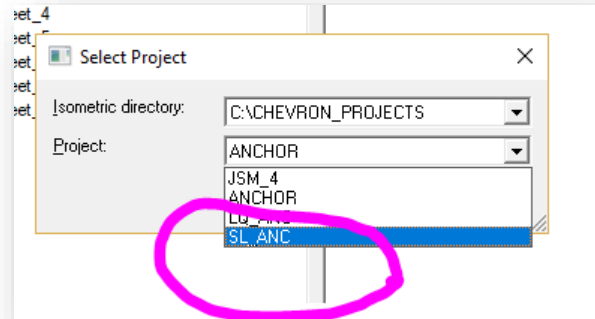


HOW TO GENERATE SLEEVE SUB ASSEMBLY UPDATED WORKFLOW

Updated for SLEEVE MIXED LIN: NORMAL SPOOLS and SUB ASSEMBLY SPOOLS and re-issued as REV4 on 07/16/21

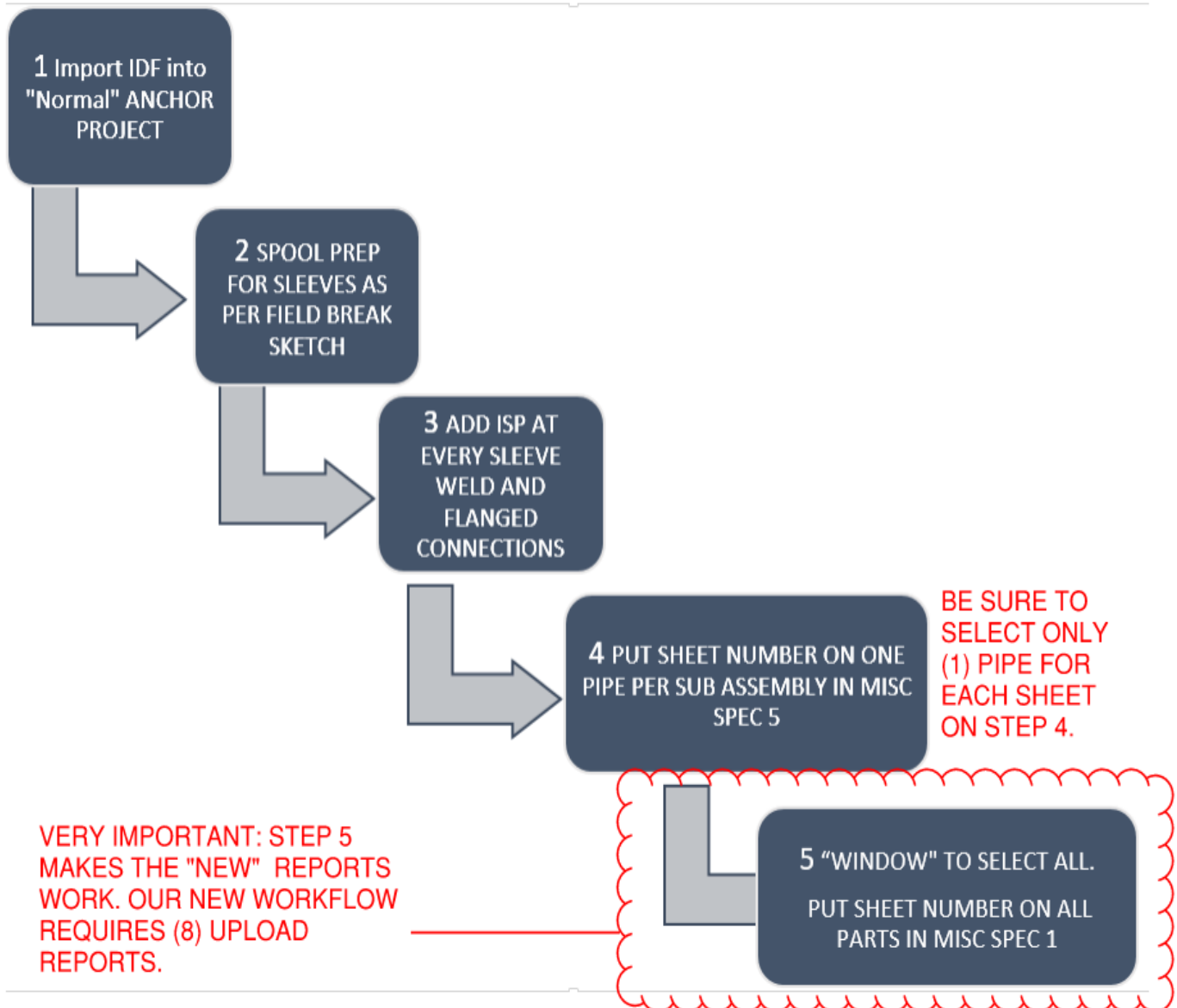
TIP: ANCHOR SLEEVES SUB ASSEMBLY drawings are generated using a NEW project called SL ANC. Always import the IDF into the ANCHOR PROJECT – never import into the SL_ ANC. We are only using the SL_ ANC project as a “helper- project” to generate the SUB ASSEMBLY DRAWINGS and UPLOAD REPORTS.



Also note: The ER-DWG and SPOOL sheet are generated using the ‘normal’ ANCHOR PROJECT.

We are using ISOMETRIC SPLIT POINTS (ISPs) to “break” the line into SUB ASSEMBLY drawings.

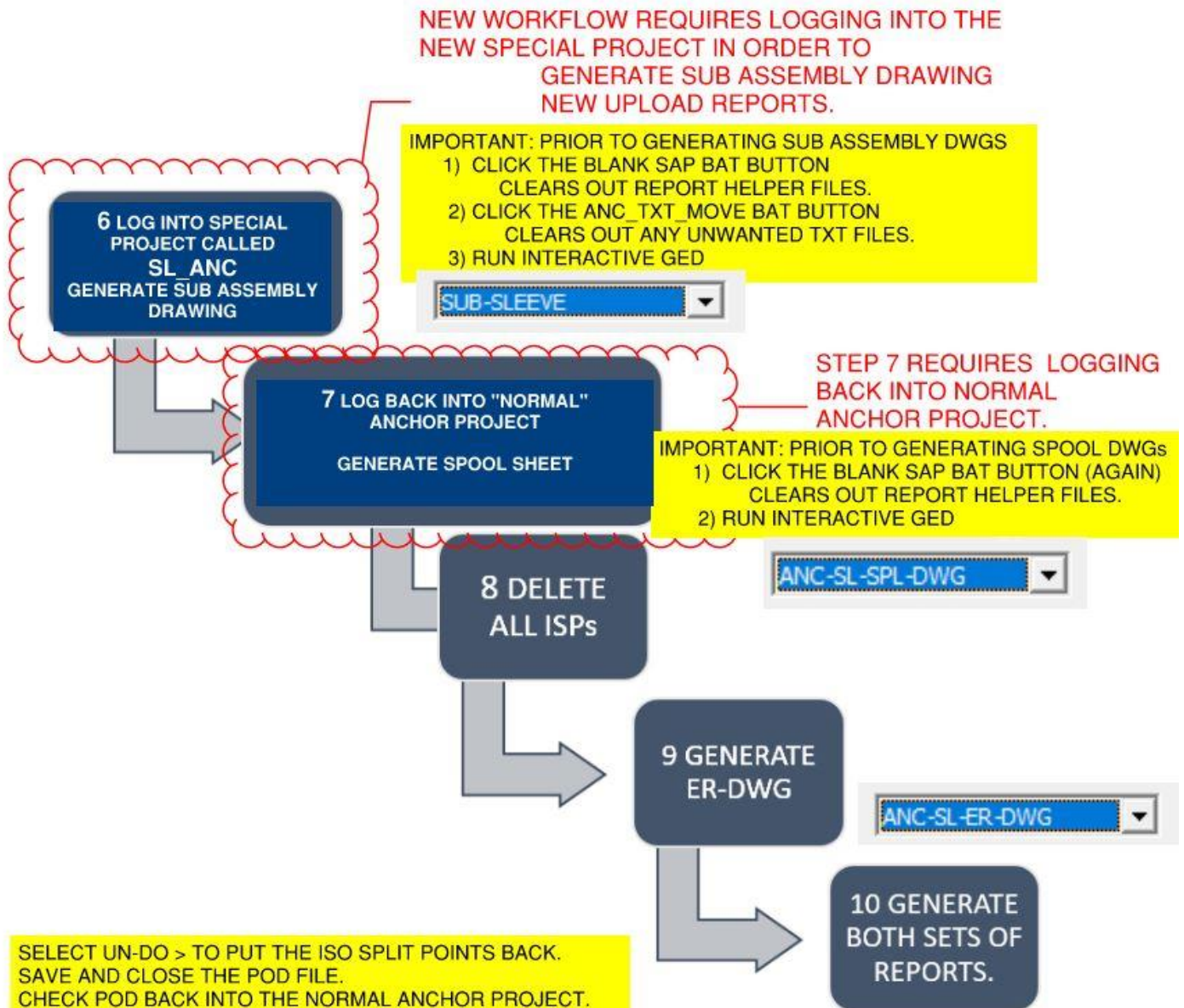
UPDATED SUB ASSEMBLY WORKFLOW



HOW TO GENERATE SLEEVE SUB ASSEMBLY UPDATED WORKFLOW

Updated for SLEEVE MIXED LIN: NORMAL SPOOLS and SUB ASSEMBLY SPOOLS and re-issued as REV4 on 07/16/21

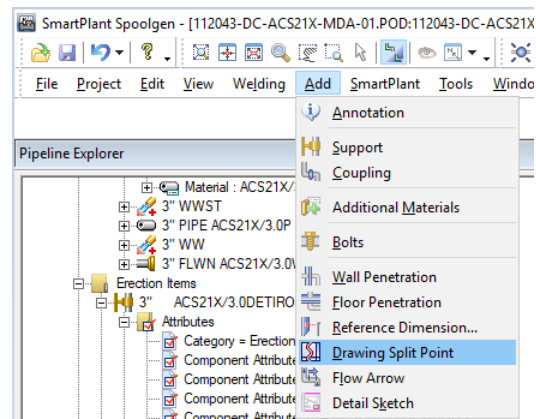
SUB ASSEMBLY WORKFLOW CONTINUED:



FURTHER EXPLANATION FOR WORKFLOW STEPS 3, 5, 6 7, 8, 9, and 10:

STEP 3 from WORKFLOW) Add Isometric Split Point (ISP) at every SLEEVE WELD and FLANGED CONNECTION:

CLICK ON Add > Drawing Split Point.

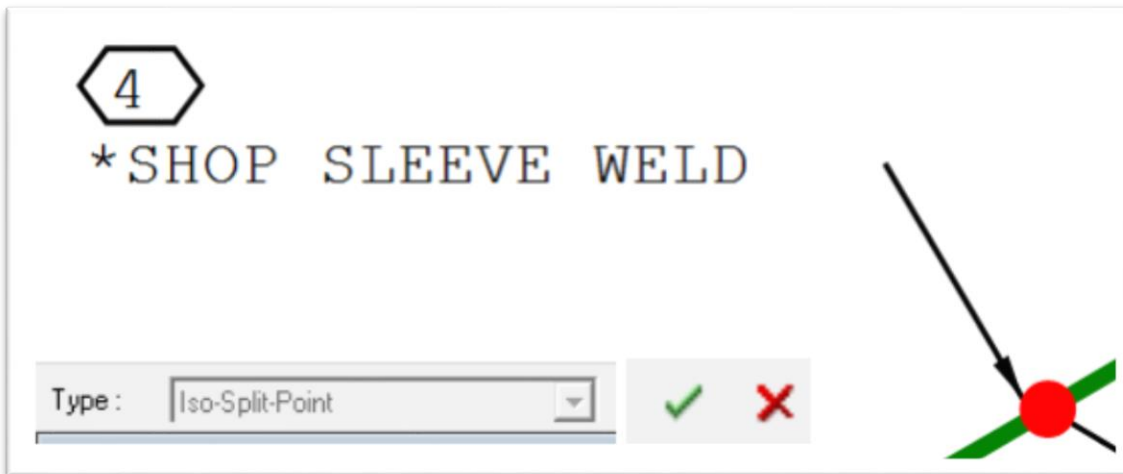


HOW TO GENERATE SLEEVE SUB ASSEMBLY UPDATED WORKFLOW

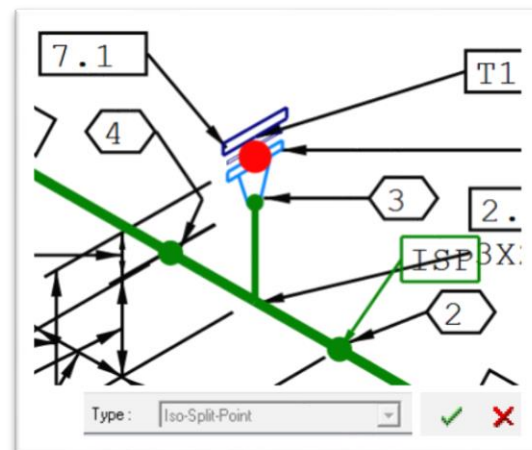
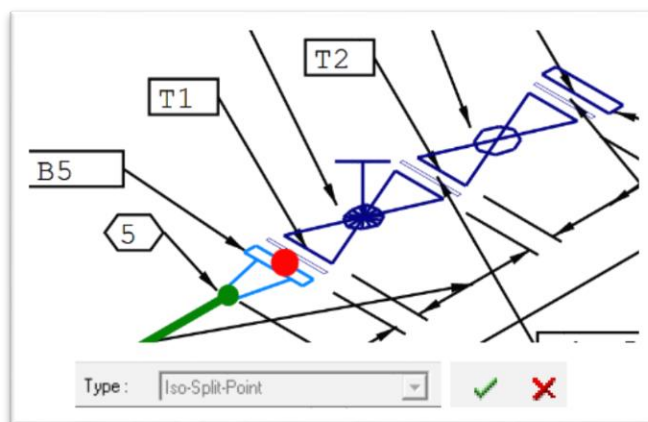
Updated for SLEEVE MIXED LIN: NORMAL SPOOLS and SUB ASSEMBLY SPOOLS and re-issued as REV4 on 07/16/21

STEP 3 CONTINUED

Isometric Split Point at SLEEVE WELD.

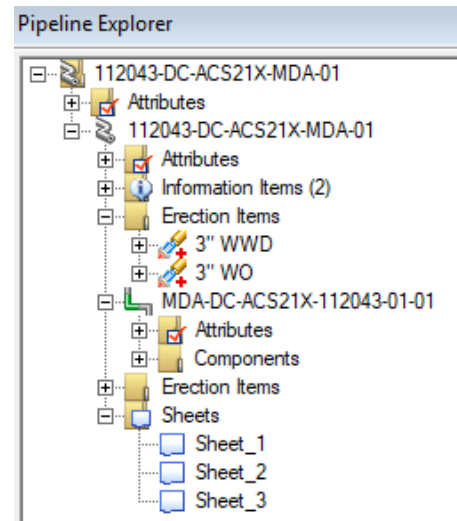
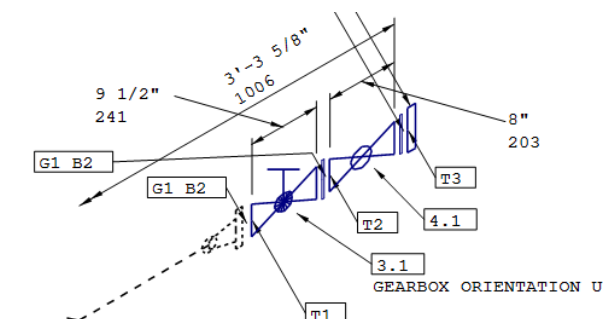


Isometric Split Point at FLANGE CONNECTION: Here are two examples of FLANGED CONNECTION.



After putting all the ISPs > Update Current View. In our example, there are two ISPs – which break the ISO into 3 sheets. Pipeline Explorer shows the Sheets.

In the example Sheet 3 (outboard of the FLANGE) is all ERECTION MATERIAL. Do not include Sheet 3 in the WORKSET.



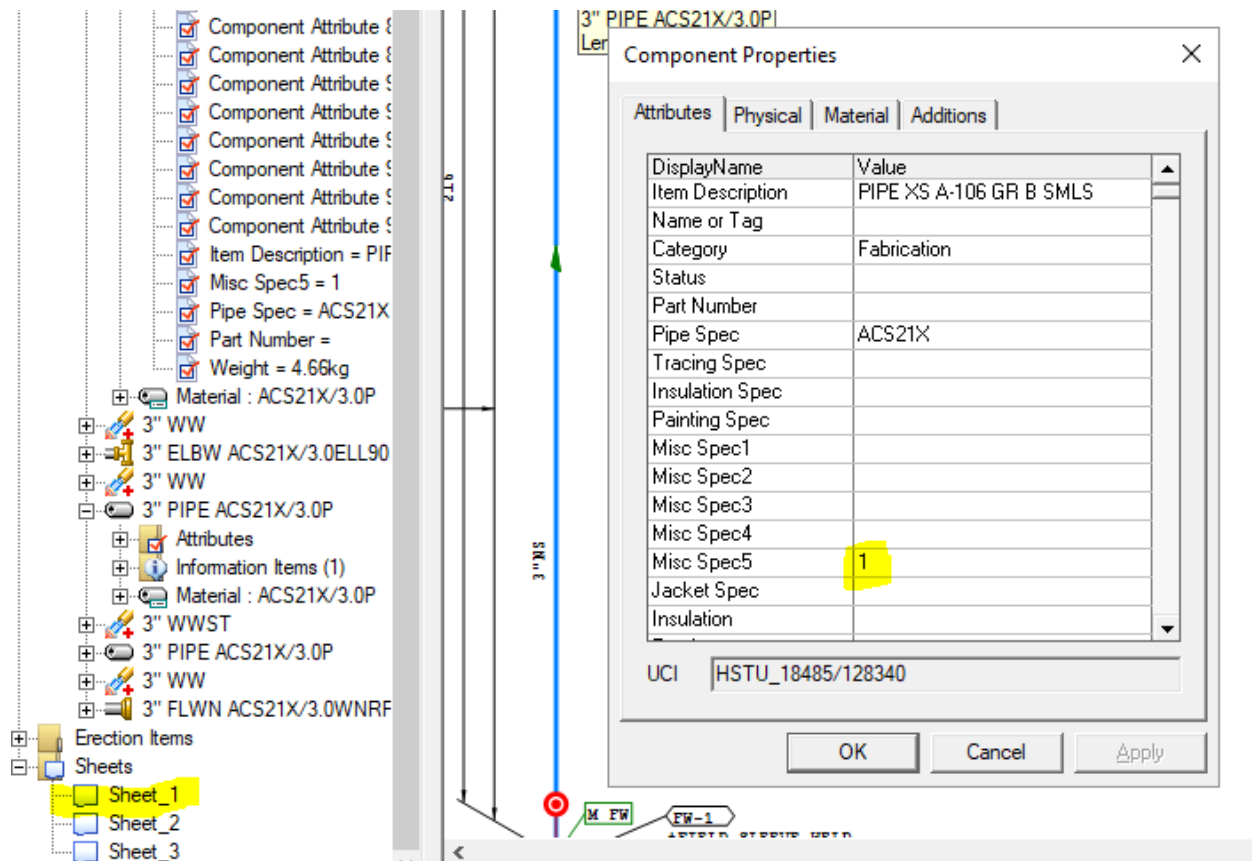
HOW TO GENERATE SLEEVE SUB ASSEMBLY UPDATED WORKFLOW

Updated for SLEEVE MIXED LIN: NORMAL SPOOLS and SUB ASSEMBLY SPOOLS and re-issued as REV4 on 07/16/21

STEP 4 from WORKFLOW) Put Sheet Number on “one pipe per SUB ASSEMBLY.” Put it in MISC SPEC 5. This step populates the SUB ASSEMBLY PIECE MARK that shows up on the SPOOL SHEET.

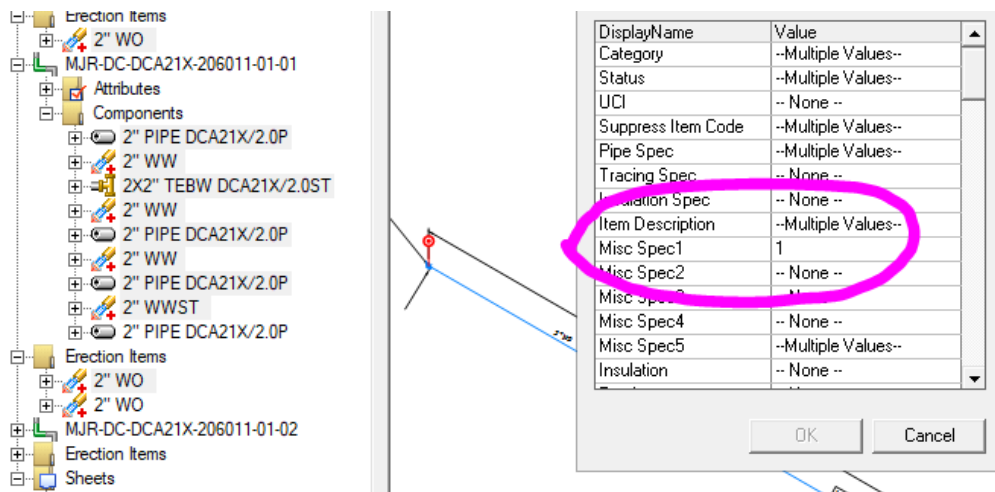
In Pipeline Explorer, double-click **Sheet 1** to make it current. Select one of the pipes in SGIMPORT and right click > put **1** in Misc Spec 5.

Note: there are multiple pipes on Sheet 1 > but only populate MiscSpec 5 for one pipe. That way only one SUB ASSEMBLY PIECEMARK shows up on the spool sheet.



STEP 5 from WORKFLOW) Use the cursor to drag a window and select everything in Sheet 1 drawing area.

Right click on one of the parts in the Pipeline explorer to open Multiple Component Properties screen. Put a **1** in MISC SPEC 1.

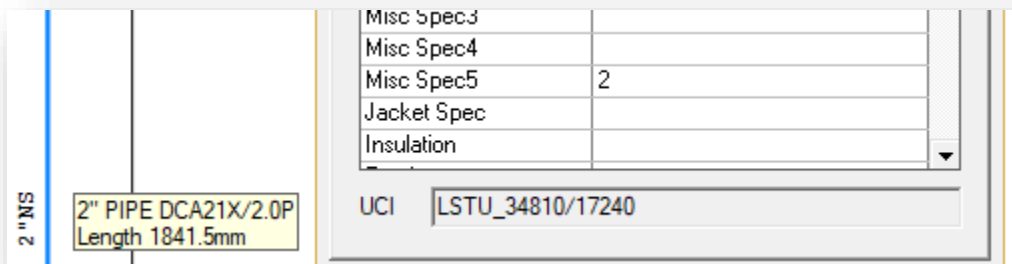


HOW TO GENERATE SLEEVE SUB ASSEMBLY UPDATED WORKFLOW

Updated for SLEEVE MIXED LIN: NORMAL SPOOLS and SUB ASSEMBLY SPOOLS and re-issued as REV4 on 07/16/21

STEPS 4 and 5 from WORKFLOW) In Pipeline Explorer, double-click **Sheet 2** to make it current.

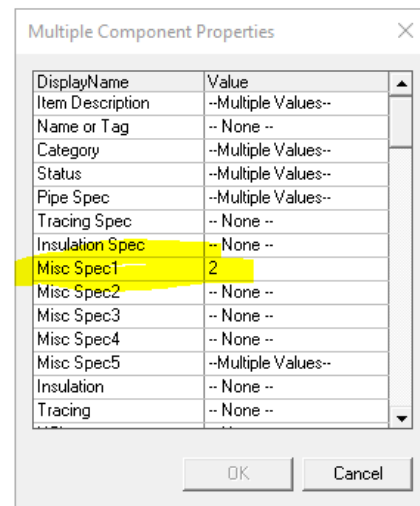
Select one of the pipes in SGIMPORT and right click > put **2** in Misc Spec 5.



“Window” to select everything on Sheet 2 and RIGHT CLICK one of the parts to open Multiple Component Properties. Put **2** in MISC SPEC 1.

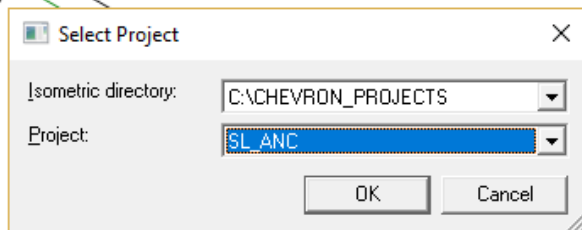
(If there are more sheets > proceed in this manner through all the SHEETS.)

1.1
2" NS



TIP: In the example, Sheet 3 is ERECTION ONLY. No MISC SPEC 5 or MISC SPEC 1 spool prep required. Sheet 3 is not part of Workset – no SUB ASSEMBLY DRAWING required.

STEP 6 from WORKFLOW) Spool Prep everything. Save the POD file > *but do not close it*. With the file OPEN > log into SL_ANC project.



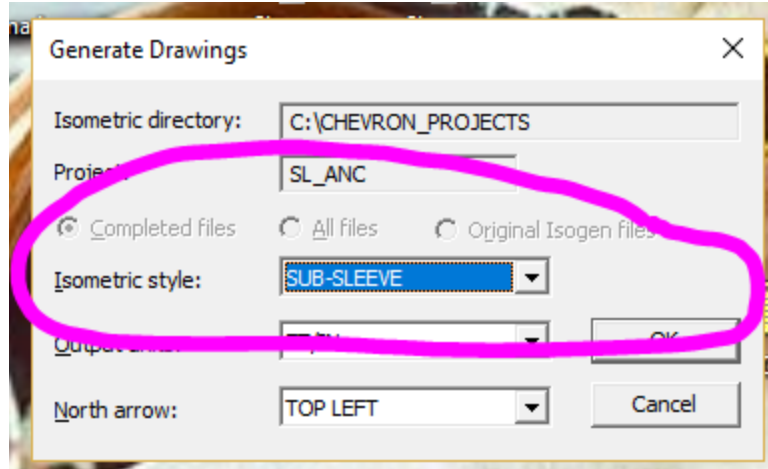
IMPORTANT: PRIOR TO GENERATING SUB ASSEMBLY DWGS

- 1) CLICK THE BLANK SAP BAT BUTTON
CLEARS OUT REPORT HELPER FILES.
- 2) CLICK THE ANC_TXT_MOVE BAT BUTTON
CLEARS OUT ANY UNWANTED TXT FILES.
- 3) RUN INTERACTIVE GED

HOW TO GENERATE SLEEVE SUB ASSEMBLY UPDATED WORKFLOW

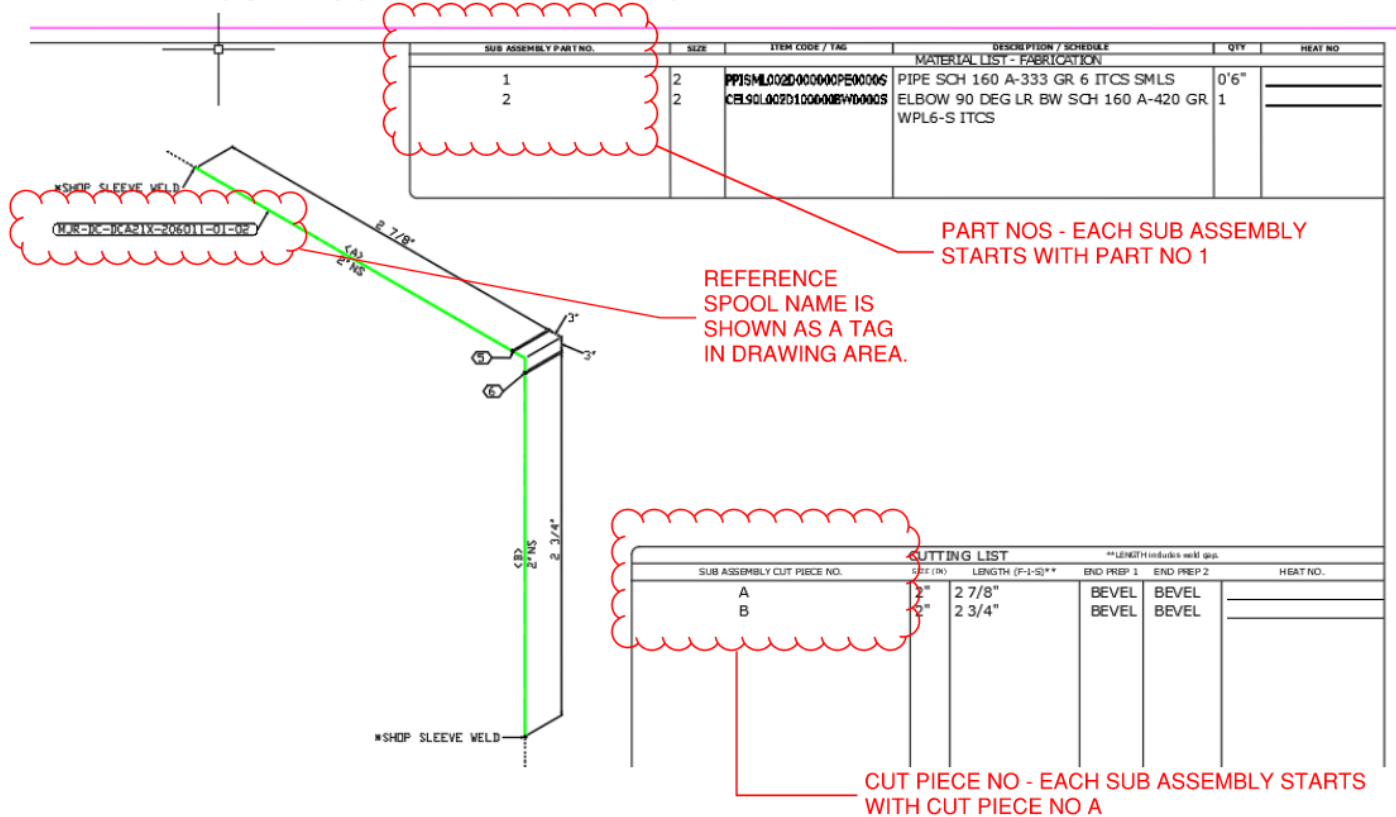
Updated for SLEEVE MIXED LIN: NORMAL SPOOLS and SUB ASSEMBLY SPOOLS and re-issued as REV4 on 07/16/21

Generate drawings using the STYLE called SUB-SLEEVE.



View drawings. Make sure that the SUB ASSEMBLY drawing looks like shown below:

EXAMPLE SUB ASSEMBLY DRAWING



The SUB ASSEMBLY drawing naming convention is shown below:

Area-Service-Spec-Line-Iso-SUB-#

Drawings generated :

MJR-DC-DCA21X-206011-01-SUB-1.1
 MJR-DC-DCA21X-206011-01-SUB-2.1
 MJR-DC-DCA21X-206011-01-SUB-3.1
 MJR-DC-DCA21X-206011-01-SUB-4.1
 MJR-DC-DCA21X-206011-01-SUB-5.1
 MJR-DC-DCA21X-206011-01-SUB-6.1
 MJR-DC-DCA21X-206011-01-SUB-7.1
 MJR-DC-DCA21X-206011-01-SUB-8.1

HOW TO GENERATE SLEEVE SUB ASSEMBLY UPDATED WORKFLOW

Updated for SLEEVE MIXED LIN: NORMAL SPOOLS and SUB ASSEMBLY SPOOLS and re-issued as REV4 on 07/16/21

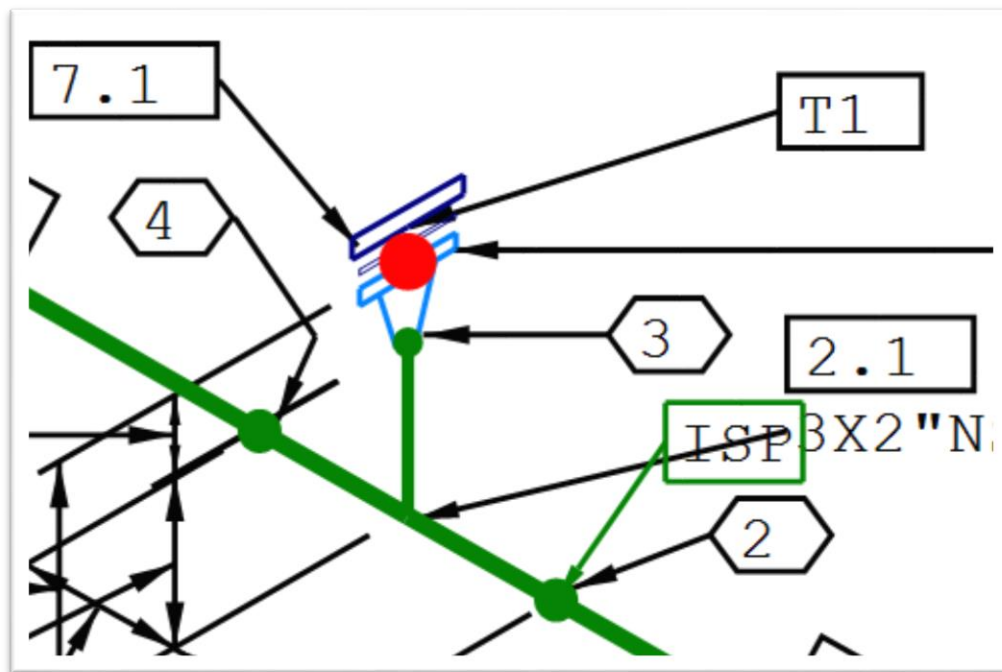
STEP 6 from WORKFLOW) Continued

In the example, Sheet 3 is ERECTION ONLY. Since Sheet 3 is at the END of the pipeline. No problem. It does not mess up the sequence of SUB ASSEMBLY drawing numbers. No one misses Sheet 3.

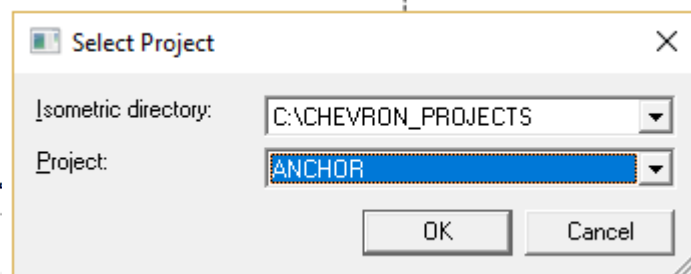
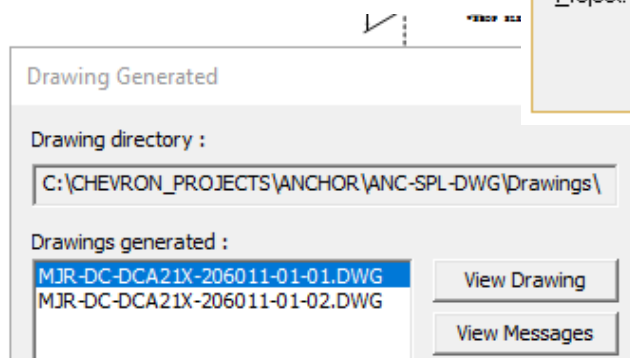
Sometimes FLANGED CONNECTIONS are in the middle of the pipeline as shown below.

FLANGED CONNECTIONS in the middle of pipeline:

- DO NOT MANUALLY RENAME THE SHEET NUMBERS.
- Use the Sheet numbers that are auto-generated for the SUB ASSEMBLY and throw away the drawings for ERECTION ONLY sheets.
- There are "skipped" numbers in our WORKSET due to the ones that we throw away. That is OK.



STEP 7) Log back into NORMAL ANCHOR PROJECT > generate SPOOL SHEETS using the style called: **ANC-SL-SPL-DWG.**



TIP: Do not use the STYLE called ANC-SLEEVE to generate SPOOL SHEETS. It is no longer required with the NEW WORKFLOW.

NO BOM OR CUTLIST - ONLY SHOW
A LIST OF SUB ASSEMBLY
DRAWINGS

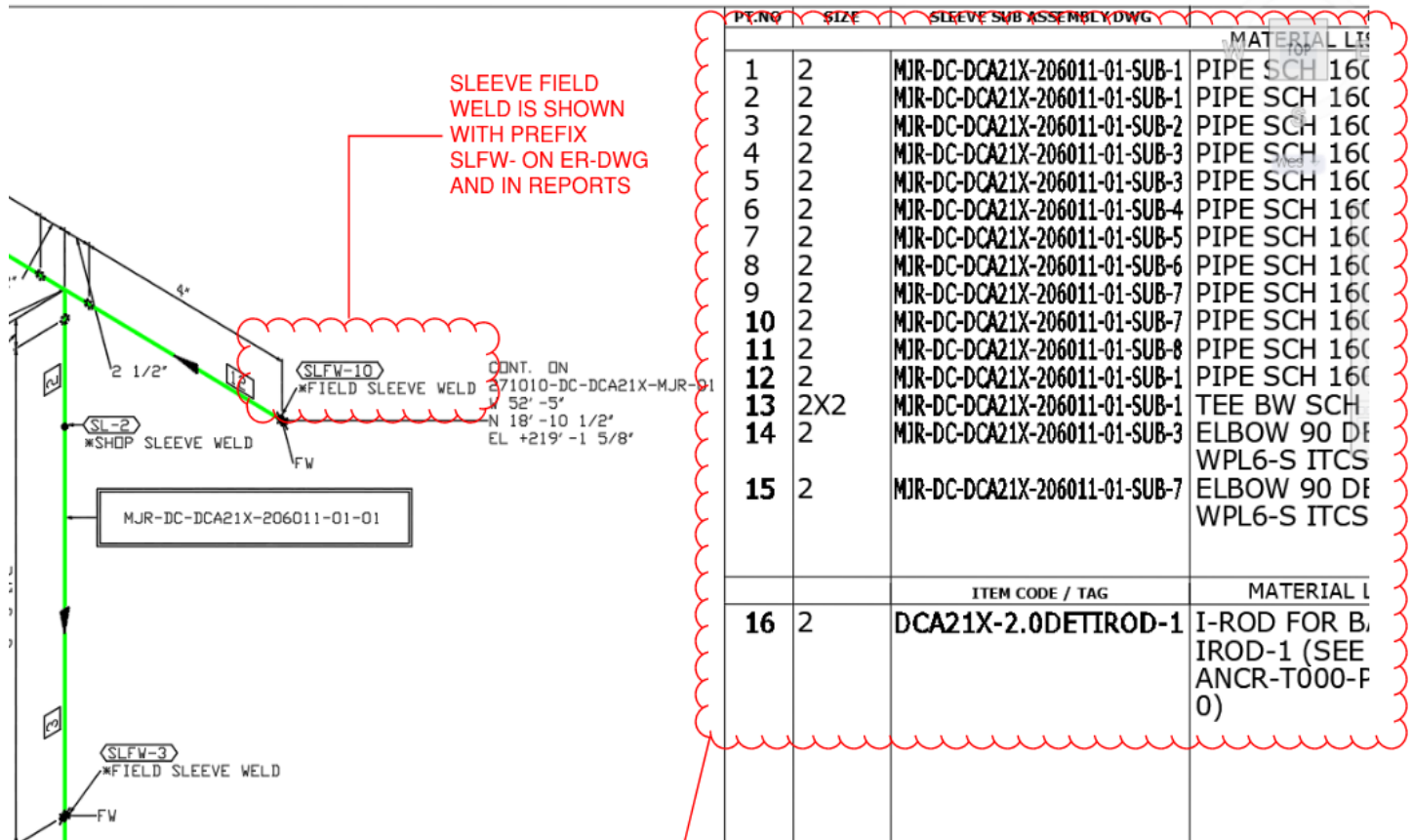


HOW TO GENERATE SLEEVE SUB ASSEMBLY UPDATED WORKFLOW

Updated for SLEEVE MIXED LIN: NORMAL SPOOLS and SUB ASSEMBLY SPOOLS and re-issued as REV4 on 07/16/21

STEP 9) Generate SLEEVE ER-DWG using the style called ANC-SL-ER-DWG.

EXAMPLE SLEEVE ER-DRAWING



ER-DWG: FABRICATION MATERIAL LIST DOES NOT SHOW KOS CODE FOR PARTS > IT SHOWS THE REFERENCE SUB ASSEMBLY DRAWING NAME

ERECTION MATERIAL LIST SHOWS KOS CODE OR TAG

IMPORTANT: PRIOR TO GENERATING SPOOL DWGS
1) CLICK THE BLANK SAP BAT BUTTON (AGAIN)
CLEARS OUT REPORT HELPER FILES.
2) RUN INTERACTIVE GED

STEP 9) Generate the reports. Move the TXT files using the BAT BUTTON for Anc_txt_move.

Note: Our BAT BUTTON has been modified to move both sets of TXT files into the folder that our report-generators are linked to:

```
ANC_txt_move.bat
1 _TXT@echo off
2
3 move C:\CHEVRON_PROJECTS\ANCHOR\ANC-ER-DWG\Reports\Cutlist.txt C:\ANCH_TEMP\Txt_Reports
4 move C:\CHEVRON_PROJECTS\ANCHOR\ANC-ER-DWG\Reports\DIA_REPORT.txt C:\ANCH_TEMP\Txt_Reports
5 move C:\CHEVRON_PROJECTS\ANCHOR\ANC-ER-DWG\Reports\Material.txt C:\ANCH_TEMP\Txt_Reports
6 move C:\CHEVRON_PROJECTS\ANCHOR\ANC-ER-DWG\Reports\Welds.txt C:\ANCH_TEMP\Txt_Reports
7 move C:\CHEVRON_PROJECTS\ANCHOR\ANC-ER-DWG\Reports\Sleeve.txt C:\ANCH_TEMP\Txt_Reports
8 move C:\CHEVRON_PROJECTS\ANCHOR\ANC-ER-DWG\Reports\Cutlist_1.txt C:\ANCH_TEMP\Txt_Reports
9 move C:\CHEVRON_PROJECTS\ANCHOR\ANC-ER-DWG\Reports\DIA_REPORT_1.txt C:\ANCH_TEMP\Txt_Reports
10 move C:\CHEVRON_PROJECTS\ANCHOR\ANC-ER-DWG\Reports\Material_1.txt C:\ANCH_TEMP\Txt_Reports
11 move C:\CHEVRON_PROJECTS\ANCHOR\ANC-ER-DWG\Reports\Welds_1.txt C:\ANCH_TEMP\Txt_Reports
12 move C:\CHEVRON_PROJECTS\ANCHOR\ANC-ER-DWG\Reports\Sleeve_1.txt C:\ANCH_TEMP\Txt_Reports
13
```

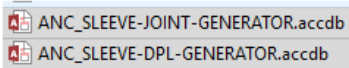
HOW TO GENERATE SLEEVE SUB ASSEMBLY UPDATED WORKFLOW

Updated for SLEEVE MIXED LIN: NORMAL SPOOLS and SUB ASSEMBLY SPOOLS and re-issued as REV4 on 07/16/21

STEP 9) Generate the reports CONTINUED.

NORMAL SLEEVE REPORTS:

Click on the BAT BUTTON to generate the “NORMAL” SLEEVE REPORTS. The new BAT BUTTON looks like shown below and works with our two new REPORT GENERATORS for NORMAL REPORTS for sleeves. These are the reports that we upload into our NORMAL SPOOLMAN PROJECT.



```
ANC SLEEVE NORMAL REPORTS.bat
1 @echo off
2
3 start C:\Users\RITA.CASS\Desktop\A_NO_PIPE.MAM
4 start C:\Users\RITA.CASS\Desktop\ANCH_SLEEVE_JOINT.MAM
5 start C:\Users\RITA.CASS\Desktop\A_DIA.MAM
6 start C:\Users\RITA.CASS\Desktop\ANCHOR_SLEEVE_DPL.MAM
7
```



Please note: SLEEVE SPOOLS DO NOT require a CUTLIST for our NORMAL UPLOAD REPORTS. The report generator creates an “empty-dummy” CUT LIST > similar to our NO-PIPE CUTLIST.

C	D	E	F	G	H	I	J	K	L
PIPELINE-REFERENCE	SHEET	REVISION	KOS SPL NAME	CUT-PIECE-NO	SIZE	ITEM CODE	DESCRIPTION	MATERIAL	UT-PIECE-LENGTH
302111-DC-ACS11X-PDA-01	01	C01							0'-0 0/16"

The JOINT REPORT shows SLEEVE WELDS (shop and field), FIELD WELDS, and TORQUES. If the line is a MIXED SLEEVE line that contains “normal” spools (NO SUB ASSEMBLY) the report shows SHOP WELDS joining two parts > just like normal. Everything else, the welds join SUB ASSEMBLIES – not parts. SUB ASSEMBLY name is shown in Part1 and Part 2 Sap_Codes and Descriptions.

M	N	O	P	Q	R	S	T	U
Joint_No	Size_Inch	Joint_Type	Field_Shop	Part1_Sap_Code	Part1_Description	Part1_Uid	Part2_Sap_Code	Part2_Description
SLFW-1	2	BW	F	NA	NA	NA	MJR-DC-DCA21X-206011-01-SUB-1	MJR-DC-DCA21X-206011-01-SUB-1
SLFW-10	2	BW	F	MJR-DC-DCA21X-206011-01-SUB-1	MJR-DC-DCA21X-206011-01-SUB-1	U199	NA	NA
SLFW-3	2	BW	F	MJR-DC-DCA21X-206011-01-SUB-2	MJR-DC-DCA21X-206011-01-SUB-2	U299	MJR-DC-DCA21X-206011-01-SUB-3	MJR-DC-DCA21X-206011-01-SUB-3
SLFW-9	2	BW	F	MJR-DC-DCA21X-206011-01-SUB-8	MJR-DC-DCA21X-206011-01-SUB-8	U899	NA	NA
SL-2	2	BW	S	MJR-DC-DCA21X-206011-01-SUB-1	MJR-DC-DCA21X-206011-01-SUB-1	U199	MJR-DC-DCA21X-206011-01-SUB-2	MJR-DC-DCA21X-206011-01-SUB-2
SL-4	2	BW	S	MJR-DC-DCA21X-206011-01-SUB-3	MJR-DC-DCA21X-206011-01-SUB-3	U399	MJR-DC-DCA21X-206011-01-SUB-4	MJR-DC-DCA21X-206011-01-SUB-4
SL-5	2	BW	S	MJR-DC-DCA21X-206011-01-SUB-4	MJR-DC-DCA21X-206011-01-SUB-4	U499	MJR-DC-DCA21X-206011-01-SUB-5	MJR-DC-DCA21X-206011-01-SUB-5

The DPL REPORT only shows SUB ASSEMBLY names for Sap_Code and Description. SPOOLS are MFA'd by SUB ASSEMBLY – not parts. If the line is a MIXED SLEEVE line that contains “normal” spools (NO SUB ASSEMBLY) the DPL report shows parts for the “normal” SPOOL just like normal.

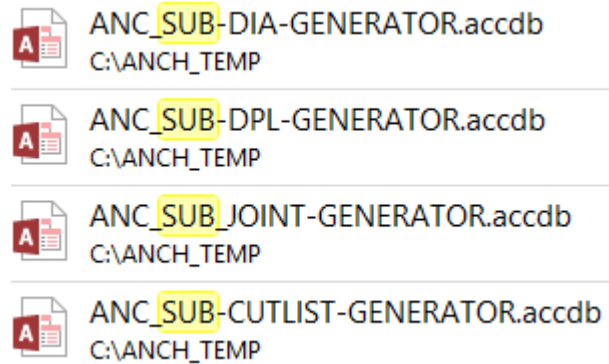
C	D	E	F	G	H	I
Drawing_Id	Rev_No	SpoolRevNo	Sap_Code	Description	Spool_No	Q
206011-DC-DCA21X-MJR-01	C01	C01	BW-WELD		206011-DC-DCA21X-MJR-01-ER	1
206011-DC-DCA21X-MJR-01	C01	C01	MJR-DC-DCA21X-206011-01-SUB-3	MJR-DC-DCA21X-206011-01-SUB-3	MJR-DC-DCA21X-206011-01-02	1
206011-DC-DCA21X-MJR-01	C01	C01	MJR-DC-DCA21X-206011-01-SUB-4	MJR-DC-DCA21X-206011-01-SUB-4	MJR-DC-DCA21X-206011-01-02	1
206011-DC-DCA21X-MJR-01	C01	C01	MJR-DC-DCA21X-206011-01-SUB-5	MJR-DC-DCA21X-206011-01-SUB-5	MJR-DC-DCA21X-206011-01-02	1
206011-DC-DCA21X-MJR-01	C01	C01	MJR-DC-DCA21X-206011-01-SUB-6	MJR-DC-DCA21X-206011-01-SUB-6	MJR-DC-DCA21X-206011-01-02	1
206011-DC-DCA21X-MJR-01	C01	C01	MJR-DC-DCA21X-206011-01-SUB-7	MJR-DC-DCA21X-206011-01-SUB-7	MJR-DC-DCA21X-206011-01-02	1
206011-DC-DCA21X-MJR-01	C01	C01	MJR-DC-DCA21X-206011-01-SUB-8	MJR-DC-DCA21X-206011-01-SUB-8	MJR-DC-DCA21X-206011-01-02	1

SUB ASSEMBLY SLEEVE REPORTS:

Click on the ANC SLEEVE SUB ASSEMBLY BAT BUTTON to generate the SUB ASSEMBLY SLEEVE REPORTS.



List of new SPECIAL SUB ASSEMBLY REPORT GENERATORS is shown at right. Example BAT BUTTON that auto-generates the SUB ASSEMBLY REPORTS is shown below.

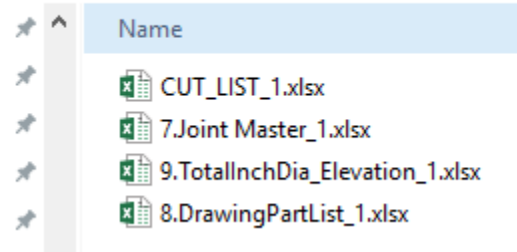


```
ANC SLEEVE SUB ASSEMBLY REPORTS.bat
1 @echo off
2
3 start C:\Users\RITA.CASS\Desktop\SL_ANC_CUTLIST.MAM
4 start C:\Users\RITA.CASS\Desktop\SL_ANC_JOINT.MAM
5 start C:\Users\RITA.CASS\Desktop\SL_ANC_DIA.MAM
6 start C:\Users\RITA.CASS\Desktop\SL_ANC_DPL.MAM
7
```

Note: Report generators make an excel spreadsheet with _1 at end of file name. See below. Upload as deliverables without renaming.

IMPORTANT: For UPLOAD into SLEEVE SUB ASSEMBLY SPECIAL SPOOLMAN PROJECT the reports must be renamed – by deleting the -1 from the end of the filename.

PDM_UPLOADER > Microsoft Excel Worksheet



Example RENAMER SCRIPT that will automatically rename the files after files are

moved into PDM UPLOADER folder. Note: Remove the NORMAL UPLOAD REPORTS from FOLDER before

RENAMING the SUB ASSEMBLY reports. If you forget – the macro will show an error that file already exists.

```
SUB ASSEMBLY RENAMER.vbs
1 Set objFso = CreateObject("Scripting.FileSystemObject")
2 Set Folder = objFso.GetFolder("C:\PDM_UPLOADER")
3
4 For Each File In Folder.Files
5     sNewFile = File.Name
6     sNewFile = Replace(sNewFile,"_1.xlsx" , ".xlsx")
7     if (sNewFile<>File.Name) then
8         File.Move(File.ParentFolder+"\ "+sNewFile)
9     end if
10
11 Next
12
```

HOW TO GENERATE SLEEVE SUB ASSEMBLY UPDATED WORKFLOW

Updated for SLEEVE MIXED LIN: NORMAL SPOOLS and SUB ASSEMBLY SPOOLS and re-issued as REV4 on 07/16/21

SUB ASSEMBLY SLEEVE REPORTS CONTINUED: No Changes to the TotalInchDia Report.

EXAMPLE SUB ASSEMBLY CUT LIST

F	G	H
KOS SPL NAME	CUT-PIECE-NO	SIZE
PDA-DC-ACS11X-302111-01-SUB-1	A	2"
PDA-DC-ACS11X-302111-01-SUB-1	B	2"
PDA-DC-ACS11X-302111-01-SUB-1	C	2"
PDA-DC-ACS11X-302111-01-SUB-3	A	2"
PDA-DC-ACS11X-302111-01-SUB-3	B	2"
PDA-DC-ACS11X-302111-01-SUB-3	C	2"
PDA-DC-ACS11X-302111-01-SUB-3	D	2"
PDA-DC-ACS11X-302111-01-SUB-4	A	2"
PDA-DC-ACS11X-302111-01-SUB-5	A	2"
PDA-DC-ACS11X-302111-01-SUB-5	B	2"

SPOOL NAME IS THE SUB
ASSEMBLY NAME

EXAMPLE SUB ASSEMBLY JOINT REPORT

L	M	N	O	P	Q	R	S	T	U	V
Spool No	Joint No	Size Inch	Joint Type	Field Shop	Part1 Sap Code	Part1 Descriptio	Part1 Uid	Part2 Sap Code	Part2 Descriptio	Part2 Uid
SUB1	1	2	BW	S	FFLWKN002B0001A0WNRF00N	FLANGE WN 150# RF XS A-105N	U01	PPISML002B200000PE0000N	PIPE XS A-106 GR B SMLS	U02
SUB1	2	2	BW	S	PPISML002B200000PE0000N	PIPE XS A-106 GR B SMLS	U02	CEL90L002B600000BW0000N	ELBOW 90 DEG LR BW XS A-234 GR WPBS	U04
SUB1	3	2	BW	S	CEL90L002B600000BW0000N	ELBOW 90 DEG LR BW XS A-234 GR WPBS	U04	PPISML002B200000PE0000N	PIPE XS A-106 GR B SMLS	U05
SUB1	4	2	BW	S	PPISML002B200000PE0000N	PIPE XS A-106 GR B SMLS	U05	CTEEQL002B600000BW0000N	TEE BW XS A-234 GR WPBS	U06
SUB1	5	2	BW	S	FFLWKN002B0001A0WNRF00N	FLANGE WN 150# RF XS A-105N	U07	CTEEQL002B600000BW0000N	TEE BW XS A-234 GR WPBS	U06
SUB1	6	2	BW	S	CTEEQL002B600000BW0000N	TEE BW XS A-234 GR WPBS	U06	PPISML002B200000PE0000N	PIPE XS A-106 GR B SMLS	U13
SUB3	10	2	BW	S	CEL90L002B600000BW0000N	ELBOW 90 DEG LR BW XS A-234 GR WPBS	U16	PPISML002B200000PE0000N	PIPE XS A-106 GR B SMLS	U17

NO TORQUES OR FIELD
WELDS ON THE SUB
ASSEMBLY UPLOAD REPORT

HOW TO GENERATE SLEEVE SUB ASSEMBLY UPDATED WORKFLOW

Updated for SLEEVE MIXED LIN: NORMAL SPOOLS and SUB ASSEMBLY SPOOLS and re-issued as REV4 on 07/16/21

SUB ASSEMBLY SLEEVE REPORTS CONTINUED

EXAMPLE SUB ASSEMBLY DPL REPORT

No	F	G	H	I	Siz
Sap_Code	Description	Spool_No	Quantity		
FFLWLNK002B0001A0WNRFO0N	FLANGE WN 150# RF XS A-105N	PDA-DC-ACS11X-302111-01-SUB-1	1	2	
PPISML002B200000PE0000N	PIPE XS A-106 GR B SMLS	PDA-DC-ACS11X-302111-01-SUB-1	0'6"	2	
CEL90L002B600000BW0000N	ELBOW 90 DEG LR BW XS A-234 GR WPBS	PDA-DC-ACS11X-302111-01-SUB-1	1	2	
PPISML002B200000PE0000N	PIPE XS A-106 GR B SMLS	PDA-DC-ACS11X-302111-01-SUB-1	0'8"	2	
CTEEQL002B600000BW0000N	TEE BW XS A-234 GR WPBS	PDA-DC-ACS11X-302111-01-SUB-1	1	2	
FFLWLNK002B0001A0WNRFO0N	FLANGE WN 150# RF XS A-105N	PDA-DC-ACS11X-302111-01-SUB-1	1	2	
PPISML002B200000PE0000N	PIPE XS A-106 GR B SMLS	PDA-DC-ACS11X-302111-01-SUB-1	0'3"	2	
CTEEQL002B600000BW0000N	TEE BW XS A-234 GR WPBS	PDA-DC-ACS11X-302111-01-SUB-3	1	2	
PPISML002B200000PE0000N	PIPE XS A-106 GR B SMLS	PDA-DC-ACS11X-302111-01-SUB-3	0'8"	2	
CEL90L002B600000BW0000N	ELBOW 90 DEG LR BW XS A-234 GR WPBS	PDA-DC-ACS11X-302111-01-SUB-3	1	2	
PPISML002B200000PE0000N	PIPE XS A-106 GR B SMLS	PDA-DC-ACS11X-302111-01-SUB-3	0'3"	2	
FFLWLNK002B0001A0WNRFO0N	FLANGE WN 150# RF XS A-105N	PDA-DC-ACS11X-302111-01-SUB-4	1	2	
PPISML002B200000PE0000N	PIPE XS A-106 GR B SMLS	PDA-DC-ACS11X-302111-01-SUB-3	0'3"	2	
CTEEQL002B600000BW0000N	TEE BW XS A-234 GR WPBS	PDA-DC-ACS11X-302111-01-SUB-5	1	2	

SPOOL NO IS THE SUB ASSEMBLY NAME
DPL CONTAINS NO ERECTION MATERIAL

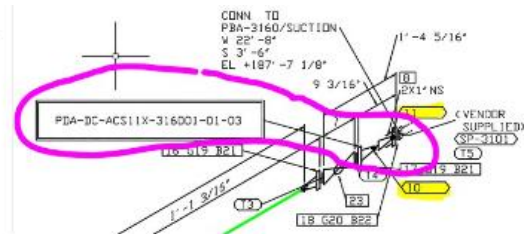
SPECIAL INSTRUCTIONS FOR SLEEVE MIXED LINE: What changes? WORKFLOW Step 7 shown below:

UPDATED STEP 7 for when the line is a SLEEVE MIXED LINE.

What is a SLEEVE MIXED LINE? It contains:

- SPOOLS that contain SUB ASSEMBLIES
- and SPOOLS that do not contain SUB ASSEMBLIES
 - o these require a "normal" SPOOL DWG
 - o and "normal" joint and DPL line entries

Example ER-DWG that contains MIXED SPOOLS. The "normal" spool is circled.



In addition to generating drawings using style ANC-SL-SPL-DWG > for SLEEVE MIXED LINES > generate a second set of drawings using the style called: ANC-SPL-DWG

Isometric style: ANC-SPL-DWG

HOW TO GENERATE SLEEVE SUB ASSEMBLY UPDATED WORKFLOW

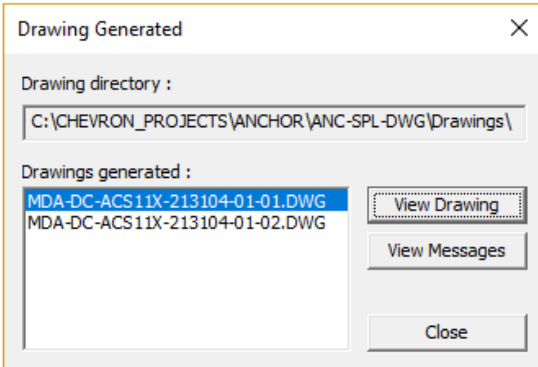
Updated for SLEEVE MIXED LIN: NORMAL SPOOLS and SUB ASSEMBLY SPOOLS and re-issued as REV4 on 07/16/21

SLEEVE MIXED LINE UPDATED WORKFLOW STEP 7 (continued)



Step 1) Generate drawings using ANC-SL-SPL-DWG style. It generates both drawings we need and drawings we do not need. Here are the steps to keep the drawing that you need.

At the Drawing Generated prompt – do not open the DWGs – click on > Close.

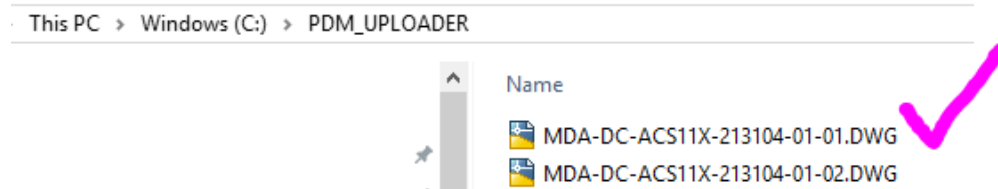


Step 2) Click on the anc_PDM_UPLOADER BAT BUTTON to move the unopened drawings into PDM folder.

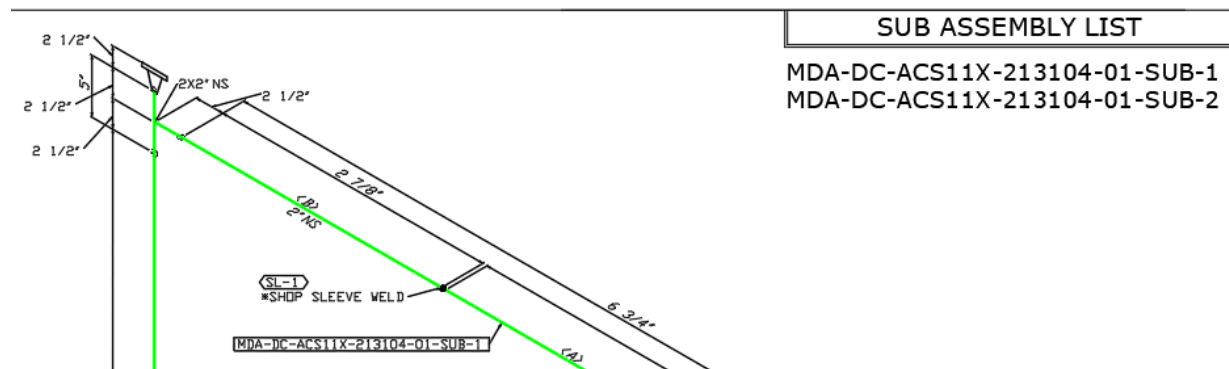
Browse to the PDM folder and open only the drawing that you want to keep for the SPOOL(s) with the SUB ASSEMBLIES. In the example shown below, spool 1 is the spool with SUB ASSEMBLIES and spool 2 is a “normal” spool.



For example, open SPOOL 1 in AutoCAD – shown with a check mark below. Do not open Spool 2 > this is the drawing that we do not need.



Here is what Spool 1 looks like. It is a spool sheet set up for SUB ASSEMBLIES.



HOW TO GENERATE SLEEVE SUB ASSEMBLY UPDATED WORKFLOW

Updated for SLEEVE MIXED LIN: NORMAL SPOOLS and SUB ASSEMBLY SPOOLS and re-issued as REV4 on 07/16/21

Step 3) Generate second set of drawings using ANC-SPL-DWG style.

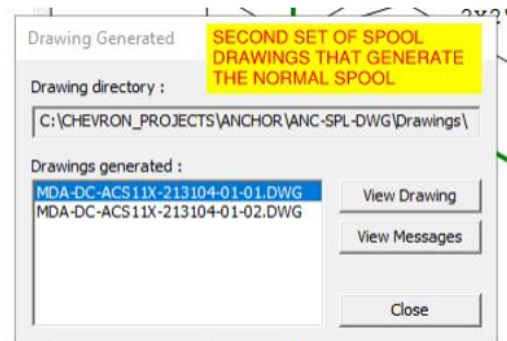
It generates both drawings we need and drawings we do not need. Here are the steps to keep the drawing (normal spool) that you need. At the Drawing Generated prompt – do not open the DWGs – instead click on > Close.

Step 4) Click on the anc_PDM_UPLOADER BAT BUTTON to move the second set of unopened drawings into PDM folder.



IMPORTANT TIP: We opened SPOOL 1 in AutoCAD. When we move the second set into PDM folder – it does not over-write Spool 1 because it is “open” in AutoCAD.

WATCH OUT. If you close the .dwg and click on BAT BUTTON again – because want to move more files– you may accidentally over-write the drawing that you want to keep. Best to leave all DWGs open until the very end – in order to prevent accidental overwriting of the drawing that you want to keep.



Step 4 continued) Browse to the PDM folder. Spool 2 is now available in the PDM folder. Notice the time stamp for both DWGs in Date Modified column Spool 1 was not overwritten and BAT BUTTON moved only Spool 2 has been moved into the folder.

Windows (C:) > PDM_UPLOADER

Name	Type	Date modified
MDA-DC-ACS11X-213104-01-02.DWG	DWG File	07/16/2021 1:12 PM
MDA-DC-ACS11X-213104-01-01.dwl	DWL File	07/16/2021 12:52 PM
MDA-DC-ACS11X-213104-01-01.dwl2	DWL2 File	07/16/2021 12:52 PM
MDA-DC-ACS11X-213104-01-01.DWG	DWG File	07/16/2021 12:39 PM

Here is what Spool 2 looks like. It is a “normal” spool.

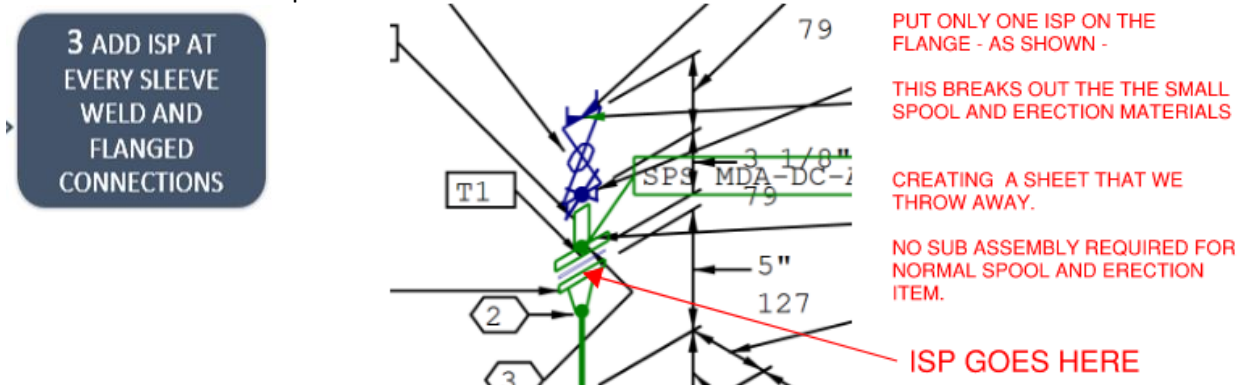
MATERIAL LIST					
PT. NO.	SIZE (IN)	DESCRIPTION / SCHEDULE	QTY*	WT. (lbs)	HEAT NO.
1	3/4	PIPE NIPPLE 3" LONG PBE SCH 160 A-106	1	0.5	
2	2X3/4	GR B SMLS FLANGE BLIND 150# RF DRILLED FOR 3/4"SW A-105N	1	5.0	

*QTY length (FEET-INCHES) includes weld gap.

OR ALL HEAT NUMBERS

SPECIAL INSTRUCTIONS FOR SLEEVE MIXED LINE for the other WORKFLOW steps are minimal.

UPDATED WORKFLOW STEP 3: if you have a “normal” spool place the ISP in a location to isolate both erection and “normal” spool.



HOW TO GENERATE SLEEVE SUB ASSEMBLY UPDATED WORKFLOW

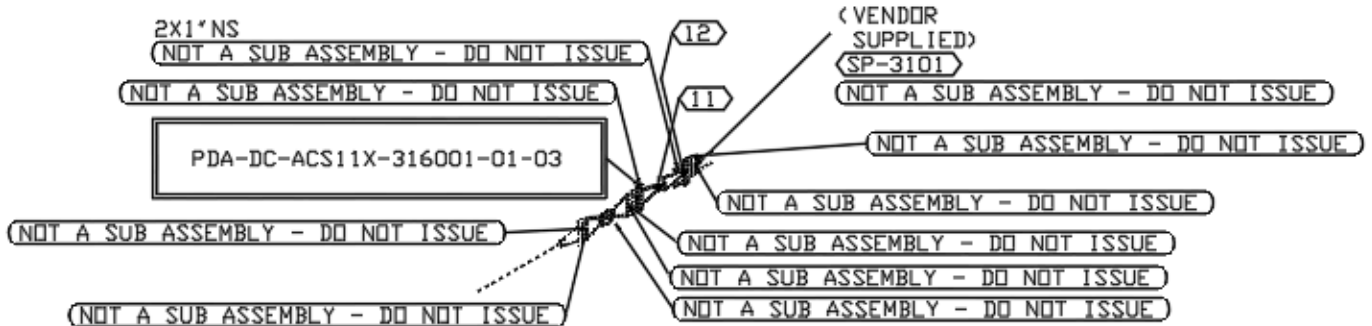
Updated for SLEEVE MIXED LIN: NORMAL SPOOLS and SUB ASSEMBLY SPOOLS and re-issued as REV4 on 07/16/21

UPDATED WORKFLOW STEP 6 > if you have a “normal” spool it is treated like ERECTION material treated.

Important: For both NORMAL SPOOLS and ERECTION ITEMS: **The sheet generates a drawing that we do not UPLOAD into PDM.**



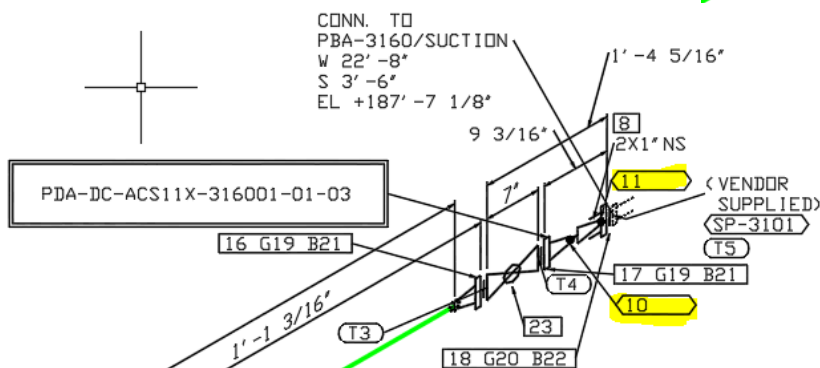
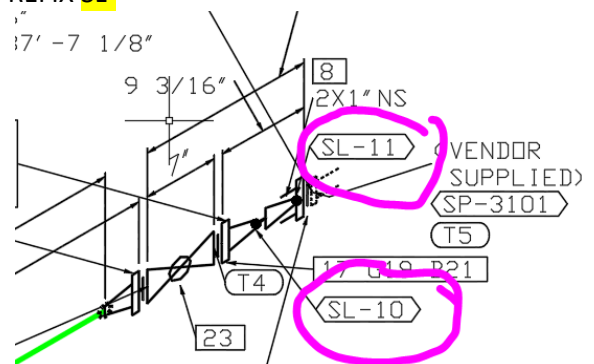
The “trash-drawing” is now indicated with banners in the drawing area. Example shown below.



UPDATED WORKFLOW STEP 9 > if you have a “normal” spool generate the ERECTION drawing:

Manually change the SHOP WELD numbers on the normal spool > in the CAD DRAWING. Example below shows the normal spool. Welds 10 and 11 are “normal” shop welds. However, the ERD-DWG will automatically put the PREFIX **SL-**

The example below shows the manually fixed weld numbers on the normal spool.



HOW TO GENERATE SLEEVE SUB ASSEMBLY UPDATED WORKFLOW

Updated for SLEEVE MIXED LIN: NORMAL SPOOLS and SUB ASSEMBLY SPOOLS and re-issued as REV4 on 07/16/21

SLEEVE MIXED LINE CONTINUED) ERECTION DRAWING example shown below. The parts for the “normal” spool show the KOS CODE and DESCRIPTION of the parts.

PT.NO	SIZE	SLEEVE SUB ASSEMBLY DWG	DESCRIPTION / SCHEDULE	QTY	HEAT NO
MATERIAL LIST - FABRICATION					
1	2	MDA-DC-ACS11X-213104-01-SUB-1	PIPE XS A-106 GR B SMLS	0'4"	WCS
2	2	MDA-DC-ACS11X-213104-01-SUB-2	PIPE XS A-106 GR B SMLS	0'3"	
3	2	MDA-DC-ACS11X-213104-01-SUB-2	PIPE XS A-106 GR B SMLS	0'5"	
4	2X2	MDA-DC-ACS11X-213104-01-SUB-2	TEE BW XS A-234 GR WPBS	1	
5	3/4	CNPSML05VB200000PE0000S	PIPE NIPPLE 3" LONG PBE SCH 160 A-106 GR B SMLS	1	
6	2X3/4	FFBLD00LB0001AD0FRF000	FLANGE BLIND 150# RF DRILLED FOR 3/4"SW A-105N	1	
7	2	MDA-DC-ACS11X-213104-01-SUB-1	FLANGE WN 150# RF XS A-105N	1	
8	2	MDA-DC-ACS11X-213104-01-SUB-2	FLANGE WN 150# RF XS A-105N	1	

There are no changes to the SUB ASSEMBLY REPORTS that are uploaded into SPECIAL PROJECT.

Reports that upload into the NORMAL PROJECT:

JOINT REPORT: See below. Shop welds are shown in the usual way > identifying the parts that weld joins.

M	N	O	P	Q	R	S	T	U
Joint No	Size Inch	Joint Type	Field Shop	Part1 Sap Code	Part1 Description	Part1 Uid	Part2 Sap Code	Part2 Description
FW-3	0.75	SW	F	ACS11X-0.75BCACX1	VALVE, BALL BCACX1	U09	CNPSML05VB200000PE0000S	PIPE NIPPLE 3" LONG PBE SCH 160 A-106 GR B SMLS
T1	2	FL	F	FFBLD00LB0001AD0FRF000	FFBLD00LB0001AD0FRF000	U07	MDA-DC-ACS11X-213104-01-SUB-2	MDA-DC-ACS11X-213104-01-SUB-2
SL-1	2	BW	S	MDA-DC-ACS11X-213104-01-SUB-1	MDA-DC-ACS11X-213104-01-SUB-1	U199	MDA-DC-ACS11X-213104-01-SUB-2	MDA-DC-ACS11X-213104-01-SUB-2
2	0.75	SW	S	CNPSML05VB200000PE0000S	PIPE NIPPLE 3" LONG PBE SCH 160 A-106 GR B SMLS	U08	FFBLD00LB0001AD0FRF000	FLANGE BLIND 150# RF DRILLED FOR 3/4"SW A-105N

DPL REPORT: See below. What's new? Fabrication items on the “normal” spool are shown in the usual way.

F	G	H	Q
Sap Code	Description	Spool No	
ACS11X-2.0DETIROD-2	I-ROD FOR BARE METAL PIPE DETAIL IROD-2 (SEE DOC NO. ANCR-T000-PIP-DTL-WGM-Z0200-00054-00)	213104-DC-ACS11X-MDA-01-ER	1
GGSSWG002G7001A000RF01B	GASKET 150# RF 1/8" THK SPIRAL WOUND TYPE 316L SS W/FLEXIBLE GRAPHITE FILLER AND 316L SS INNER RING, CS CENTERING RING	213104-DC-ACS11X-MDA-01-ER	1
FFBLD00LB0001AD0FRF000	FLANGE BLIND 150# RF DRILLED FOR 3/4"SW A-105N	MDA-DC-ACS11X-213104-01-02	1
CNPSML05VB200000PE0000S	PIPE NIPPLE 3" LONG PBE SCH 160 A-106 GR B SMLS	MDA-DC-ACS11X-213104-01-02	1
ACS11X-0.75BCACX1	VALVE, BALL BCACX1	213104-DC-ACS11X-MDA-01-ER	1
TSBSTB07UE9000000000000-HDG	3.1/4 STUD BOLT ASTM A193 GR B7 W/2 ASTM A194 GR 2H HVY HEX NUTS MODUMETAL NANOGALV COATED PER PIM-SU-5300 TABLE 1A	213104-DC-ACS11X-MDA-01-ER	1
MDA-DC-ACS11X-213104-01-SUB-1	MDA-DC-ACS11X-213104-01-SUB-1	MDA-DC-ACS11X-213104-01-01	1
MDA-DC-ACS11X-213104-01-SUB-2	MDA-DC-ACS11X-213104-01-SUB-2	MDA-DC-ACS11X-213104-01-01	1