

071505T4WAF

WELDING AND FABRICATION CRAFTSPERSON LEVEL 5

ENG/OS/WEF/CR/05/5/A

Perform Tungsten Inert Gas (TIG) Welding

Nov/ Dec 2024



**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION
COUNCIL (TVET CDACC)**

PRACTICAL ASSESSMENT

OBSER

CKLIST

Candidate's Name & Registration Cod			
Assessors Name & Registration Code			
Venue of Assessment			
Date of Assessment			
Items to be evaluated. <i>Award marks appropriately. Give a brief comment where less marks are awarded.</i>	Marks Available	Marks Obtained	Comments
1. Adhered to prescribed safety: Wore and used PPE correctly; a. Welding shield b. Safety boots c. Leather gloves d. Leather apron/Overall (Award 1 or 0 mark for each)	4		
2. Set up TIG welding equipment;			

a. Connected contact cables firmly b. Set correct working current c. Assembled the welding torch d. Set the shielding gas e. Switched off the machine after welding (Award 1 or 0 mark for each)	5		
3. Performed welding positions as per the job specifications; a. 1G b. 2F c. 2G d. 3F e. 3G f. 5G (Award 1 or 0 mark for each)	6		
4. Performed housekeeping; a. Hanged up the welding gun and welding cables b. Cleaned weld table and floor after welding c. Segregated waste and disposed as per workplace procedures d. Returned tools and unused materials to the store (Award 1 or 0 mark for each)	4		
Sub- Total (Observation)	19		
PRODUCT CHECKLIST			
5. Prepared work pieces according to task specifications:			

a. Dimensions: Linear tolerance: ± 1 mm; All dimensions are in mm i. 100 (20 $\times \frac{1}{2}$) ii. 50 (4 $\times \frac{1}{2}$) iii. 50 (pipe height) (2 $\times \frac{1}{2}$) (Award $\frac{1}{2}$ or 0 mark for each) b. Squareness of work pieces; i. 100 $\times$ 100 (8 $\times \frac{1}{2}$) ii. 100 $\times$ 50 (4 $\times \frac{1}{2}$) (Award $\frac{1}{2}$ or 0 mark for each) c. Performed edge preparation for butt (beveling) (3 $\times$ 1) (Award 1 or 0 mark for each bevel)	10		
Weld is completed as per acceptance cr and job requirements 6. Open corner joint (in at least one of the joints) a. Alignment $90^\circ \pm 1$ b. Weld quality; i. No cavities ii. Proper fusion iii. Uniform beads iv. No porosity v. No cracks (Award 2 or 0 marks for each)	12		
7. Tee fillet joint (on pipe to sheet) a. Alignment (perpendicular to the workpiece)			

b. Weld quality i. No cavities ii. No cracks iii. Proper fusion iv. Uniform bead v. No porosity (Award 2 or 0 marks for each)	12		
8. Butt joint: (in at least one of the joints) a. Alignment b. Weld quality; i. Uniform bead ii. No cavities iii. No cracks iv. Proper fusion v. No porosity (Award 2 or 0 marks for each)	12		
9. Tee fillet joint (on pipe to pipe) a. Alignment (perpendicular to the workpiece) b. Weld quality i. No cavities ii. No cracks iii. Proper fusion iv. Uniform bead v. No porosity (Award 2 or 0 marks for each)	12		
10. Assembly; a. Produced components as per working drawing b. Welded as per weld symbols (Award 2 or 0 marks for each)	4		

Sub Total (Product)	74		
GRAND TOTAL (Observation + Product)	93		
CANDIDATE SCORE ($\frac{x}{93} \times 100$)	100%		
The candidate was found to be: ☐ Competent ☐ Not yet competent (Please tick as appropriate) (The candidate is competent if s/he gets 50% and above)			
Feedback from candidate: ----- -----			
Feedback to candidate: ----- -----			
Candidate's signature: -----	-----		
Assessor's signature: -----	Date: -----		

This is the last printed page.