

# Jewelry

## 1. Final task assignment

- The objective of this subject is to make an earring.
- The expected result is the realization of each of the two modules mentioned in the description.
- These modules must be completed within the allotted time and will be evaluated separately.
- The final result will be the total of all the marks attributed for the two modules.
- The piece will be made of silver.

### **Day 1: Fabrication of module 1**

- At the beginning of the test, the contestant receives the metal for the two modules (including brazing), the drawings and instructions.
- After a study of the module, the contestant starts the fabrication of module 1. If the module is finished before the time limit, the module 02 cannot be manufactured.
- At the end of the first day, the contestant returns the module 1 (complete or incomplete) to be anonymized and marked.
- All remaining metal is returned (work in progress, scraps and soldering).

### **Day 2: Fabrication of module 2**

- At the beginning of the second day, the expert gives back to the candidate:
  - The module 01
  - The metal returned the day before (work in progress, offcuts and soldering).
- After a study of the module, the candidate begins the fabrication of module 02.
- At the end of the second day of the test, the contestant returns the assembled modules 01 and 02 to be anonymized and graded. If, however, the subject remains unfinished, it will be returned and marked as is.
- The remaining metal is to be returned.

- All of the work material (work, solder, scraps and filings), returned by the candidate will be weighed, a tolerance of 5% loss will be allowed. This mark will be assigned to criterion G of the scale.

## 2. Allocated time: 6 hours 00 minutes

6 hours of competition.

Day 1: 3 hours (Module 1).

Day 2: 3 hours (Module 2).

## 3. Requirements

- The contestant has to use only the metal and solder provided.
- During the execution of the test, it is possible that a candidate misapplies the manufacturing instructions, makes a manufacturing error, or loses part of the work material. In this case, the Chief judge may decide to give the contestant some of the work material again; only one cut and only once. In this case, the contestant will be sanctioned and given a score of 0 for criterion G, whether the event occurs on the first or second day of competition.
- The contestant uses only the emery provided to finish the surface of the modules.
- The contestant has to turn in work in progress, scraps and soldering at the end of each day.
- Photographs are permitted only after the second day's grading.
- Cell phones are not allowed during the tests.
- Candidates must bring their own calculator.
- All tools (templates, preforms, etc.) related to the test subject will be removed from the toolbox.
- All silver metal will be removed from the toolbox.

### A. Materials and consumables

List of materials provided per contestant and consumables necessary for the realization of the test: Silver 1st heading.

Title	Reference in mm	Quantity
Flat	1.5 X 25 X 18	02 per contestant
	1.5 X 22 X 45	02 per contestant

	4 X 10 X 30	02 per contestant
<b>Round wire</b>	0.8 X 20	04 per contestant
	1.2 X 70	02 per contestant
<b>Very weak solder 02</b>	35 X 35	01 per contestant
<b>Weak solder 04</b>	35 X 35	01 per contestant
<b>Medium solder 06</b>	35 X 35	01 per contestant
<b>Strong solder 08</b>	35 X 35	01 per contestant

\_ 1.5mms, 2mms fissure burs 1 box of each per candidate 1 box each per candidate

\_ Round burs 1mm, 1.5mms

Drill bits 0.8mm, 1mm, 1.2mm, 1.5mm, 2mms 1 box each per candidate

Round emery boards 3 per candidate

3 per candidate

\_ Emery powder 1kg grain 500 for all candidates

Saws 2/0, 4/0, 6/0 1 large per candidate

Welding flux 1liter for all candidates

Emery in sheets 220, 320, 500 grain, 10 sheets of each per candidate

Emery strip 220, 320, 500 grain 2 rolls each for all candidates

Refractory welding plate 1 per candidate

Ecological acid 1 kg for all candidates

\_ Ultrasonic cleaning fluid 1 liter for all candidates

## B. Toolbox

List of tools to be brought at workstations by contestants:

Title	Reference	Quantity
Jeweller's complete classic toolbox		1 per contestant
Measuring and control tools		
Assortment of round and fissure milling cutters etc... different sizes		
Assortment of drill bits of different diameters		
Personal authorized dowel (bench pin)		1 per contestant
Plastic acid pliers, Filing box with sieve, Cleaning and bench brush, Cup for products (flux), rags etc..		
Personal authorized soldering board (Soldering board)		1 per contestant
Handpiece		1 per contestant

**The use of complete gas-oxygen flashlights is authorized in addition to the equipment provided; these possible installations will be under the responsibility of the candidate and his juror (installation, conformity, safety or any other risk). In case of non-compliance, this equipment may be refused and not installed.**

#### 4. Procedure

**Day -1 (March 23<sup>rd</sup>):** On the day before the competition, contestants will be welcomed on the stand by the members of the jury. A briefing about the organization of the contest and the safety rules will be arranged. Contestants will draw lots to be assigned to a work station, where they may drop off their tools.

For safety and fairness reasons, the jury will perform an inspection of each contestant's personal tools. The jury has the final decision-making power in authorizing or forbidding the use of these tools, particularly of welding stations different from those provided by the organization. Contestants' toolboxes must not contain any precious metal or brazing filler metal different from the metal provided by the organization.

**Day 1 (March 24<sup>th</sup>):** The final task assignment will be presented to the contestants. They will have 15 minutes to read it and another 30 minutes will be allocated for a question & answer session. Contestants will then have 3 hours to start their creation. Contestants will have 3 hours to complete the module 1. No break.

At the end of the 3 hours, the finished or unfinished piece, as well as all the work materials, will be returned to the Chief judge for evaluation by the jury.

**Day 2 (March 25<sup>th</sup>):** The work materials will be given back to the contestants.

Contestants will have 3 hours to complete the module 2. No break.

At the end of the 3 hours, the finished or unfinished piece, as well as all the work materials, will be returned to the Chief judge for evaluation by the jury.

## 5. Scoring criteria

Grid with details of the scoring criteria: objective (O), judgment (subjective), subject to penalties (P).

- FOR CRITERION D: DIMENSIONS (P)

The tolerance is:

For dimensions not exceeding 5 mms, + - 1/10° mm, withdrawal of 20% of the mark for every 1/10°mm more or less.

For dimensions between 5.10 mms and 15 mms, + - 2/10° mm, withdrawal of 20% of the note for any 2/10° mm more or less.

For dimensions between 15.10 mms and 30 mms, +- 4/10°, withdrawal of 20% of the note for all 4/10° more or less.

For the dimensions exceeding 30.10 mms, + - 5/10° mm, withdrawal of 20% of the note for all 5/10° mm more or less.

- FOR CRITERION F: COMPLETED MODULE (P)

The number of finished updates can be variable and subject to penalties which are also variable.

11 finished updates, score of 7 points awarded.

From 6 to 10 finished updates, score of 5 points awarded.

From 4 to 5 finished updates, score of 3 points awarded.

From 0 to 3 finished updates, score of 0 point awarded.

- FOR CRITERION G: MATERIAL MANAGEMENT (P)

The tolerance is 5% loss between the initial weight of material entrusted to the contestant and the final weight delivered by the contestant at the end of the second day.

Weight returned with between 5% and 10% loss between the initial weight and the final weight; withdrawal of 1 point.

Weight returned with more than 10% loss between the initial and final weight; a mark of 0 will be awarded.

N°	Items to be evaluated	O/S	Scoring scale
<b>CRITERION A: SIMILARITY</b> <b>CRITÈRE A : SIMILARITÉ</b>			<b>17</b>
01	Day 1 - Exterior pear motif - front and back <i>Jour 1 - Motif poire extérieur - devant derrière</i>	S	1
02	Day 1 - Exterior and interior pear setting <i>Jour 1 - Sertissage poire extérieur et intérieur</i>	S	2
03	Day 1 - Position stone number regularity positioning in front and back 11 drillings <i>Jour 1 - Position mise en pierre nombre régularité positionnement devant derrière 11 perçages</i>	S	3
04	Day 1 - Position update regularity positioning <i>Jour 1 - Position mise à jour régularité positionnement</i>	S	3
05	Day 2 - Barette bezel conformity of the removals of material width depth above <i>Jour 2 - Barette chatons conformité des enlèvements de matière largeur profondeur dessus</i>	S	2
06	Day 2 - Barette bezel conformity of the diameter of the drilling regularity below <i>Jour 2 - Barette chatons conformité du diamètre du perçage régularité dessous</i>	S	1
07	Day 2 - Barette bezel conformity of material removal width depth both sides <i>Jour 2 - Barette chatons conformité des enlèvements de matière largeur profondeur les 2 cotés</i>	S	1
08	Day 2 - Similarity of the assembly of the parts above Ring against ring <i>Jour 2 - Similarité de l'assemblage des pièces dessus Anneau contre anneau</i>	S	1
09	Day 2 - Similarity of the assembly of the bottom parts ring against ring <i>Jour 2 - Similarité de l'assemblage des pièces dessous anneau contre anneau</i>	S	1
10	Day 2 - Assembly similarity of the parts on both sides <i>Jour 2 - Similarité de l'assemblage des pièces les deux cotés</i>	S	1
11	Day 2 - Similarity of the system shape <i>Jour 2 - Similarité de la forme du système</i>	S	1
<b>CRITERION B: MATERIAL REMOVAL</b> <b>CRITÈRE B : ENLÈVEMENT DE MATIÈRE</b>			<b>22</b>
12	Day 1 - Quality of the drilling regularity neatness of the drilling in front <i>Jour 1 - Qualité du perçage régularité netteté du perçage devant</i>	S	1
13	Day 1 - Quality of the drilling regularity neatness of the drilling behind <i>Jour 1 - Qualité du perçage régularité netteté du perçage derrière</i>	S	1
14	Day 1 - Update quality of the external cutting lines <i>Jour 1 - Qualité de la mise à jour lignes de coupe extérieures</i>	S	3

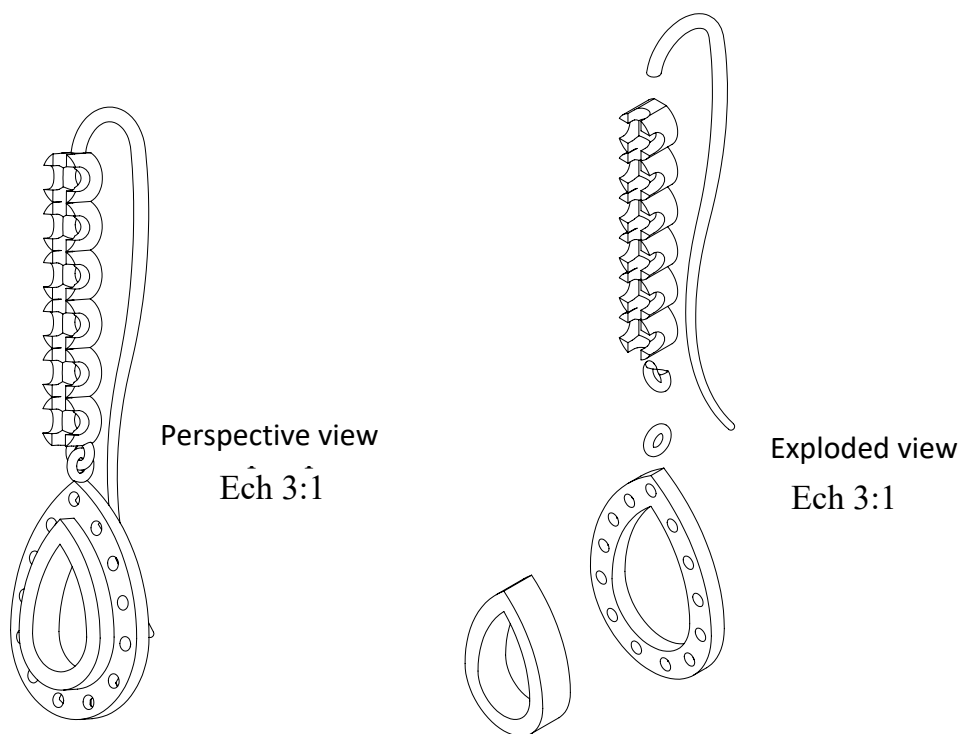
15	Day 1 - Update quality of the inside corners <i>Jour 1 - Qualité de la mise à jour angles intérieurs</i>	S	2
16	Day 1 - Update quality of the interior surfaces <i>Jour 1 - Qualité de la mise à jour surfaces intérieures</i>	S	3
17	Day 2 - Milling quality of the top bar <i>Jour 2 - Qualité du fraisage de la barette dessus</i>	S	3
18	Day 2 - Milling quality of the bottom bar <i>Jour 2 - Qualité du fraisage de la barette dessous</i>	S	1
19	Day 2 - Quality of the milling of the bar on both sides <i>Jour 2 - Qualité du fraisage de la barette les 2 cotés</i>	S	2
20	Day 2 - Filing quality of the outside of the top bezel <i>Jour 2 - Qualité du limage des extérieurs des chatons dessus</i>	S	1
21	Day 2 - Filing quality of the outside of the bottom bezel <i>Jour 2 - Qualité du limage des extérieurs des chatons dessous</i>	S	1
22	Day 2 - Filing quality of the bezels on both sides <i>Jour 2 - Qualité du limage des chatons les 2 cotés</i>	S	3
23	Day 2 - Filing quality of the leakage system <i>Jour 2 - Qualité du limage du système en fuite</i>	S	1
<b>CRITERION C: BRAZING</b> <b>CRITÈRE C : BRASURES</b>			<b>14</b>
24	Day 1 - Quality of the crimp weld on the tip <i>Jour 1 - Qualité de la soudure sertissure en pointe</i>	S	1
25	Day 1 - Quality of the crimp weld on the upper part of the stonework <i>Jour 1 - Qualité de la soudure de la sertissure sur la pièce empierrée dessus</i>	S	3
26	Day 1 - Quality of the weld on the crimped part underneath of the stonework <i>Jour 1 - Qualité de la soudure de la sertissure sur la pièce empierrée dessous</i>	S	3
27	Day 1 - Weld quality of the ring on the stoneware part <i>Jour 1 - Qualité de la soudure de l'anneau sur la pièce empierrée</i>	S	1
28	Day 2 - Weld quality of the assembly of the 2 rings between them <i>Jour 2 - Qualité de la soudure de l'assemblage des 2 anneaux entre eux</i>	S	3
29	Day 2 - Quality of the weld of the system on the bezels <i>Jour 2 - Qualité de la soudure du système sur la bande de chatons</i>	S	2
30	Day 2 - Weld quality of the ring on the bezels line <i>Jour 2 - Qualité de la soudure de l'anneau sur ligne de chatons</i>	S	1
<b>CRITERION D: DIMENSIONS</b> <b>CRITÈRE D : DIMENSIONS</b>			<b>23</b>
31	Day 1 - Dimensions of the pear piece with ring length 22.27 <i>Jour 1 - Dimensions de la pièce poire avec anneau longueur 22.27</i>	P	2



32	Day 1 - Size of the pear piece width 14.00 <i>Jour 1 - Dimension de la pièce poire largeur 14.00</i>	P	2
33	Day 1 - Size of pear setting Length 14.03 <i>Jour 1 - Dimension de la sertissure poire longueur 14.03</i>	P	2
34	Day 1 - Size of pear setting width 9.00 <i>Jour 1 - Dimension de la sertissure poire largeur 9.00</i>	P	2
35	Day 1 - Height of the whole stone pattern and pear setting 3.20mm <i>Jour 1 - Hauteur de l'ensemble motif empierre et sertissure poire 3.20mm</i>	P	1
36	Day 2 - System dimension length 43.81 <i>Jour 2 - Dimension du système longueur 43.81</i>	P	2
37	Day 2 - Bezels line dimension length on the whole line at once 24.00 <i>Jour 2 - Dimension de la ligne de chatons longueur sur l'ensemble de la ligne en une fois 24.00</i>	P	2
38	Day 2 - Bezels Line Size width across the line at once 4.00 <i>Jour 2 - Dimension de la ligne de chatons largeur sur l'ensemble de la ligne en une fois 4.00</i>	P	3
39	Day 2 - Bezels line dimension height on the whole line at once 3.00 <i>Jour 2 - Dimension de la ligne de chatons hauteur sur l'ensemble de la ligne en une fois 3.00</i>	P	2
40	Day 2 - Assembly size system and bezels line with ring length 29.66 <i>Jour 2 - Dimension de l'assemblage système et ligne de chatons avec anneau longueur 29.66</i>	P	2
41	Day 2 - Size of assembly pear pattern bezels line and system ring against ring total piece 50.10 <i>Jour 2 - Dimension de l'assemblage motif poire ligne de chatons et système anneau contre anneau pièce totale 50.10</i>	P	3
<b>CRITERION E: FINISHES</b> <b>CRITÈRE E : FINITIONS</b>			<b>10</b>
43	Day 1 - Quality of finish and cleanliness of the pear motif on top and sides <i>Jour 1 - Qualité de finition et propreté motif poire dessus et cotés</i>	S	1
44	Day 1 - Quality of finish and cleanliness of the inner pear setting <i>Jour 1 - Qualité de finition et propreté sertissure poire intérieur</i>	S	1
45	Day 1 - Quality of finish and cleanliness of the pear setting on the top <i>Jour 1 - Qualité de finition et propreté sertissure poire dessus</i>	S	1
46	Day 1 - Finishing quality and cleanliness of the pear setting on the sides <i>Jour 1 - Qualité de finition et propreté sertissure poire cotés</i>	S	1

47	Day 1 - Quality of finish and cleanliness of the pear pattern and setting on the bottom <i>Jour 1 - Qualité de finition et propreté motif poire et sertissure dessous</i>	S	1
48	Day 2 - Finishing quality and cleanliness of the bezels line above <i>Jour 2 - Qualité de finition et propreté de la ligne de chatons dessus</i>	S	1
49	Day 2 - Finishing quality and cleanliness of the side bezels line <i>Jour 2 - Qualité finition et propreté ligne de chatons cotes</i>	S	1
50	Day 2 - Finishing quality of the lower bezel line and inside holes <i>Jour 2 - Qualité de finition ligne de chatons dessous et intérieurs des trous</i>	S	1
51	Day 2 - Finishing quality and cleanliness of the system all sides <i>Jour 2 - Qualité de finition et propreté du système toutes faces</i>	S	1
52	Day 2 - Finish quality and cleanliness of the whole assembled part <i>Jour 2 - Qualité de finition et propreté de l'ensemble de la pièce assemblée</i>	S	1
<b>CRITERION F: COMPLETED MODULE</b> <b>CRITÈRE F : MODULE ACHEVÉ</b>			<b>12</b>
53	Module fully completed within the allotted time taking into account the observations 6 to 10 updates completed 5 points awarded From 4 to 5 updates completed 3 points awarded From 0 to 3 updates carried out the mark of 0 is attributed <i>Module entièrement achevé dans le temps imparti en tenant compte des observations</i> <i>De 6 à 10 mises à jour effectuées 5 points attribués</i> <i>De 4 à 5 mises à jour effectuées 3 points attribués</i> <i>De 0 à 3 mises à jour effectuées la note de 0 est attribuée</i>	P	7
54	Module fully completed within the time limit, taking into account the observations <i>Module entièrement achevé dans le temps imparti en tenant compte des observations</i>	O	5
<b>CRITERION G: MATERIAL MANAGEMENT</b> <b>CRITÈRE G : GESTION DE LA MATIÈRE</b>			<b>2</b>

55	<p>Final weight of material returned taking into account the observations and the scale</p> <ul style="list-style-type: none"> <li>- Weight of material rendered with more than 5% loss up to 10% loss, a mark of 1 point is attributed.</li> <li>- Weight of material returned with more than 10% loss, a mark of 0 is attributed.</li> <li>- Request for additional material according to the observations the mark of 0 is attributed.</li> </ul> <p><i>Poids de matière final rendu en tenant compte des observations et barème</i></p> <ul style="list-style-type: none"> <li>- <i>Poids de matière rendue avec plus de 5% de perte jusqu'à 10% de perte la note de 1 point est attribuée</i></li> <li>- <i>Poids de matière rendue avec plus de 10% de perte la note de 0 est attribuée</i></li> <li>- <i>Demande de matière supplémentaire suivant observations la note de 0 est attribuée</i></li> </ul>	P	2
<b>TOTAL POINTS</b>			<b>100</b>

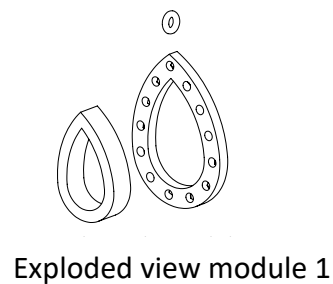
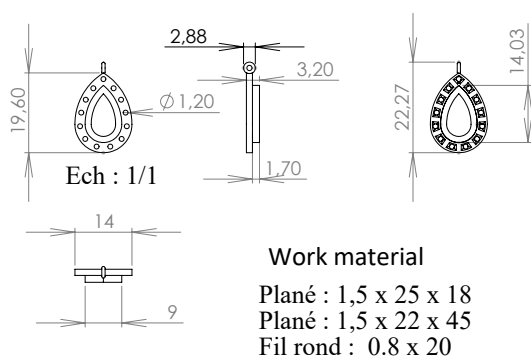


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## Module 01

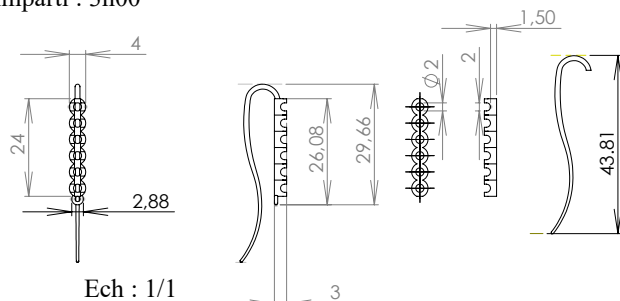
Temps imparti : 3h00



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## Module 02

Temps imparti : 3h00



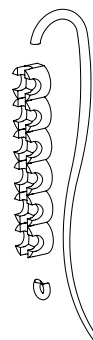
Ech : 1/1

### Work material

Plané : 4.5 x 3.5 x 30

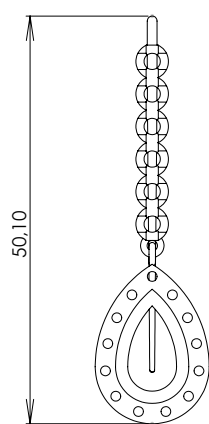
Fil rond : 0.8 x 20

Fil rond : 1.2 x 70

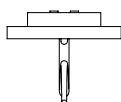


Exploded view module 2

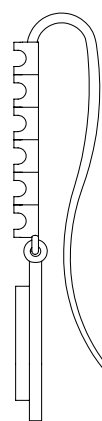
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Ech : 2/1



### Géométral



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