

**ÉVALUATION SPÉCIFIQUE POUR L'ATTRIBUTION
DE LA MENTION « SECTION EUROPÉENNE »**

**Baccalauréat professionnel
Technicien Usinage**

Session 2023

Épreuve orale

Durée de l'épreuve A et B : 20 minutes

Préparation : 20 minutes

A. Première partie : durée 10 mn, préparation : 20 mn

**SUJET N°1
Document candidat**

SLEDGE HAMMER : HEAD

Travail à faire par le candidat

Role play :

As a machinist in a machine shop, you are in charge of manufacturing a series of 100 sledge hammers machined on different machines for a new customer.

Production is stabilized.

Today, new customers are visiting the workshop and want to see the head production. You will explain to them the entire manufacturing process including the raw material and the workpiece, the machines, tools used and the finished part.

You will also tell them about the specific equipment required.

You are expected to :

- Introduce yourself to these visitors.
- Present to them the machines used: general use, advantages, technical documents, tools...
- Tell the customers about the personal protective equipment needed.
- Explain to them how the part is machined. Tell about the different steps of the process.
- Explain how the tools are used.

Enclosure(s) :

- **Document 1** : PPE
- **Document 2** : Assembly drawing
- **Document 3** : Head detail drawing
- **Document 4** : Global manufacturing process
- **Document 5** : Head manufacturing process

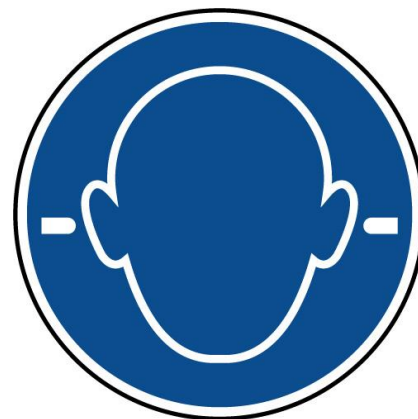
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DOCUMENT 1 : PPE

Required PPE

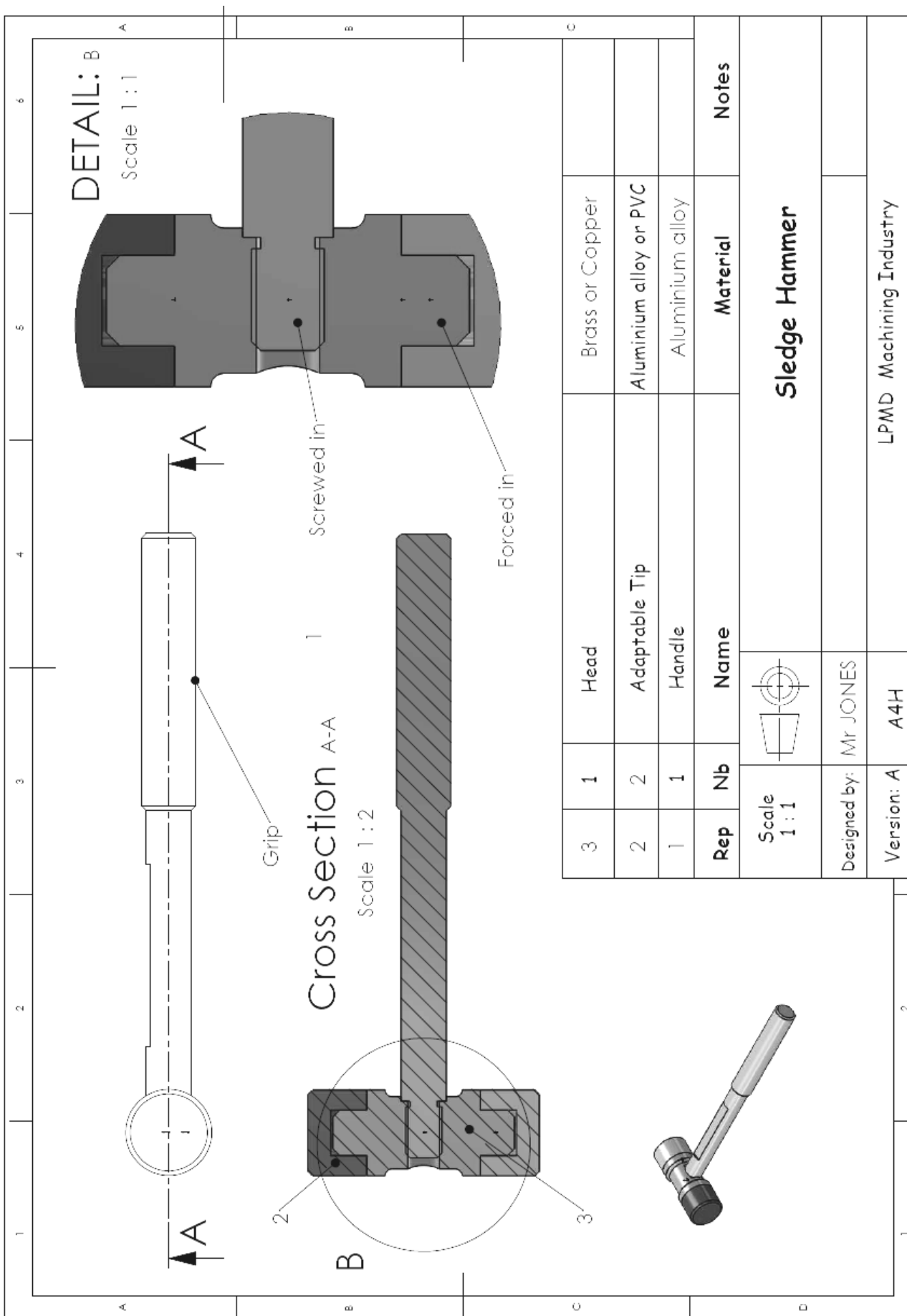


Available PPE



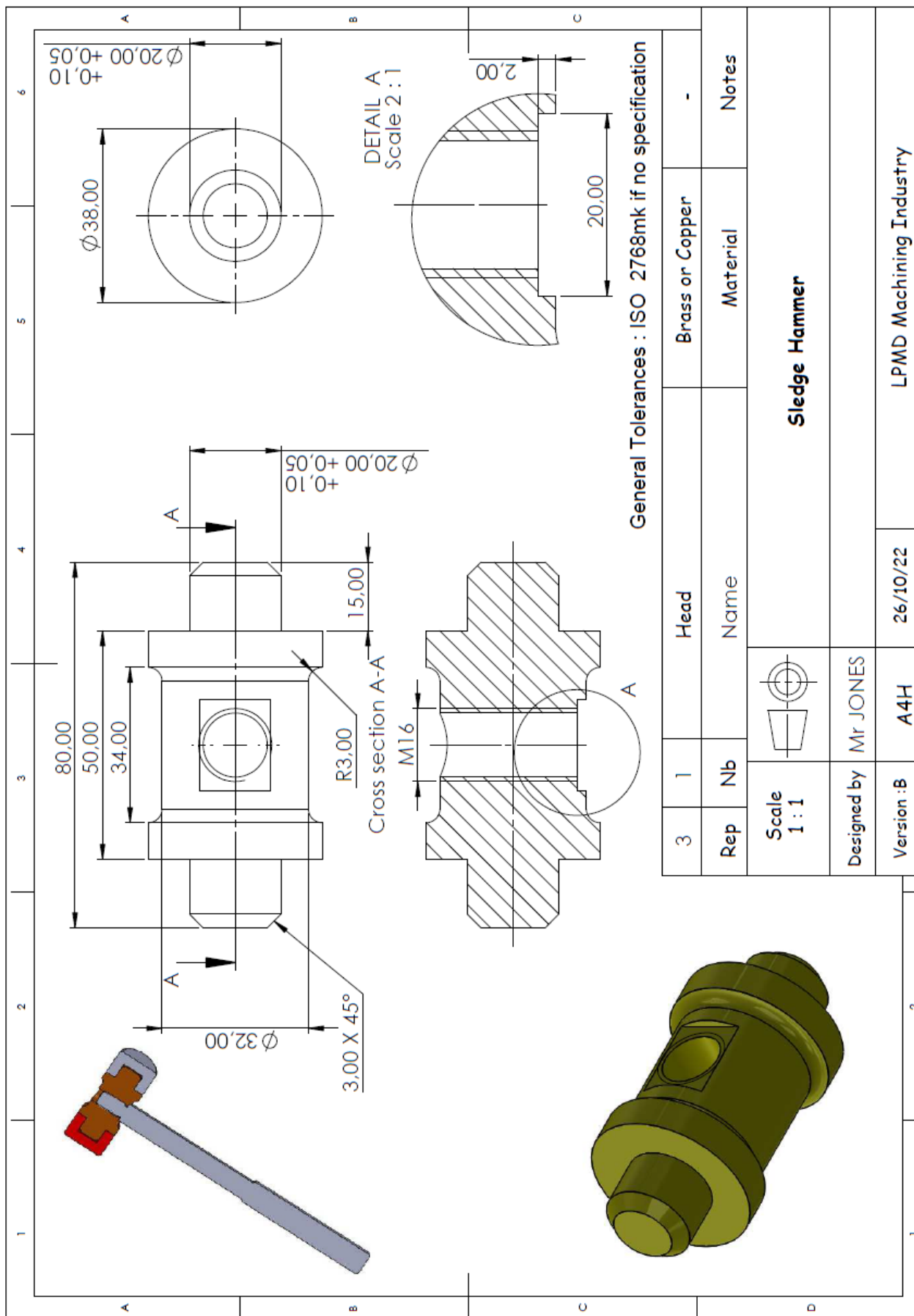
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DOCUMENT 2 : Assembly drawing




Rep	Nb	Name	Material	Notes
3	1	Head	Brass or Copper	
2	2	Adaptable Tip	Aluminium alloy or PVC	
1	1	Handle	Aluminium alloy	
Scale 1 : 1			Sledge Hammer	
Designed by: Mr JONES				
Version: A		A4H		
			LPMD Machining Industry	

DOCUMENT 3 : Head detail drawing












DOCUMENT 4 : Global manufacturing process

GLOBAL MANUFACTURING PROCESS		Assembly	Sledge Hammer		<div style="border: 1px solid black; padding: 5px; text-align: center;"> 6 7 </div>
		Part	All parts		
		Material	EN AW 2017 – COPPER / BRASS - PVC		
Name.....		Date	2023	Document 4	
Number	Process	MACHINE		NOTE	
010	SAWING	Mechanical saw 		ALL RAW PARTS	
020	TURNING Handle	CNC Lathe machine (HAAS ST10) Threading  Conventional Lathe machine Contouring and grip 			
030	MILLING Handle	CNC Milling machine (HAAS VF2) Facing and Engraving 			
040	TURNING Head	CNC Lathe machine (DMG) Contouring and parting off 			
050	MILLING Head	Conventional Milling machine Facing, drilling and tapping 			
060	TURNING	Conventional Lathe machine Contouring and boring 			
070	ASSEMBLY and CHECKING	Hydraulic Press and checking station  			

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DOCUMENT 5 : Head manufacturing process

MANUFACTURING PROCESS of the head		Assembly	Sledge Hammer		<div style="border: 1px solid black; padding: 5px; text-align: center;"> 7 / 7 </div>
		Part	Head		
Material	Brass or copper				
Name.....	Date 2023	Document 5		EFICNSW	
Number	Process	MACHINE		NOTE	
010	SAWING	Mechanical saw		RAW PART	
020	TURNING 1- External turning tool 2- Parting off tool	CNC lathe machine DMG			
030	MILLING 1- End mill 2- Pointer drill 3- Drill	Conventiannal miling machine			
040	TAPPING 1- Tape M16	Conventiannal miling post (bench)			
050	CHECKING 1- Calliper 2- Depth callper	Checking station		-	