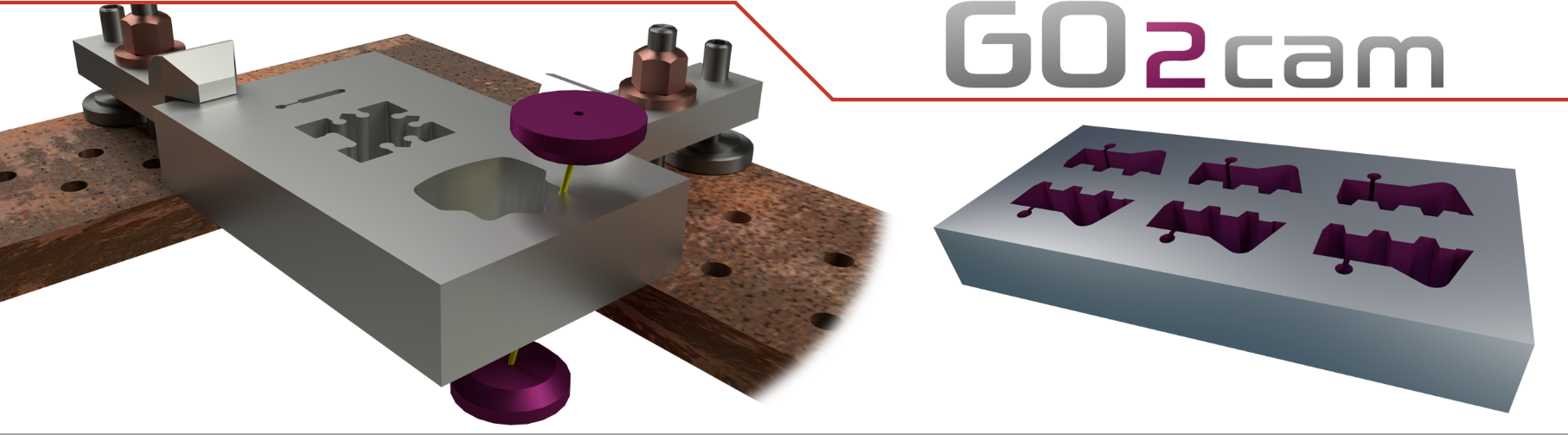
W06

GO2cam V6.08

Tutorial solid

W06 – Taper Cut



## Process of Solid import:

|  |  |
| --- | --- |
| Repositioning:  * In the menu **File**, Left click on * Open file: **W06 - Solid Taper Cut.X\_T** * Left click on the **support face** with the icon * Validate  Definition of Stock: Automatically create stock regarding your solid.  **Note:** It is a parallelepipedical stock defined by default, and has a constant overflow of 5 mm around the solid.   * Left click on  in order to make the height of stock equal to the height of solid, the Height turns grey * Change the overflow value to 0 * Left click on  to validate  Positioning of origin: **GO2cam** saves at the last location used for the origin. If your origin position is still in the same location, you can directly verify this step.   * Left click on , choose center of part * Left click on to finish the solid import   Solid is imported and repositioned, stock is defined relative to the part, and the origin is positioned. |  |

## Create machining profile on topology:

|  |  |
| --- | --- |
| 1. Definition of Profile:  * In Design, enter in menu **EDM Geom** * Left click on **Straight/Taper on solid** * Left click on the start face of Profile * Left click on the arrow to define the direction of the profile. * Left click on the same face to close the profile * A selection appears and the starting position of the profile is displayed in green, Left click on to validate   The profile is displayed in greenish-yellow, and the green flag indicates the start and end positions. Create a 4-axis profile: We will process the taper in 4-axis mode.   * Left click on **4 axis on solid** * Choose mode **Chaining of faces** * Left click on above taper surface * Check direction of the arrow is  the same as the previous profile * Left click on the same face to close the profile   The top and bottom profiles appear, and we can view the white automatic markers.   * Left click on  Save of file:  * Left click on the menu **File** * Left click on **Save as** * Type name : **W06 - Solid Taper Cut** * Left click on **Save** |  |
| Definition of threading point:  * Return in the menu **Design** * Enter in menu **Threading** * Left click on the function **Manual Threadings** and choose « Auto-Threadings on profiles » * Type value 3 for **Slug**, * Choose mode **Die** * Type value 5 for the **Distance**. * Left Click the profile to automatically create the threading point * Validate   Your part is ready for machining. |  |

## Machining Procedure:

|  |  |
| --- | --- |
| Application of a Complete Cutting Cycle:  * Left click on * Left click on the icon * Left click on the bottom profile   **Note: Because of the machining profile, the thread point is automatically selected**. | Maybe to re-consider this image |
| Selection of tool:  * Left click on * In the list of tool, select tool **"Cobra Cut 0.25**" |  |
| Selection of cycle:  * Left click on * Left click on **Straight Cut** |  |
| Calculation of Cycle :  * Left click on **Cycle Calculation** |  |
| Toolpath in 4 Axis:  * Left click on * Left click on * Select the top or bottom profile of the taper surface   The height, angle, and threading point are automatically created. |  |
| Selection of cycle: It is no longer necessary to define a tool because it has been selected in last operation.   * Left click on * Left click on **4 axes cnt/cnt** |  |
| Calculation of cycle:  * Left click on **Cycle Calculation** |  |

|  |  |
| --- | --- |
| Simulation :  * Left click on * Left click on * Left click on  to start simulation on all machining operations * Click the space bar or click on  if you want to switch to step-by-step mode * Left click on  or Press Escap to stop the simulation. |  |
| Generation of ISO program:  * Left click on * From the suggested list, go into the lib folder then select the post-processor «EROBOF44«. * Open and confirm   ISO program is generated. |  |

## Multi-pass machining procedure:

Save the PCE file and re-open it without the toolpath.

|  |  |
| --- | --- |
| 1. Applying first pass "Complete + Stop":  * In * Left click on * Left click on * Select the top or bottom profile of the taper surface * Select cutting type **"Complete+Stop"**   **Note:** The stop value corresponds to the slug value entered when creating the threading point. |  |
| 2. Selection of tool:  * Left click on * In the list of tool, select **"Cobra Cut 0.25**" |  |
| 3. Selection of cycle:  * Left click on * Left click on **4 axes cnt/cnt** * Left click on **Cycle Calculation** |  |

|  |  |
| --- | --- |
| 4. Simulation :  * Left click on * Switch the simulation to toolpath mode to view the stop * Left click on  to start the simulation   **Note: In order to visualize the stop during the simulation, you must choose toolpath mode. Dynamic mode will not simulate the stop**. |  |
| Second pass of **"Cut of the complete profile"**:  * Left click on * Left click on * In the machining tree, drag profile icon into the middle of the screen * Change the cutting type to « **Cut of the complete profile »** * Check whether other settings remain unchanged * Select strategy 4 axes cnt/cnt, the tool has been defined at the first cycle * Left click on **Cycle Calculation** |  |

|  |  |
| --- | --- |
| Third pass of "Cut of complete profile in inverse direction" :  * Left click on * Left click on the icon * In the machining tree, drag profile icon into the middle of the screen * Change the cutting type to **"cut of the complete profile in inverse direction"** * Check whether other settings remain unchanged * Select the strategy 4 axes cnt/cnt * Left click on Cycle Calculation |  |
| Simulation :  * Left click on * Choose mode **"Dynamic"** or **"Toolpath"** * Left click on  to start simulation |  |