

The best way to explain the contents is with a chronology:

1. CTC-05-A.STEP is the original import
2. CTC-05-A.SLDPRT is as-imported from the STEP file, but it gets modified later on
3. CTC-05A-3DPM.SLDPRT is created from an inserted CTC-05-A.SLDPRT to define the process plan.
4. CTC-05_A-3DPM.SLDDRW is created from CTC-05-A-3DPM.SLDPRT
5. CTC-05-602NC-A.SLDPRT is created from CTC-05A-3DPM.SLDPRT.
It is the NC program (SolidCAM) for operation 60.2
6. CTC-05-B.STEP is the revised import
7. CTC-05-B.SLDPRT is as-imported from the STEP file, but it gets modified later on.
8. CTC-05-AB.dcv.xml is saved by the DCV application to save the recognized difference between CTC-05-A.SLDPRT and CTC-05-B.SLDPRT. At the same time, DCV modifies CTC-05-A.SLDPRT to assure that every face has a unique identifier assigned as a name. CTC-05-B.SLDPRT is modified to assure that every matched face has the same name as in CTC-05-A.
9. DcvFolderMgr.xml is created by the DCV application as a rudimentary effort to manage DCV files and their relationship to the analyzed SolidWorks files.
10. CTC-05-AB.SLDPRT is created by DCV. The geometry is the same as that in CTC-05-B.SLDPRT, but it can be used to replace CTC-05-A.SLDPRT with associativity intact.
11. CTC-05-AB-3DPM.SLDPRT is created by renaming a copy from CTC-05-A-3DPM.SLDPRT then replacing the reference to CTC-05-A.SLDPRT with a reference to CTC-05-AB.SLDPRT.
Replace inserted part is done per: https://www.youtube.com/watch?v=AauP_Jzbbu4
12. CTC-05-AB-3DPM.SLDDRW is created by renaming a copy from CTC-05-A-3DPM.SLDDRW replacing the reference to CTC-05-A.SLDPRT with a reference to CTC-05-B-3DPM.SLDPRT
13. CTC-05-602NC-AB.SLDPRT is created by the following steps:
 - Copy/Rename from CTC-05-602NC-A.SLDPRT.
If you attempt to use CTC-05-602NC-A.SLDPRT it will get overwritten.
 - Open CTC-05-602NC-AB.SLDPRT, replacing the reference to CTC-05-A-3DPM.SLDPRT with CTC-05-AB-3DPM.SLDPRT per: https://www.youtube.com/watch?v=AauP_Jzbbu4 from CTC-05A-3DPM.SLDPRT.

The actual chronology was slightly different as some steps were redone to fix minor issues.

Some TIF files may be present. They were created for figures in the journal article.