



9th International
Abilympics
Bordeaux 2016

Vocational Skills Contest

V39 Welding

1. Task Assignment

Contestants will have to perform 3 different welding tasks and assemble a sheet metalwork structure made of aluminum by TIG and semi-automatic procedures.

- Task 1: Welding of two stainless steel tubes using TIG procedure.
- Task 2: Welding of two steel tubes together end to end on horizontal/flat position (rotation: making the tubes turn themselves), using TIG procedure.
- Task 3: Assembly of a sheet metalwork structure made of aluminum, using TIG procedure, including: internal corner horizontal, external corner horizontal, internal corner vertical and external corner vertical.
- Task 4: Welding of two steel plates together end to end on horizontal axis (cornice position), using MAG semi-automatic procedure.

Welding of two steel plates together, internal corner and vertical position, using MAG semi-automatic procedure.

2. Allocated time: 5H30

5 hours and 30 minutes of competition.



3. Requirements

- Using the provided materials of the required dimensions, and using consumer welding goods, contestants will have to perform the different tasks using the required positions. Contestants must also use the required procedures: task 1 (stainless steel), task 2 (steel) and task 3 (aluminum) using TIG procedure, and task 4 MAG semi-automatic procedure.
- Task 4 will be done by one-hour turns. The jury will call the contestants one by one. The contestant called will have to stop his/her work on the other tasks in order to do the task 4.
- Safety rules must be respected.
- Contestants are not allowed to lend or to borrow any tool or material during the tasks.
- Any contestant caught cheating, talking to someone from the public or using a communication device will suffer a penalty of 5 points for the first transgression. A second transgression will lead to an exclusion from the contest.

4. Procedure








Day -1 (March 24th): On the day before the competition, contestants will be welcomed on the stand “V39 Welding” by the members of the jury. A briefing about the organization of the competition and the safety rules will be arranged. Due to the large number of registered contestants, the competition will be organized in two groups. Contestants from a same delegation will inevitably be placed in the same group. Each contestant will receive a schedule with the detailed working hours. Contestants will draw lots to be assigned to a work station, where they may drop off their tools.

Day 1 (March 25th): Group n°1 will have 5 hours and 30 minutes to perform the 4 tasks.

Day 2 (March 26th): Group n°2 will have 5 hours and 30 minutes to perform the 4 tasks.

5. List of the provided equipment





Non-exhaustive list.






N°	Equipment	Picture	Specifications	Qty per person	Qty for all	Notes
01	TIG power supply		Complete (torch will be provided)	1		
02	Argon gas		bottle	1		
03	MAG semi-automatic welding machine		Complete		2	
04	TIG welding consumables			1 set		
05	TIG rods		Steel, stainless steel and aluminum	1 set		
06	Tungsten electrodes			1		
07	MAG steel welding wire spool		10/10	1		

08	Gloves		Leather	1		01
09	Protective glasses		transparent	1		02
10	Welding helmet			1		03

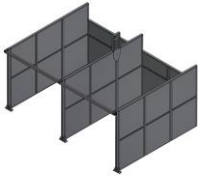


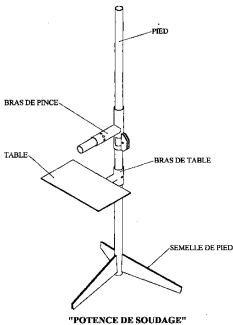


6. List of tools to be brought for each contestant

N°	Tool	Picture	Specifications	Qty	Notes
PERSONAL PROTECTION EQUIPMENT					
01	Safety shoes			1 pair	
02	Working clothes		Cotton	1	
TOOLBOX					
03	Flat files			1 set	
04	Hammer			1	

05	Set square			1	
06	Ruler			1	
07	Measuring tape			1	
08	Clamps			1	
09	Angle grinder		Complete with disks	1	
10	Other tools				

7. List of facilities installed at the contest site

N°	Equipment	Picture	Specifications	Qty	Note
01	Workstation		Welding cabin	1	
02	Protective curtain			1	
03	Workbench			1	
04	Welding bracket			1	

8. Evaluation Criteria



N°	Items to be Evaluated	Scoring scale
01	Overall appearance of the welding	10
02	Quality and regularity of the weld beads	60
03	Respect of the safety rules	10
04	Compliance with the DMOS description (description for operating methods for welding)	20
	Total	100