



9th International  
Abilympics  
Bordeaux 2016

# Vocational Skills Contest

## V41 Artificial Limb Socket Making

### 1. Task Assignment

The task consists in completing an orthosis using a pre-thermoformed basis (positive). Contestants will adjust and curve the orthosis' struts, cut the thermoplastic, install the hinges and fillings.

Assembly instructions describing the procedure to follow will be provided on the day of the competition.

### 2. Allocated time: 6h00

6 hours of competition.

**Day 1:** 3 hours and 30 minutes.

**Day 2:** 2 hours and 30 minutes.



### 3. Requirements

- Contestants will keep their work station clean and will respect the safety and hygiene rules for the duration of the competition.
- The use of PPE (personal protective equipment), mask, helmet, glasses and gloves is mandatory.
- 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 24<sup>th</sup>):** On the day before the competition, contestants will be welcomed 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 25<sup>th</sup>):** The final task assignment will be handed out to contestants. They will have 15 minutes to study it. A 15-minutes Q&A session will then be organized. Contestants will have 3 hours and 30 minutes to work on the task assignment.

**Day 2 (March 26<sup>th</sup>):** Contestants will have 2 hours and 30 minutes to complete the task.

## 5. List of the provided equipment







*Non-exhaustive list.*

N°	Equipment	Photo	Specifications	Qty per contestant
01	Thermoforming		Already performed	1
02	Trashcan			1
03	Jigsaw			1
04	Bending iron			1
05	Container for sharp objects			1
06	Bucket		Contains water	1
07	Heat gun			1




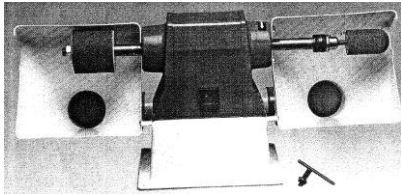
08	Gloves		PPE specific	1 pair
09	Screws		Provided with the thermoforming	
10	Vacuum			
11	Oscillating saw			1
12	Acetone			1
13	Velcro		Provided with the thermoforming	Sufficient quantity
14	3D textile		Provided with the thermoforming	Sufficient quantity
15	Thin polystyrene film		Provided with the thermoforming	Sufficient quantity



## 6. List of tools to be brought for each contestant

N°	Tool	Photo	Qty	Notes
01	Caliper		1	
02	Scissors		1 pair	Contestant's choice
03	Overall		1	
04	Ruler		1	
05	Measuring tape			
06	Cutter		1	
07	Work gloves		1 pair	
08	Dust mask		1	
09	Safety glasses		1 pair	
10	Acoustic earmuffs		1	
11	Hammer		1	Contestant's choice
12	Other tools		1 toolbox	To be validated by the jury

## 7. List of facilities installed on each work station

N°	Equipment	Photo	Qty
01	Work station equipped with a vise		1
02	Chair		1
03	Power strip		1
04	Bench grinder for sanding and polishing		1

## 8. Evaluation Criteria



N°	Items to be Evaluated	Scoring scale
01	Respect of the safety and hygiene rules	5
02	Quality of the thermoplastic's finish (sanding of the edges)	15
03	Respect of the given dimensions	20
04	Quality of the filling's finish (installation of the rivets, Velcro)	10
05	Accuracy of the curve (struts, calipers)	20
06	Quality and accuracy of the flattening	25
07	General appearance (respect of the provided frame, thermoplastic)	5
	<b>Total</b>	<b>100</b>