

# New Part Creation

**Purpose :** To generate new Profile/structure and sheet metal file as per BEC standard

## Functions:

- This tool generates sheet metal and structural part files using the BEC standard sizes database.
- Users can choose the category and file properties from a dropdown menu, and these selections will be applied to the newly created part.

## Constraint:

- Any changes in the BEC Material Data Excel format can cause possible failure in the tool.

# New Part Creation

## User Interface Guide:

1. Launch the Automation tool and access new part creation by clicking on it.
2. Click on "Get BEC material data" to retrieve data from the BEC material Excel.
3. Provide a preferred file name.
4. Choose a category from the dropdown menu.
5. From the dropdown menus, select the type and material.
6. Click "create part" to generate a new file with the specified properties.
7. New part will be created in the solidedge.
8. If necessary, close the tool feature to use other tools.

The screenshot shows the 'New Part Creation' window in the Brookville software. The interface includes a sidebar with navigation options: '+ Add/ Update', 'Virtual Structure', 'New Part Creation' (highlighted), 'Part/ Sheet-Metal Update', and 'Assembly Validation'. Below these are icons for 'Design', 'QC Report', and 'Configuration'. The main area contains fields for 'SolidEdge Parts Template Directory' and 'BEC Material Excel Path', both pointing to a local file path. A 'Get BEC Material Data' button is present. Below this is a form with the following fields: 'File Name' (containing 'BEC Part Number'), 'Category' (dropdown menu), 'Type' (dropdown menu), 'BEC Code/Material Used' (dropdown menu), 'Material Spec.' (containing 'ANGLE, 1/4 X 1 X 1 HR'), 'BEC Material' (dropdown menu), 'Thickness' (dropdown menu), 'Height' (text input), 'Linear Length' (text input), 'Width' (text input), and 'Template' (containing 'ANGLE\_inch'). At the bottom right are 'Close' and 'Create Part' buttons. A preview window on the right shows a 3D model of an L-shaped part with dimensions (1.000, 1.000, 1.000) and a callout 'Output'. Numbered callouts 1 through 8 are overlaid on the interface to guide the user through the steps.

Field	Value
SolidEdge Parts Template Directory	V:\Admin\BEC Automation Tool\BEC_DataBase\Part Template
BEC Material Excel Path	V:\Admin\BEC Automation Tool\BEC_DataBase\Excels\BEC_Material_081823.xlsx
File Name	BEC Part Number
Category	Structure
Type	ANGLE
BEC Code/Material Used	SMHRAN1/4X1X1
Material Spec.	ANGLE, 1/4 X 1 X 1 HR
BEC Material	A36 STEEL PLATE
Thickness	0.25
Height	1
Linear Length	0
Width	1
Template	ANGLE_inch