

Automated check and Review Tool

Purpose : To Automate the check and review (MTC & MTR) process to reduce ECO & Re-work.

Functions:

- The tool fetches assembly metadata temporary BoM in a draft file and compares those values with BEC NPM standards & M2M Data.
- Further It validates values with appropriate remarks against MTC & MTR checkpoints.
- It also sorts out reports according to part category (Assembly, Sheet metal, Part, Baseline, Electrical)
- Tool also highlights the baseline model having a different path than the defined.
- And creates two individual reports for BEC and DGS.
- Tool creates an additional report which is used for the Routing sequence tool (RST).

Constraint:

- Tool runs only on assembly model.
- Only Desired assembly needs to open in solid edge, no other model should be open while using this tool.
- Wrong modeling practice may cause errors in the tool.
- This tool can detect and highlight most of the modeling errors that cause the crashing of this tool. Such part numbers would be highlighted in the reports
- If the tool crashes, the user can refer log file to identify the problematic part and repair it.

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User Interface Guide:

1. Open the desired assembly in Solid Edge and Activate the tool by clicking on it.
2. Select the appropriate category to get the report.
3. Assign the baseline directory to validate the path of baseline parts in the desired assembly.
4. Assign the output destination of the report
5. Clicking "Export Report" will initiate the process.
6. Progress bar will keep updating the numbers of the part being checked.
7. Once all parts are checked data will appear in a grid
8. Destination folder will pop up, where all the reports can be seen.
9. Close the tool to use other tools if needed

The screenshot shows the Brookville MTC/MTR tool interface. The left sidebar contains a menu with options: Add/Update, Design, QC Report, Interference, MTC/ MTR (highlighted with a red dashed box and callout 1), KPI, Raw Material Estimation, and Configuration. The main panel has a top section with checkboxes for 'All', 'Assembly', 'Part', and 'Sheet Metal' (callout 2). Below these are fields for 'Baseline Dir Path' and 'Export Directory', each with a 'Browse' button (callout 4). The main area displays a table of items with columns: Select, Item Number, File Name (no extension), Quantity, and Material Used. A 'Please Wait' dialog box with a progress bar and the text 'In progress..' is overlaid on the table (callout 6). At the bottom right, there are 'Close' and 'Export Reports' buttons (callout 5). A file explorer window is open at the bottom left, showing the 'REPORT' folder with several report files (callout 8).

Select	Item Number	File Name (no extension)	Quantity	Material Used
<input checked="" type="checkbox"/>	3	1-2543	4	PL1A36, 2 1/8" X 2"
<input type="checkbox"/>	4	1-2545	2	SMHRAN1/2X4X4, 6" LONG
<input type="checkbox"/>	5	1-2631	4	PIPE, 1-1/2", SCH 40, 4" LG
<input type="checkbox"/>	9	1-5149		
<input type="checkbox"/>	10	1-6126		
<input type="checkbox"/>	11	1-6992		
<input type="checkbox"/>	12	1-7716		
<input type="checkbox"/>	13	1-7717		
<input type="checkbox"/>	14	1-7809		
<input type="checkbox"/>	15	1-8275		
<input type="checkbox"/>	17	1-8501		
<input type="checkbox"/>	18	1-9115		
<input type="checkbox"/>	19	1-9126		
<input type="checkbox"/>	20	1-9274	6	PL3/16A36, 9 3/4" X 4 3/4"
<input type="checkbox"/>	31	1-9432	4	SMHRRD3/4, X 4 1/4" LONG APPROX.
<input type="checkbox"/>	33	1-9437	2	SMHREL 1/2X11/4, 23 3/4" LG
<input type="checkbox"/>	37	1-9450	4	1 1/2" X 1 1/2" X 1 1/2"

Desktop > REPORT > 100000030-6

Name	Date modified
100000030-6_MTC_Report_BEC_Oct_24_2022_16_36	24-Oct-22 4:36 PM
100000030-6_MTC_Report_DGS_Oct_24_2022_16_37	24-Oct-22 4:37 PM
100000030-6_MTR_Report_BEC_Oct_24_2022_16_37	24-Oct-22 4:37 PM
100000030-6_MTR_Report_DGS_Oct_24_2022_16_38	24-Oct-22 4:38 PM
100000030-6_RoutingSequence_Report_Oct_24_2022_16_39	24-Oct-22 4:39 PM