Straddle Carriers	**Delivery Lead Time**	**Tender Schedule: T2.2-37 a**

Capacity and ability to deliver on time in accordance with the Employer's programme is a vital requirement of this contract. The Tenderer must submit a complete schedule for the delivery of the straddle carriers showing the duration and location of each major related activity like manufacture of modules, shipping, assembly and commissioning of the straddles and in what batches these will be erected and handed over after commissioning and final endurance test. **A period of six weeks must be allowed for in the schedule for the third party design review**.

NOTE: Delivery of the straddle carriers will be evaluated in batches of twelve straddle carriers. Evaluation of the delivery lead time will also be pro-rata for staggered delivery.

The Tenderer must comprehensively identify all probable and unlikely risks to the delivery schedule, and mitigating measures that should be put in place. The Tenderer must also identify all contingency plans that could be put in place by him to address possible unforeseen problems in availability of materials, labour, delivery of plant, shipping etc.

The programme must be in the form of a bar chart, clearly indicating key dates for progress measurements and/or payments due, and will identify all milestones during manufacture, shipping, site delivery, assembly testing, commissioning and completion of 100 hour endurance test.

The programme must be accompanied by a provisional cashflow of milestone payments based on the tendered exchange rate, but excluding price adjustment for inflation.

Please provide your proposed first programme. This programme should show:

1. The information required of a programme submitted for acceptance in clause 2.6 of the Works Information.
2. Any other requirements for a programme stated in the Works Information.

Further to the programme, the Tenderer must complete the required information below.

	Activity	**Duration (months)**
1.	Order placement to completion of designs	_____
2.	Order placement to Handover/**Endurance test completed** for straddles as per table below: (Point allocation to be pro-rata for staggered delivery.)	

The scoring of the Delivery Lead Time will be as follows:

Batch	Weighting	Scoring Principal	Score
Lead time from contract award to commissioning & handover (incl endurance testing) of straddle carriers.	100%	< or = 10 months	8
	80%	> 10 months & < or = 11 months	
	60%	> 11 months & < or = 12 months	
	40%	> 12 months & < or = 13 months	
	20%	> 13 months & < or = 14 months	
	0%	> 14 months	

Signed _____ Date _____

Name _____ Position _____

Tenderer: _____

Straddle Carrier	**Compliance to Employer's Technical Specification** **TPT_TS_ DESC_6 rev 6**	**Tender schedule: T2.2-73 b**

Tenderers are to complete the attached schedule indicating their compliance to each clause of the Technical Specification together with comments regarding their compliance or non-compliance. Note that this schedule is cross-referenced and must be read in conjunction with the Technical Specification TPT_TS_DESC_Rev 6. Elements of this document not completed will be deemed as the Tenderer not complying. The Tenderer's sign-off at the bottom is deemed confirmation that this document has been read in conjunction with the Technical Specification.

Technical Spec. Clause	Comply (Y/N)	Comment (mandatory if non-compliant)
1. Scope		
1		
2. Operational Requirements		
2.1 Equipment Functionality		
2.1.1		
2.1.2		
2.1.3		
2.1.4		
2.1.5		
2.1.6		
2.1.7		
2.1.8		
2.1.9		
2.1.10		
2.1.11		
2.1.12		
2.1.13		
2.2 Constraints		
2.2		
2.3 Ergonomics		
2.3.1 Operator's Cab		
2.3.1.1		
2.3.1.2		
2.3.1.3		
2.3.1.4		

2.3.1.5		
2.3.1.6		
2.3.1.7		
2.3.1.8		
2.3.1.9		
2.3.1.10		
2.3.1.11		
2.3.1.12		
2.3.1.13		
2.3.1.14		
2.3.1.15		
2.3.1.16		
2.3.1.17		
2.3.1.18		
2.3.1.19		
2.3.1.20		
2.3.2 Operator's Controls		
2.3.2.1		
2.3.2.2		
2.3.2.3		
2.3.2.4		
2.3.2.5		
2.3.2.6		
2.3.2.7		
2.3.2.8		
2.3.2.9		
2.3.2.10		
2.3.2.11		
2.3.2.12		
2.3.3 Operational Aids		
2.3.3.1		
2.3.3.2		
2.3.3.3		
2.3.3.4		
2.3.3.5		
2.3.3.6		
2.3.3.7		
2.3.3.8		
2.4 Terminal Specific Requirements		
2.4.1		
2.4.2		
3. Technical/Technology Requirements		
3.1 Design Requirements		

3.1.1		
3.1.2		
3.1.3		
3.2 Power Plant		
3.2.1		
3.2.2		
3.2.3		
3.2.4		
3.2.5		
3.2.6		
3.2.7		
3.2.8		
3.2.9		
3.2.10		
3.2.11		
3.2.12		
3.2.13		
3.2.14		
3.2.15		
3.3 Hoisting		
3.3.1		
3.3.2		
3.3.3		
3.4 Spreader		
3.4.1		
3.4.2		
3.4.3		
3.4.4		
3.4.5		
3.4.6		
3.4.7		
3.4.8		
3.4.9		
3.4.10		
3.5 Elec. Enclosure & Mounting Panels		
3.5.1		
3.5.2		
3.5.3		
3.5.4		
3.5.5		
3.5.6		
3.6 Access		
3.6.1		
3.6.2		

3.6.3		
3.6.4		
3.6.5		
3.6.6		
3.6.7		
3.6.8		
3.6.9		
3.7 Circuitry, Lighting, Heating & Power Points		
3.7.1		
3.7.2		
3.7.3		
3.7.4		
3.7.5		
3.7.6		
3.7.7		
3.7.8		
3.7.9		
3.8 Air-conditioning		
3.8.1		
3.8.2		
3.8.3		
3.8.4		
3.8.5		
3.8.6		
3.8.7		
3.9 Control System		
3.9.1		
3.9.2		
3.9.3		
3.9.4		
3.9.5		
3.9.6		
3.9.7		
3.10 Computer Systems		
3.10.1		
3.10.2		
3.10.3		
3.10.4		
3.10.5		
3.10.6		
3.10.7		
3.10.8		
3.10.9		
3.10.10		
3.10.11		

3.11 Main Drive Systems		
3.11.1		
3.11.2		
3.11.3		
3.11.4		
3.11.5		
3.11.6		
3.12 Painting		
3.12.1		
3.12.2		
3.12.3		
3.12.4		
3.12.5		
3.12.6		
3.12.7		
3.12.8		
3.12.9		
3.12.10		
3.13 Signage & Markings		
3.13.1		
3.13.2		
3.13.3		
3.13.4		
3.13.5		
3.13.6		
3.13.7		
3.13.8		
3.13.9		
3.13.10		
4. Safety & Environmental		
4.1 Safety Requirements		
4.1.1		
4.1.2		
4.1.3		
4.1.4		
4.1.6		
4.1.7		
4.1.5 Main hoist & Spreader		
4.1.5.1		
4.1.5.2		
4.1.5.3		
4.1.5.4		
4.1.5.5		
4.1.5.6		

4.1.5.7		
4.1.5.8		
4.2 Fire Detection and Suppression		
4.2.1		
4.2.2 Diesel motor/hydraulic enclosure		
4.2.2.1		
4.2.2.2		
4.2.2.3 Activation of fire suppression system		
4.2.2.3.1		
4.2.2.3.2		
4.2.2.3.3		
4.2.2.3.4		
4.2.3 Electrical panel/ Generator enclosure		
4.2.3.1		
4.2.3.2		
4.2.3.3		
4.2.4		
4.2.5		
4.2.6		
4.2.7		
4.2.8		
4.3 Smoke Detection		
4.3.1		
4.4 Environmental Requirements		
4.4.1		
4.4.2		
5. Maintenance		
5.1 Lubrication		
5.1.1		
5.1.2		
5.1.3		
5.1.4		
5.2 Accessibility		
5.2.1		
5.2.2		
5.3 Manuals		
5.3.1		
5.3.2		
5.3.3		
6. General		

6.1		
6.2		
6.3		
6.4		
6.5		
6.6		
6.7		
6.8		
6.9		
6.10		
6.11		
6.12		
6.13		
6.14		
7. Training		
7.1		
7.2		
8. Referenced Specifications		
Standard Specifications		
Employer Specifications		

The scoring of the Compliance to Employer's Technical Specification will be as follows:

Weighting	**Scoring Principal**	**Score**
100%	223 compliant clauses = 100 % compliant	**25**
80%	<223 but >=200 compliant clauses	
60%	<200 but >= 160 compliant clauses	
40%	<160 to >= 140 compliant clauses	
20%	<140 to >= 120 compliant clauses	
0%	< 120 compliant clauses	

Signed _____ Date _____

Name _____ Position _____

Tenderer

_____

Straddle Carriers	**Guarantees and Warrantees**	**Tender Schedule: T2.2-37 c**

The extent of guarantees and warranties in **excess of the standard 12 months** that can be offered by the Tenderer on electrical, mechanical and electronic components, and in **excess of 5 years** on the structure will play an important role in the evaluation of the tenders. Compliance of the corrosion protection to Employer's specification EEAM-Q-008 is critical.

The Tenderer is required to indicate on the schedule what warrantee period is offered for each of the items listed, as well as much detail as possible on the extent of the guarantee.

The Tenderer must also clearly indicate what technical support would be available from him after Completion of the Works. The Tenderer must also state the lead time (after request from Employer) for technical support that may be required on site during the first year of operations of the straddle carriers.

The Tenderer is encouraged to offer any other value adding element related to guarantees, warrantees and technical back-up, like preferential customer status that the Employer will be afforded, preferential pricing and/or delivery that would be applied for purchasing of spares by the Employer, etc.

Item	**Guarantees and Warrantees offered (duration in months)**	**Description of Guarantee**
Structure		
Diesel Motor		
Generator		
Spreader		
PLC's		
Gearboxes		
Electrical Motors		
Electrical Drives		
Hoisting Brakes		
Hydraulic components		
Corrosion Protection		

The scoring of the **Guarantee on Structure and components** will be as follows:

Weighting	Scoring Principal
100%	"For an extended guarantee on the structure > or = 10 years and For an extended guarantee in excess of 24 months on parts of the equipment as follows: Diesel motor and generator, spreader, hydraulic components, electrical drives and PLC = 100%"
80%	"For an extended guarantee on the structure > or = 8 years but < 10 year and For an extended guarantee in excess of 18 months on parts of the equipment as follows: Diesel motor and generator, spreader, hydraulic components, electrical drives and PLC = 80%"
60%	"For an extended guarantee on the structure > or = 7 years but < 8 year and For an extended guarantee in excess of 12 months on parts of the equipment as follows: Diesel motor and generator, spreader, hydraulic components, electrical drives and PLC = 60%"
40%	"For an extended guarantee on the structure > or = 6 years but < 7 year and For an extended guarantee in excess of 12 months on parts of the equipment as follows: Diesel motor and generator, spreader, hydraulic components, electrical drives and PLC = 40%"
20%	"For an extended guarantee on the structure > or = 5 years but < 6 year and For an extended guarantee in excess of 12 months on parts of the equipment as follows: Diesel motor and generator, spreader, hydraulic components, electrical drives and PLC = 20%"
0%	"For an extended guarantee on the structure < 5 years and For an extended guarantee in < 12 months on parts of the equipment as follows: Diesel motor, generator, spreader, hydraulic components, electrical drives and PLC = 0 Points"

Item	Guarantees and Warrantees offered (duration in years)	Description of Guarantee
Corrosion Protection Guarantee		

The scoring of the **Corrosion Protection compliant with EEAM-Q-008** will be as follows:

Weighting	Scoring Principal
100%	Guarantee > or = 10 years, Paint thickness > or = 250 microns and Number of coats of paint > or = 3
80%	Guarantee > or = 8 years but < 10 years, Paint thickness < 250 microns and Number of coats of paint > or = 3 - 80%
60%	Guarantee > or = 6 years but < 8 years, Paint thickness < 250 microns and Number of coats of paint > or = 3 - 60%
40%	Guarantee > or = 5 years but < 6 years, Paint thickness < 250 microns and Number of coats of paint > or = 3 - 40%
20%	Guarantee > or = 4 years but < 5 years, Paint thickness < 250 microns and Number of coats of paint > or = 3 - 20%
0	Guarantee < 4 years; Paint thickness < 250 microns and Number of coats of paint < 3 = 0 Points

Details of Technical Support after completion:

1.
2.
3.
4.

Lead time for on-site Technical Support: _____ hours

Other Value Adding Elements

1.
2.
3.

Signed _____ Date _____

Name _____ Position _____

Tenderer

_____

Straddle Carriers	**Track Record**	**Tender Schedule: T2.2-37 d**

Tenderers are required to demonstrate their or their OEM's experience in the design and supply of diesel electric straddle carriers, with a capacity of at least 40 ton under the spreader and a stacking ability of at least four high, delivered over the last 5 years, and to this end shall supply a sufficient detailed reference list with straddle carrier details and contact details of existing customers.

#	Name of Previous Customer	Contact Details	Safe Working Load (SWL)	No. of Units	Year
1					
2					
3					
4					
5					
6					
7					
8					
9					
	Additional sheets to be added as required.				

The scoring of the Track Record will be as follows:

Score	Track Record
100%	> or = 100 units
80%	> or = 80 units but < 100 units
60%	> or = 60 units but < 80 units score 40%
40%	> or = 40 units but < 60 units score 60%
20%	> or = 20 units but < 40 units score 80%
0%	< or = 20 units

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

Straddle Carriers	**Site Establishment Requirements**	**Tender Schedule: T.2.2-37 e**

The erection site area available for the erection of the straddle carriers is an area 120 m by 55 m. An additional area of approximately 80 m by 30 m will be made available as a laydown area approximately 150 m from the erection area.

Tenderers are to indicate further site requirements for the supply of the Straddle Carriers, including the following:

- Estimated electricity usage per month including average usage and peak demand.
- Estimated water consumption per month including average usage and peak demand.
- Special requirements on site e.g. hard standing or concrete beams, access, etc.

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

Straddle Carriers	**Supplier's Specifications / Functional Information**	Tender Schedule: T2.2-37 f

Tenderers are to complete this schedule with regards to operating parameters, specifications and functional information for the straddle carriers offered.

Parameter	**Scoring Principal**	**Operating Parameter**	**Comments**
Unrestricted operation in wind speed exceeding minimum requirement of 72 km/hr	> or = 90 km/hr = 100 points		
	> or = 85 but < 90 km/hr = 80 points		
	> or = 80 but < 85 km/hr = 60 points		
	> 75 but < 80 km/hr = 40 points		
	> 72 but < 75 km/hr = 20 points		
	< or = 72 km/hr = 0 points		
Spreader side shift, to either side of center (mm)	If side shift > or = +/- 300mm, then 100 points		
	If > or = +/- 275mm but < +/- 300mm, then 80 points		
	If > or = +/- 250mm but < +/- 275mm, then 60 points		
	If > or = +/-225mm but < +/-250mm then 40 points		
	If > or = +/-200mm but < +/-225mm then 20 points		
	If < +/- 200mm, then 0 points		
Travelling speed with load of up to 40 ton under the spreader (km/hr)	> or = 25 km/hr = 100 points		
	> or = 24 but < 25 km/hr = 80 points		
	> or = 23 but < 24 km/hr = 60 points		
	> or = 22.5 but < 23 km/hr = 40 points		
	> or = 22 but < 22.5 km/hr = 20 points		
	< 22 km/hr = 0 points		
Hoist speed with empty container under the spreader (m/min)	> or = 24 m/min = 100 points		
	> or =23 but < 24 m/min = 80 points		
	> or =22 but < 23 m/min = 60 points		
	> or = 21 but < 22 m/min = 40 points		
	> or = 20 but < 21 m/min = 20 points		
	< 20 m/min = 0 points		
Hoist speed with load of up to 40 ton under the spreader (m/min)	> or = 20 m/min = 100 points		
	> or = 19 but < 20 m/min = 80 points		
	> or = 18 but < 19 m/min = 60 points		
	> or = 17.5 but < 18 m/min = 40 points		
	> or = 17 but < 17.5 m/min = 20 points		
	< 17 m/min = 0 points		
Lowering speed with load of up to 40 ton under the spreader (m/min)	> or = 18 m/min = 100 points		
	> or = 17 but < 18 m/min = 80 points		
	> or = 16 but < 17 m/min = 60 points		
	> or = 15 but < 16 m/min = 40 points		
	> or = 14 but < 15 m/min = 20 points		

	< 14 m/min = 0 points		
Make / model of straddle carrier tendered			
Lifting capacity of single lift straddle carrier (ton)			
Ground clearance of spreader when in the raised (highest) position (metres)			
Ground clearance of spreader when in the lowered (lowest) position (mm)			
Type of diesel motor to be used			
Euromot Standard to which Diesel motor complies to with regards to emissions			
Corrosion Protection: Number of Coats of Paint Minimum overall Paint Thickness			
Fuel tank capacity			
Other "Value-add" systems; designs; innovations			
1.			
2.			
3.			

Diesel Engine and Generator Type	Mass	Operating RPM	Manufacturer	Rating Kw	Duty Type

Spreader	Mass	Capacity	Manufacturer

Motor Drives

Function	Numbers of	Motor Type	Manufacturer	Rating Kw	Control Method
Hoist					
Drive					
Steering					
Others					

	Parameterisation Methodology	Diagnostic Tools Required	Parameterising and Diagnostic tools supplied. Y/N
Drive Setup and Diagnostics methods			

Straddle Computer Diagnostic System

Function	On board Computer specification	On board Computer Manufacture	Software Manufacture	Configuring Software inclusive? Y/N
SCADA				
Other Diagnostic Systems				

PLC

Brief description	Make of PLC	Communication bus system used. Description and make	Make of Slave stations

Total straddle management system

The scoring of the Spreader side shift will be as follows:

Score	Scoring Principal
100%	If side shift > or = +/- 300mm
80%	If > or = +/- 275mm but < +/- 300mm
60%	If > or = +/- 250mm but < +/- 275mm
40%	If > or = +/-225mm but < +/-250mm
20%	If > or = +/-200mm but < +/-225mm
0	If < +/- 200mm

The scoring of the Travelling speed with load up to 40 ton in km/hr will be as follows:

Score	Scoring Principal
100%	> or = 25 km/hr
80%	> or = 24 but < 25 km/hr
60%	> or = 23 but < 24 km/hr
40%	> or = 22.5 but < 23 km/hr
20%	> or = 22 but < 22,5 km/hr
0	"< 22 km/hr = 0 points

The scoring of the Hoist speed with empty container in m/minr will be as follows:

Score	Scoring Principal
100%	> or = 24 m/min
80%	> or =23 but < 24 m/min
60%	> or =22 but < 23 m/min
40%	> or = 21 but < 22 m/min
20%	> or = 20 but < 21 m/min

0	"< 20 m/min = 0 points

The scoring of the Hoist speed with load up to 40 ton in m/min will be as follows:

Score	Scoring Principal
100%	> or = 20 m/min
80%	> or = 19 m/min but < 20 m/min
60%	> or = 18 m/min but < 19 m/min
40%	> or = 17,5 m/min but < 18 m/min
20%	> or = 17 m/min but < 17,5 m/min
0%	< 17 m/min = 0 points

The scoring of the Lowering speed with load up to 40 ton in m/min will be as follows:

Score	Scoring Principal
100%	> or = 18 m/min
80%	> or = 17 but < 18 m/min
60%	> or = 16 but < 17 m/min
40%	> or = 15 but < 16 m/min
20%	> or = 14 but < 15 m/min
0%	< 14 m/min

The scoring of the Fuel tank capacity shall allow for enough fuel for shift will be as follows:

Score	Scoring Principal
100%	For the machine operating a > or = 12 hours shift on one fuel tank
80%	For the machine operating a > or = 11 hours shift on one fuel tank
60%	For the machine operating a > or = 10 hours shift on one fuel tank
40%	For the machine operating a > or = 9 hours shift on one fuel tank

20%	For the machine operating a > or = 8 hours shift on one fuel tank
0%	For the machine operating a < 8 hours shift on one fuel tank

Four top features of the system offered:

1.

2.

3.

4.

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

Straddle Carriers	**Recommended Maintenance Spares List**	**Tender Schedule: T2.2-37 g**

Note to Tenderer: Tenderers are to complete this schedule with regards to recommended spares required for the first year of operation (approximately 4,500 hours) of the straddle carriers. Tenderers are to complete this schedule with regards to recommended maintenance spares, not included in the 'Mandatory Critical Spares' list and 'Mandatory Maintenance Spares' list required for the first year of operation.

Tenderers to indicate those spares that will be available in South Africa (i.e. locally available) and provide a method statement detailing procedure/action plan on how stock will be made available in South Africa. Prices for the spares to be valid for one year (12 months).

#	Description	Supplier	Locally Avail (Yes/No)	Delivery Lead Time	Price
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
Etc.	Additional page/s to be added to supply comprehensive list				

Signed _____ Date _____

Name _____ Position _____

Tenderer

_____

Straddle Carriers	Compliance to Eligibility Criteria	Tender Schedule: T2.2-37 h

Tenderers are to list in this schedule compliance to the Eligibility Criteria of the Straddle Carriers. Tenderers must provide evidence for all the yes or any superior specification. If no is selected, it will mean non-compliance, which lead to disqualification.

Parameter for Straddle Carrier	Comply (Yes/No)
Tenderer is an original equipment manufacturer (OEM) of Straddle Carriers. (Letter from OEM declaring they will be supplying TPT directly will be required.)	
Compliance to FEM 1.001 Design Specifications. Brochures or OEM's technical specifications must be submitted.	
Compliance to EUROMOT II emissions standard as a minimum. Brochures or OEM's technical specifications must be submitted.	
The straddle carrier shall be capable of handling cargo flats as low as 500mm. Brochures or OEM's technical specifications must be submitted.	
The straddle carrier shall be capable of handling other loads using wire ropes or slings. Brochures or OEM's technical specifications must be submitted.	
Straddle carrier can operate with a spacing of 1.65 m between container stacks. Brochures or OEM's technical specifications must be submitted.	
Minimum unrestricted in-service wind speed of 72 km/hr. The straddle carrier shall be able to operate, even if restricted, in a wind speed of up to 90 km/hr. Brochures or OEM's technical specifications must be submitted.	
Additional / secondary access provided from ground level to top of straddle shall be an inclined cat ladder, designed to allow maintenance to safely gain access to the top of the straddle carrier while carrying their tool bags. This access will also serve as the emergency exit from operator's cabin. Brochures or OEM's technical specifications must be submitted.	
The straddle carrier outer turning radius must not exceed the 10m turning radius. Brochures or OEM's technical specifications must be submitted.	

The straddle carrier outer width must not exceed 5.00m from side to side. Brochures or OEM's technical specifications must be submitted.	
Straddle carrier height: Pier 2: 4 high, PECT: 3 high, CTCT 4 high, EL MPT: 3 high, CT MPT: 4 high	
The camera system must continually save to the recorder for the 7 day cycle. Brochures or OEM's technical specifications must be submitted.	
Spreader shall be equipped with a shear pin/ failsafe on hydraulic ram mounting to prevent impact damage on the hydraulic ram itself. Brochures or OEM's technical specifications must be submitted.	
Fleet management system to be provided for the life of the machine. The system to include for remote access able to integrate through open application programming interface (API's) or equivalent into the on-board PLC systems on the straddle carrier in order to view machine status, condition, faults, hours etc. Brochures or OEM's technical specifications must be submitted.	
The straddle carrier is supplied with on-board and remote crane management system software for fault diagnostics. Brochures or OEM's technical specifications must be submitted.	
The straddle carrier is equipped with high speed industrial wireless adapter for SCADA connection. Brochures or OEM's technical specifications must be submitted.	
The stacking height of the straddle carrier as per the Scope of Work. DCT, CTCT: 4 High EL, PECT: 3 High	

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

Straddle Carriers	**Technical Data**	**Tender Schedule: T2.2-37 i**

Note to Tenderer:
All information, technical data and/or data (or particulars of the offer) called for in the Works Information or in the *Employer's* Standard Specification, shall be submitted by the tenderer with its tender as a separate returnable schedule in appropriate format. Tenderers shall also attach to this schedule detailed descriptive literature and specifications for all the major components offered, including principles of operation. These attachments must be **specific** to the components offered and **not** general brochures of the supplier

Summary of items attached to this schedule:

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

Straddle Carriers	**Reference List**	**Tender Schedule: T2.2-37 j**

Tenderers are required to provide a reference list of sites / terminals where OEM has supplied four high diesel electric straddles in the last 3 years, with site / terminal, contact person, contact phone numbers and e-mail addresses provided. (**Note**: Transnet Port Terminals is not to be used as a reference site.)

Tenderers to ensure that the contact persons provided are contactable at the details provided as references provided will be contacted as part of the evaluation process. Failure to submit **at least three** (3) contactable references may lead to tenderer's bid not being further evaluated. In addition to contacting the references, and based on the adequacy of the feedback from the reference checks, Transnet Port Terminals reserves the right to conduct a site visit to any or all of these sites / terminals to further assist in the evaluation of the bids.

	Name of Site / Terminal	Contact Details	No. of Units	Year
1		Name: Phone: E-mail:		
2		Name: Phone: E-mail:		
3		Name: Phone: E-mail:		
4		Name: Phone: E-mail:		
	Additional sheets to be added as required.			

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

Straddle Carriers	**Origin of Parts / Components Making Up Straddle Carriers**	Tender Schedule: T2.2-37 k

Tenderers are to indicate where the different parts and components for the straddle carriers will be fabricated or sourced from for the straddle carriers offered. Parts / components making up the entire straddle carrier structure are to be listed.

Part / Component	**Sub-Contractor / Supplier**	**Country**

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

Straddle Carriers	**Plant and Material Schedules**	Tender Schedule: T2.2-37 l

Note to Tenderers:

Tenderers are to list in this schedule all major mechanical (including brakes), hydraulic , air- conditioning, electrical and electronic components proposed to be incorporated in the Straddle Carriers offered, as well as the speed control systems. These items are to be listed by type, rating and proposed make/supplier. A motivation for why this particular make/model of component is proposed must be submitted, taking into consideration the local support environment, previous experience with the local conditions.

Component and application	Type	Rating / size	Supplier / make / model	Motivation

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

Straddle Carriers	Total Cost of Ownership	Tender Schedule: T2.2-37 m

Note to Tenderer:

Tenderers are to complete this schedule with regards to the Total Cost of Ownership (TCO) of the straddle carriers. This is to be in the form of a spread sheet with the information as set out below.

Servicing							
Servicing costs							
Service Type i.e. 1000hrs, 2000hrs,etc (A,B,C,D,E)							
Service intervals (Operating Hours)	100hr	500hr	1,000hr	2,000hr	3,000hr	4,000hr	Etc. repeated for life of straddle
Hours required for service at the different intervals							
Consumables for the different services (to be identified and priced)							
List each item							
Total for Consumables							
Fuel Consumption							
Average expected consumption assuming 70% max revs	l/hr						
Tyre Life Expectancy	Hours						
Mid-life refurbishment details							
(Assuming 4500 operating hours per year. Give details of hours when this will be performed)							
List each item							
Total for mid-life refurbishment							
Hours required for mid-life refurbishment							
Design life in hours for straddle carrier	Hours						

Total							

Signed _____ Date _____

Name _____ Position _____

Tenderer

_____

Straddle Carriers	**Site Establishment Requirements**	**Tender Schedule:T2.2-37n**

Tenderers are to indicate their site establishment requirements for the supply of the Straddle Carriers , including the following:

- Erection site area required (m²).
- Site lay-down area required (m²) and preferred proximity to the erection site.
- Estimated electricity usage per month including average usage and peak demand.
- Estimated water consumption per month including average usage and peak demand.
- Special requirements on site e.g. hard standing or concrete beams, access etc.

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

Fork Lifts	Fuel Tank Capacity	Tender Schedule: T2.2-37 o

The Tenderer is required to provide Fuel Tank Parameters

Item	Value / Detail	Comments
Capacity of fuel tank (liters)		
Confirmation that fuel tank capacity is sufficient for machine to operate for an eight-hour shift (Yes / No)		

The scoring principle for Fuel Tank Capacity is as follows.

Score	Required operating hours on a Single Fuel tank
0%	For the machine operating a < 8 hours shift on one fuel tank
20%	For the machine operating a > or = 8 hours shift on one fuel tank
40%	For the machine operating a > or = 9 hours shift on one fuel tank
60%	For the machine operating a > or = 10 hours shift on one fuel tank
80%	For the machine operating a > or = 11 hours shift on one fuel tank
100%	For the machine operating a > or = 12 hours shift on one fuel tank

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

Straddle Carriers	**Origin of Parts / Components Making Up Straddle Carriers**	Tender Schedule: T2.2-37 p

Tenderers are to indicate where the different parts and components for the straddle carriers will be fabricated or sourced from for the straddle carriers offered. Parts / components making up the entire straddle carrier structure are to be listed.

Part / Component	**Sub-Contractor / Supplier**	**Country**

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

T2.2-37 q: Recommended Critical Spares SC

Note to Tenderer:

Tenderers are to complete this schedule with regards to recommended critical spares required to support the equipment supplied for the first 5 years of operation, excluding the 'Mandatory Critical Spares' (T2.2-37 r).

Tenderers to indicate those spares that will be available in South Africa (i.e. locally available) and provide a method statement detailing procedure/action plan on how stock will be made available in South Africa.

Prices to be fixed for a period of 12 months.

#	Description	Supplier	Locally Avail (Yes/No)	Delivery Lead Time	Price
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
Etc.	Additional page/s to be added to supply comprehensive list				

Signed _____ Date _____

Name _____ Position _____

Tenderer

_____

T2.2-37 r: Mandatory Critical Spares

Tenderers are to complete this returnable for the critical spares identified by Employer below, for the straddle carriers.

Tenderers are reminded that as per the Works Information clause, the spares listed below are required as part of the Main Offer.

Item #	Description	Supplier	No Required	Cost per unit	Total Cost
1	Engine		5		
2	Generator		5		
3	Variable Speed Drives (Hoist)		20		
4	Variable Speed Drives (Travel)		20		
5	Hoist Motor		4		
6	Drive (Travel) Motors		20		
7	Auxillary inverters		8		
8	AC- DC converters (from generator to DC bus)		8		
9	Hydraulic power pack (pump + motor)		4		
10	Main hydraulic manifold		2		
11	Brake manifold		4		
12	Steering / brake pumps (if different from hydraulic power pack)		4		
13	Drive Hubs		12		
14	Freewheel (Non-Drive) Hubs		12		
15	Turbo		5		
16	Steering arm sets		40		
17	Spreader valve blocks		10		
18	Spreader extension rams		10		
19	Sideshift rams/ cylinder		8		

20	Pantographs (Hose bridge connecting top frame to spreader)		5		
21	Encoder hoist/ drive		20		
22	PLC units		4		
23	PLC / Cabin screens		4		
24	Sheaves		8		
25	Wheel rims		10		
26	Loadcells		8		
27	Cabin aircon unit		2		
28	Loadskates/ spreader claws		16		
29	Full set (complete) spreader		1		
30	Ground control unit (Handheld unit to view and rectify errors from the bottom of the machine, with overide/bypass functions for technical)		6		
31	Multi-function seat		5		
32	Full cabin set (Complete spare replacement cabin)		1		
33	Shuttle beams (Yoke beams)		4		
34	Brake resistor		10		
35	Full service kit for 500 hours		60		
36	Full service kit for 1000 hours		60		
37	Full service kit for 2000 hours		60		

Signed _____ Date _____

Name _____ Position _____

Mandatory Critical Spares

Tenderer _____

Mandatory Critical Spares

Straddle Carriers	**Track Record - For wind speeds exceeding 72 km/ hr**	**Tender Schedule: T2.2-37 s**

Tenderers are required to demonstrate their or their OEM's experience in the design and supply of straddle carriers that can operate **unrestricted** (i.e. at normal operating speeds) in wind speeds **exceeding 72 km / hr**, with a capacity of at least 40 ton under the spreader, delivered over the last 5 years, and to this end shall supply a sufficient detailed reference list with straddle carrier details and contact details of existing customers.

#	Type of straddle	Wind speed (in excess of 72 km/hr - unrestricted)	Name of Previous Customer	Contact Person and Details	Safe Working Load (SWL)	No. of Units	Year
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

Signed _____ Date _____

Name _____ Position _____

Tenderer _____