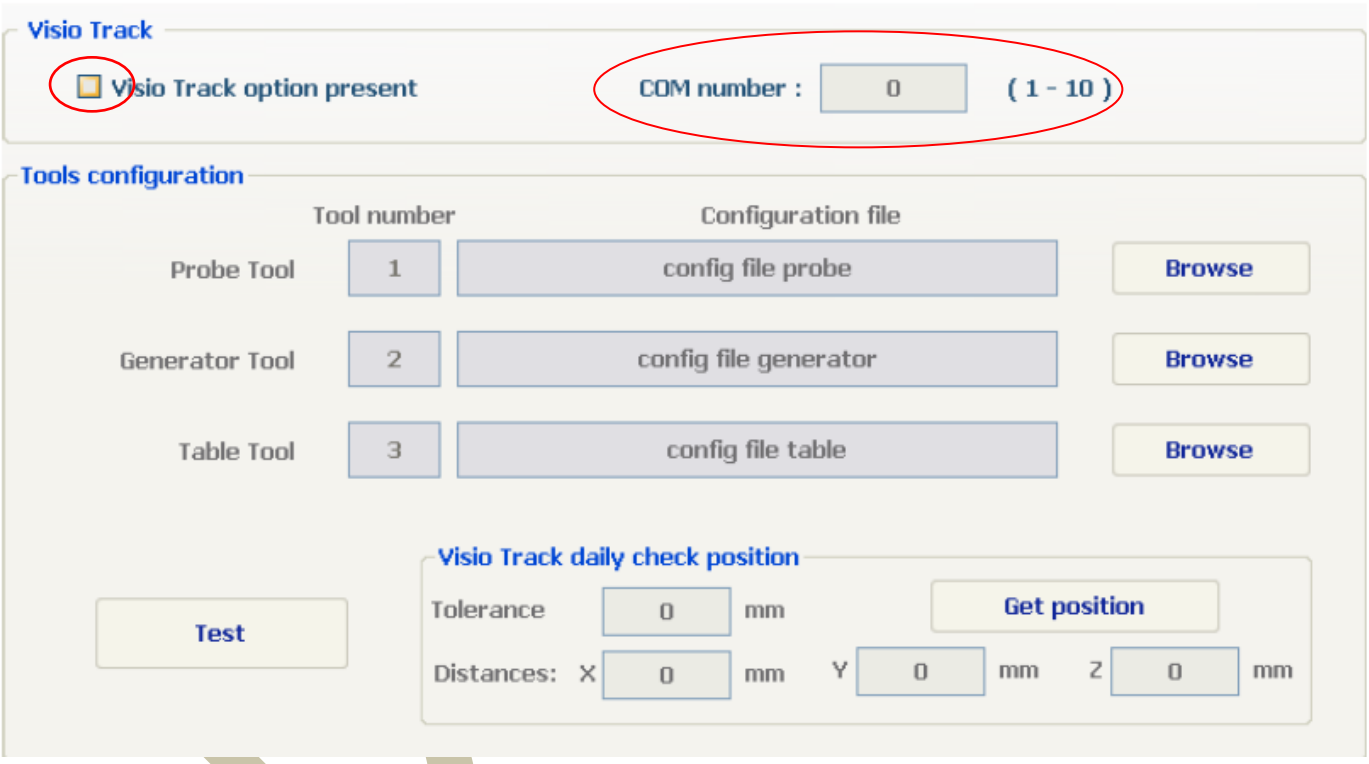
Localisation with the Visio-Track

The Visio-Track system uses tools equipped with reflecting spheres. Do not touch them in order to avoid altering their surface. When you install them, wear clean latex gloves. As well, the calibration tool should be stored in a clean environment where the spheres are protected.

A) Preliminary checks

In order to be able to use the Visio-Track, check that the option has been validated in the technical file, under the tab "**U/S Localisation config**" a relevant COM port number should be entered as well, in order to be able to communicate with the NDI system (For first installation, check the port number in Control panel \ System \ Hardware \ Peripheral \ Ports).



Check that the tool configuration files are the following ones. If not, select them by clicking on "**Browse**" and search them in the folder C:\Litho7_VT\NDI\:

- Table tool: TMS232862 table tool.rom
- Probe tool: TMS232722 probe tool.rom
- Generator tool: TMS232764 generator tool.rom

Last but not least, before performing a calibration, make sure that all the spheres are seen using Track.exe placed under c:\Program Files\ Northern Digital Inc\Toolbox.

B) Calibration of the generator and probe tools

To perform this calibration you need the tool calibration ref. TMS232750.

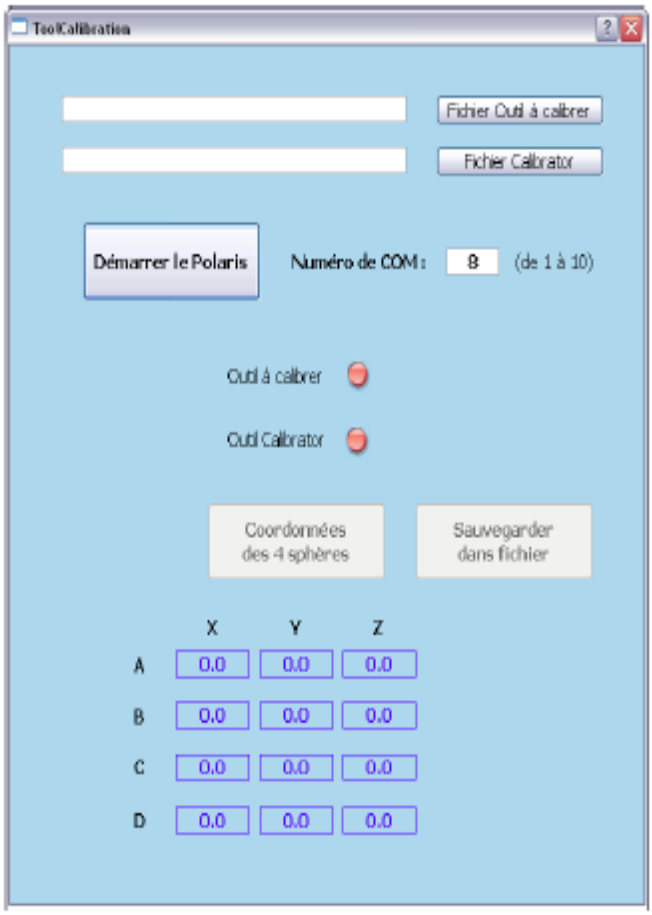
On the computer, validate the technical file with OK to record any changes.

At this stage you need to switch ON the Visio-Track camera. You go in Maintenance and under the tab "**MEP digital I/O**" tick the box "**Sp4 Visio-Track relay**". Then click on the button "Active". Do not quit the Maintenance, and go to C:\Litho7_VT\NDI by pressing **Win** key **and E** at the same time. Launch "**Tool calibration.exe**".

IMPORTANT:

During the calibration, make sure that the table tool is hidden since this tool has the same shape as the calibration tool…..

1) Calibration of the generator tool.
   Place the generator in the lower position (Horizontal). Then place the calibration tool on its top: the small pin goes inside the air outlet tube. Screws head, not rounded anymore, should be used to secure the position of the calibration tool (Rotate the butterfly nuts to achieve it).



On the window « **ToolCalibration** », click on « **Tool file to calibrate**" and select the file :

"C:\Litho7_VT\NDI\Standalone TMS232733 generator tool I-Sys.rom".

Then click on "**Calibrator file**" and select the file:

"C:\Litho7_VT\NDI\Calib TMS232750 gene tool I-Sys.rom".

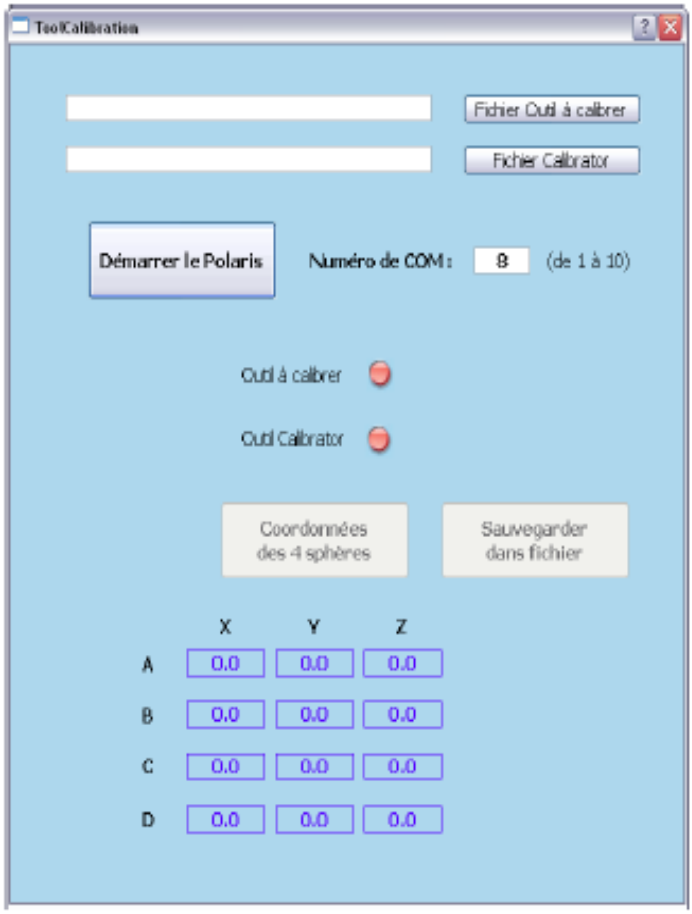
Check that the COM port entered is similar to the one seen previously in the technical file. Then click on "**Start the Polaris**".

Wait for a few seconds to get the two green lights and then click on "**4 spheres coordinates**". Then, select "**Saved in file**" and in the window appearing select the file:

"C:\Litho7_VT \NDI\TMS232764 generator tool and click on "**Open**". Validate if necessary the message.

2) Calibration of the probe tool.

If necessary bring the generator in the 0° position. Put the probe on the calibration tool on the special middle stand. Orientate the calibration tool as shown in the following pictures (Be careful those pictures are true only for the calibration of the probe tool).



On the Toolcalibration screen, click on « Tool file to be calibrated » and select :

"C:\Litho7_VT\NDI\Standalone TMS232722 probe tool.rom".

Then click on "**Calibrator file**" and select the file:

"C:\Litho7_VT\NDI\Calib TMS232750 probe tool .rom".

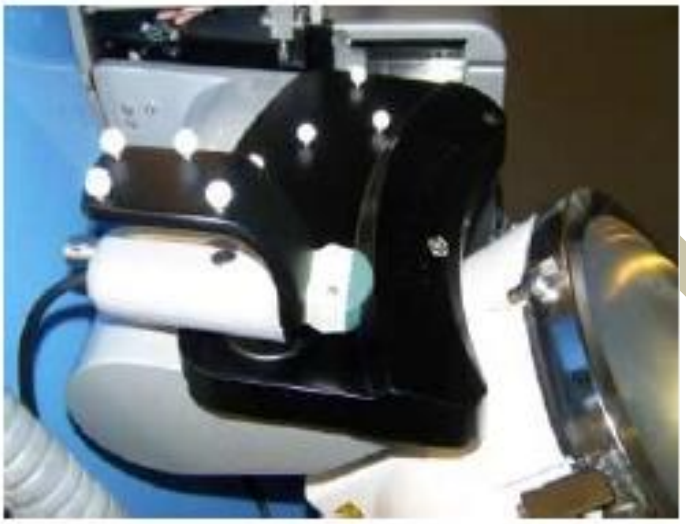
Then click on "**Start the Polaris**".

Wait for a few seconds to get the two green lights and then click on "**4 spheres coordinates**". Then, select "**Saved in file**" and in the window appearing select the file:

"C:\Litho7_VT \NDI\TMS232722 probe tool and click on "**Open**". Validate if necessary the message.

C) Storage of the daily test reference.

Go in the Technical file and select the tab "**U/S Localisation config**". Enter **2 mm** for the "tolerance". Then put the probe on the generator where the daily test is performed.



Click on "**Calib Position**". Wait a few seconds to initialize the Visio-Track.

Once you get the following window, check that you have both green lights and click "**Validate**" to store the daily test reference.