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Cut List - User Defined

This list fits in well with the Style 3 BOM and Style 3 Weld Summary and provides lots of flexibility

The User Defined Cut List operates on an X-Y co-ordinate system like the Style 3 BOM and Style 3 Weld Summary

The Cut List is positioned between the BOM and the Weld Summary and is a sideways double banked arrangement to make it compact

12	4	EEL90CFSTD-L	ELBOW, 90 DEG, FRG CS A234 WPB, STD WT, LR, BW	1
13	3	EEL90CFSTD-L	ELBOW, 90 DEG, FRG CS A234 WPB, STD WT, LR, BW	1


PIECE NO.	N.S.	LENGTH	END PREP1	END PREP2	ITEM CODE	PIECE NO.	N.S.	LENGTH	END PREP1	END PREP2	ITEM CODE
A	4'	742	SQ. CUT	BEVEL	PA5BSTD	J	3'	980	BEVEL	BEVEL	PA5BSTD
B	4'	750	BEVEL	BEVEL	PA5BSTD	K	3'	1900	BEVEL	BEVEL	PA5BSTD
C	3'	585	BEVEL	BEVEL	PA5BSTD						
D	3'	900	BEVEL	BEVEL	PA5BSTD						
E	3'	900	BEVEL	BEVEL	PA5BSTD						
F	3'	892	BEVEL	SQ. CUT	PA5BSTD						
G	4'	1750	BEVEL	BEVEL	PA5BSTD						
H	4'	1000	BEVEL	BEVEL	PA5BSTD						
I	4'	750	BEVEL	BEVEL	PA5BSTD						

WELD NUMBER	SIZE INCHES	TYPE	CATEGORY	LOCATION	OPERATION	WELDER NAME	DATE
1	4'	SOF	SHOP	8-1	MANUAL		
2	4'	SOF	SHOP	9-1	MANUAL		
3	4'	BW	SHOP	1-12	MANUAL		

On this style of Cut List the Data Items are listed horizontally in 2 banks using this layout pattern -

A	- - - -	J	- - - -
B	- - - -	K	- - - -
C	- - - -		
D	- - - -	ETC.	
E	- - - -		
F	- - - -		
G	- - - -		
H	- - - -		
I	- - - -		

The basic controls for this are -
TABLE-LAYOUT VERTICAL
VERTICAL-TABLE-DIRECTION DOWN

The controls are in two sections of the Material List Definition File (MLD) which look like this - 

This is the Control Data and Data Items for the Cut List output shown on the previous page

CUT-LIST-CONTROLS

TABLE-LAYOUT	VERTICAL
VERTICAL-TABLE-DIRECTION	DOWN
START-POSITION	259 165
TEXT-HEIGHT	2.0
VERTICAL-SPACING	4.5
HORIZONTAL-SPACING	81
DRAWING-LAYER	25
CUT-LIST-OVERFLOW	YES
MAXIMUM-COLUMNS	2
MAXIMUM-ROWS	9

CUT-LIST-DATA-ITEMS

' CUT-PIECE-NO'	259
' N. S. '	265
' CUT-PIECE-LENGTH'	277
' END-PREPARATION-1'	288
' END-PREPARATION-2'	301
' ITEM-CODE'	314

This is the Cut List from page 1 again - Its main structure is -

- The Data Items are listed horizontally
- It's a Double Banked Vertical Table - going Downwards
- The Start Position of the list on the isometric drawing sheet is X 259 mm / Y 165 mm
- The Horizontal (sideways) spacing between the 2 data column banks is 81 mm
- 18 Cut Pipe entries can be accommodated in total before overflow onto another drawing occurs

CUT-LIST-CONTROLS

TABLE-LAYOUT VERTICAL 

VERTICAL-TABLE-DIRECTION DOWN 

START-POSITION 259 165 

TEXT-HEIGHT 2.0 

VERTICAL-SPACING 4.5 

HORIZONTAL-SPACING 81 

DRAWING-LAYER 25 

CUT-LIST-OVERFLOW YES 

MAXIMUM-COLUMNS 2 

MAXIMUM-ROWS 9 

PIECE NO.	N.S.	LENGTH	END PREP1	END PREP2	ITEM CODE	PIECE NO.	N.S.	LENGTH	END PREP1	END PREP2	ITEM CODE
A	4"	742	SQ. CUT	BEVEL	PA5BSTD	J	3"	980	BEVEL	BEVEL	PA5BSTD
B	4"	750	BEVEL	BEVEL	PA5BSTD	K	3"	1900	BEVEL	BEVEL	PA5BSTD
C	3"	585	BEVEL	BEVEL	PA5BSTD						
D	3"	900	BEVEL	BEVEL	PA5BSTD						
E	3"	900	BEVEL	BEVEL	PA5BSTD						
F	3"	892	BEVEL	SQ. CUT	PA5BSTD						
G	4"	1750	BEVEL	BEVEL	PA5BSTD						
H	4"	1000	BEVEL	BEVEL	PA5BSTD						
I	4"	750	BEVEL	BEVEL	PA5BSTD						

These are the CUT-LIST-CONTROLS



Cut Pipe List

PIECE NO.	N.S.	LENGTH	END PREP1	END PREP2	ITEM CODE	PIECE NO.	N.S.	LENGTH	END PREP1	END PREP2	ITEM CODE
A	4"	742	SQ. CUT	BEVEL	PA5BSTD	J	3"	980	BEVEL	BEVEL	PA5BSTD
B	4"	750	BEVEL	BEVEL	PA5BSTD	K	3"	1900	BEVEL	BEVEL	PA5BSTD
C	3"	585	BEVEL	BEVEL	PA5BSTD						
D	3"	900	BEVEL	BEVEL	PA5BSTD						
E	3"	900	BEVEL	BEVEL	PA5BSTD						
F	3"	892	BEVEL	SQ. CUT	PA5BSTD						
G	4"	1750	BEVEL	BEVEL	PA5BSTD						
H	4"	1000	BEVEL	BEVEL	PA5BSTD						
I	4"	750	BEVEL	BEVEL	PA5BSTD						

CUT-LIST-DATA-ITEMS

' CUT-PIECE-NO' 259 — X259

' N. S. ' 265 — X265

' CUT-PIECE-LENGTH' 277 — X277

' END-PREPARATION-1' 288 — X288

' END-PREPARATION-2' 301 — X301

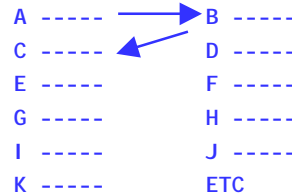
' ITEM-CODE' 314 — X314

← These are the CUT-LIST-DATA-ITEMS

Horizontal 'X'
Positions

Cut Pipe List

This Cut List is a variation to the one on page 1
Here, the layout pattern is like this -



The basic controls for this are -
TABLE-LAYOUT HORIZONTAL
VERTICAL-TABLE-DIRECTION DOWN

PIECE NO.	N.S.	LENGTH	END PREP1	END PREP2	ITEM CODE	PIECE NO.	N.S.	LENGTH	END PREP1	END PREP2	ITEM CODE
A	4"	742	SQ. CUT	BEVEL	PA5BSTD	B	4'	750	BEVEL	BEVEL	PA5BSTD
C	3"	900	BEVEL	BEVEL	PA5BSTD	D	3'	900	BEVEL	BEVEL	PA5BSTD
E	3"	900	BEVEL	BEVEL	PA5BSTD	F	3'	892	BEVEL	SQ. CUT	PA5BSTD
G	4"	750	BEVEL	BEVEL	PA5BSTD	H	4'	750	BEVEL	BEVEL	PA5BSTD
I	4"	750	BEVEL	BEVEL	PA5BSTD	J	3'	900	BEVEL	BEVEL	PA5BSTD
K	3"	900	BEVEL	BEVEL	PA5BSTD						



This Cut List is different to the ones on pages 1 and 5 -

Here, the Data Items are listed vertically rather than horizontally

The main structure of this example Cut List is -

- It's a Horizontal Table - going from Left to Right
- The start position of the list on the isometric drawing sheet is X 272 mm / Y 164 mm
- The Horizontal (sideways) spacing between the adjacent data columns is 14.7 mm
- 10 Cut Pipe entries can be accommodated in total before overflow onto another drawing occurs

CUT-LIST-CONTROLS

TABLE-LAYOUT HORIZONTAL ↔

HORIZONTAL-TABLE-DIRECTION RIGHT →

START-POSITION 272 164

TEXT-HEIGHT 2.0

HORIZONTAL-SPACING 14.7

DRAWING-LAYER 25

CUT-LIST-OVERFLOW YES

MAXIMUM-ENTRIES 10

PIECE NO.	A	B	C	D	E	F	G			
N.S.	4"	4"	4"	4"	4"	4"	4"			
LENGTH	750	750	750	750	750	750	750			
END PREP1	BEVEL	BEVEL	BEVEL	BEVEL	BEVEL	BEVEL	BEVEL			
END PREP2	BEVEL	BEVEL	BEVEL	BEVEL	BEVEL	BEVEL	BEVEL			



These are the CUT-LIST-CONTROLS

CUT-LIST-DATA-ITEMS

' CUT-PIECE-NO' 164 ——— Y164

' N. S. ' 155.3 ——— Y155.3

' CUT-PIECE-LENGTH' 146.6 ——— Y146.6

' END-PREPARATION-1' 139.7 ——— Y139.7

' END-PREPARATION-2' 129.2 ——— Y129.2

PIECE NO.	A	B	C	D	E	F	G			
N.S.	4'	4'	4'	4'	4'	4'	4'			
LENGTH	750	750	750	750	750	750	750			
END PREP1	BEVEL	BEVEL	BEVEL	BEVEL	BEVEL	BEVEL	BEVEL			
END PREP2	BEVEL	BEVEL	BEVEL	BEVEL	BEVEL	BEVEL	BEVEL			

Vertical 'Y' Positions

These are the CUT-LIST-DATA-ITEMS



PERMISSIBLE CUT LIST CONTROL ENTRIES -

Start Position of the Cut List (MANDATORY) - The location input is the bottom left hand point of the first line of the Cut List

START-POSITION X pos Y pos in mm's - e.g. 120 120.5 etc

Text Height (MANDATORY) - Height of the characters on the Cut List

TEXT-HEIGHT value in mm's - e.g. 2 2.3 etc.

Vertical Spacing of Output Lines (OPTIONAL) - Vertical Spacing (Pitch) required between each row of the Cut List when the table is vertically formatted or is two dimensional

VERTICAL-SPACING value in mm's - e.g. 5 5.5 etc.

Vertical Table Direction (OPTIONAL) - Key command to control the vertical direction of a table

VERTICAL-TABLE-DIRECTION DOWN (Default)

VERTICAL-TABLE-DIRECTION UP

Horizontal Spacing of output lines (OPTIONAL) - Horizontal distance required between each column of the Cut List when the table is horizontally formatted or two dimensional

HORIZONTAL-SPACING Value in mm's - e.g. 5 5.5 etc.

Horizontal Table Direction (OPTIONAL) - Key command to control the horizontal direction of a table

HORIZONTAL-TABLE-DIRECTION RIGHT (Default)

HORIZONTAL-TABLE-DIRECTION LEFT

Drawing Layer (OPTIONAL) - Drawing Layer on which the Cut List will be placed

DRAWING-LAYER Value - e.g. 1 20 etc.



PERMISSIBLE CUT LIST CONTROL ENTRIES - continued

Text Thickness (OPTIONAL) - Single value for the identification of the Text Thickness (Weight) to be used for the output of the Cut Pipe List

TEXT-THICKNESS value e.g. 1 2 etc.

Text Font (OPTIONAL) - Identification of the Text Font for the Cut List

TEXT-FONT value - where value is the number of a Font in the Font Information File

Text Width Factor (OPTIONAL) - The percentage Width Factor applied to the Cut List Text characters

TEXT-WIDTH-FACTOR value where value is a %age number e.g. 86

Maximum number of output entries (MANDATORY) -

Two dimensional table -

MAXIMUM-COLUMNS value e.g. 2 etc

MAXIMUM-ROWS value e.g. 12 14 etc - value determine the MAXIMUM number of entries that can be fitted into the allocated space in both the horizontal and vertical directions of the Cut Pipe List

Single dimensional table -

MAXIMUM-ENTRIES value e.g. 8 12 etc - value determines the MAXIMUM number of entries that can be fitted into the allocated space of the Cut List

When setting these values, Text Height, Vertical and Horizontal Spacing must all be taken into account by the User.

Providing **CUT-LIST-OVERFLOW** is set - when the declared Maximum is reached this Cut List will automatically overflow onto as many continuation Sheets (Drawings) as required in order to output the complete Cut List



PERMISSIBLE CUT LIST CONTROL ENTRIES - continued

Table Layout (OPTIONAL) - Key command to control the order in which a Cut List Table is to be organised

TABLE-LAYOUT VERTICAL (Default)

TABLE-LAYOUT HORIZONTAL

Cut List Overflow (OPTIONAL) - Key command to control whether or not the Cut List will produce overflow drawings

CUT-LIST-OVERFLOW YES (Default)

CUT-LIST-OVERFLOW NO



PERMISSIBLE CUT LIST LIST DATA ITEMS

CUT-PIECE-NO

N. S.

CUT-PIECE-LENGTH

REMARK

END-PREPARATION-1

END-PREPARATION-2

ITEM-CODE

PART-NUMBER

SPOOL-ID

PIPING-SPEC

MACHINE (only valid when using pipe bending module)

BENDER (only valid when using pipe bending module)

HAND (only valid when using pipe bending module)



The User Defined Printed Cut List Report

Overview

In addition to plotting a Cut List on the isometric - an optional User Defined Cut List Printed Output File is available

When used, output will be to one of the existing -116 (Overwrite) or -129 (Append) Cut Pipe Summary output files

The file can be generated with or without [Title Headings](#) or [Column Headings](#) which are optional

The maximum file width is 500 characters

A data delimited file can be created instead of the normal formatted file by entering the unique names without column numbers or justification. However, a delimiter character must be specified (e.g. ,)

The generation of a User Defined Cut List Output File is triggered by the **CUT-PIPE-REPORT** command being set in the MLD file

Following the **CUT-PIPE-REPORT** command line - there can be up to three sections, as follows -

Optional { **CUT-PIPE-REPORT-TITLE-HEADINGS**
Title Headings - up to 10 lines long
CUT-PIPE-REPORT-COLUMN-HEADINGS
Column Headings - up to 5 lines long

CUT-PIPE-REPORT-DATA-ITEMS

Data Items



ITEMS AVAILABLE FOR OUTPUTTING IN A TITLE HEADING IN THE USER DEFINED PRINTED CUT LIST REPORT -

' AREA'
' ATTRIBUTE0' to ' ATTRIBUTE199' (PCF Use)
' BATCH'
' DATE-DMY'
' MI SC-SPEC1'
' MI SC-SPEC2'
' MI SC-SPEC3'
' MI SC-SPEC4'
' MI SC-SPEC5'
' NOMI NAL-CLASS'
' NOMI NAL-RATI NG'
' PI PELI NE-REFERENCE'
' PI PELI NE-TEMP'
' PI PI NG-SPEC'
' PROJECT-I DENTI FIER'
' REVI SI ON'
' -600 TO -699'
' -900 TO -999'



DATA ITEMS AVAILABLE FOR OUTPUTTING IN THE USER DEFINED PRINTED CUT LIST REPORT -

' AREA'
' ATTRIBUTE0' to ' ATTRIBUTE199' (PCF Use)
' BATCH'
' BENDER' (only valid when using the Pipe Bending Module)
' CUT-PIECE-LENGTH'
' CUT-PIECE-NO'
' DESCRIPTION'
' DRG'
' END-PREPARATION-1'
' END-PREPARATION-2'
' HAND' (only valid when using the Pipe Bending Module)
' ITEM-CODE'
' MACHINE' (only valid when using the Pipe Bending Module)
' N. S. '
' PART-NUMBER'
' PIPELINE-REFERENCE'
' PIPING-SPEC'
' PROJECT-IDENTIFIER'
' REMARK'
' REVISION'
' SPOOL-ID'
' UNIQUE-COMPONENT-IDENTIFIER'
' WEIGHT'
' DELIMITER-CHARACTER'
' -600' to ' 699'
' -80' to ' -89'
' -900' to ' -999'



Sample Output File

Tile headings

Column headings

Data items

LINE REF. 6-GYU-6400		ISSUE 1				
SPOOL I.D.	PIECE NO.	SIZE	CUT LENGTH	END PREP1	END PREP2	COMP CODE
6-GYU-6400-A	1	6"	2181	BEVEL	BEVEL	PAW40
6-GYU-6400-A	2	6"	1819	BEVEL	BEVEL	PAW40
6-GYU-6400-B	3	6"	1627	BEVEL	BEVEL	PAW40
6-GYU-6400-C	4	1"	73	BEVEL	SQ. CUT	PAW80
6-GYU-6400-C	5	1"	186	SQ. CUT	SQ. CUT	PAW80
6-GYU-6400-C	6	6"	2342	BEVEL	BEVEL	PAW40
6-GYU-6400-C	7	4"	334	BEVEL	SQ. CUT	PAW40
6-GYU-6400-D	8	4"	261	SQ. CUT	SQ. CUT	PAW40
6-GYU-6400-B	9	6"	1627	BEVEL	BEVEL	PAW40
6-GYU-6400-E	10	1"	73	BEVEL	SQ. CUT	PAW80
6-GYU-6400-E	11	1"	186	SQ. CUT	SQ. CUT	PAW80
6-GYU-6400-E	12	6"	2342	BEVEL	BEVEL	PAW40
6-GYU-6400-E	13	4"	334	BEVEL	SQ. CUT	PAW40
6-GYU-6400-F	14	4"	261	SQ. CUT	SQ. CUT	PAW40

MLD Input Data for
the above output
sample

CUT-PIPE-REPORT						
CUT-PIPE-REPORT-TITLE-HEADINGS						
LINE REF.	' PIPELINE-REFERENCE'	ISSUE ' REVISION'				
' BLANK'						
CUT-PIPE-REPORT-COLUMN-HEADINGS						
SPOOL I.D.	PIECE NO.	SIZE	CUT LENGTH	END PREP1	END PREP2	COMP CODE
-----	-----	---	-----	-----	-----	-----
CUT-PIPE-REPORT-DATA-ITEMS						
' SPOOL-ID'	1 L					
' CUT-PIECE-NO'	23 N					
' N. S. '	36 N					
' CUT-PIECE-LENGTH'	45 N					
' END-PREPARATION-1'	59 L					
' END-PREPARATION-2'	73 L					
' ITEM-CODE'	87 L					

Column

Justification



Cut Piece Identifiers

The standard Cut Piece Identifier enclosures < > that are automatically output on the isometric picture like this -



Can optionally be output on the Printed Cut Pipe List as shown below

LINE REF. 6-GYU-6400		ISSUE 1				
SPPOOL I.D.	PIECE NO.	SIZE	CUT LENGTH	END PREP1	END PREP2	COMP CODE
6-GYU-6400-A	<1>	6"	2181	BEVEL	BEVEL	PAW40
6-GYU-6400-A	<2>	6"	1819	BEVEL	BEVEL	PAW40
6-GYU-6400-B	<3>	6"	1627	BEVEL	BEVEL	PAW40
6-GYU-6400-C	<4>	1"	73	BEVEL	SQ. CUT	PAW80
6-GYU-6400-C	<5>	1"	186	SQ. CUT	SQ. CUT	PAW80
6-GYU-6400-C	<6>	6"	2342	BEVEL	BEVEL	PAW40
6-GYU-6400-C	<7>	4"	334	BEVEL	SQ. CUT	PAW40
6-GYU-6400-D	<8>	4"	261	SQ. CUT	SQ. CUT	PAW40
6-GYU-6400-B	<9>	6"	1627	BEVEL	BEVEL	PAW40
6-GYU-6400-E	<10>	1"	73	BEVEL	SQ. CUT	PAW80
6-GYU-6400-E	<11>	1"	186	SQ. CUT	SQ. CUT	PAW80
6-GYU-6400-E	<12>	6"	2342	BEVEL	BEVEL	PAW40
6-GYU-6400-E	<13>	4"	334	BEVEL	SQ. CUT	PAW40
6-GYU-6400-F	<14>	4"	261	SQ. CUT	SQ. CUT	PAW40



Cut Piece Identifier enclosures

To do this - make this entry in the **CUT-LIST-CONTROLS** section of the MLD file -

CUT-LIST-CONTROLS

CUT-PIECE-ENCLOSURE YES