Procedure for Electrical Manufacturing Preparation

This workflow describes how to use Electrical Manufacturing Preparation.

Before you begin: Import an electrical harness data with at least one branch and an electrical physical system.

1. From the **Compass**, click Electrical Manufacturing Preparation.
2. Generate a formboard data by flattening the harness data.

   You can place the components in an optimized plane (managing the flatten status and backbone) or in a torsion free position (managing the start element). See Formboard Generation Process.
3. Generate the documentation of harness by flattening the electrical harness data. See Procedure for Generating the Documentation of a Harness.
   A scaled layout of flattened harness with annotations and 2D drafting is generated automatically.
4. Instantiate the tables declared in Data Setup to place the layout of flatten data on it. See Instantiating Tables.
5. Manipulate the flattened data in the 3D area.

   You can rotate, roll, scale, and straighten the branches, segments, etc. You can also arrange the junctions and rotate the components. See Preparing the Layout.
6. Analyze the torsion generated on a branch during flattening using torsion report, color codes, and relative position of torsion vectors.

   You can also edit the torsion by rotating the electrical components. See Analyzing and Editing Torsion.
7. **Optional:** Extract and generate the layout of the harness data. See Extracting 3D Content, Flattening an Electrical Geometry, and Preparing the Layout.

   You can link the electrical geometries after extracting and flattening the harness data. You can also modify the flatten status of a branch. See Linking Electrical Geometries.
8. Synchronize the flattened data to reflect changes made to the harness data. See Synchronizing the Environment.
9. Highlight the elements between the harness data and the corresponding flattened data.

   You can also generate the Bill Of Material (BOM). See Using Manufacturing Tool.
10. Export the electrical harness data to KBL file. See Electrical Physical System Export in KBL.