



# Guide to the exchange of good practices

"Stone and wood- two materials of traditional habitat, two materials of artistic expression"

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*Jean Jacques Philip*

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# Summary of the project

"Stone and wood- two materials of traditional habitat, two materials of artistic expression"



## PARTICIPANTS & OBJECTIVES

This project brought together seven structures from three countries (France, Poland and Croatia) school partners (Klesarska skola in Puscisca, Quintin Professional School, Zespól Szkól in Lubawa), associative partners (French-Polish Association Côtes d'Armor Warmia and Mazury of Saint Briec, Memory of Saint Thelo) and local public organizations (Franco-Polish Center of Olsztyn and the ethnographic ecomuseum of Olsztynek).

This project was a part of a bilateral cooperation initiative established by agreements between the Department of Côtes d'Armor and the Warmian-Masurian Voivodeship in Poland. It was also part of a cooperation agreement between the Warmian-Masurian Voivodeship and the Dalmatian region in Croatia.

These three partner territories are rooted in a rich legacy of a heritage built from the two materials - wood and stone that have shaped their history and landscape, marking the ingenuity and cultural richness of their creators. This heritage is currently an important asset for the economic and social attractiveness of these territories.

Our goal was to enable partner organizations in three territories to network, increase their capacity to operate at the transnational level and share and compare ideas, practices and working methods.

The skills required for these trades are based on the know-how of the history and traditions of professional woodworking and stone techniques.

Through this project, we built the acquisition of this traditional know-how by offering participants a panel of professional training in line with companies creating jobs in the wood and building trades. This enriched a course of academic training towards jobs in heritage restoration companies. Our goal was also to reconcile students with Art and the cultural heritage that surrounds them.

We wanted to highlight this small rural heritage, often forgotten, absent in tourist guides, away from main trails and paths and to transmit this love to younger generations. Another goal was to promote exchanges between countries on good practices of protection and enhancement of heritage.

The project was aimed at young people in the second grade and in CAP, aged 15-17 (born in 2003 - 2005), some of whom have fewer opportunities for different reasons. The other actors of this project were trainers and teachers of the professional disciplines of wood and building trades, teachers of applied art, language and high school documenters and teachers in charge of ICT Information Technology and Technology. Communication. 3D technology teachers using modelling programs. The cultural animators and mediators of the partner Museums. The language of exchanges was English for all project partners.



During the project, the joint restoration took place through three international projects of small rural heritage and the collective creation of three artistic works combining two emblematic materials of the three territories: the stone (Granite Breton and stone Brač) and wood. The planned immersion camps also were an opportunity to organize operations in each territory to promote the cultural heritage built (conferences, exhibitions, films). The Partner Museums organised the exhibition venues available to the general public.

The methodology employed initiates the adoption of new pedagogical practices to develop cross-curricular competencies between the professional disciplines of the wood and stone trades and applied art disciplines to meet the needs of disadvantaged groups and take into account the differences in learning outcomes related to geographical and socioeconomic disparities. The partners were at the antipodes East-West and South of Europe.

The results of this project were disseminated through the exhibition of the joint works produced and exhibited in the three territories during event renditions and in the Partner Museums. A conference was organized at each exhibition to promote this work.

In the long term, we hope to sensitise young people to the problem of local heritage by giving practical tools to build the Europe of tomorrow. We hope to give them the tools to achieve better integration into the labour market. We hope that this project has helped to develop new partnerships for organisations like ours, located in rural areas, but capable of working in a European dimension.



# A word from the President of ACAWM as the project leader

Jean Jacques Philip

In line with its objectives, the project has developed in each partner territory around the following sectoral priorities:

**HORIZONTAL:** It allowed the young actors and their trainers to become aware of the social and educational value of the Breton, Croatian and Warmia Mazurian cultural heritages. It has given rise to professional vocations which will be materialised by the creation of jobs in the field of maintenance and restoration of the built heritage in territories which are seeking to enhance this heritage, which is recognised in European labelling programmes and is a vector of economic growth and social cohesion.

At the level of **VOCATIONAL EDUCATION AND TRAINING**, the project has established sustainable partnerships to further develop national, regional and sectoral organisations for skills competitions. The experience has been a great exchange of of experience, sharing of know-how in the wood and stone trades.

This experience will be perpetuated by setting up practical training sessions between the establishments and also by sharing a network of addresses of companies likely to receive trainees within the framework of their specialities.



At the level of **SCHOOL EDUCATION:** The experience of mobility of young people in Croatia and in Brittany, of sharing a common work site, of discovering cultural elements linked to the heritage of stone and wood has revitalised the appetite for learning and for continuing the training courses. It has been an effective remedy against early school leaving and has warded off the problems faced by disadvantaged pupils.

In return for their experience, these students were valued in the image they gave of their training, they acquired greater self-confidence in the knowledge that they had acquired as a result of this experience, not only in professional terms but also in artistic terms and in terms of their general culture.

In return for their experience, these students were valued in the image they gave of their training, they acquired greater self-confidence in the knowledge that they had acquired as a result of this experience, not only in professional terms but also in artistic terms and in terms of their general culture. In their curriculum vitae, this enrichment of knowledge and skills acquired during this Erasmus project will be a strong added value in their job search.

They had a strong experience that impacted their personality. It had two impacts:

**A revelatory experience** through the change of scenery generated by the mobility.

**An experience of acquiring knowledge and know-how** transmitted by a quality human framework made up of trainers recognised in their specialised fields and adults representing the partner associations.

This convergence of adult educators, professionals and voluntary associations around the project has generated a global and inclusive education approach, the most powerful weapon to change the world according to Mandela.

The major difficulty was the management of the health situation which impacted on the project in at least two ways:

- The complication in the organisation of transport and reception logistics during the course in Cotes d'Armor, an outlying region. The coordinators were always concerned not to expose the young people and adults to the risk of contamination. This resulted in transport and accommodation logistics that exceeded exceeded the planned budgets.
- The dates in the course schedule were exceeded. The time allowed for the organisation of the last practical course in Poland could not be met.

Despite this setback, which was beyond the control of the project partners, we can state that our objectives were achieved.

The result of this project was the creation of a common artefact made of the three emblematic materials of the three partner countries: white stone from Brač, Breton granite and wood from Warmia Mazury. This artefact represents a Triskel, a universal symbol of water, earth and fire.

# Presentation of the structures in the project

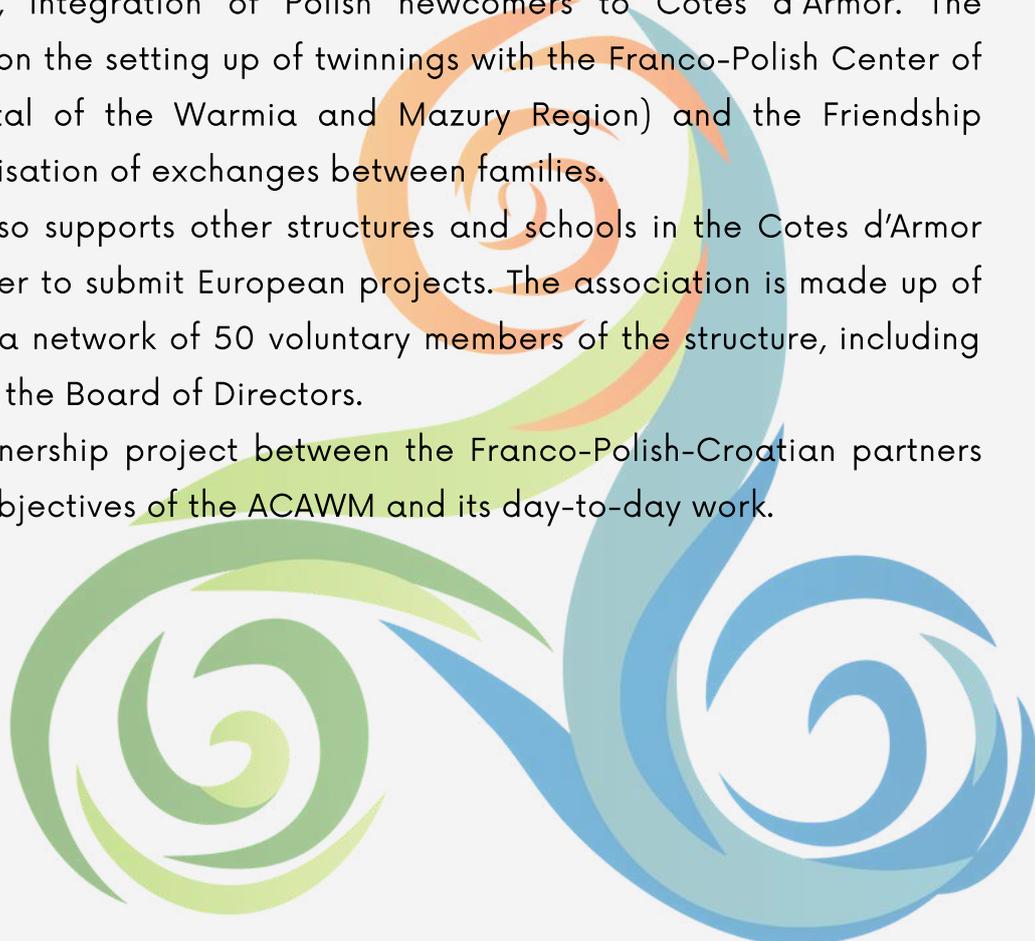
THE ASSOCIATION COTES D'ARMOR COTES D'ARMOR WARMIA AND MAZURY (ACAWM)

The association Cotes d'Armor Cotes d'Armor Warmia and Mazury (ACAWM) partner of the Council Departmental Cotes d'Armor by an agreement, has the mission of developing fraternity by implementing bilateral cooperation projects and exchanges between the region of Warmia and Mazury (Poland) and the Côtes d'Armor department (France). This cooperation falls within a framework of decentralized cooperation between the Cotes d'Armor department and its Polish equivalent the Office of Marchal in Warmia and Masuria.

Projects are developed in several areas: education, youth, sport, culture and historical memory, integration of Polish newcomers to Côtes d'Armor. The association works on the setting up of twinnings with the Franco-Polish Center of Olsztyn (the capital of the Warmia and Mazury Region) and the Friendship Association: organisation of exchanges between families.

The association also supports other structures and schools in the Cotes d'Armor department in order to submit European projects. The association is made up of an employee and a network of 50 voluntary members of the structure, including 16 who are part of the Board of Directors.

The strategic partnership project between the Franco-Polish-Croatian partners is in line with the objectives of the ACAWM and its day-to-day work.



## JEAN MONNET PROFESSIONAL SCHOOL QUINTIN

The Lycée Jean Monnet is a vocational training establishment. They work with wood and stone. They work with local construction companies. They are used to establishing cooperations with companies or associations for the renovation of the heritage (outdoor renovation site).

Their students are used to sharing their skills with each other: the woodworkers present their work to the stonecutters. They work together on projects.

They are a small structure with structure with 20 teachers. Each of them has been involved in a project at one time or another: vocational education in stone or wood, general education in science, general education in geography and history to make the link with Europe and the local heritage, English language learning to facilitate partnerships and exchanges... (e-twinning for example).

They are also accompanied by a language inspector to build the project because we because they are beginners.

The added value is their competence in the field of built heritage. Their students are aware of all constructions and are eager to discover other practices. They live in a city with a strong heritage enhancement connotation, because Quintin is a city Character.



They must also promote exchanges and promote European partnerships for the mobility of our pupils, cultural openness, tolerance and the discovery of other ways of functioning.

The LP Jean Monnet of Quintin is a small structure located 20 km south of Saint Briec, in the Côtes d'Armor. They have 20 teachers and 120 students. They offer two CAPs: Masonry and Stone Cutting (the only one in the public sector in Brittany); and three Professional Baccalaureates: Sustainable Building Construction Trades (Masonry), Carpentry, and Wood Construction Technician (the only one in the public sector in the department). As a result of their course in our school, some students continue their training in BTS, or find a job in the nearby sector.

The students come from towns and villages less than 50km away.

Half of our students come from disadvantaged social and professional backgrounds, which is why it was important to involve them in the project in order to encourage their success at school

## THE ASSOCIATION MEMORY IN RESIDENCE

The association "Memory in residence" founded in July 2007, aims to create solidarity between the individuals. It works for the enhancement of cultural heritage, ancient and contemporary, in harmony with the Maison des Toiles and the linen route. The association contributes to the safeguarding and enhancement of cultural heritage. It creates partnerships and sets up events to highlight, promote and bring this heritage to life. The association also oversees schools interested in the discovery of flax, the history of the golden age of Textile Brittany (exhibitions, guided tours). It manages the Maison des Toiles de St Thélo (3500-5000 annual visitors) devoted to the cultural and historical heritage of Brittany.

In this project the association was involved in:

- 1) The definition of the restoration site of the small rural heritage in the municipality of St Thélo
- 2) the setting up of exhibitions in the Côtes d'Armor
- 3) the supervision of schoolchildren interested in the components of the project
- 4) the encouragement of associations, professionals and social and economic players in the territory
- 5) exchanges related to this project, between France, Poland and Croatia

The resource persons - Jacques Aubert and Claire Aubert as well as the network of volunteers worked hand in hand with the partners of this project. This made it possible to take a step towards an European opening.



## THE FRANCO-POLISH CENTER CÔTES D'ARMOR – WARMIA MASURIA



The Franco-Polish Center Côtes d'Armor – Warmie Mazury was created in 1993. It is a regional cultural and educational institution. Its missions relate to the development of the local democracy and the promotion of the idea of a united Europe. The activity of the FP Center is based on the promotion of French culture and language. The center has a library, an exhibition hall, offers cultural events (Journées Francophonie and French Culture, Brittany Days, film screenings, meetings), educational (competitions, activities for schoolchildren) and associations (in cooperation with Association of Friends of France and Brittany "Friendship"). An important part of the activity of the institution are the French courses, addressed to the public of all ages (from 6 years old), organized within the Center, but also in schools. The FP Center accompanies implementation of initiatives aimed at the development of Franco-Polish cooperation, and above all regional, between the department of Côtes d'Armor and the region of Warmia Mazury, carried out by schools, non-governmental organizations, cultural institutions. The center also organizes literary evenings and conferences devoted to European subjects. The program of the Center is addressed to children, young people and adults of Olsztyn and Warmia Masuria.

At the Franco-Polish Center, there are 5 permanent employees. In addition, for the school year, FLE teachers are hired (including a native), as well as an EVS volunteer. The VT Center cooperates with schools in Olsztyn and the region, with associations, cultural centers and libraries, thanks to which its network of partners is very large. The FP Center team has experience in organizing cultural and educational events, local and international.

The role of the PF Center in the organization of exchanges and stays was multiple: the recruitment of young people and supervisors, the technical and logistical organization (transport, development of the program of stay, formal and documentary questions, insurance, etc.). Their institution is well experienced in the organization of stays and meetings of young people.

Since 2018, the Center has coordinated the project "Stalag – living and dying in a German camp for prisoners of war during the 2nd World War" carried out in cooperation with German and French partners, ensuring the coordination of actions, travel, international youth and adult meetings.

## MUSEUM OF PEOPLE'S CONSTRUCTION - ETHNOGRAPHIC PARK IN OLSZTYNEK

Museum of People's Construction - Ethnographic Park in Olsztyn is one of the largest and oldest open-air museums in Poland. It had its origins in 1909, when the municipality of Königsberg (now Kaliningrad) decided to create the museum of folk architecture on the territory of Königsberg Zoo Park. At that time, 24 copies of 18th-19th century folk wooden houses from the territory of Warmia, Masuria, Vistula (Powisle) region and Little Lithuania were reconstructed. In 1937, it was decided to move the constructions from Königsberg to Olsztyn. The translocation took place in the years 1938-1942. Currently there are 12 constructions of folk architecture of this period, among others: the Lithuanian ensemble, the Evangelical church in Rychnowo, the porticoed folk house in Burdajny, the Bielica forge. During World War II the construction equipment was destroyed.



After the war, the Architect of Buildings of the Olsztyn Voivodeship directly took care of this museum complex. In 1962, the Ethnographic Park was established, and in 1969 it was transformed into an independent cultural center. Since 1998, the Museum has become the cultural center of the Municipality of the Voivodeship of Warmia and Mazury. Territory: 93 ha, including 35 ha Ethnographic Park.

Museum offers theoretical courses for young school children on the cultural heritage of the region and practical courses in our museum with original wooden architectural objects in the field of conservation. The framework of the work was defined with our curator. We planned to work on the subject of windmills. In this project we had a plan to implement a mix of theory lessons, field trips and practical lessons, where in the theory module participants would familiarise themselves with the history of windmills in Warmia and Mazury, discuss the types of windmills, present the current state of conservation of windmills in the region. Field trip would serve as a springboard to visit selected windmills, discussion on the state of preservation. Practical lessons were planned for building a model of one of the windmills using regional materials: stone, wood and brick.

## LUBAWA SCHOOL GROUP



Lubawa School Group - (High School, Economic School, Electrical Technical School, Agricultural school, agricultural technical school, industrial school 1st degree, including students preparing for carpentry professions, etc.)

Number of students: about 800

Number of teachers: about 60

Organisation of the school complex: two school buildings and workshops - used as for electricians, school practices for the technical school and the industrial school. Completely equipped: cabinets for learning professional subjects for electricians, 4 computer rooms, 3D printer. computer rooms, 3D printer. Numerous classrooms equipped with interactive boards, projectors and projectors and computers. A boarding school with 30 places. The large gymnasium and the new sports field.

In the field of internships for students, the school cooperates with IKEA INDUSTRY, SZYNAKA FURNITURE, ORISTO and the Guild of Craftsmen and Employers, i.e. local entrepreneurs and craftsmen.

The students of the group of schools in Lubawa come from the town or municipality of Lubawa or from neighbouring municipalities: Ostróda, Nowe Miasto, Grodziczno, Dąbrówno, Iława.

Stone and Wood mobilities within the framework of European projects allowed our students opportunities to learn about other cultures, helped in raising awareness and appreciating of the local cultural heritage. These projects prepare a future citizen for activities in relation to the rest of Europe, and the countries where they have already been to.

The strong cooperation between the school and local companies such as IKEA was an added value to this project as the pupils were also able to discover new professional environments, tools, production machinery, organisation, business rules, ... Furthermore, we wanted to bring cooperation with the companies which, once sensitised, will be able to join in the protection of local heritage.

Within the school, the close-knit team of teachers who have been working together for years contributed to the success of the smooth running of the project. The team was made up of the vocational trainers, teachers of general subjects, arts and languages under the direction of Mrs Kinga Zedlewska.

## THE KLESARSKA ŠKOLA IN PUČIŠĆA



The Klesarska škola stonemasonry school in Pučišća on the island of Brač is the only specialized stonemasonry school in the Republic of Croatia. The training is provided by 22 teachers, including two construction engineers, a mechanical engineer and a licensed sculptor. It was founded on January 5, 1909. The main emphasis in the school curriculum is on manual stone cutting mainly executed with hand-forged tools. The school offers two programs: a three-year program for professional stonemasons and a four-year program for stonemason technicians.

The stonemasons have a lot of practical work and after three years at the school, they can take the senior craftsman's examination.

If the stonemason technicians have less practical work, they mainly deal with organisation of work in the workshop and on the building site. After the final state examination they can continue at university, mainly in Civil Engineering, Architecture, or Art Academy and similar other similar activities.

In the practical work, the hand chiselling is based on the ancient Roman school of stone cutting with classical tools. The teachers are highly qualified professionals in all kinds of stonemasonry work. In the school's workshop they mainly use stones (lime) from local quarries. The school organises the traditional gathering of international trade professionals in the stone sector entitled "Symposium on the excavation, treatment, use and restoration of stone". The school publishes the journal "Stone Masonry and Building" to discuss and exchange knowledge that impacts on archaeology, history and art building, conservation and protection of cultural heritage, excavation technology, geology, sculpture, design in stone construction etc.

Klesarska škola participated in:

- work on the stone heritage in the workshop and on the site
- work on stone embedded in the building, limited to situations without scaffolding
- participated in dissemination and management tasks.

# Individual & group educational work done in schools in France and Croatia

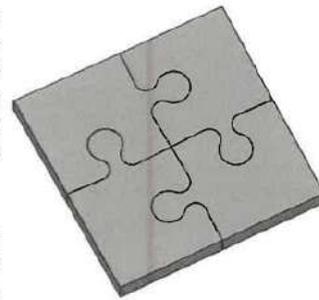
## INDIVIDUAL WORK

Nom :	Prénom :	Date :
	Manufacture of Coasters and trivet with 	



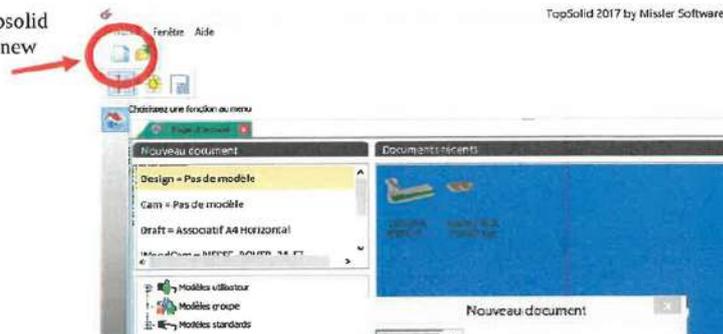
The goal of this tutorial is to draw and plan a trivet in the shape of a puzzle. The software will allow us to make the programs used by the CNC (computer numerical control) to make the under glass.

It will then be necessary to make the finishes with portable equipment (router, jigsaw, sander) and hand tools.



Here is the result of what you need to get with Topsolid software. Follow these steps to get there.

1. After opening the topsolid software, click on the "new document" icon.



2. The following dialog box is displayed.

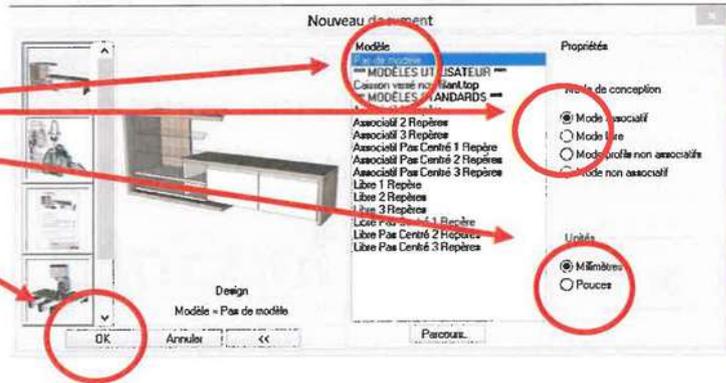
Click on the button



INDIVIDUAL WORK

3. The dialog box expands.  
Check the following options:
- Pas de modèle
  - Mode associatif
  - Millimètre

Then click on Ok.

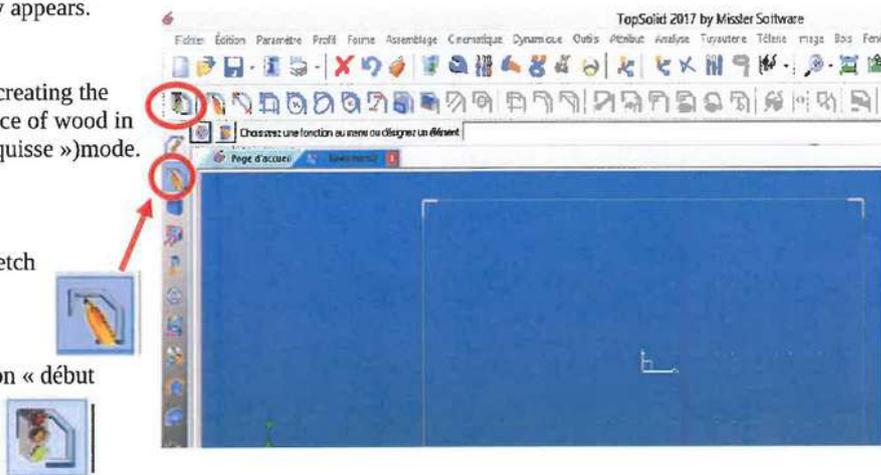


4. A new window appears.

We will start by creating the outline of the piece of wood in the Sketch (« Esquisse ») mode.

To do this:  
- Click on the sketch icon «nouvelle esquisse»

- Click on the icon « début esquisse »

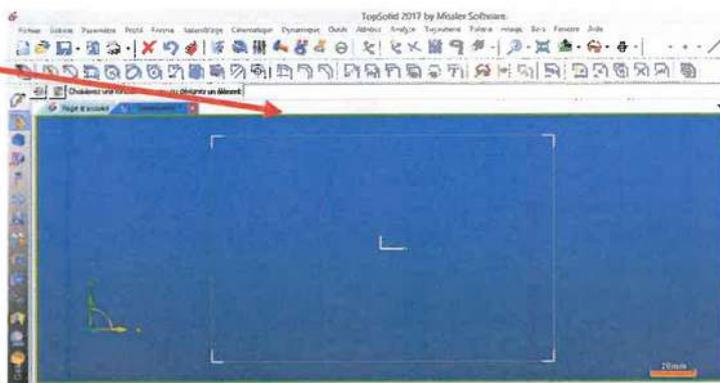


- Then click on « repère courant » (current landmark)



A green frame is displayed around the work plan

You're ready to sketch the piece of wood.



INDIVIDUAL WORK

5. Using the following icons draw the following figure:

-Icon « ligne »



- Icon « contraintes »



-Icon « coter »



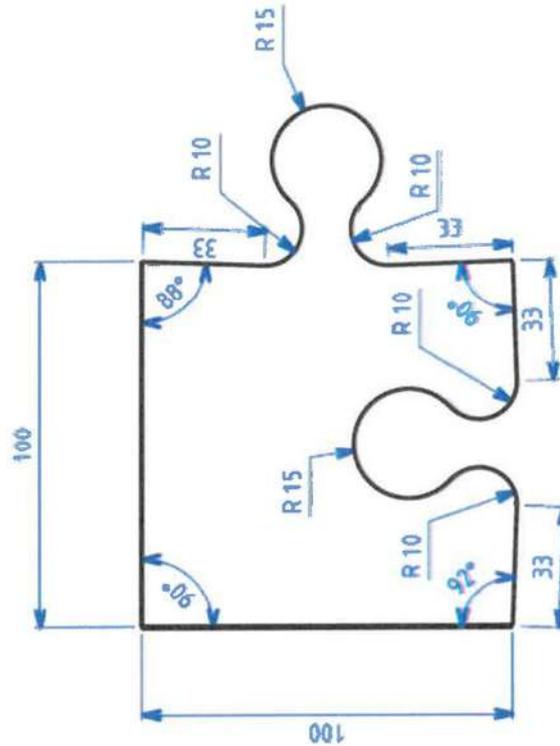
-Icon « Cercle »



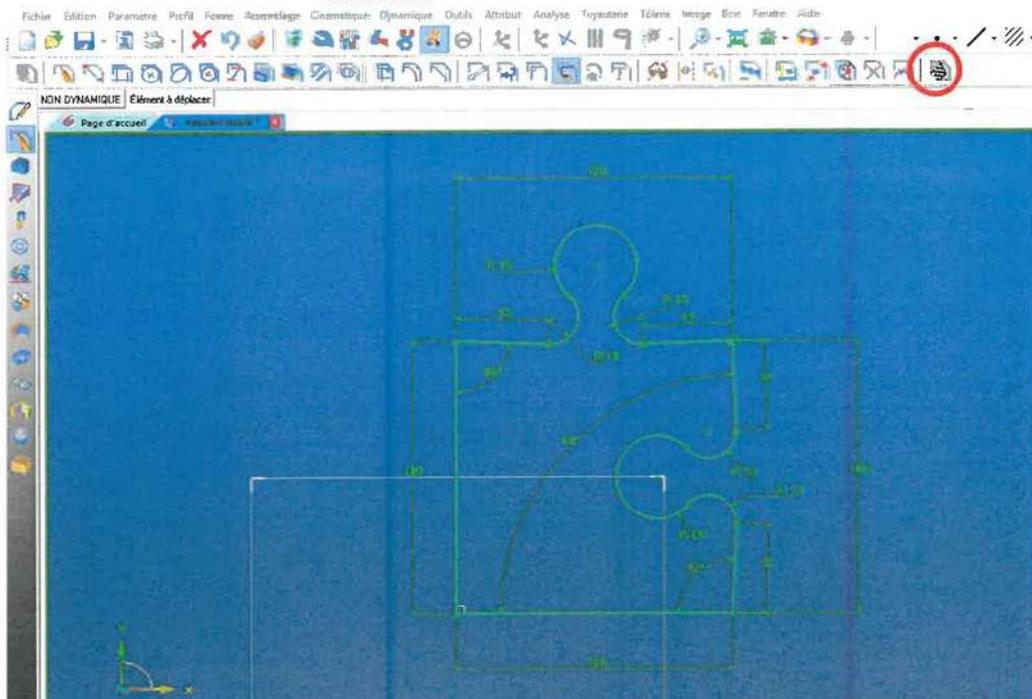
- To move points use the icon « chariot »



- To delete points or elements use icon « corbeille » (dish)



When the sketch is green, it means that there is no error on the constraints.



INDIVIDUAL WORK

Click on the end of sketch icon « fin esquisse »

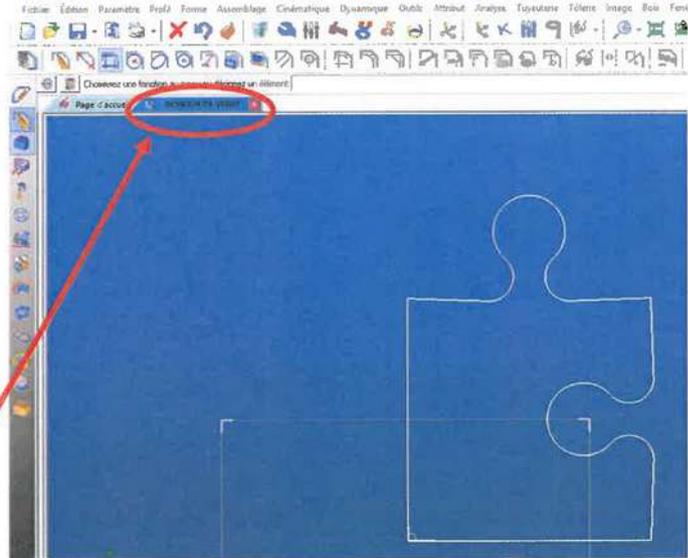


The sketch is coloured white.

Save the work to a folder.



Name the file "DESSOUS DE VERRE" (coaster). This name is displayed in the tab.



6. We will extrude the sketch (give it volume).

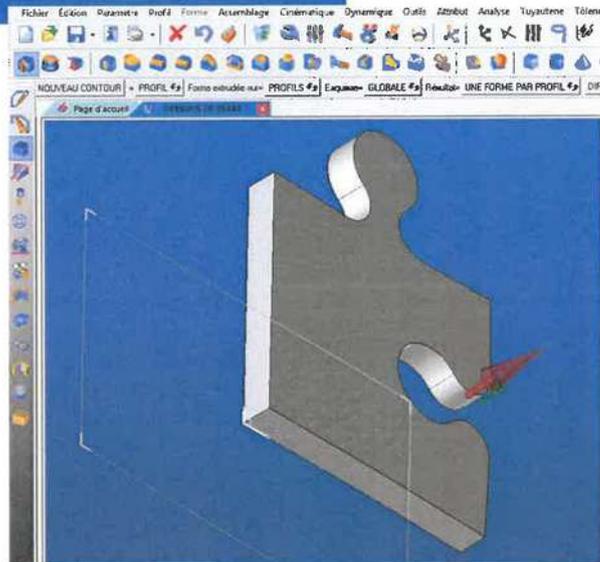
Click on the icon « extruder »



Then click on the previous sketch and indicate 12mm in height.



You get the screen opposite.



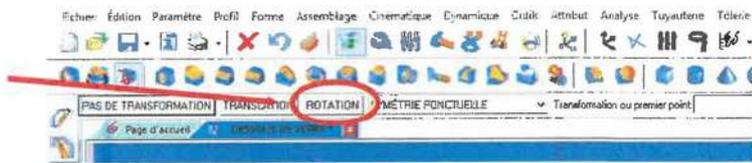
INDIVIDUAL WORK

7. We will duplicate the coaster 4 times to make a Trivet.  
To do this, go to «EDITION» then duplicate.

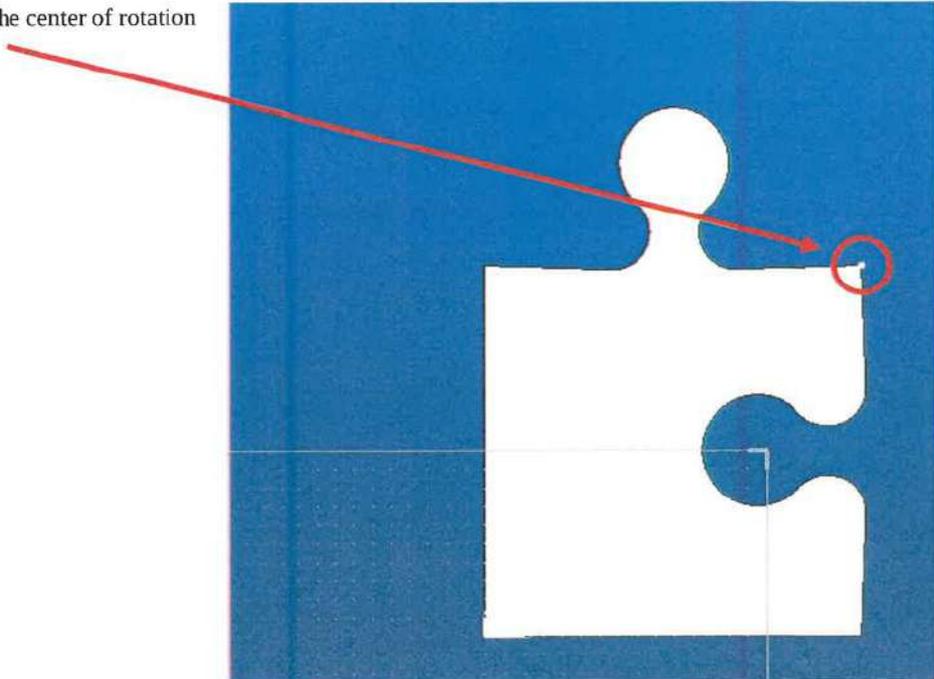


On the dialog bar click

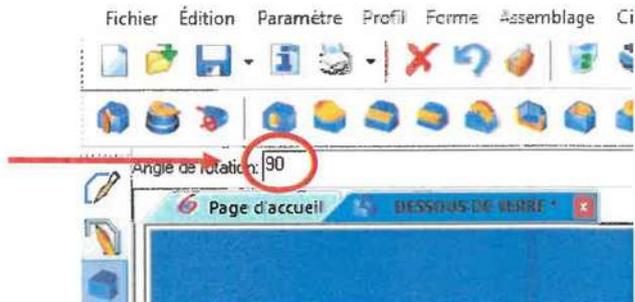
ROTATION



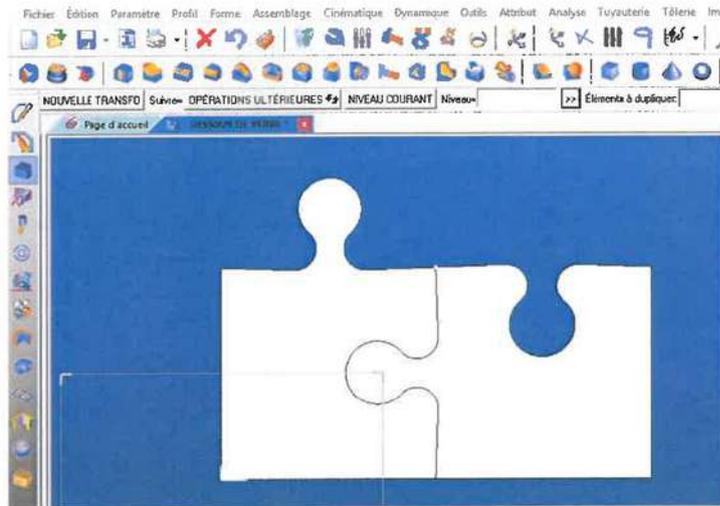
Click on the center of rotation point:



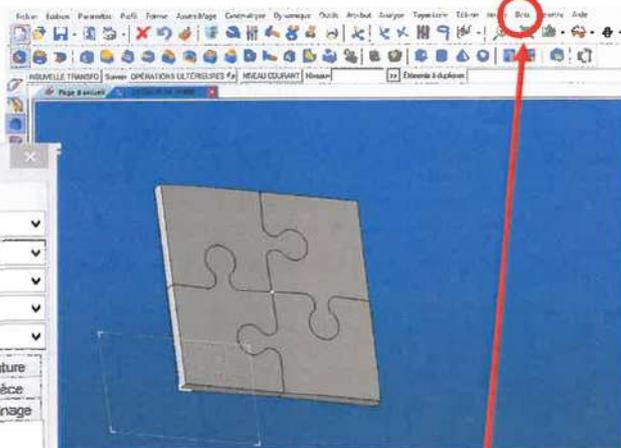
Indicate the angle of the rotation: 90°. then click on the under glass shape, you will get the next screen.



INDIVIDUAL WORK



Do the other rotations to get 4 nested coasters.



8. Define the pieces of wood, to do this:

- Click on "WOOD" in the menu bar, then on "define" and then on "define piece". Then click on the first piece of the puzzle.

A dialog box opens:

- Call the piece of wood « Coaster » (dessous de verre)
- Indicate the material in the material tab: oak (chêne)
- Define the 4 pieces of wood.

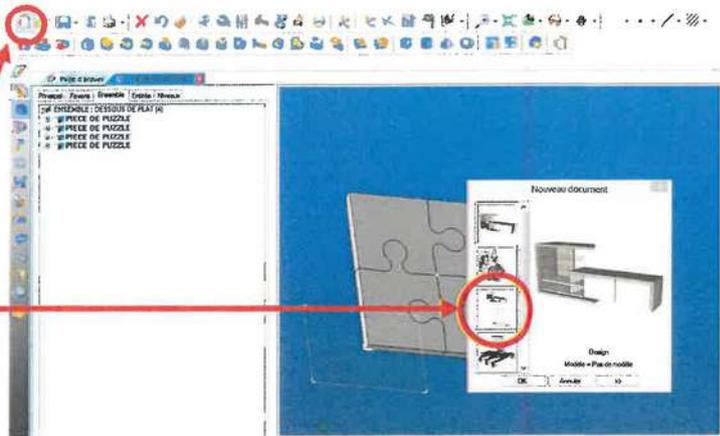
INDIVIDUAL WORK

9. Plan.  
We're going to plan the underside.

-Click on the "new document" icon



Opens a new window, click on "DRAFT"

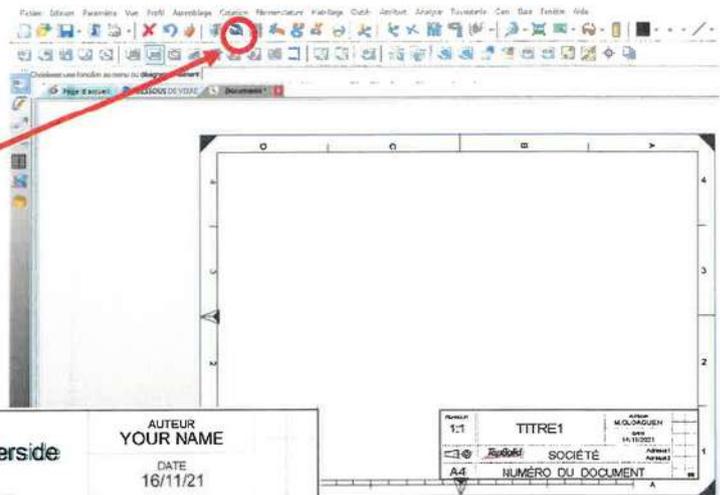


A new tab opens with a blank plan.

With the icon « modifier »



Modify the cartridge as shown



-Click on main view



- click on set and choose dessous de verre (Coaster)



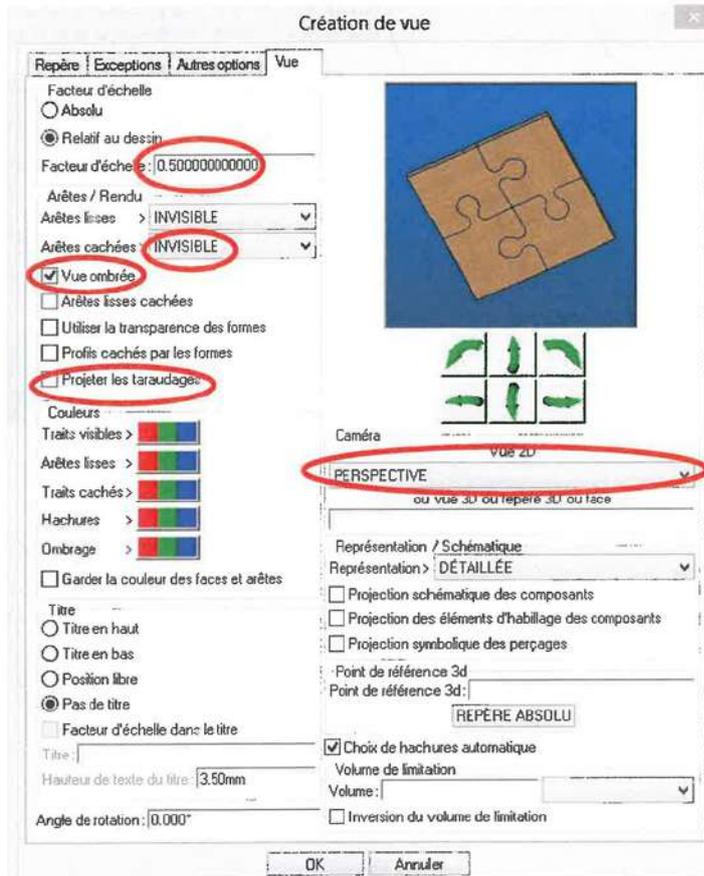
INDIVIDUAL WORK

A dialog box appears:

Change the settings like the picture opposite.

Then click ok.

Place the trivet on your plan.



10. Grading of the piece of wood.

- Click on main view



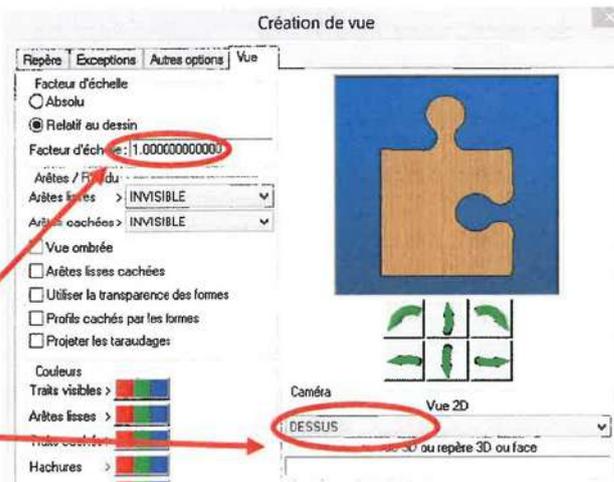
then on the Coaster tab (the 3d model)

Then on a piece of the puzzle.

The "Create View" dialog box appears.

Set the scale factor to 1.  
View from TOP (DESSUS)

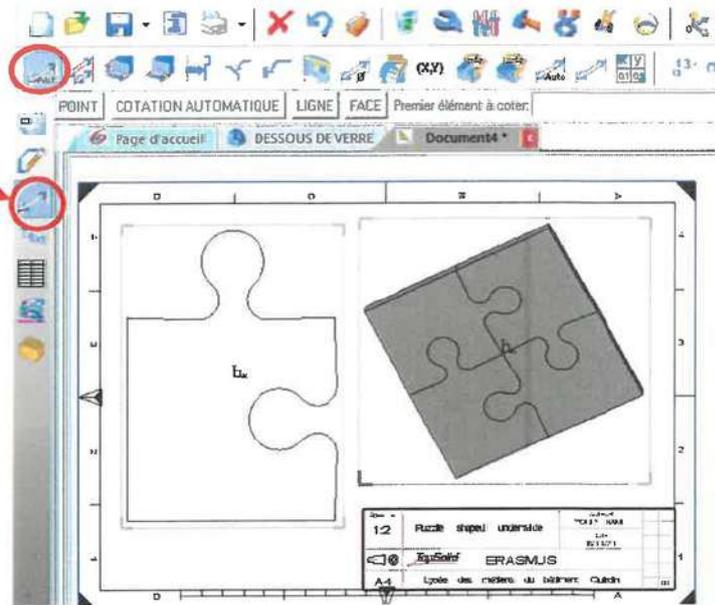
Then click on ok



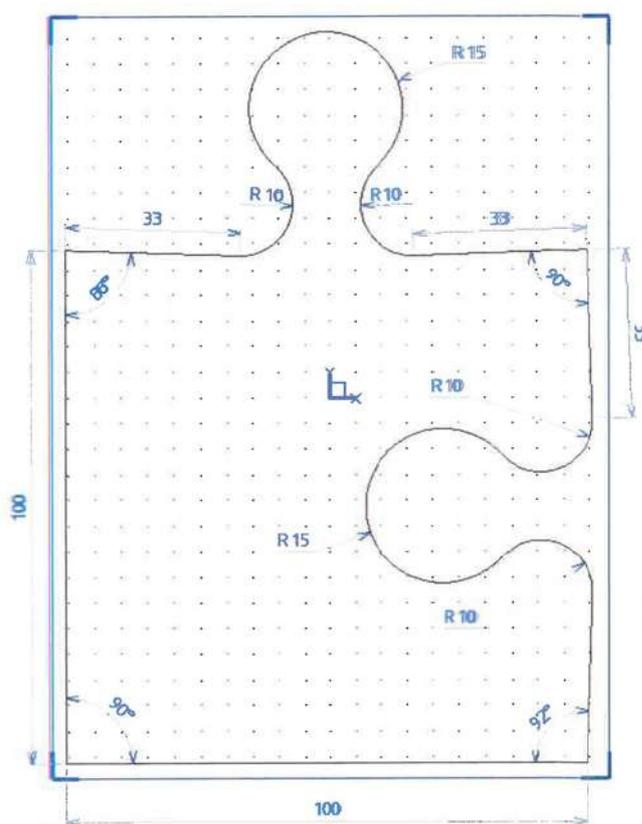
INDIVIDUAL WORK

You get the following screen:

You still need to rate the figure with the "COTER" (rate) icon .



You get this:



## INDIVIDUAL WORK

	<h2>Projet ERASMUS</h2>	Le 16 /11 / 02021
		8 élèves
		Pologne Croatie France

### Conception de Jardinière

**Etape 1 :** Calcul du volume, conception de la structure et recherche des sections de bois.

**Ouvrage fini :**

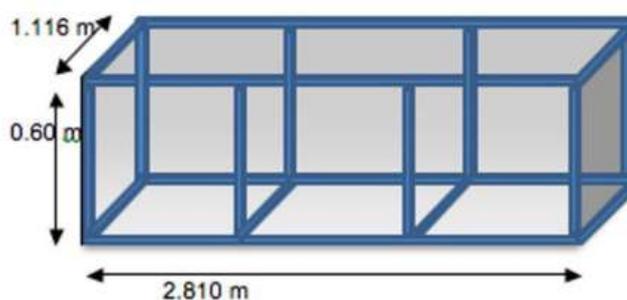
Longueur : 2.90 m

Largeur : 1.20m

Hauteur : 0.70 m à 0.80 m

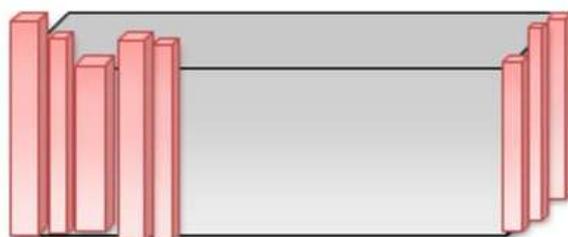


**Etape 2 :** Structure assemblage vissé



Section 70 /45 mm

**Etape 3 :** Bardage pointé (inox) sur châssis bois

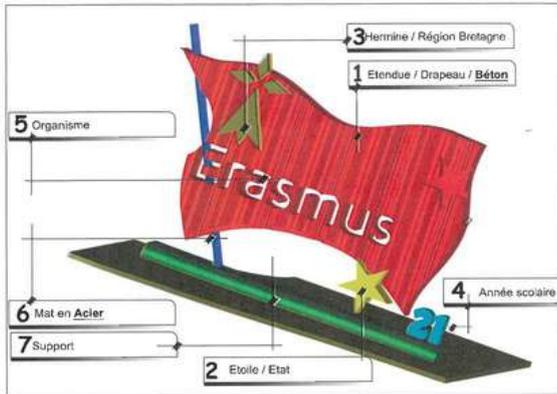


X 20 lames soit 2.90 m

X 8 lames soit 1.20 m

Section de 45 /145 mm

INDIVIDUAL WORK



**Présentation:**

- Drapeau représentant les 03 pays ( la France, la Pologne et la Croatie): 03 Etoiles
- Béton teinté rouge
- Touche locale / Hermine/ Bretagne
- Ensemble en mouvement

Ouvrage: Drapeau en béton armé

Coffrage périphérique

**Etapes (phases):**

- 1- Préparation du coffrage
- 2-Mise en place lettres
- 3-Mise en place du négatif de l'hermine et des étoiles
- 4- application de l'huile de décoffrage
- 5- mise en place du mat
- 6- préparation et coulage du béton
- 7- Décoffrage et nettoyage



coulage des étoiles / lettres/ huile de décoffrage

**Moyens:**

- 1- Béton: 60 litres
- 3-Bois de coffrage ceintrable
- 4- Polystyrène
- 5- Colorants en poudre: jaune et rouge
- 6- Huile de décoffrage
- 7- Acier Diam 06 mm
- 8- Barre acier Diam 16 mm
- 9- Plâtre

Négatif de l'hermine



Réalisation



Coulage du béton et finitions

INDIVIDUAL WORK

Exploded view and assembly diagram of a birdhouse. The exploded view shows parts 101 (facade), 102 (back), 103 (right side), 104 (left side), 105 (base), 106 (roof), 107 (roof slats), and 108 (perch). The assembly diagram shows the birdhouse with dimensions: 250 (width), 331.75 (height), 130 (width of the base), and 116 (width of the entrance hole).

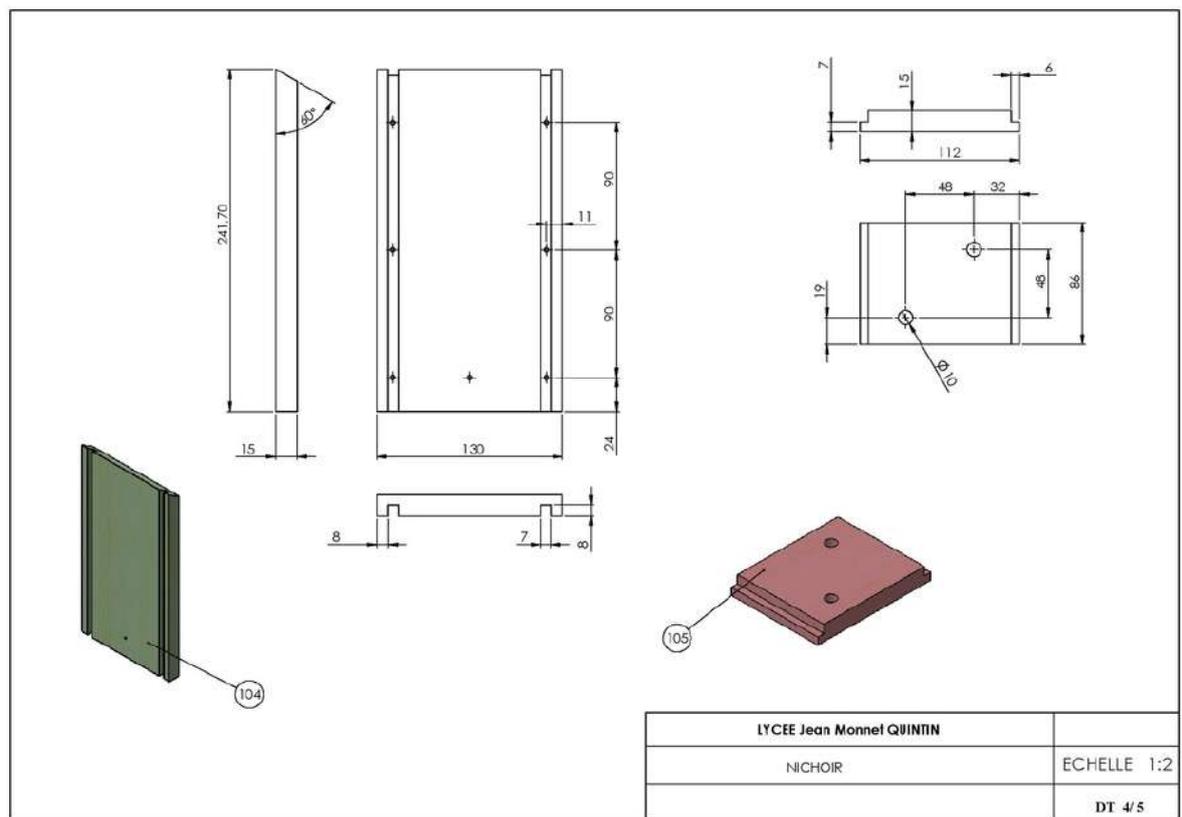
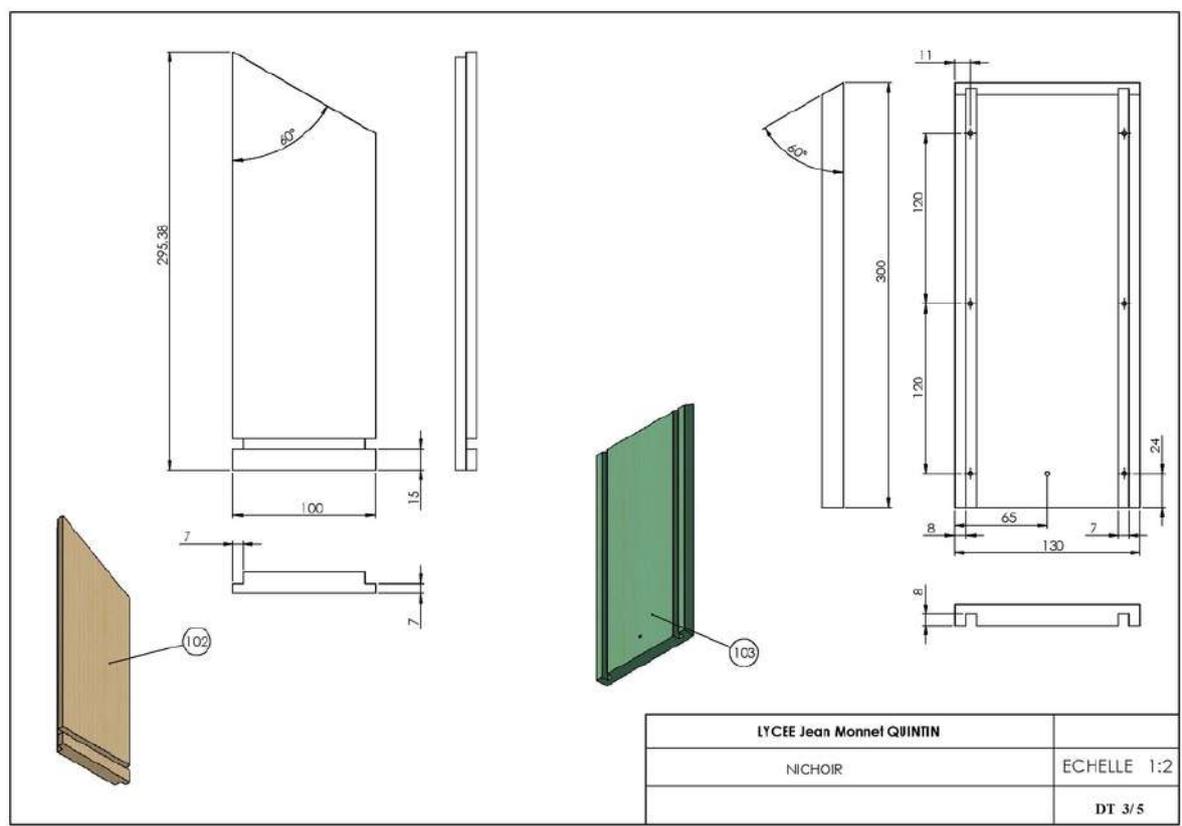
REPERE	NOMBRE	DESIGNATION	OBSERVATION
101	1	FACADE	
102	1	ARRIERE	
103	1	COTE DROIT	
104	1	COTE GAUCHE	
105	1	FOND	
106	1	TOIT	
107	2	TASSEAU TOIT	
108	1	PERCHOIR	

LYCEE Jean Monnel QUINTIN	
NICHOIR	ECHELLE 1:4
DT 1/5	

Technical drawing of a wooden slat (part 101). The drawing shows a perspective view, a side view with dimensions (100, 60, 140, 295.38, 10, 156, 15, 7, 7, 7), and a cross-section view with dimensions (7, 7). The slat has a circular hole with a diameter of  $\Phi 32$  and a radius of  $R4$ .

LYCEE Jean Monnel QUINTIN	
NICHOIR	ECHELLE 1:2
DT 2/5	

INDIVIDUAL WORK



INDIVIDUAL WORK

Technical drawing of a birdhouse (NICHOR) showing front, side, and perspective views of the main body and three detail components (104, 107, 108) with their respective dimensions.

Front view: 250

Side view: 200, 8°

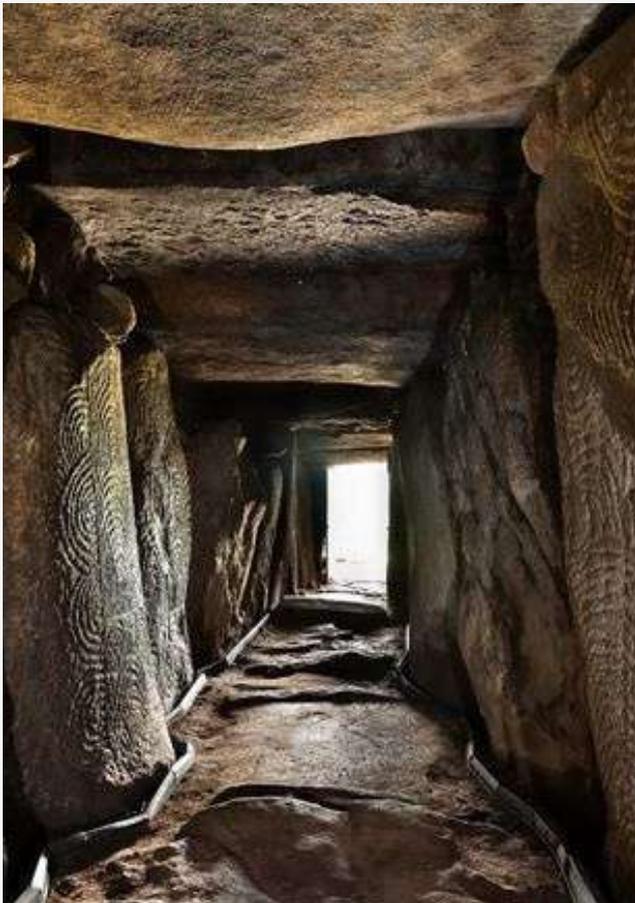
Detail 104: Perspective view of a dark red rectangular plate.

Detail 107: Perspective view of a dark red rectangular block. Front view: 90. Side view: 15, 20.

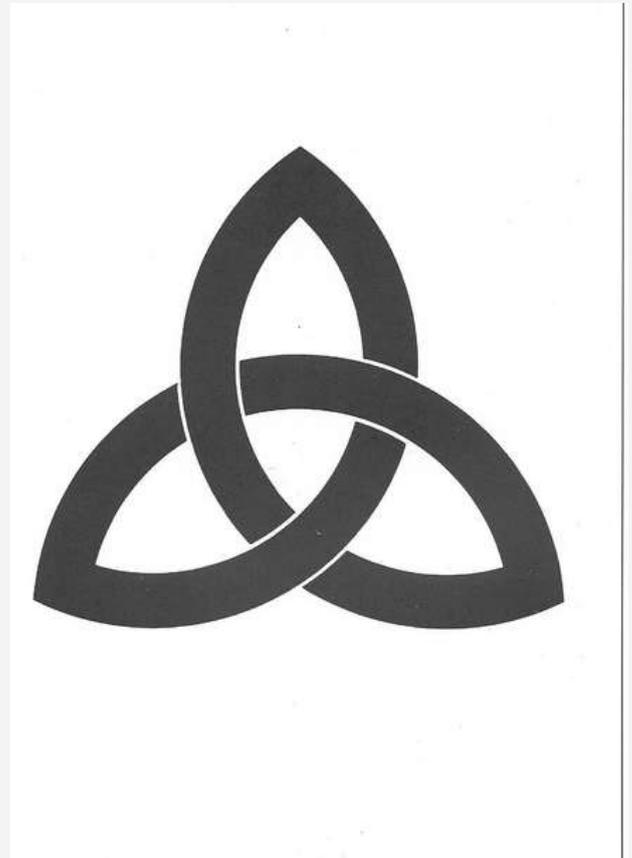
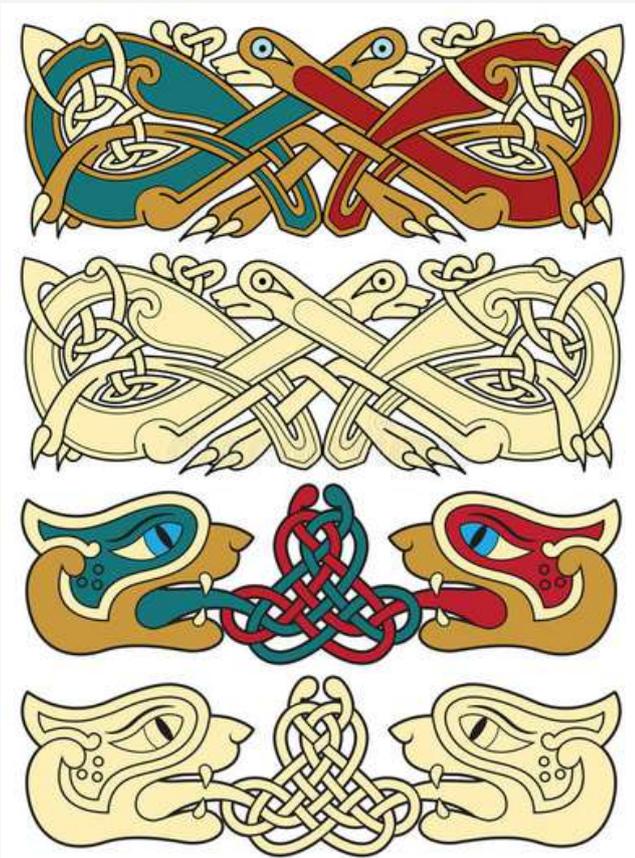
Detail 108: Perspective view of a dark blue cylindrical rod. Front view: 60. Diameter:  $\varnothing 8$ .

LYCEE Jean Monnet QUINTIN	
NICHOIR	ECHELLE 1:2
DT 5/5	

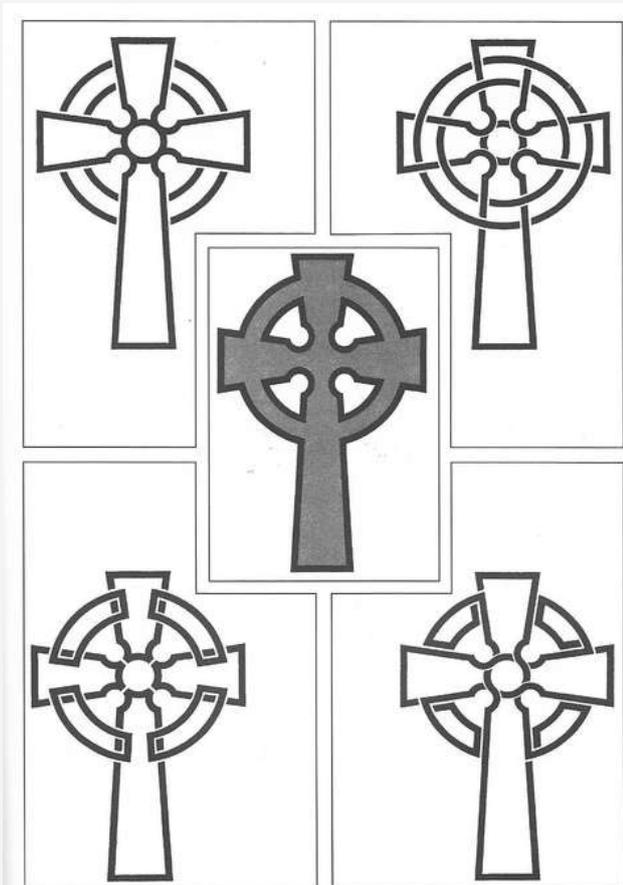
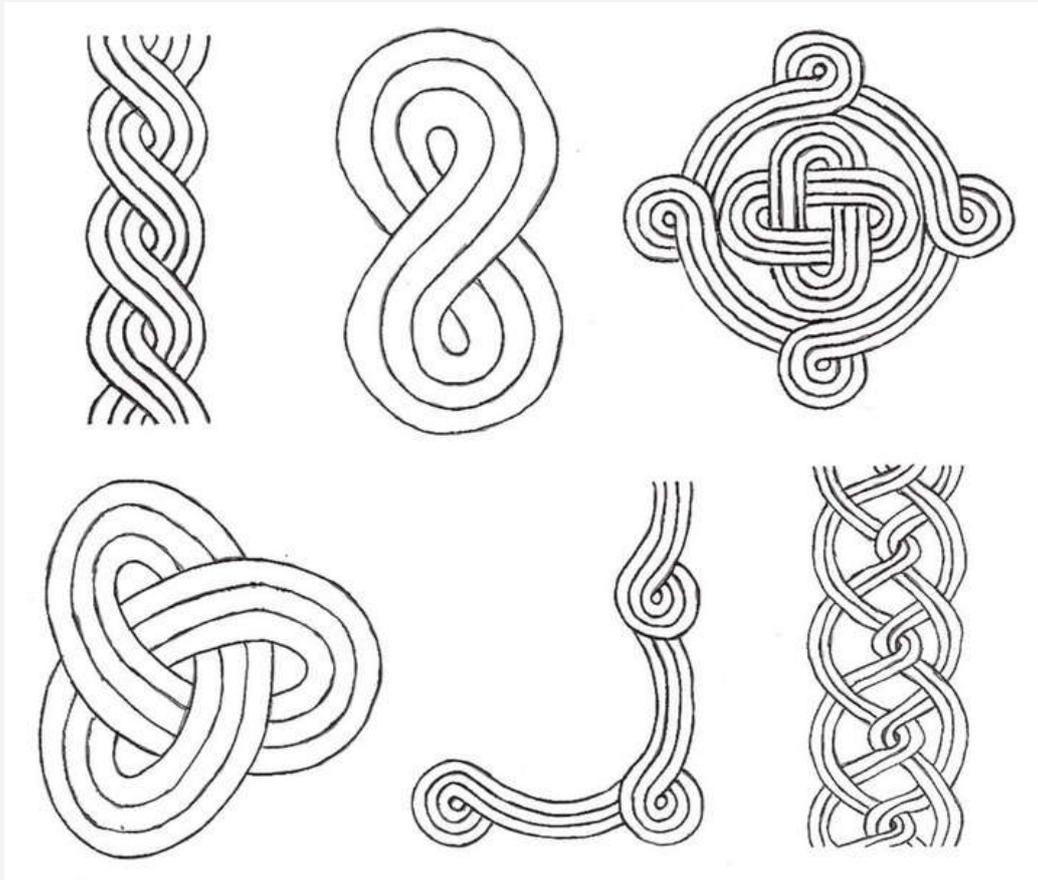
INDIVIDUAL WORK



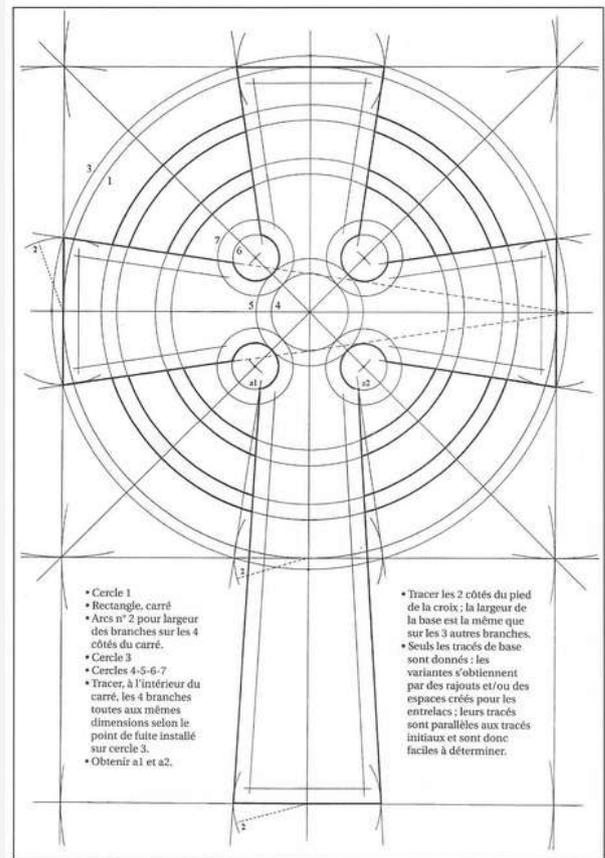
INDIVIDUAL WORK



INDIVIDUAL WORK



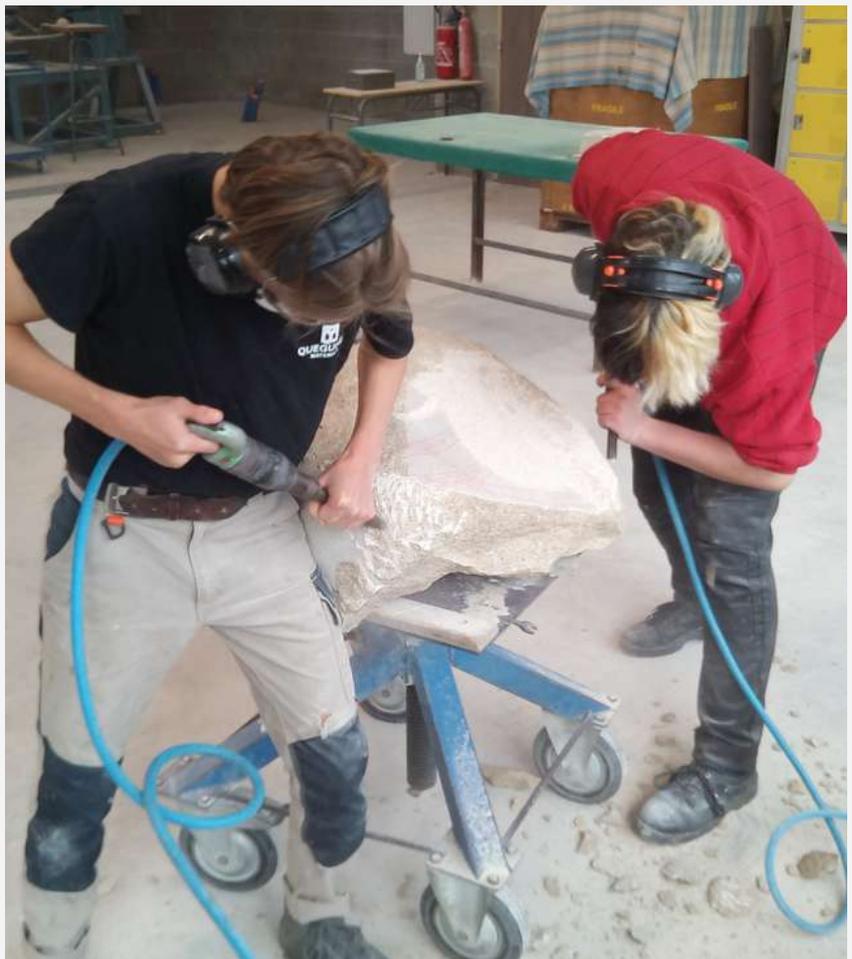
Une croix celtique... qui en fait 5



- Cercle 1
- Rectangle, carré
- Arcs n° 2 pour largeur des branches sur les 4 côtés du carré.
- Cercle 3
- Cercles 4-5-6-7
- Tracer, à l'intérieur du carré, les 4 branches toutes aux mêmes dimensions selon le point de fuite installé sur cercle 3.
- Obtenir a1 et a2.

- Tracer les 2 côtés du pied de la croix; la largeur de la base est la même que sur les 3 autres branches.
- Seuls les tracés de base sont donnés; les variantes s'obtiennent par des rajouts et/ou des espaces créés pour les entrelacs; leurs tracés sont parallèles aux tracés initiaux et sont donc faciles à déterminer.







## GROUP WORK - TRISKELE



A symbol as old as the world, here is the meaning of the Triskel. It is part of the Celtic culture.

The Triskel is not a historically Breton symbol. Though its history is closely linked to the origins of Brittany. To trace its origins we need to go back to the Neolithic period and head for Ireland to find the first appearances of the Triskel. At the same time, the Celtic symbol was found on megalithic temples on the Isle of Man.

Many historians state that the Triskele, or Triple Spiral is the oldest symbol of spirituality.

The name comes from the Greek words "Tri" and "Skelos," which, when translated to English, mean "three legs."

There are different interpretations of the meaning of the Triskel.

There are different discussions about its true meaning. The most common one is that the three spiral branches that characterise it evoke water, earth and fire.

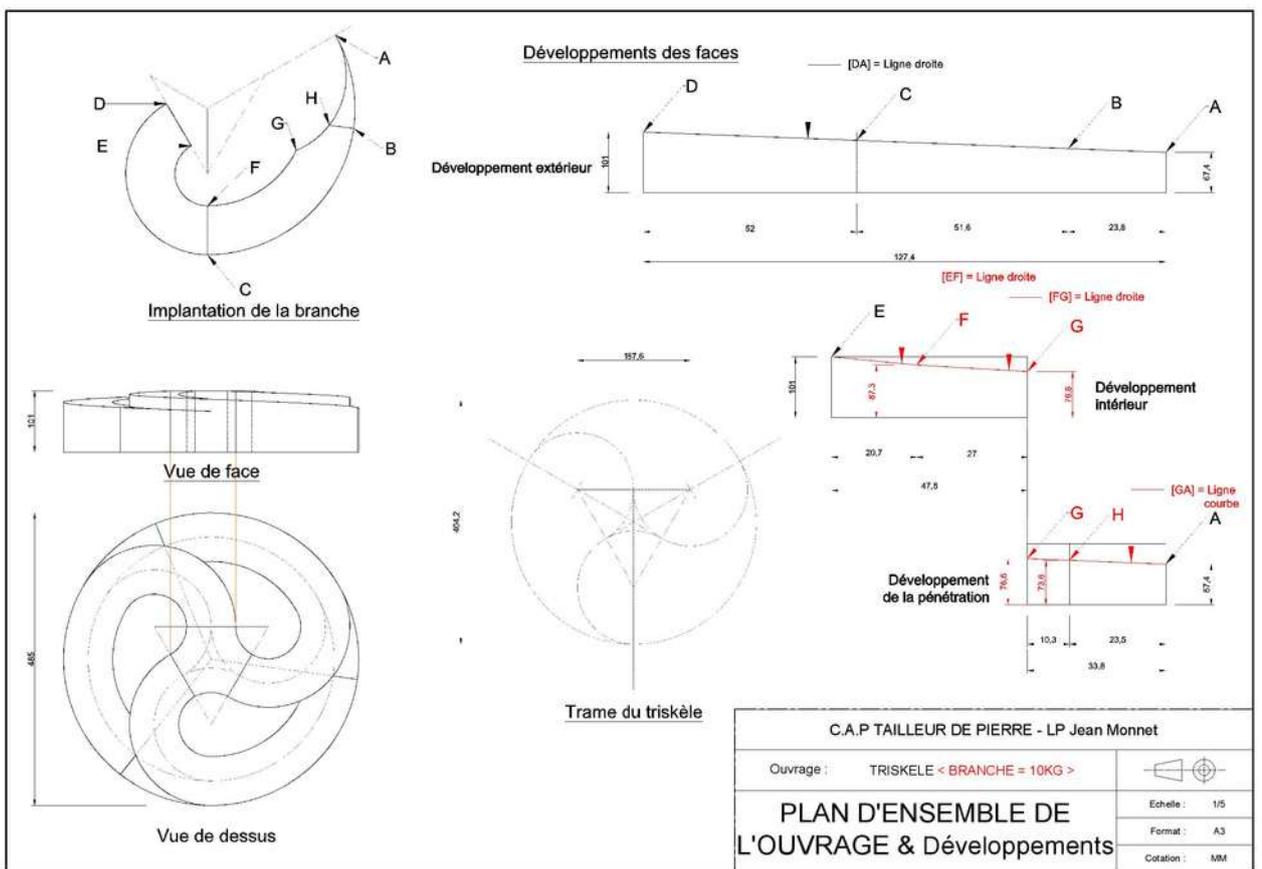
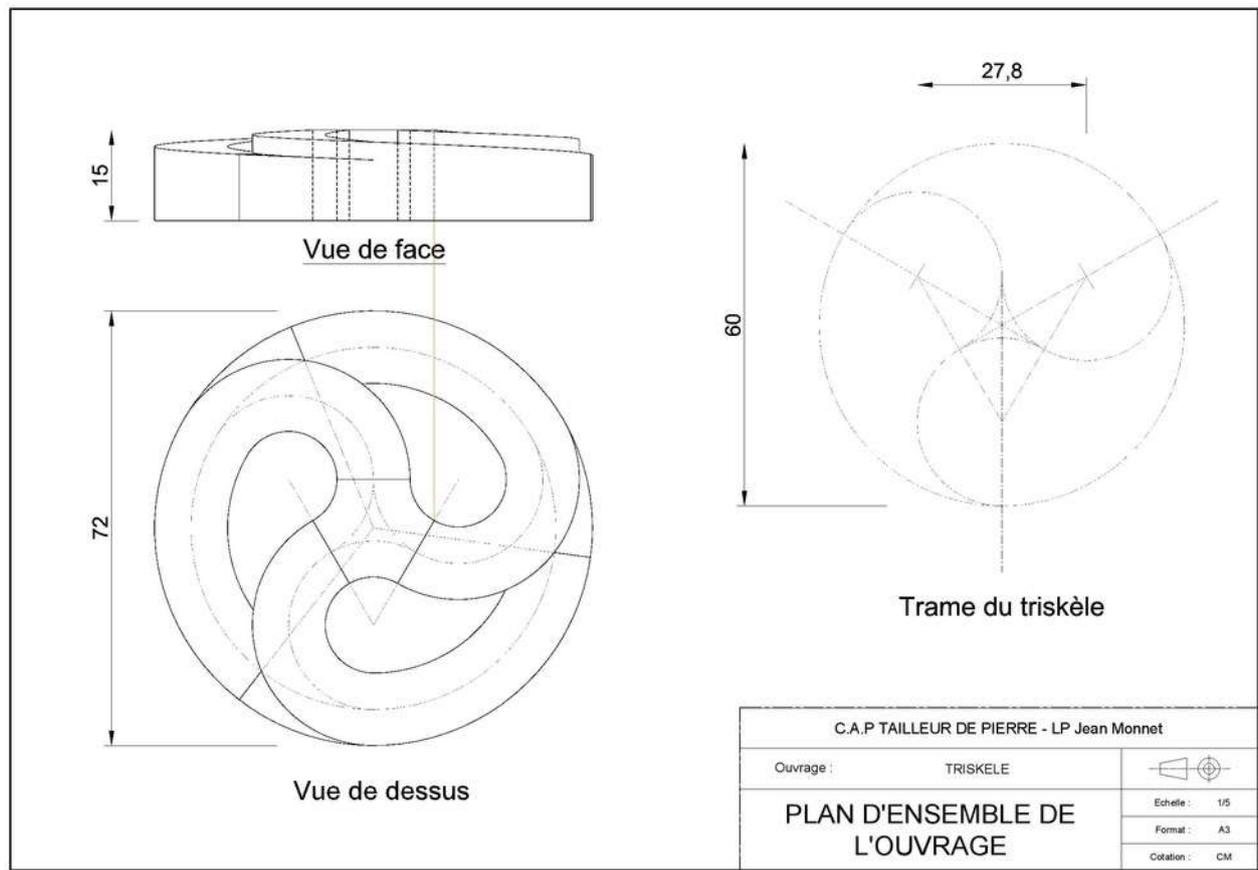
As such it was a perfect subject for our project. We built our triskele using 3 very distinctive materials characteristic for each area involved - French granite, Polish wood and white stone from Brač. Like 3 arms of triskele that came together in our work, so did the friendships and exchange of experience.

Other than versions of Triskele symbolism exist too:

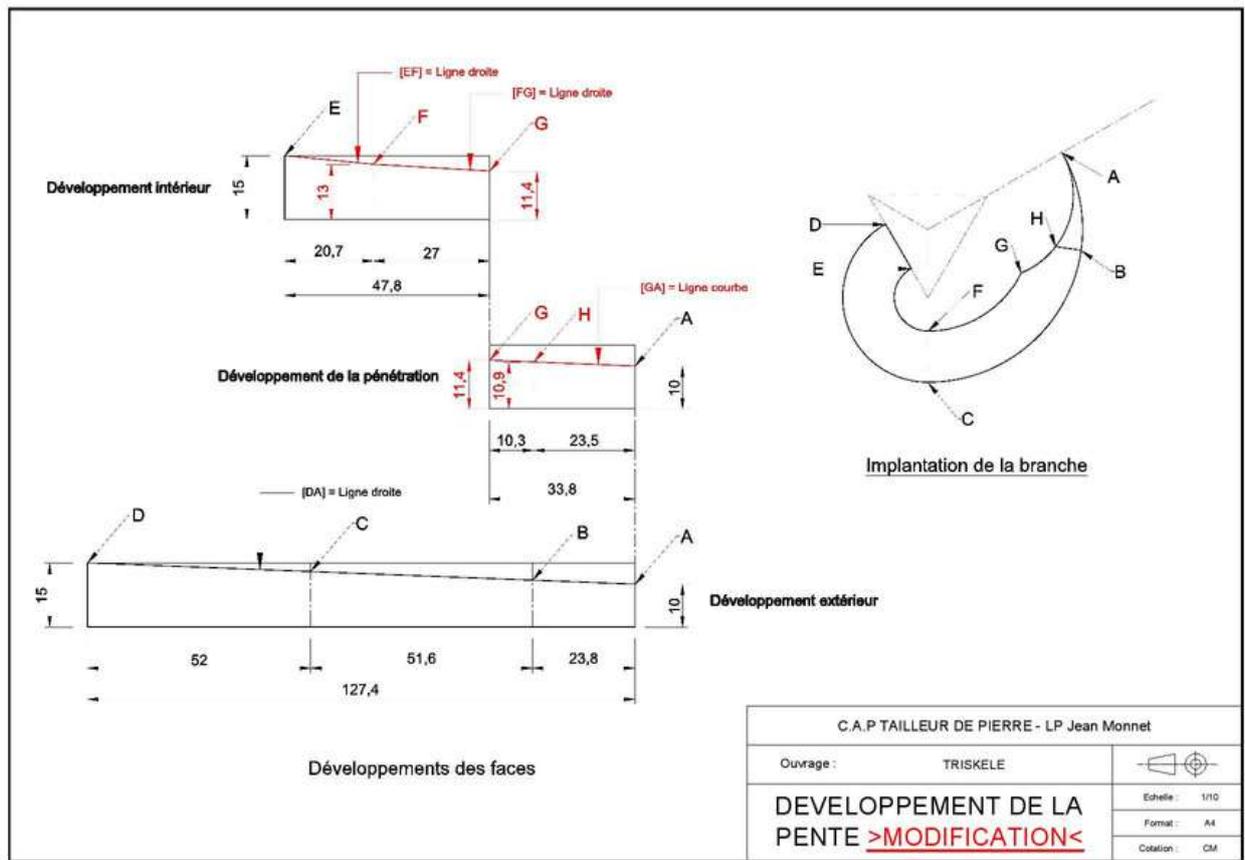
- the Celtic gods : Lug, Ogme and Dagda
- the stages of life: childhood, adulthood and old age
- time: past, present, future
- for the Celtic Christians: the Holy Trinity

This Celtic symbol is very present in Brittany, Ireland or Galicia in Scotland.

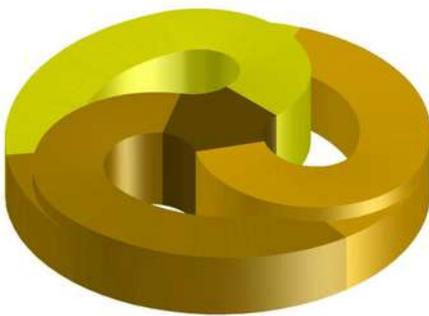
GROUP WORK



GROUP WORK

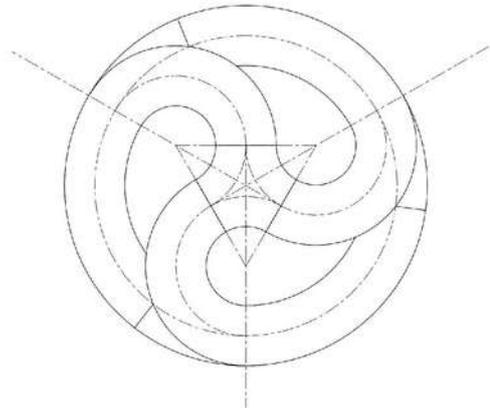
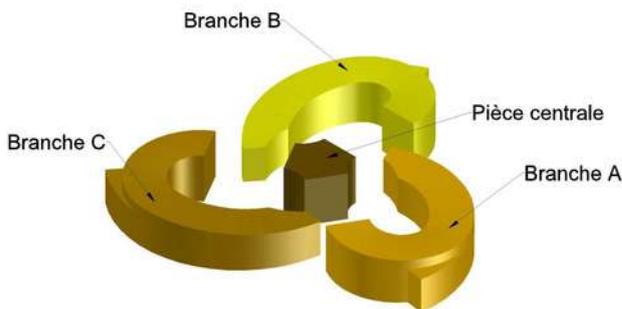


Erasmus implementation project proposal - Decembre 2020



**The triskel, 3 countries, 3 pieces, 3 materials**

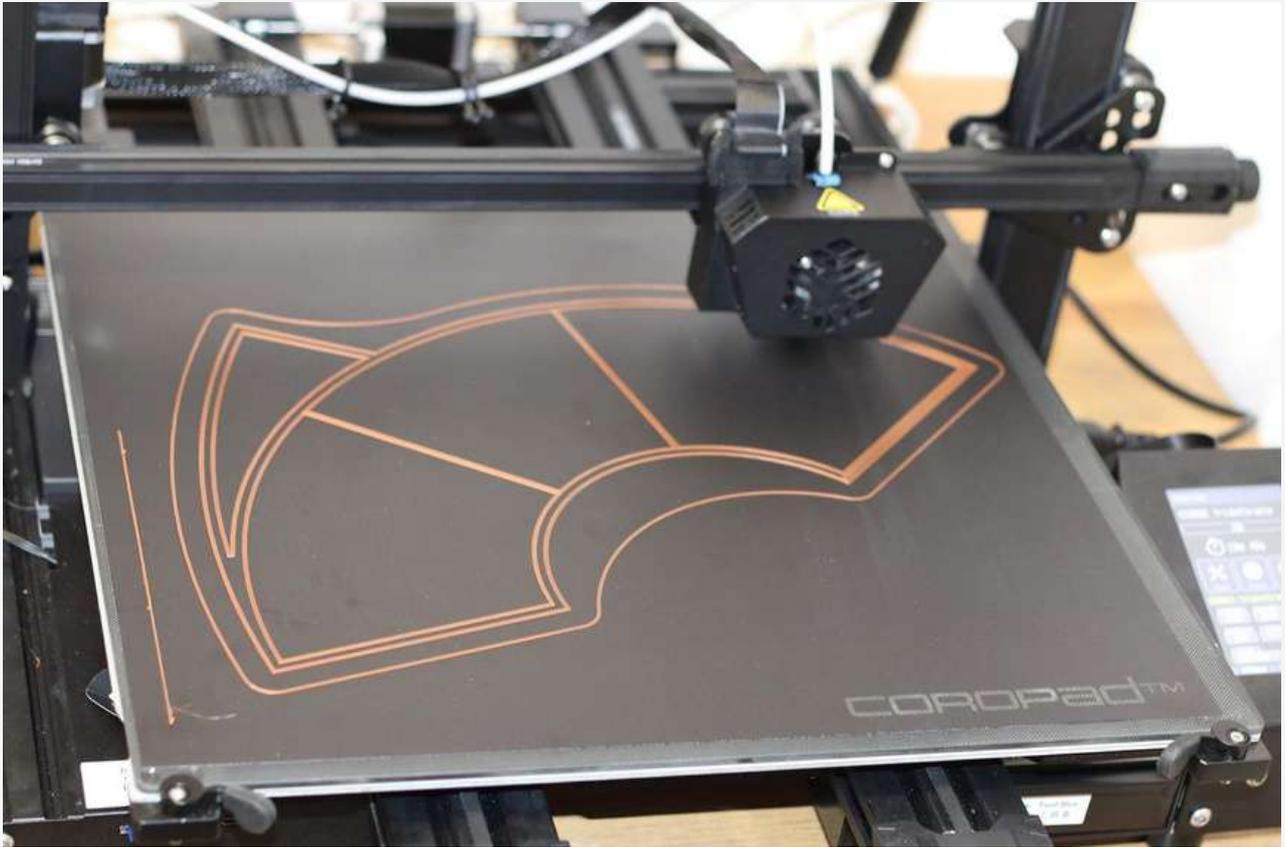
The triskel is formed by 3 identical branches. Each face of the top has a slight slope of 5 cm. The overall height is 15 cm for 72 cm of width. The width of each branch is 12 cm. A central piece unites the 3 branches. The top side of this room is level, so it could accommodate an element complementary... The triskel will be presented horizontally on a base.

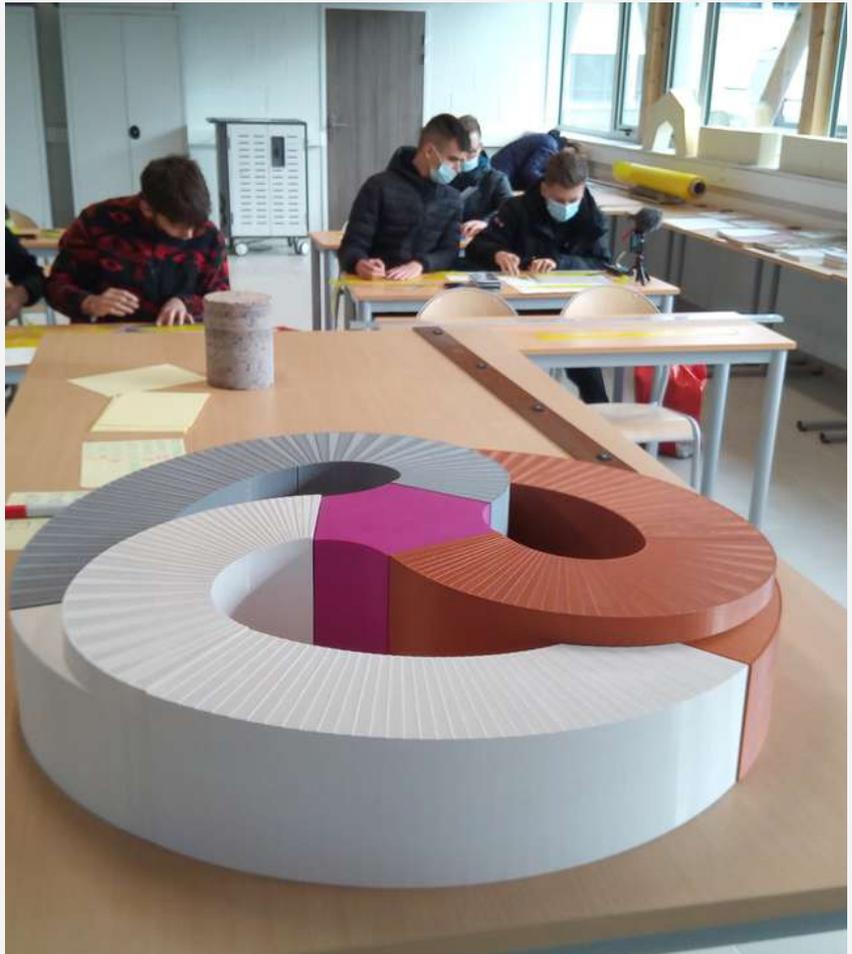
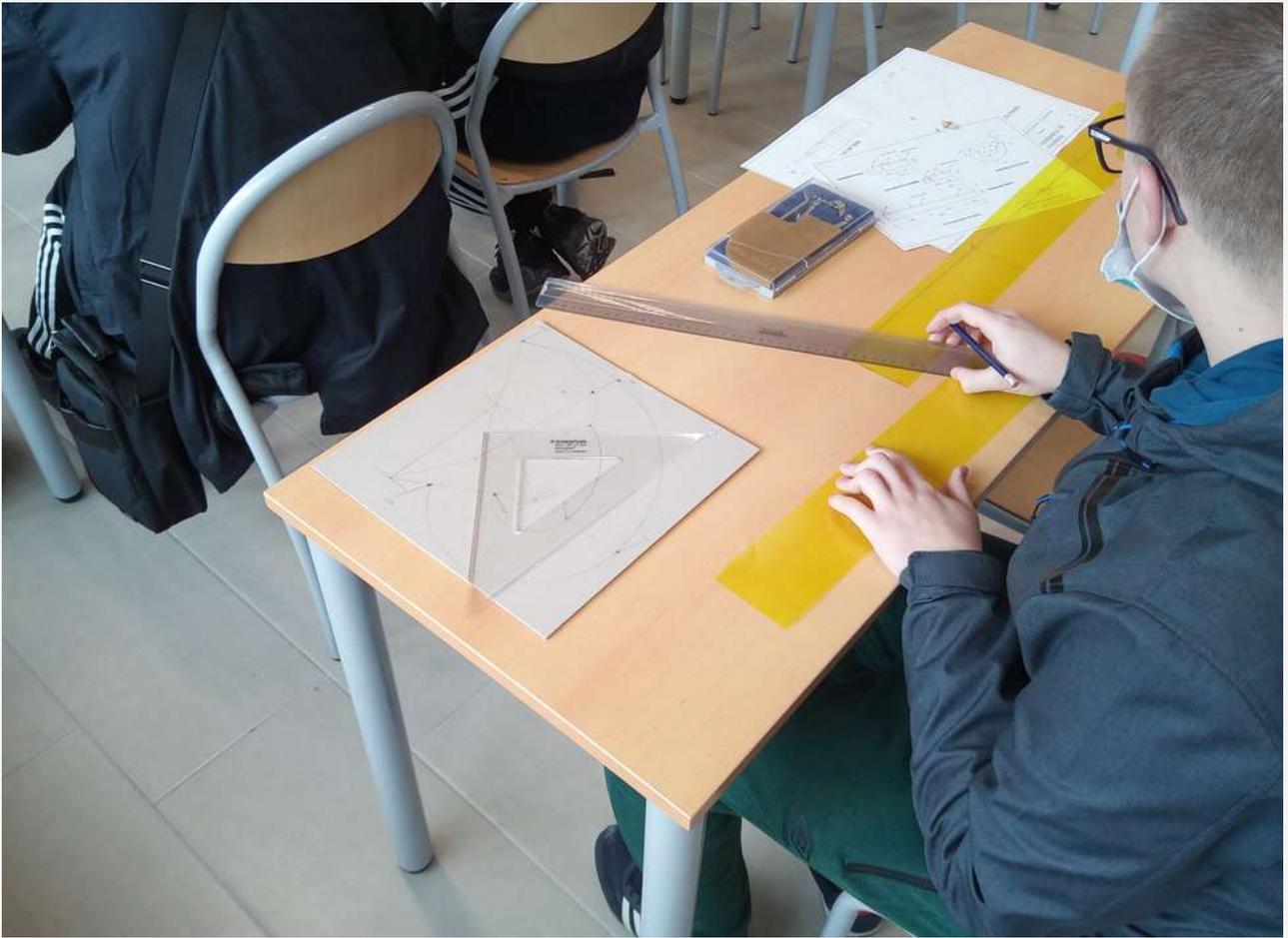


## GROUP WORK

<p><b>Principaux résultats pratiques pour la suite du projet</b></p>	<p><b>Volonté de pratiquer de l'échange de temps de formation professionnelle</b></p> <p><b>Maintenir des échanges entre pays</b></p>
<p><b>Outils d'évaluation</b></p>	<p><b>RÉFÉRENTIEL CAP TAILLE DE PIERRE :</b></p> <p><b><u>A - Pratique de la taille en atelier</u></b></p> <p><i>Tâche : Taille manuelle d'éléments architecturaux</i></p> <p>COMPETENCE C3-5 TAILLER UN BLOC</p> <p>Capacité C3-5 1 : Organiser et préparer le poste de travail</p> <p>Capacité C3-5 2 : Préparer et vérifier l'outillage</p> <p>Capacité C3-5 5 : Tailler un élément</p> <p><i>Tâche : Assemblage d'un ouvrage (Triskèle)</i></p> <p>COMPETENCE C3-6 METTRE EN OEUVRE DES OUVRAGES NEUFS</p> <p>Capacité C3-6 3 : Implanter un ouvrage</p> <p>Capacité C3-6 6 : Mettre en oeuvre des éléments d'ouvrages</p> <p>Capacité C3-6 7 : Réaliser les finitions</p> <p><i>Tâche : Réalisation d'une pièce par CNC</i></p> <p>COMPETENCE C3-4 USINER UN ELEMENT SUR MACHINE A COMMANDE NUMERIQUE</p> <p>Capacité C3-4 1 : Positionner l'élément à usiner</p> <p>Capacité C3-4 2 : Régler, paramétrer le centre d'usinage</p> <p>Capacité C3-4 5 : Usiner l'élément</p> <p><b><u>B - Pratique de CAO-DAO</u></b></p> <p><i>Tâche : Modélisation d'un réseau gothique</i></p> <p>COMPETENCE C1-1 COLLECTER ET ANALYSER DES INFORMATIONS</p> <p>Capacité C1-1 1 : Lire et décoder un plan d'ensemble et de détail</p> <p>Capacité C1-1 3 : Relever des cotes</p> <p>REPRÉSENTER GRAPHIQUEMENT UNE SOLUTION TECHNIQUE</p> <p>Capacité C2-1 1 : Réaliser un croquis, une perspective cavalière, un dessin coté</p> <p>Capacité C2-1 4 : Tracer une épure d'ouvrage courant</p> <p>Capacité C2-1 2 : Exploiter le modèle 3D d'une pièce unique ou d'un assemblage simple</p>

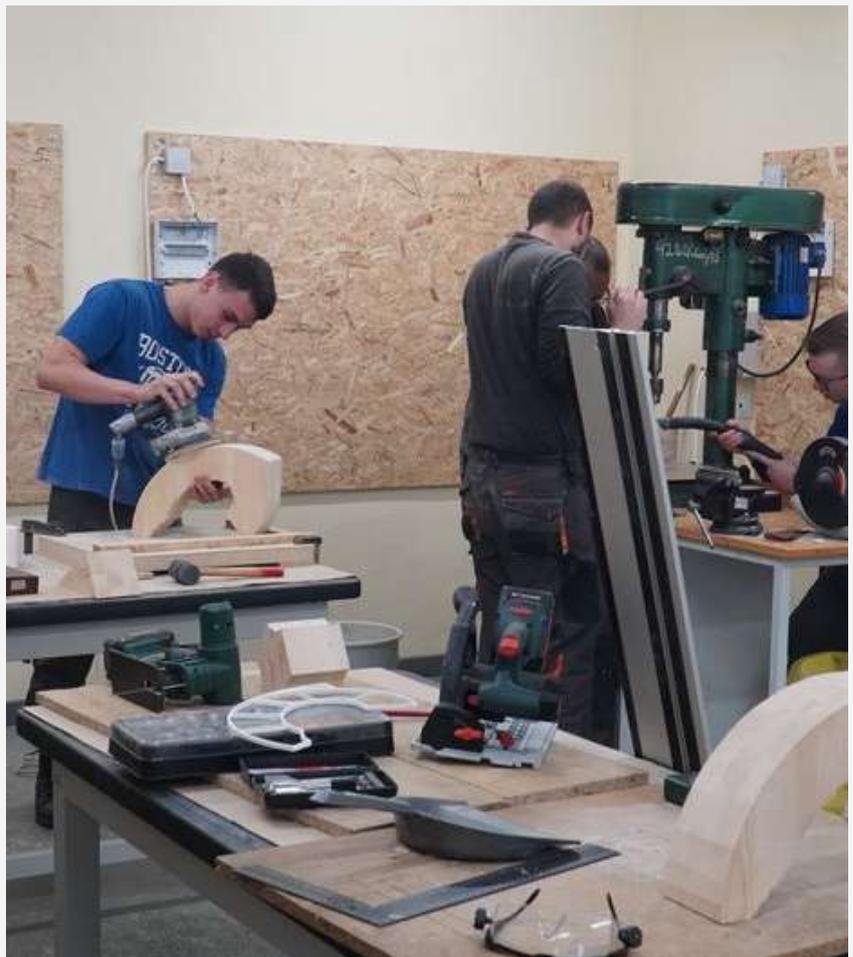
GROUP WORK



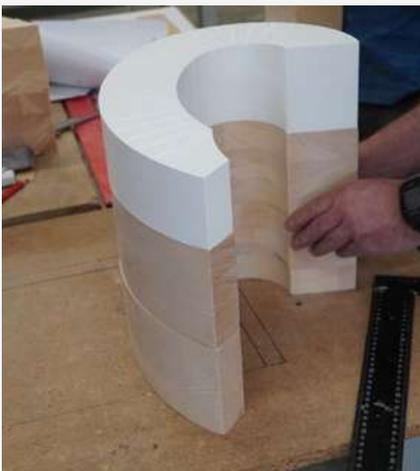


GROUP WORK



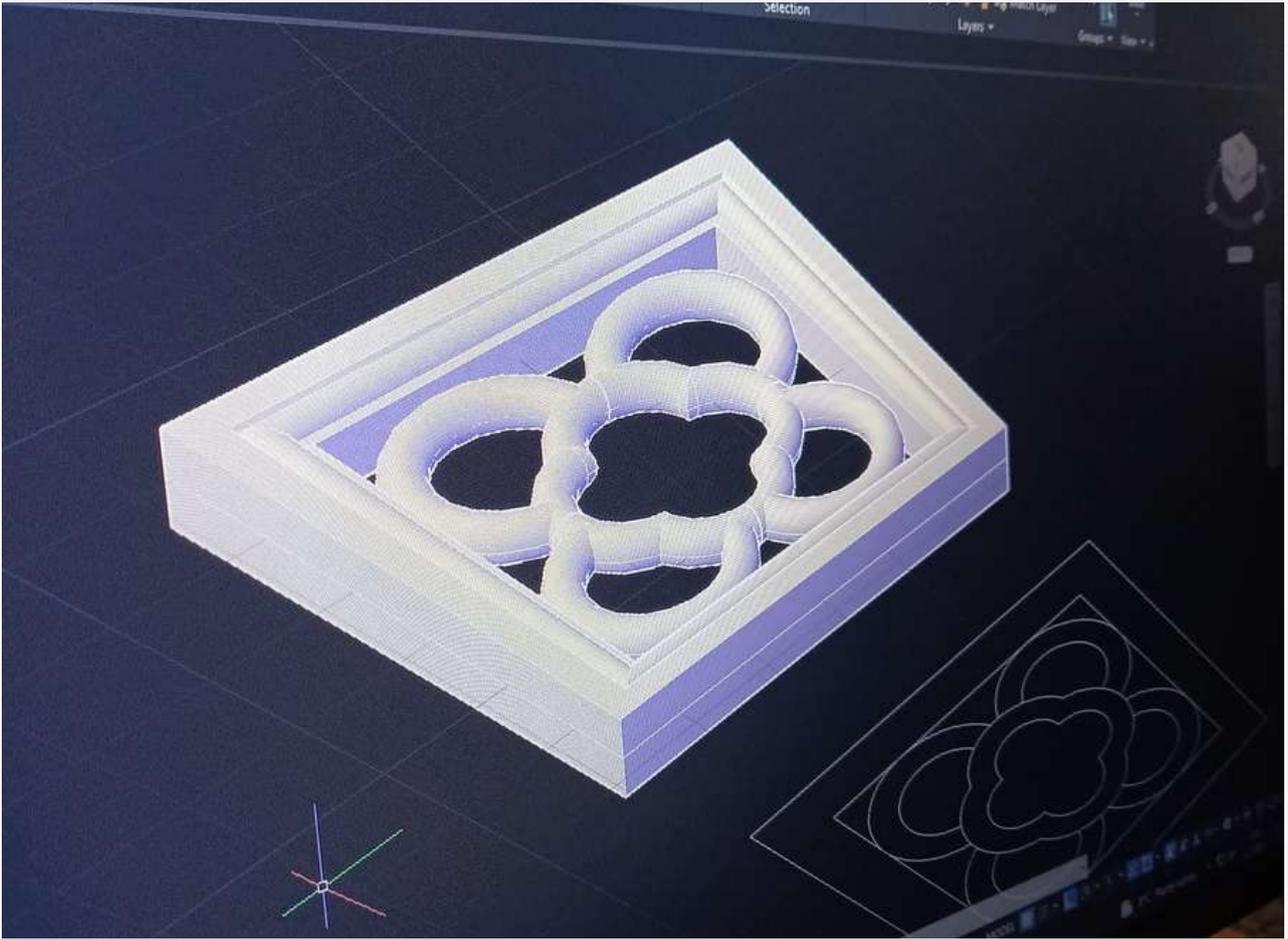




























# Educational group work in Saint Thélo





## ERASMUS PROJET PIERRE ET BOIS

L'association *Mémoire en demeure*, partenaire du projet, a été chargée de conduire et réaliser des chantiers liés au patrimoine bâti du bourg de Saint-Thélo.

Après quelques idées non retenues, le choix s'est porté sur deux édifices, la Maison du forgeron et la halle de l'espace Le Bouffo.

Dans le projet « Maison du Forgeron », il s'agissait de réaliser un espace d'exposition comprenant un muret en pierre de schiste et d'un plancher en Bois. Si la réalisation du plancher a été reportée à plus tard, la construction du muret, elle, a commencé en octobre par les travaux préparatoires exécutés par les élèves du Lycée professionnel Jean Monet de Quintin sous la conduite de leur professeur Xavier Faujouron.

The association *Mémoire en demeure*, partner of the project, was responsible for leading and carrying out projects related to the built heritage of the village of Saint-Thélo. After some unsuccessful ideas, the choice fell on two buildings, the Maison du forgeron and the hall of the Space Le Bouffo. In the "Maison du Forgeron" project, it was a question of creating an exhibition space including a shale stone wall and a wooden floor. If the realization of the floor was postponed to later, the construction of the wall, it, began in October with the preparatory work carried out by the students of the Lycée professionnel Jean Monet de Quintin under the direction of their teacher Xavier Faujouron.

**Les 17 et 18 novembre, les élèves polonais et croates ont rejoint leurs collègues français pour continuer le montage du muret. Ce travail en commun a enthousiasmé tous les participants par la réalité du travail, les échanges techniques et la camaraderie ainsi créée.**

**On 17 and 18 November, Polish and Croatian students joined their French colleagues to continue the assembly of the wall. This joint work enthused all the participants with the reality of the work, the technical exchanges and the camaraderie thus created.**



**Les enseignants, les élèves, les organisateurs et partenaires sont enchantés du travail qui a été accompli.**

**Il en va de même pour la réalisation du coin buvette réalisé par tous les élèves, polonais, croates et français. Ils ont travaillé sous la conduite de l'enseignant polonais et mes directives. Il s'agissait de fermer la partie utilisée pour la buvette avec du bois de récupération en respectant l'aspect ancien de la bâtisse. Cette ancienne grange ouverte est régulièrement utilisée lors d'évènement sur l'espace Le Bouffo.**

**Teachers, students, organizers and partners are delighted with the work that has been done.**

**The same goes for the realization of the refreshment corner made by all the students, Polish, Croatian and French. They worked under the guidance of the Polish teacher and my instructions. It was a question of closing the part used for the refreshment bar with reclaimed wood while respecting the old appearance of the building. This former open barn is regularly used during events on the Le Bouffo space.**



**L'ambiance de travail et le bon esprit ont permis une réalisation répondant parfaitement à l'attente de chaque participant.**

**Dans les deux cas, les travaux bien avancés seront terminés fin janvier par les élèves de Quintin.**

**The working atmosphere and the good spirit allowed a realization perfectly meeting the expectations of each participant.**

**In both cases, the well-advanced work will be completed at the end of January by the students of Quintin.**



**Les échanges entre les élèves des trois pays se sont fait lors du travail mais également lors des moments plus convivial.**

**The exchanges between the students of the three countries were made during the work but also during the more convivial moments.**



**Comme les repas....**

**Like meals....**



**La visite de la Maison des Toiles...**

**The visit of the House of Canvases...**

Et les poses photos

And the photo poses



**Un grand merci à tous les partenaires, enseignants et élèves qui se sont investis dans ce projet Erasmus. Pierre & Bois a été une magnifique expérience pour tous et tous en garderont un excellent souvenir. Jacques Aubert, membre de *Mémoire en demeure***

**A big thank you to all the partners, teachers and students who have invested themselves in this Erasmus project. Stone & Wood was a wonderful experience for everyone will have excellent memories of it. Jacques Aubert, member of *Mémoire en demeure***







## Students' feedback



I told my mother that my eyes are like cameras all the time

Sir, this morning we opened the shutter in our room, the most amazing thing, we have a terrace with a view of the sea and the mountains, it's magical



In my opinion atmosphere was amazing everybody were felling like he is in his own house. Every student and teacher were very kind to each other.

I expected something very different, reality was better than my expectetions!



## Students' feedback



Thank You for making this project for us. This is one of that things which could not happen again!

The best thing was the opportunity to get to know other people's cultures and environment, so I could learn a lot.



It was very cool, we had something to do all the time, there was no time for boredom.

The work went very well for us, we all tried to do it as well as possible. And the teachers and students of this school gave us the knowledge as much as they could.



## Students' feedback



I am very happy and grateful that I was able to take part in the project. I really appreciate it. I was able to see beautiful places, meet people from other countries and learn new things about stone. I learned the history of the Croatian school. Amazing experience!

It was better than I expected. I experienced a lot in just a couple of days. The project and the country made a really good impression on me.



I am so happy of being a part of Erasmus+ project. I have learned much in my manual and speaking skills. I visited so beautiful places. I have met so many kind and friendly people.

## Students' feedback



I expected great adventures, great people and getting to know new things. It turned out that it was so.

It was an amazing adventure for me.



In my opinion, the educational part of the project went well because local students were well prepared to show their routines which was satisfying. The second thing is sightseeing. We were able to visit the most interesting places with local tour guide.



Poland

France

Croatia