tight buffer stripper.
- 12.1.3 High leverage Kevlar Shears
- 12.1.4 1,6 mm to 3 mm Jacket read er.
- 12.1.5 99,5% Isopropyl al ohol (20) ml).
- 12.1.6 Cable stripper.
- 12.1.7 Canned, non-resolue filtered compressed air, 400 ml.
- 12.1.8 Fibre s rap bin.

13. TRAINING

- 13.1 Tenderer must quote separately for training in optical fibre splicing. Training must be conducted at the regional installation depots.
 - 13.11 Cost per session.
 - 1.2 Number of sessions.
 - 13.1.3 Number of candidates that can be accommodated per session.
- 13.2 Training must comply with Transnet Freight Rail specification SPC-00003.

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