

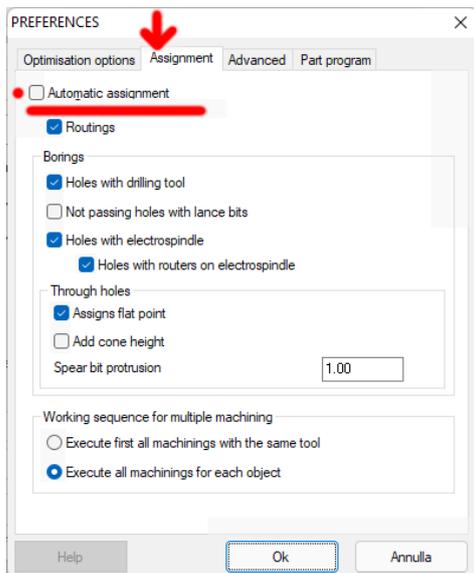
# NEW TOOL ASSIGNMENT AND OPTIMISATION MANAGEMENT

The new tool assignment and optimisation management makes it easy to decide when and how the programme should perform **automatic tool assignment** and **sequence optimisation** operations. This working mode integrates and complements the pre-existing ones.

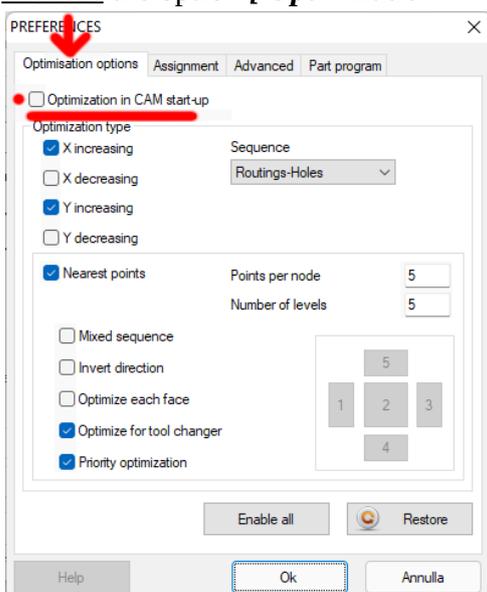
## Configuration of the working environment

The operations described below are to be performed in the Supervisor Environment:

- (menu) “**Machine > Utility > Preferences**”;
- click the button [ **Header Assignment** ];
- **Disable** the option [ **Automatic assignment** ];

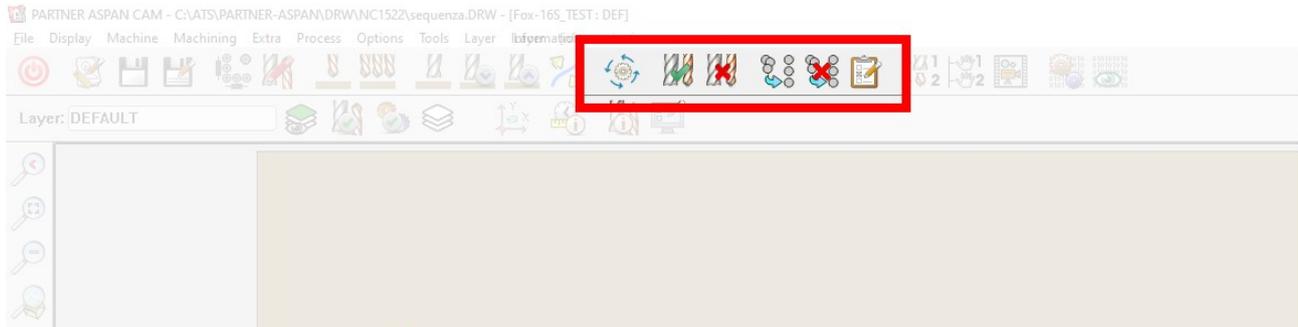


- Select the tab [ **Optimization** ];
- **Disable** the option [ **Optimization in CAM start-up** ];



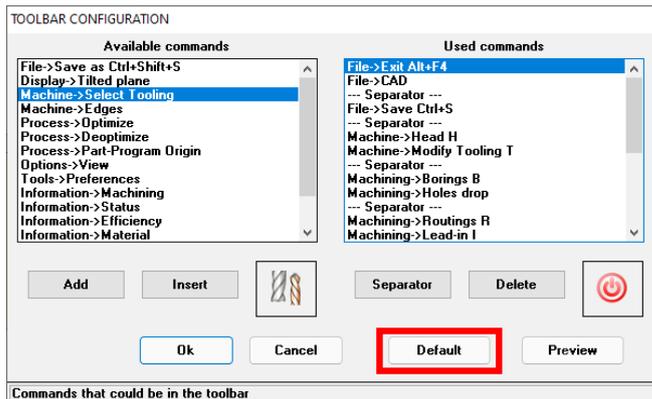
With the options 'Automatic assignment' and 'Optimization in CAM start-up' disabled, these operations will no longer be performed automatically each time a user accesses the CAM environment, but will only be performed when the user executes the commands dedicated to these operations as described below.

### CAM toolbar



The CAM toolbars now contain buttons dedicated to this new work mode. If they are not displayed, proceed as follows:

- (CAM menu) '**Options > Configure Toolbar > 1**';
- click [ **Default** ] button and confirm with [ **Ok** ];



- Repeat the operation for the lower toolbar:  
(CAM menu) '**Options > Configure Toolbar > 2**';
- click [ **Default** ] button and confirm with [ **Ok** ];

	Process > Assign and optimize	Performs both automatic tool assignment and sequence optimisation.
	Machining > Automatic assignment	Performs automatic tool assignment. Any assignments made manually by the user (forced specific tool) remain unchanged. Maintains the sequence in which the geometries were created.
	Machining > Delete assignments	Remove tool assignment: you can choose whether to delete the tool assignment for all machining, for milling only or for drilling only.
	Process > Optimize	Optimises the machining sequence.

	Process > Deoptimize	Delete set machining sequence: machinings will be executed in the order in which they were created during the design phase.
	Tools > Preferences	Allows you to set assignment and optimisation preferences.

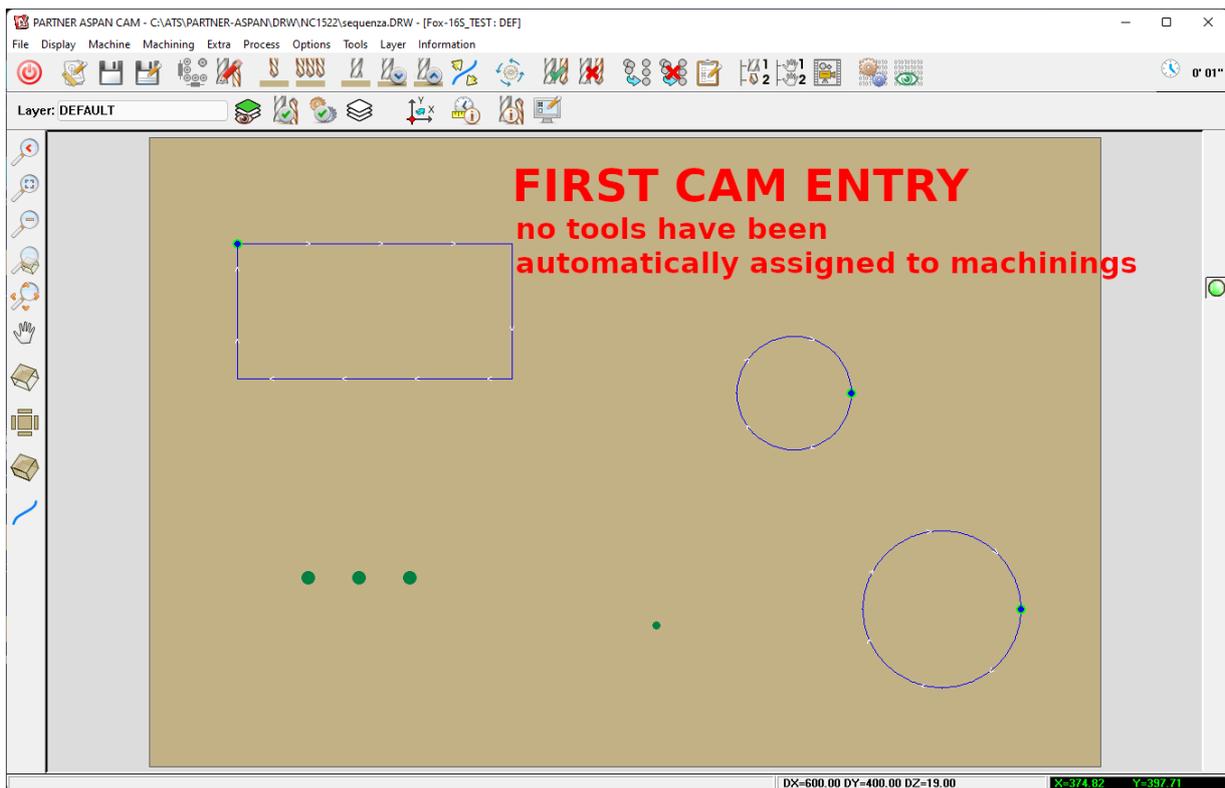
## Working methods

The planning and design phase remains unchanged.  
 When the drawing is finished, enter the CAM environment.

### FIRST CAM ENTRY

On first entry into CAM:

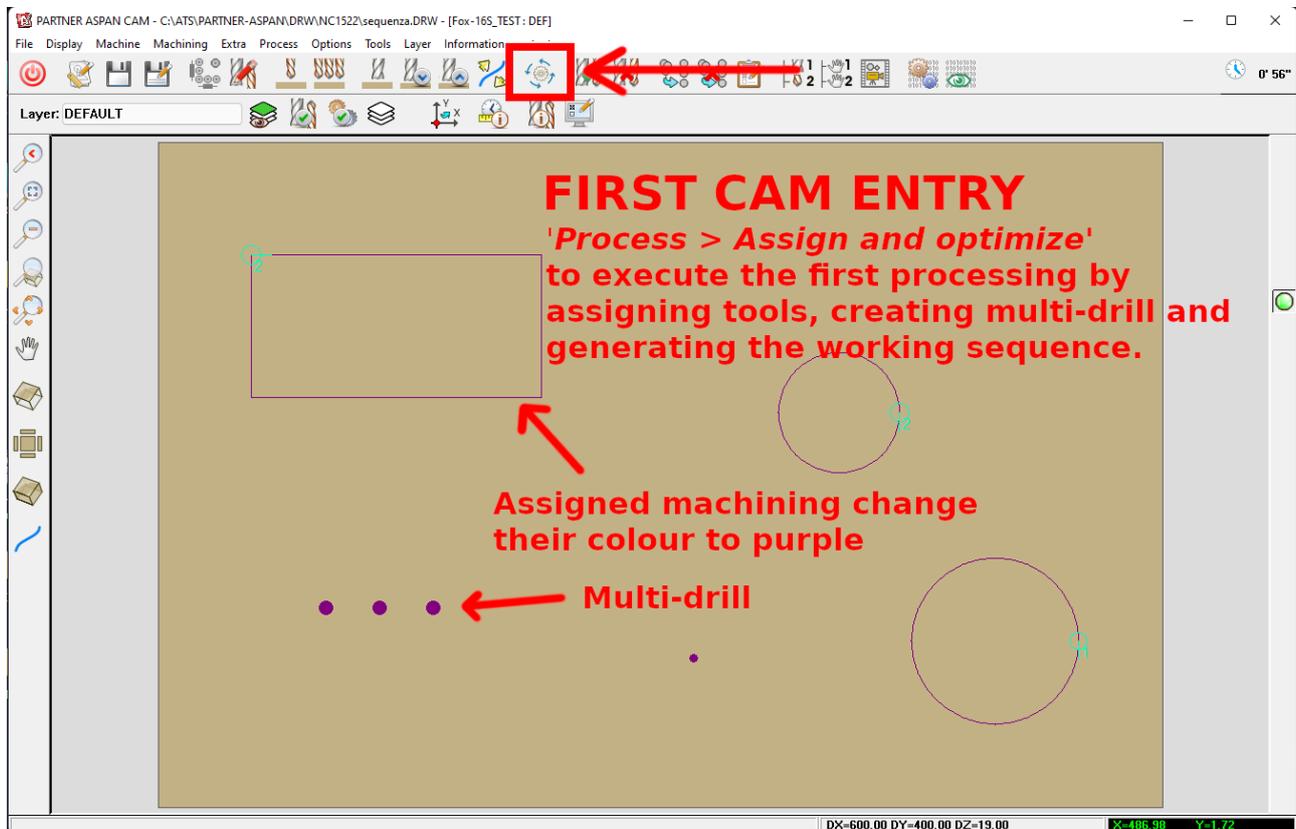
- no automatic assignment is performed;
- sequence optimisation is not performed.



**It is up to the user to decide whether to continue by assigning the tools and creating the sequence manually or to let the program perform an initial automatic processing of the machining:**

 *'Process > Assign and optimize'* to allow the program to make an **initial tool assignment**, create **multi-drill** where possible and **optimise the work sequence**.

If you do not wish to optimise the work sequence, but only to assign tools and create hole patterns, alternatively run the command  'Machining > Automatic assignment'.



## ***DRAWING CHANGES AND SUCCESSIVE CAM ENTRIES***

### ***New machining added to the drawing***

Tool assignment for **new machining** must be done **manually**.

All **new machinings** drawn after the first processing are placed at the **end of the work sequence**.

Existing machining operations are not reassigned and the work sequence is not processed/changed.

### ***Modifications to existing machining***

In the case of changes to entities already present in the drawing, the machining properties do not change unless they are structural changes. If the machining properties are reset upon entering CAM, the geometry will be unassigned (return to blue) and you must proceed to manually assign tool and machining properties.

If the changes do not involve regeneration of the geometry, the previously assigned machining operations will be maintained.

**Attention:** the program in this case does not make a check on the changes made, so if the user changes the diameter, set a depth that is too deep, change the tool characteristics in tooling, the assignments made by the user remain unchanged unless he changes them himself or deletes the assignments and repeats the automatic assignment command.