


Specification supplying, testing, commissioning, and training of 3-wheel submerged arc welding tractor and the power source at Germiston main plant (TE)

Specification and Document Compiled by:

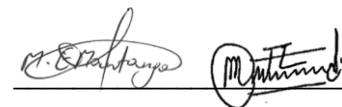
Name & Surname Kgobisa Makena

Signature 

Date 27/October/2022

Supported by:

Name & Surname Elvis Mantanga & Funanani Mufamadi

Signature 

Date 28-10-2022

Recommended by:

Name & Surname Benjamin Mosia

Signature 

Date 02/11/2022

Approved by:

Name & Surname Kgabisi Phalime

Signature 

Date 03/ 11 / 2022

Document Name: Specification Template for MPE Classification: Internal Date: 22 October 2022	Ref: MPE_MAIN_GMX_SPEC_ Revision: 01 Page: 1 of 4	Configuration Control Only
--	--	----------------------------

1. SCOPE OF WORK INSTRUCTION

1.1 This specification is strictly for the supplying, testing, commissioning, and training of a 3-wheel submerged arc welding tractor and the power source at Germiston main plant (TE)

2. MINIMUM REQUIREMENTS:

This specification does not absolve the supplier of sound engineering practices.

Material to be supplied should be SABS approved and of first grade.

THIS SPECIFICATION IS FOR: 3-wheel submerged arc welding tractor

* **Max Current:**1000AMP

***Travel Speed (met):** 0.1-2.0 m/min (4-78.7 in./min)

* **Metal Type:** mild steel (**wire type**)/mild steel or stainless wire

***Wire Diameter (met):**1.6-5mm

***Flux Capacity (met):** 6.0 l (1.6 gal)

***Wire Feed Speed (met):** 9.0 m/min (354.3 in./min)

***Max Temperature (met):** -10 - +40 deg C (+14 - 104 degF)

*The welding matching must be equipped with Lamp kit (2x36W LED)

*Features should include V-wheel track in steel (set of 3)

*The latest model is recommended

*Overall dimensions of welding tractor should be able to fit through minimum tank diameter of **428mm** without being disassembled. If the welding tractor is too big to fit through **428mm** diameter, at least minimum quick disassembly and re-assembly of the machine sub-components may be done in order to fit the machine through minimum tank diameter of **428mm**.

*The original equipment manufacturer (OEM) of the welding tractor will be responsible to at least train minimum of **four** employees on operation of the machine including basic first line maintenance of the machine.

*The welding tractor should be able to travel and weld minimum tank internal diameter of **1500mm**.

The supplier must be able to give support to the machine at his/her expense to any technical or operational issues that may arise within the period of machine guarantee.

TECHNICAL DATA FOR THE SUBMERGED ARC WELDING POWER SOURCE

<p>Document Name: Specification Template for MPE</p> <p>Classification: Internal</p> <p>Date:22 October 2022</p>	<p>Ref: MPE_MAIN_GMX_SPEC_</p> <p>Revision:01</p> <p>Page: 2 of 4</p>	<p>Configuration Control Only</p>
---	--	-----------------------------------

- *Supply also a three phase 400VAC 50Hz, fan cooled dc welding power source **Current:** Min 30A and Max 1200A
- *Ideal for submerged ARC Welding, MIG/MAG Welding
- *Equipped with Digital Controller
- *Voltage, 3 PH 60 Hz, V.....400/440/550
- *Current A 100% 60 Hz.....64/64/52
- *Maximum Load at 100% Duty Cycle A/V.....800A/44V
- *Maximum Load at 60% Duty Cycle A/V.....1000A/44V
- *Setting Range A/V MIG/MAG.....50/17-1000/45
- *Setting Range A/V SAW.....40/22-1000/45
- *The power source should be latest model
- *The original equipment manufacturer (OEM) of the welding tractor will be responsible to at least training a minimum of **four** employees on operation of the machine including basic first line maintenance of the machine.

3. GUARANTEE

- 3.1 The Contractor shall guarantee the machine for a period of twelve (12) months

4. SAFETY COMPLIANCE:

- 4.1 The Contractor's personnel will have to attend a compulsory safety induction course at the Transnet plant before they commence work/enter within the plant, which will be for the expense of Transnet.
- 4.2 The employees of the contractor shall at all-times adhere to Transnet Engineering's security and safety procedure
- 4.3 Wearing of appropriate PPE is always mandatory when entering the workshops.

5. BIDDERS SHALL NOTE THAT:

- 5.1 Full detail of recommended lubricants shall be furnished.
- 5.2 The bidder to supply three set of manuals, for operation, maintenance and spares list
- 5.3 Bidders to provide training for maintenance and the operation of the machine

Document Name: Specification Template for MPE Classification: Internal Date:22 October 2022	Ref: MPE_MAIN_GMX_SPEC_ Revision:01 Page: 3 of 4	Configuration Control Only
--	---	----------------------------

6. BIDDERS SHALL STATE:

- 6.1 Whether all essential renewable parts for the machines / equipment will be readily available in the Republic of South Africa
- 6.2 What after-sales service for the machines / equipment can be offered?
- 6.3 Where similar machine has been supplied in the Republic of South

Acceptance Column:

Name & Surname:	
Company Name:	
Signature:	Date:

By signing on the acceptance column, the supplier acknowledges that he understands the content of the specification. He/She shall conform to the requirements specified in the specification. He/She has the authority within his delegation to represent and sign on the company's behalf.

END OF SPECIFICATION FOR 3-WHEEL SUBMERGED ARC WELDING TRACTOR AND THE POWER SOURCE

Document Name: Specification Template for MPE Classification: Internal Date: 22 October 2022	Ref: MPE_MAIN_GMX_SPEC_ Revision: 01 Page: 4 of 4	Configuration Control Only
--	--	----------------------------