

Routing Sequence Tool

Purpose : To generate sequence report and calculate pro time and arrange WC process codes.

Functions:

- The tool will fetch part numbers and WC process codes from input report.
- The tool will arrange WC process code in sequence and display in grid.
- User can add and update processes using tool.
- The tool has pro time calculator which helps user to add pro time manually.
- User can improvise process code logic in input excel to get desire results in tool.
- User can modify existing properties values from tool.
- User can approve and generate sequence report category wise.

Constraint:

- Tool is unable to calculate pro time or process if properties are empty in input report.
- At present tool is process WC based on basic logics which is added in "*Routing_Sequence_Report*". User can modify or add logics in excel template stored on below path:

V:\Admin\BEC Automation Tool\BEC_DataBase\Excels\Routing_Sequence_Report.xlsx

Routing Sequence Tool

User Interface Guide:

1. To begin, initiate the tool by going to the QC Report tab and selecting "Routing Sequence."
2. Next, pick the input routing sequence report that you generated through the review and check tool.
3. Now, from the dropdown menu, choose a category and hit the "get data" button.
4. After this step, the report will be shown in the grid. If you want to access the properties of a specific part number, simply click on it.
5. Take a look at the properties grid located in the bottom right panel and make any necessary updates.
6. To proceed to the next steps, click on "Apply Values", and you'll receive the updated sequence.
7. You have the option to select a new process from the dropdown list, and it will be added in the top right panel (12).

The screenshot displays the BROOKVILLE Routing Sequence application. The interface includes a left sidebar with navigation options: Add/Update, Design, QC Report (selected), Interference, MTC/ MTR, KPI, Raw Material Estimation, Routing Sequence, and Configuration. The main area is divided into several panels:

- Top Panel:** Contains input fields for 'Input Report' (pointed to by callout 3), 'Output Directory', and a 'Category' dropdown menu (pointed to by callout 4). A 'Reset' button is also present.
- Grid:** A large table displaying routing data for various part numbers (e.g., 210-03736-1, 210-03737-2). It includes columns for 'ProdTime', 'MoveTime', and 'Total'. A blue label 'Grid' is overlaid on the table.
- Process Window:** A panel on the right showing details for a selected process (210-03736-1). It includes a table with columns: PROCESS#, WC#, PTIME#, MTIME#. A blue label 'Process Window' is overlaid.
- Meta data:** A panel at the bottom right showing properties for the selected part (210-03736-1). It includes fields for Material (Steel, A36), Material Thickness (0.175), Material Used (PL3/6A36), Mass (88.89), Bend Radius (0.551), Flat Pattern, M., Hole Feature, Hole Dia., and Louvers (FALSE). A blue label 'Meta data' is overlaid.
- Calculator:** A panel at the bottom left with a 'Save' button and a 'Reset' button. A blue label 'Calculator' is overlaid.
- Buttons:** 'Apply Values' and 'ApproveSequence' buttons are located at the bottom right.

Numbered callouts (1-12) highlight specific UI elements as described in the guide:

- 1: QC Report tab in the sidebar.
- 2: 'Routing Sequence' option in the sidebar.
- 3: 'Input Report' field.
- 4: 'Category' dropdown menu.
- 5: 'Process Window' panel.
- 6: 'Meta data' panel.
- 7: 'Apply Values' button.
- 8: 'ApproveSequence' button.
- 9: 'Save' button in the Calculator panel.
- 10: 'Reset' button in the Calculator panel.
- 11: 'Routing Sequence' option in the sidebar.
- 12: 'Process Window' panel.

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8. If needed, you can move processes up or down and delete them using the provided buttons.
9. To preview a selected model, just click the preview button, and a preview window will open separately.
10. You also have the option to open the preview part by using the "open Solid Edge" button.
11. To calculate the processing time, click on the appropriate process.
12. Upon clicking the process, a process calculator window will activate. Here, you can update selected parameters and add values to calculate the processing time.
13. Click "Calculate" to obtain the final processing time.
14. Clicking "Save" will update the final processing time.
15. Once you've finalized the part sequence, you can apply the sequence to the report by clicking "Apply Sequence".
16. After making all the required updates, click "Approve Sequence" to generate the sequence report.

The screenshot displays the Routing Sequence Tool interface. At the top, there are fields for 'Input Report' and 'Output Directory'. Below these is a 'Category' dropdown set to 'SheetMetal' with a 'Reset' button. The main area features a table with columns for 'Process', 'WC#', 'PTIME#', 'MTIME#', and 'Total'. The table lists various processes like 'Nesting', 'Cutting Center', 'Grind/Buf', 'Radial Arm Drill', and 'Brake, Press 240...'. To the right of the table is a 'PROCESS# 210-03736-1' section with 'UP', 'Down', 'Delete', 'Preview', and 'Apply Sequence' buttons. Below this is a 'Data' section with fields for 'Material', 'Material Thick...', 'MATERIAL SPEC', 'Material Used', 'Flat Pattern_M...', 'Hole Feature', 'Hole Fit', and 'Louvers'. At the bottom right, there is a 'Calculate' button and a 'Save' button. A 'Preview' window is open, showing a 3D model of a part and an 'Open SolidEdge' button. A 'Process Calculator' window is also open, showing a table with 'Process', 'WC#', 'PTIME#', and 'Final PTIME' columns, and 'Calculate', 'Save', and 'Reset' buttons.