

PD2CII™ - Plant Design-to-CAESAR II Translator (For Aveva's TRIBON)

1.0 Installing Program

To install PD2CII on Windows NT, load the product CD supplied by InfoPlant and execute the followings steps:

- 1.1 Browse the CD, and run the program "SETUP.EXE" and follow the instructions as they appear on the screen.

2.0 Limitations

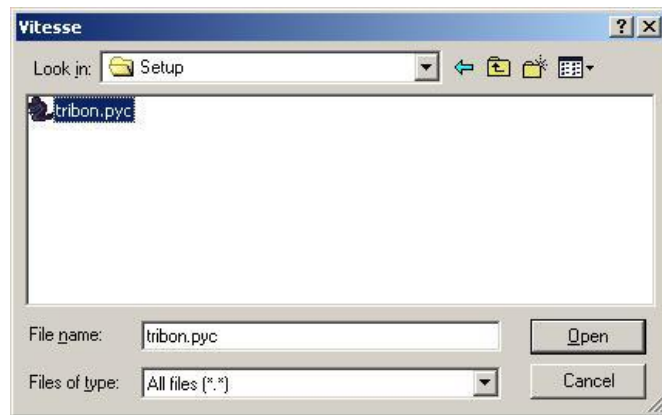
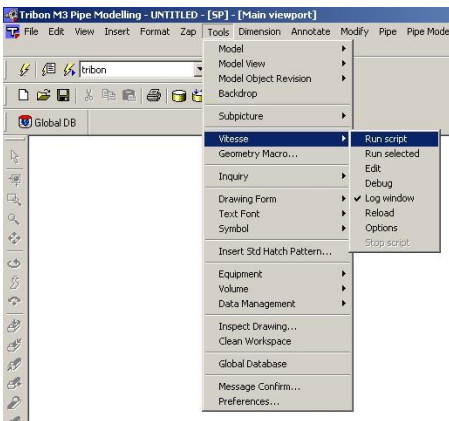
- 2.1 By default, the analysis code is set to "B31.3". Refer the CAESAR II User's Manual for different types of Analysis Code.
- 2.2 Pressure and Temperature will be transferred to CAESAR II, if it is defined in the Specification DB of TRIBON and the piping components are placed into the TRIBON outfitting using the Specification DB. On the other hand, if you use the component DB of TRIBON directly to place the piping component into the TRIBON outfitting, the program will write the value of Temperature and Pressure as 0 in the neutral file. By default, the program will write the value of Pressure in "bar" and the value of Temperature in "Deg C".
- 2.3 Support modeled in TRIBON is not transferred to CAESAR II at this time.
- 2.4 The materials available in TRIBON Component DB are mapped with the CAESAR II Materials and are listed below for your reference. (for e.g. if you use, "Steel Ordinary" as material in TRIBON Component DB, then the program will transfer the material as A53 Grade A to CAESAR II.)

TRIBON Material	CAESAR II Material
Steel Ordinary	A53 Grade A
Steel Heat Proof	A53 Grade A
Steel Stainless	A312 TP304 (18cr-8Ni)
Copper, Brass	Red Brass B43 (C23000) Annealed
Aluminum Brass	Aluminum B241 A96061 T6
Copper Nickel	Monel B165 Annealed (Ni-Cu)
Aluminum Alloy	Aluminum B241 A96061 T6
Plastic	A53 Grade A
Other Materials	A53 Grade A

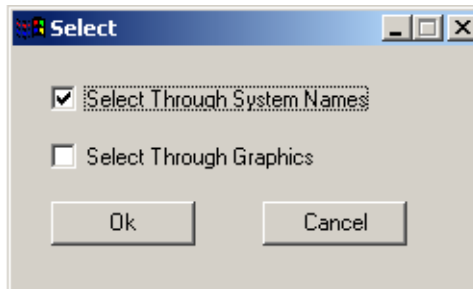
3.0 Neutral File Extraction

3.1 Load the TRIBON Outfitting Pipe Module and from the “Tools” menu select “Vitesse->Run script” as shown in figure left below.

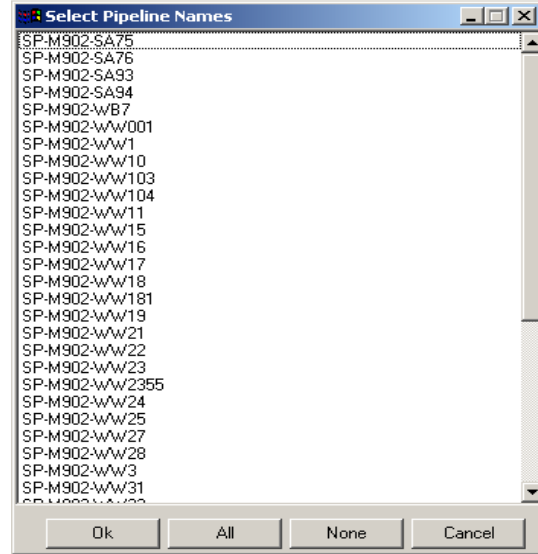
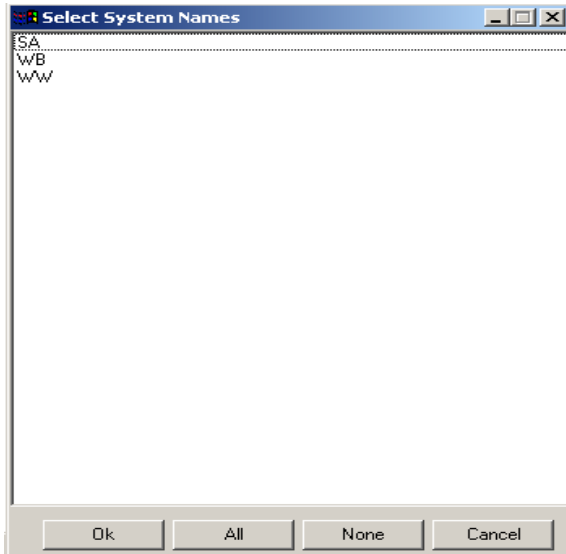
3.2 Locate and select the file “TRIBON.pyc” by navigating to the folder “setup” which is available in Plant Design-to-CAESAR II translator (for Aveva’s TRIBON) installed directory as shown in figure right below.



3.3 Choose the method to be followed for selection of pipelines from the dialog box as shown in Figure below.

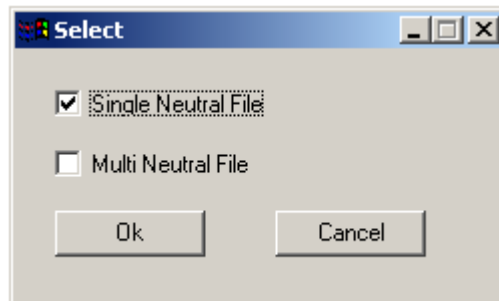


- a. The option “Select Through Graphics” lets the user to select the objects from the graphics and display the names of the pipeline thus selected in the dialog box as shown in below.
- b. “Select Through System Names” option lets the user to select pipeline names to be transferred to CAESAR II by displaying the System Names available in the TRIBON Pipe Outfitting Module.

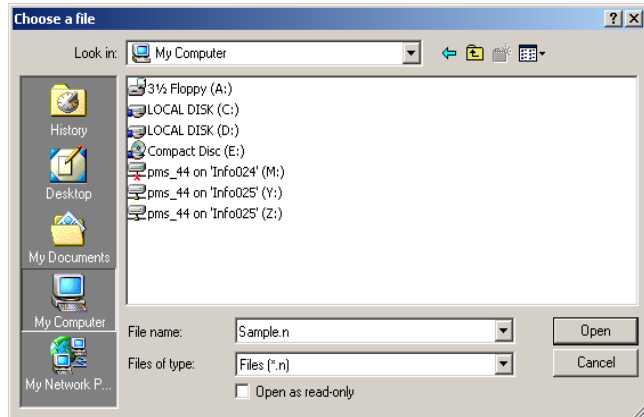
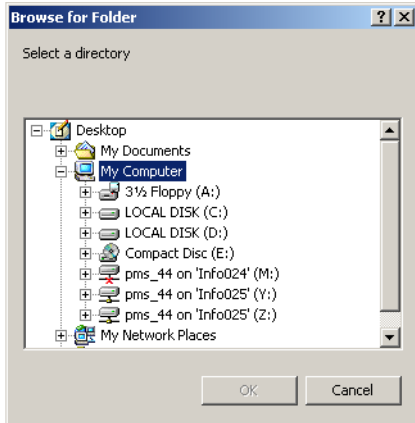


3.4 From the pipeline list, select the name(s) of the pipeline to be transferred and press the button “Ok”.

3.5 Then specify file creation method from the options as shown in figure left below.



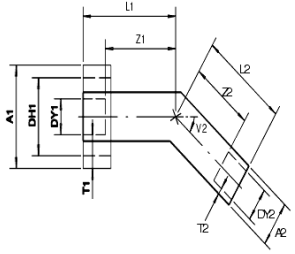
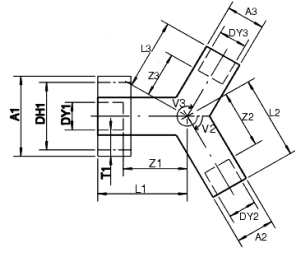
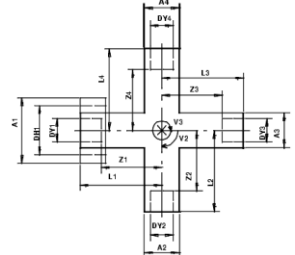
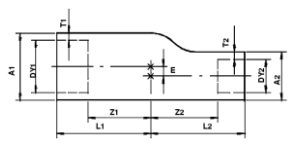
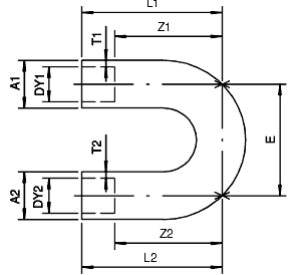
- a. Selecting the option “Multiple Neutral File” pops up a directory browser as shown in figure left below and through which the user can define the file storage location. The translator then creates a set of files in the specified directory with the name(s) of the file(s) identical to the name of the pipeline(s).
- b. Secondly, selecting the option “Single Neutral File” pops up a file browser as shown in figure right below and through which the user can define the name of the file. This creates a single neutral file for all the selected pipeline(s) from the list. At this time, the numbers of branches are limited to 49, if they are interconnected to each other and 24, if they are not interconnected to each other. Now, Type in the name of the neutral file with or without extension (.n) and press the button “Open”.

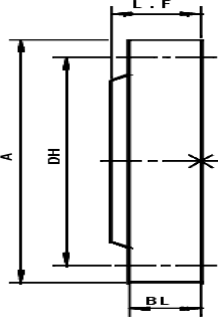
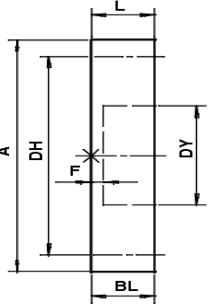
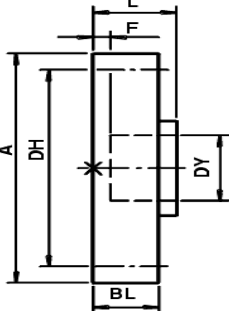
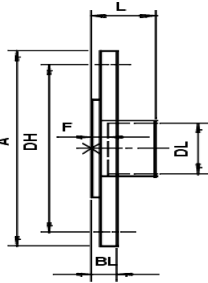


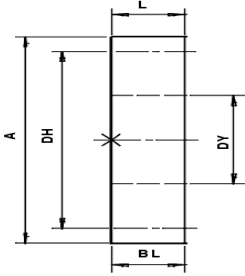
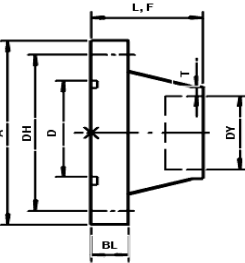
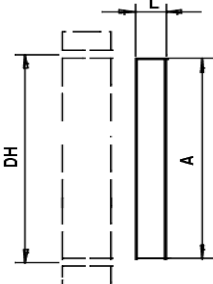
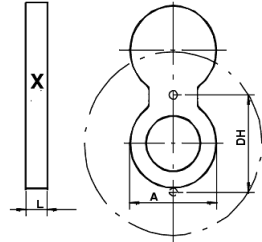
4.0 Plant Design to CAESAR II Component Mapping

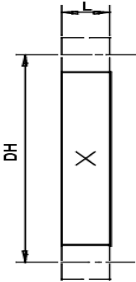
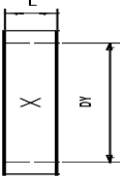
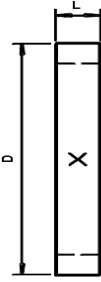
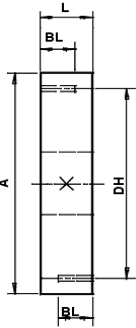
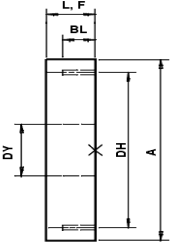
The types of component available in TRIBON Pipe Outfitting Module are mapped with CAESAR II components and are listed below for reference. If the TRIBON components meets the “Component Type Code” as listed in the table below, the program transfers them into CAESAR II as mentioned in the column “CAESAR II Component” below.

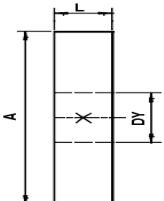
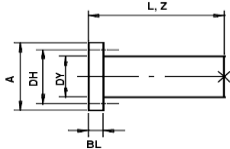
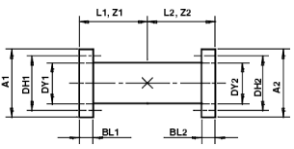
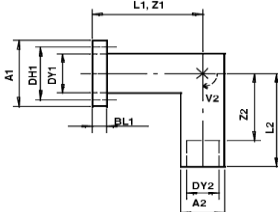
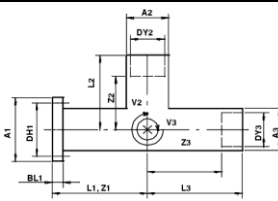
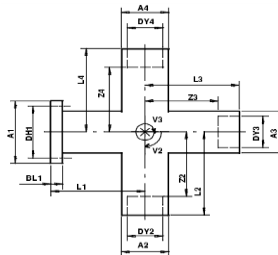
Plant Design Software Component Description	Component Type Code	Shape	CAESAR II Component	Key Word in Neutral File
Coupling Group:				
Cap	1101		Rigid Element	RB
Plug	1102			
Straight Coupling	1201		Rigid Element	RB
Straight Joint Coupling	1202		Rigid Element	RB
Sleeve Straight Coupling	1203		Rigid Element	RB
Nipple Straight Coupling	1204		Rigid Element	RB
Straight Connector Pipe	1205		Rigid Element	RB
Straight Reducer	1206		Conc. Reducer	RD

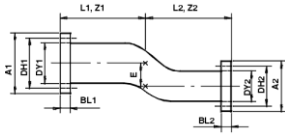
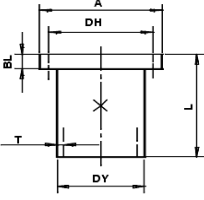
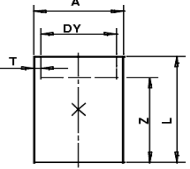
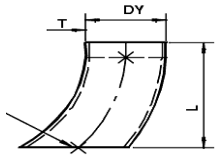
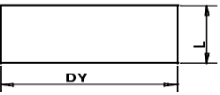
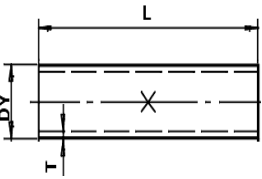
Angle Coupling Angle Joint Coupling Nipple Angle Elbow Angle	1221 1222 1224 1225 1226		Bend	EL
Tee Coupling Tee Joint Coupling Tee Nipple Y – Piece, Tee	1301 1302 1304 1305		Three Pipes with SIF & TEE	TW
Cross Coupling Cross Nipple Cross Pipe	1401 1404 1405		Four Pipes with SIF & TEE	CR
Eccentric Reducer	1501		Reducer Eccentric	ER
Return Elbow	1522		Bend	EL
Flange Group:				

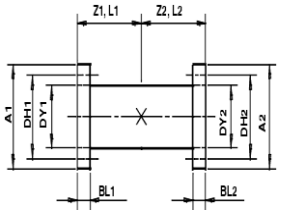
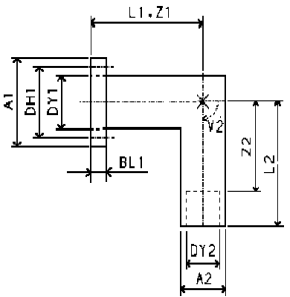
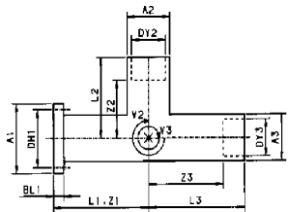
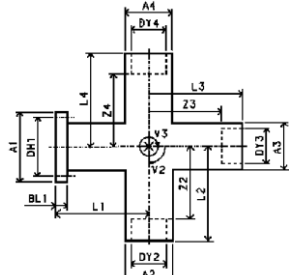
Blank Flange	2101		Rigid Element	FL
Slip on Flange Circular Slip on Flange Square	2201 2202		Rigid Element	FL
Thread Flange and Flange with Bevel	2203		Rigid Element	FL
Weld Neck Flange	2204		Rigid Element	FL
Flange With Hubs	2205		Rigid Element	FL

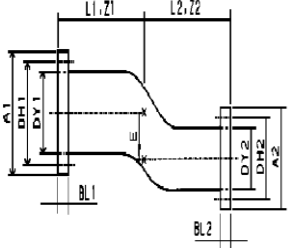
Backing Ring	2206		Rigid Element	FL
Weld Neck Flange With Gasket Groove Weld Neck Flange Without Gasket Groove	2301 2302		Rigid Element	FL
Orifice Plate	2401		Rigid Element	FL
Spectacle Flange	2402		Rigid Element	FL

Gasket dh	2403		Rigid Element	FL
Gasket ID	2404		Rigid Element	FL
Gasket D	2405		Rigid Element	FL
Penetration Flange	2501		Rigid Element	FL
Set-on Flange Circular Set-on Flange Square	2502 2503		Rigid Element	FL

Set-on Flange and other Set-on Components	2601		Rigid Element	FL
Cock	3101		Rigid Element	RB
Straight Valve	3201		Rigid Element	VA
Angled Valve	3221		Rigid Element	VA
3 Way Valve	3301		Three Rigid Elements	3W
4 Way Valve	3401		Four Rigid Elements	4W

Eccentric Valve	3501		Rigid Element	VA
Connection Pieces Group:				
Connection Piece With Flanges	4101		Pipe	PI
Connection Piece Without Flanges	4102		Pipe	PI
Welded Elbow	4201		Bend	EL
Stop Lug	4301		Pipe	PI
Pipe Group:				
Straight Pipes Bend Pipes	7101 7102 7103 7104 7105 7106 7108 7109 7110	Part Type = "Straight pipe" Part Type = "Bend pipe"		Pipe Bend PI EL
Miscellaneous Group:				

Straight Expansion Element Straight Heating Coil Straight Strainer, Mud Box Straight Pump Straight Indicator	8201 8202 8203 8204 8205		Rigid Element	RB
Angled Expansion Element Angled Heating Coil Angled Strainer, Mud Box Angled Pump Angled Indicator	8221 8222 8223 8224 8225		Rigid Element	RB
3 Way Expansion Element 3 Way Heating Coil 3 Way Strainer, Mud Box 3 Way Pump 3 Way Indicator	8301 8302 8303 8304 8305		Three Rigid Elements	3W
4 – Way Expansion Element 4 – Way Heating Coil 4 – Way Strainer, Mud Box 4 – Way Pump 4 – Way Indicator	8401 8402 8403 8404 8405		Four Rigid Elements	4W

<p>2 – Way Eccentric Expansion Element</p> <p>2 – Way Eccentric Heating Coil</p> <p>2 – Way Eccentric Strainer, Mud Box</p> <p>2 – Way Eccentric Pump</p> <p>2 – Way Eccentric Indicator</p>	<p>8501</p> <p>8502</p> <p>8503</p> <p>8504</p> <p>8505</p>		<p>Rigid Element</p>	<p>RB</p>
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