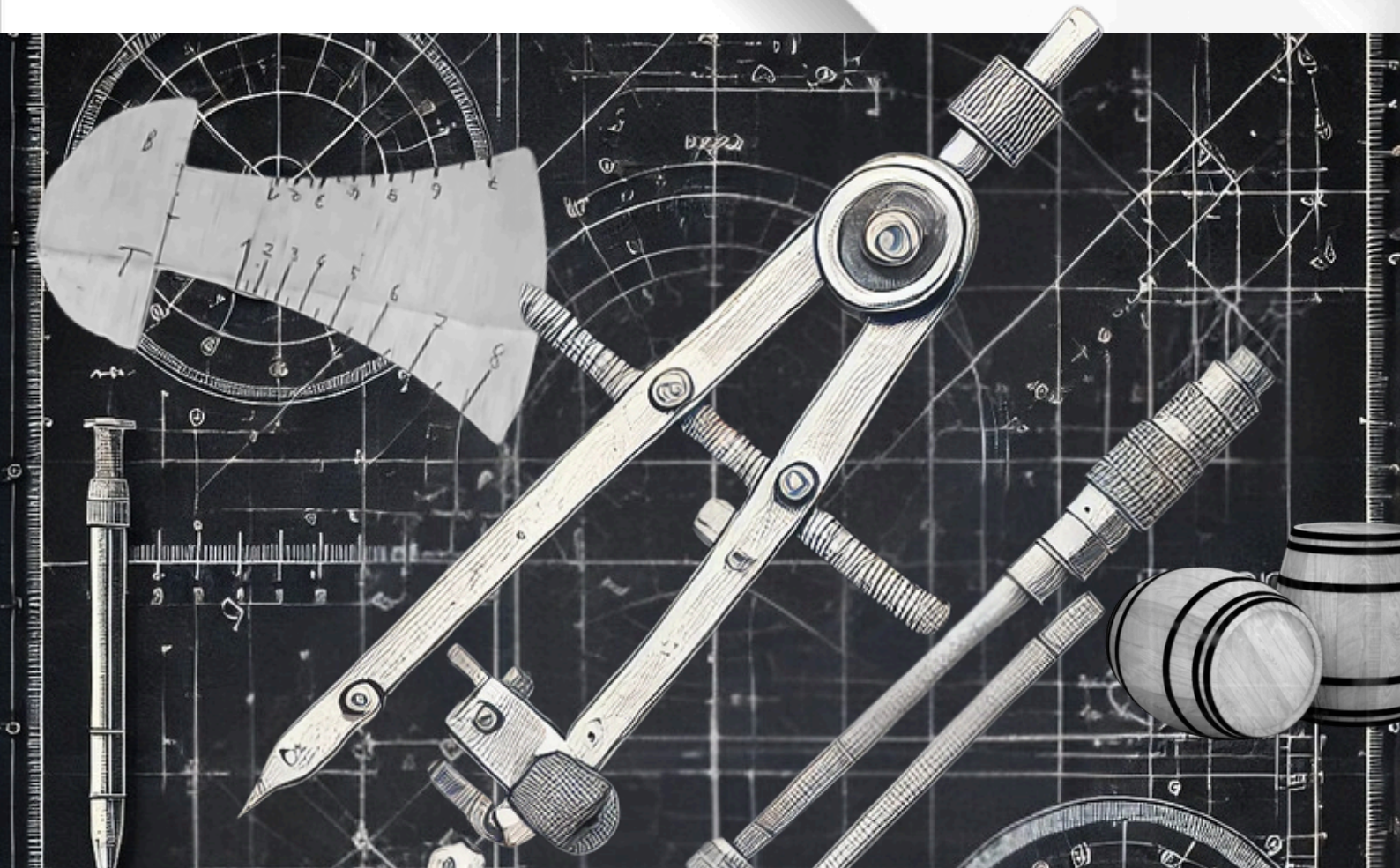


"One-third" Version AutoCAD

MARIAUD CONSULTING



Drawing of a third to quarter-point oval – Version AutoCAD

1. Principe

The AutoCAD layout follows exactly the same construction as the hand-drawn layout. Only the tools change, not the logic.

The "one-third" oval relies on a division of the major axis into 3 and generates arcs of different radii.

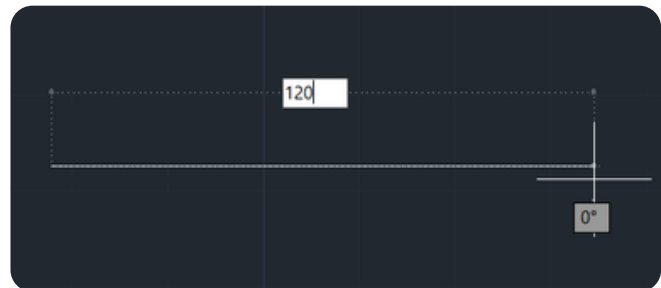
• Step 1

Action

- Trace the segment (major axis)

Tool

- L (LINE)
- Note the dimension (ex:120)
- Enter



• Step 2

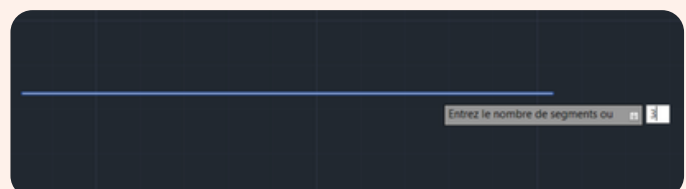
Division of the major axis

Action

- Divide into 3 equal segments

Simple method:

- DIVIDE → enter 3 segments
- Retrieve points using NODE object snap



"One-third" oval

• Step 3

Layout of the construction circles

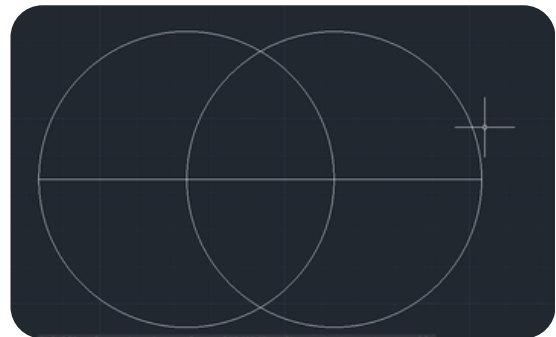
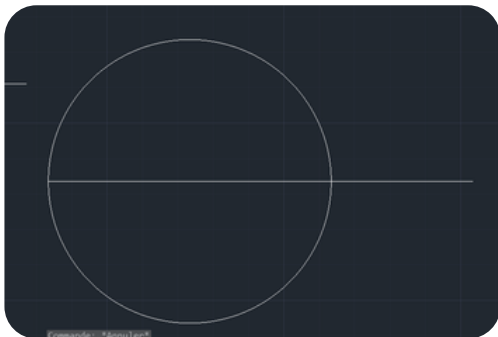
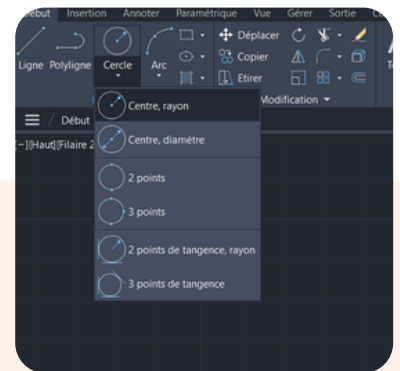
Action

- Draw two circles :
 - center 1
 - center 2

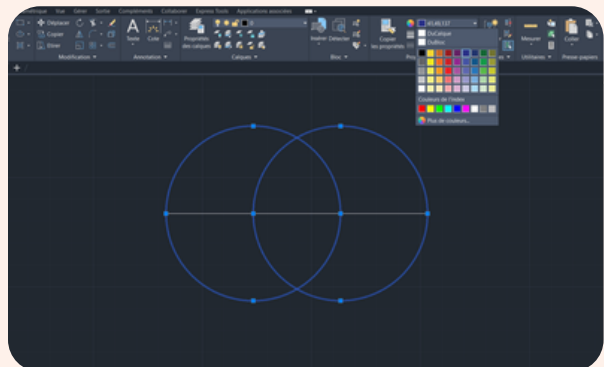
Tool

- C (CIRCLE)

☞ The circles intersect at F and C (INTERSECTION object snap).



- **Select the construction lines**, then change their color in the properties (right-click → Properties).
- **Assign a different color** depending on the elements (*axes, circles, lines*).
- **Keep the final layout in a distinct color** for clear reading.



"One-third" oval

• Step 4

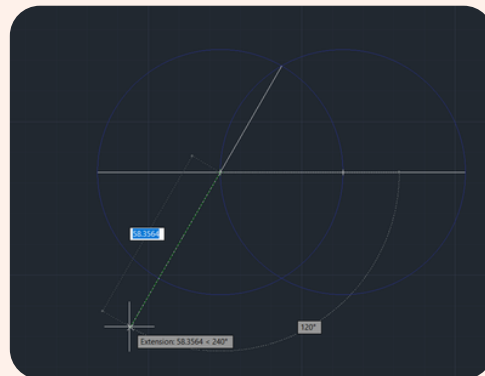
Construction of the lines (optimized method)

Action

- Trace the line

Tool

- L (LINE)
- INTERSECTION object snap



• Step 5

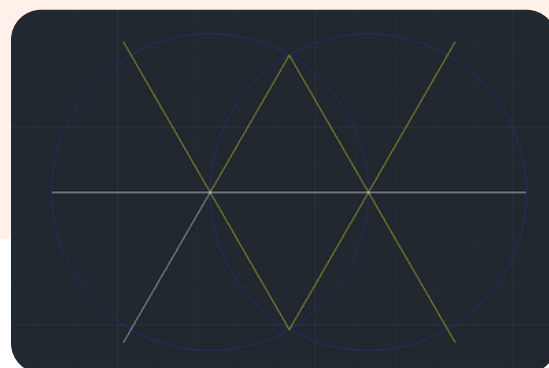
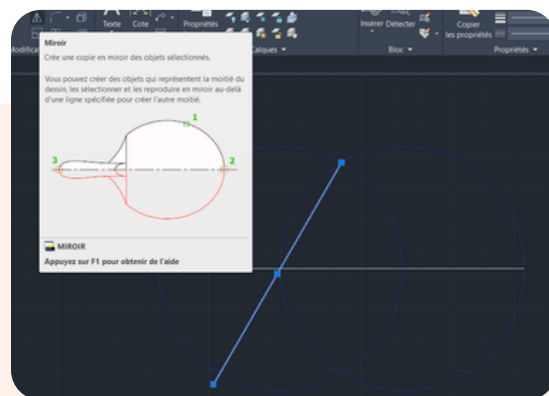
Construction of centers I and J

Action

- Trace the line.

Tool

- L (LINE)
- INTERSECTION object snap



"One-third" oval

• Step 6

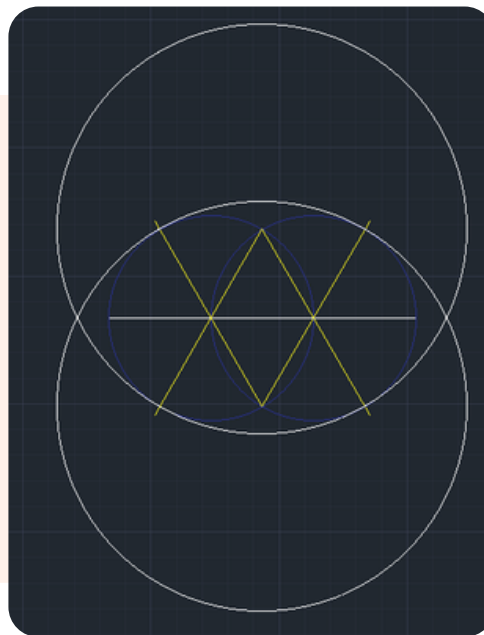
Layout of the arcs

Action

- trace :
 - arc 1
 - arc 2

Tool

- CIRCLE



• Step 7

Trimming

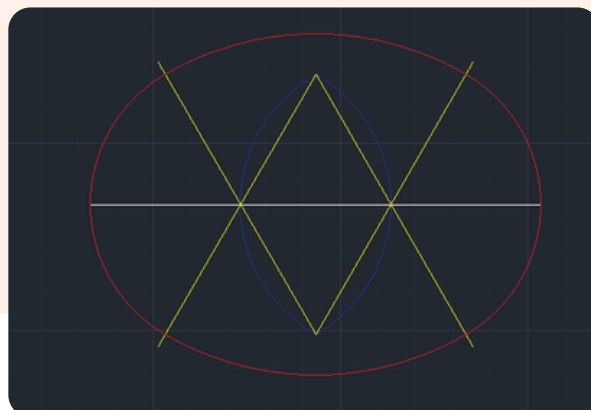
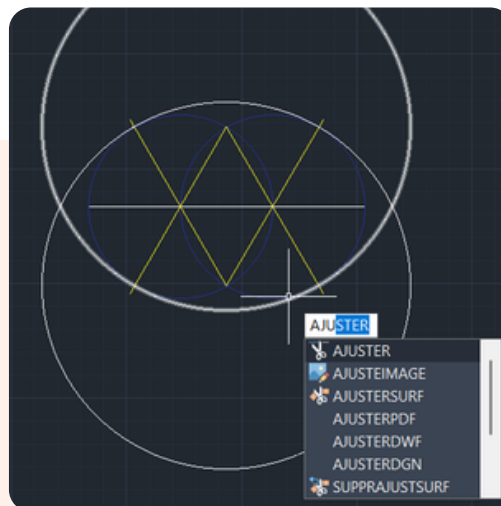
The arcs are drawn in full and then trimmed to keep only the useful shape.

Command

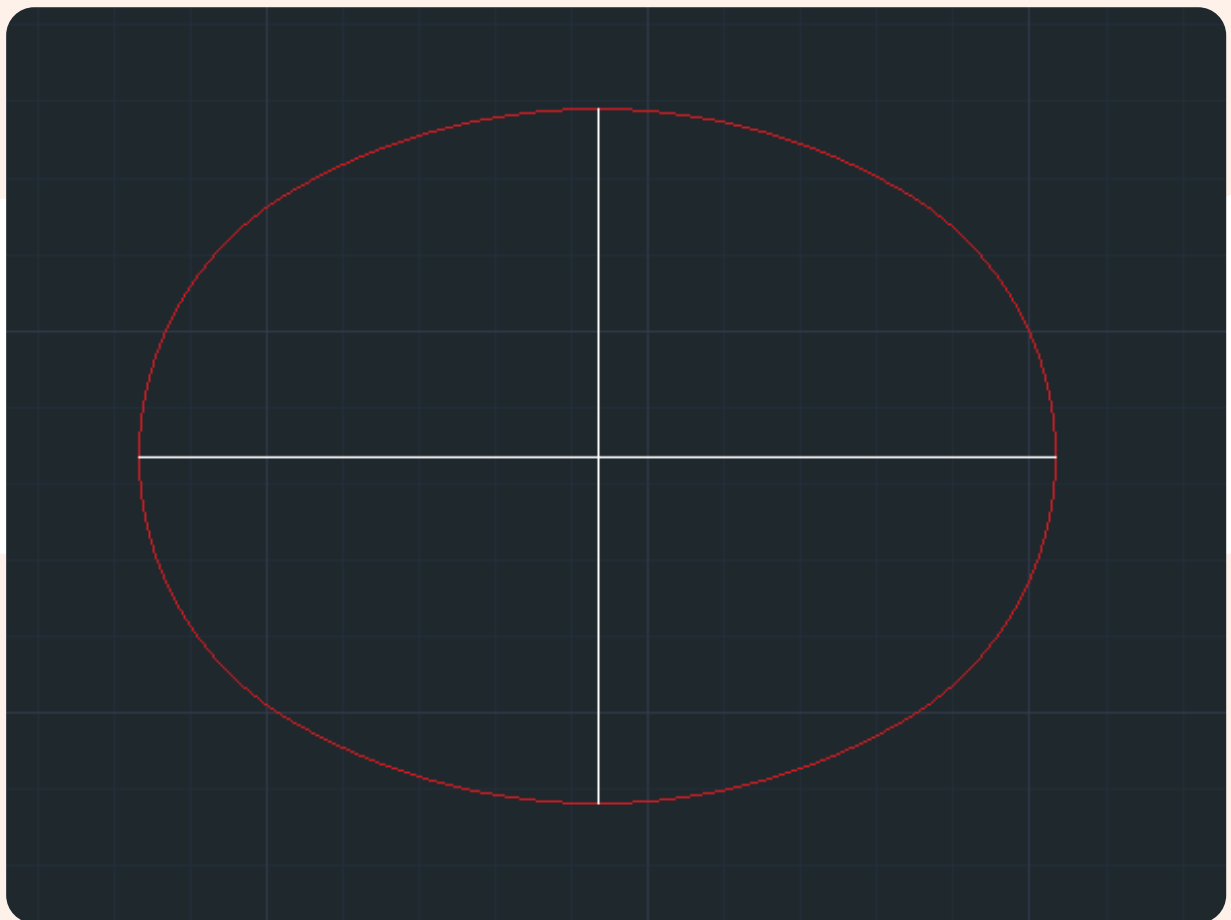
- TRIM (ou TR)

Action

- select the boundaries
- delete the unnecessary parts



"One-third" oval



The axes structure the construction, and the arcs connect to form a regular and mastered oval.



*It is up to you to
put this into practice
and perfect your
craftsmanship!*