



PRODUCT DEVELOPMENT - WHEELS USER REQUIREMENT SPECIFICATION

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USER REQUIREMENT SPECIFICATION FOR THE SUPPLY OF INDUSTRIAL BARCODE PRINTERS

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DOCUMENT CONTROL

Distribution List:	
Document Availability:	SAP Docman
Related Policy Documents:	
Supporting Templates:	

1. BACKGROUND AND SCOPE OF WORK

- 1.1 This user requirement specification (URS) is for the supply and delivery of a quantity of industrial barcode printers. The quantity and delivery locations will be as stated in the 'request for quotation (RFQ)' document.

The barcode printers will be used by Transnet Engineering in the wheel workshop for printing barcodes which will be used in production and maintenance of wheelsets (**see figure 1 in appendix B for an example**).

- 1.2 The tenderer must indicate compliance to each item in the attached feedback checklist in Appendix A.

2. SPECIFIC REQUIREMENTS

The following minimum requirements must be complied with:

2.1	Printer Specification	
2.1.1	Print Method	Thermal transfer
2.1.2	Print speed	152mm per second
2.1.3	Printing resolution	Minimum 203 dpi
2.1.4	Print Width (Max)	104 mm
2.1.5	Printer Memory	32MB RAM / 16 MB flash
2.1.6	Print length	2000 mm
2.1.7	Loading	Side loading path for easy media and ribbon loading
2.1.8	Time	Standard real time clock
2.2	Ribbon Specification	
2.2.1	Ribbon Type	Wax, Wax-Resin or Special Resin
2.2.2	Ribbon Width (Min/Max)	25.4/112 mm
2.2.3	Max ribbon Length	450 m
2.2.4	Inner Core Diameter	25.4 mm
2.2.5	Outer Core Diameter	81 mm
2.2.6	Ribbon system	Automatic ribbon tension adjustment
2.3	Media Specification	
2.3.1	Media Type	Roll feed thermal paper
2.3.2	Media Width (Min-Max)	25.4/114 mm
2.3.3	Media Length (min/Max):	6/2000 mm
2.3.4	Media sensing	Transmissive (Gap)
2.3.5	Media thickness	0.0635~0.254 mm
2.3.6	Media handling mode	Cutter (cut at the end of each print)
2.4	Connectivity/Interfaces	<ul style="list-style-type: none">Serial RS232, USB 2.0, and Ethernet 10/100Base TCompatible with Windows 10 and above
2.5	Power requirements	Internal universal switching power supply. Input voltage: 100 ~240V, 50 ~ 60Hz
2.6	Operational interface	Light to provide status indicator

2.7	User Operating Temperature	-20°C to 50°C / -4°F to 122°F
2.8	Humidity (Non-condensed)	Operating 10% to 90% / Storage 5% to 95%
2.9	Dimensions	Max: W =500 mm, H =500 mm, D :500 mm
2.10	Operating manual to be provided for each unit.	

3. OPERATING ENVIRONMENT

3.1 The equipment will be used in the wheel workshop where there is a high level of noise and vibration and dust.

4. EXECUTION OF WORK UNDER THE CONTRACT

4.1 The contractor must at all times adhere to the access and control requirements as specified by Transnet Engineering.

5. GUARANTEE

5.1 The Barcode printers shall include a 12-month guarantee period during which any fault and failures shall be fully covered by the contractor.

5.2 The tenderer shall clearly stipulate the nature of the guarantee and how long it will take their maintenance staff to be on site. Transnet Engineering requires a response time of no more than 24 hours.

5.3 In the event of a defect/failure being one which is inherent in the design and/or manufacture, the Contractor shall be obliged forthwith to make good and remedy such defect. A defect may be declared inherent when it fails in operation in a 12 month period or when a particular component fails three times or more in this period after being rectified. Once an inherent defect is declared during the guarantee period, the guarantee period will be delayed with such a time required to solve the inherent defect. Once the Inherent defect is solved and cleared, the guarantee period will continue and will be extended with the corresponding Inherent defect remedy period.

5.4 Should any defect be found which, in the opinion of Transnet Engineering is due to improper or faulty material, workmanship, design, a method of manufacture or from any other fault or neglect on the part of the Contractor, such defect / failure shall immediately be made good or remedied by the contractor at his/her sole cost.

5.5 Anything replaced as a result of the clause above, will again carry an as new guarantee from the date of delivery of the replaced / repaired component.

5.6 Should the Contractor fail, when called upon, to make good or remedy a defect (under guarantee or declared inherent) within a reasonable time, Transnet Engineering may

affect the repair and thereafter recover from the Contractor all costs and expenses associated with such repair.

6. PAYMENT

6.1 The following would be considered by Transnet Engineering for payment:

- i. The contractor has supplied the equipment.
- ii. All requested information and actions have been taken as outlined in this document.
- iii. A responsible person as identified by Transnet Engineering signs a document indicating that the equipment is as per the requirement.

7. AFTER SALES SERVICE

7.1 The tenderer shall give full details of who the supplier of the equipment is as well as the availability of spares. It shall be indicated whether a local supplier exists.

8. OTHER TENDER REQUIREMENTS

8.1 The contractor shall further include the following in the tender:

- i. The tenderer must indicate compliance to each item separately in the format of the attached feedback checklist in Appendix A.
- ii. The period for delivery.

APPENDIX A

No.	Heading / Sub-section	Comply		Comments
		Yes	No	
1.0	BACKGROUND AND SCOPE OF WORK			
1.1				
1.2				
2.0	SPECIFIC REQUIREMENTS			
2.1				
2.1.1				
2.1.2				
2.1.3				
2.1.4				
2.1.5				
2.1.6				
2.1.7				
2.1.8				
2.2				
2.2.1				
2.2.2				
2.2.3				
2.2.4				
2.2.5				
2.2.6				
2.3				
2.3.1				
2.3.2				
2.3.3				
2.3.4				
2.3.5				
2.3.6				
2.4				
2.5				
2.6				
2.7				
2.8				
2.9				
2.10				

3.0	OPERATING ENVIRONMENT			
3.1				
4.0	EXECUTION OF WORK UNDER THE CONTRACT			
4.1				
5.0	GUARANTEE			
5.1				
5.2				
5.3				
5.4				
5.5				
5.6				
6.0	PAYMENT			
6.1				
i.				
ii.				
iii.				
7.0	AFTER SALES SERVICE			
7.1				
8.0	OTHER TENDER REQUIREMENTS			
8.1				
i.				
ii.				

APPENDIX B



Figure 1: Industrial Barcode printer