

PD2CAEPIPE™ - Plant Design-to-CAEPIPE Translator [for Intergraph's PDS]

Procedure for extracting neutral files from PDS software

This interface is compatible with PDS versions released after May 1998 and upto PDS Version 8.xx.

1. The present version of the PD2CAEPIPE translator is supplied with the PDSTRESS.TBL and DEFAULTS.DAT.
2. Replace the files PDSTRESS.TBL and DEFAULTS.DAT currently available in the directory PDS_Installed_Dir\win32app\INGR\pdstress\dat\ with the files PDSTRESS.TBL and DEFAULTS.DAT supplied with this version.
3. Replace the PDS to STRESS Map path available in EXTERNAL FILES block of DEFAULTS.DAT as shown below with your current path of PDSTRESS.TBL (path in which PDSTRESS.TBL is available) by opening the file DEFAULTS.DAT.

EXTERNAL FILES

!Note: maximum 5 files, 40 characters maximum for each file

! 1234567890123456789012345678901234567890

e:\win32app\ingr\pdstress\dat\pdstress.tbl !PDS TO STRESS MAP (path is user defined)

ENDOF EXTERNAL FILES

4. *Refer to PDS Stress Interface User's Guide for more details on how to modify the option files PDSTRESS.TBL and DEFAULTS.DAT for adding new components.*
5. For User-defined components, the PDS Administrator has to ensure that the corresponding details are added in PDSTRESS.TBL and DEFAULTS.DAT. For new component categories, the PDS Administrator has to send the details of such component categories to InfoPlant, so that InfoPlant could incorporate such details in the next release of the Translator.
6. If the support detail is not specified at support location then it will be transferred as "Hanger" to CAEPIPE.
7. Load the PDS software and click on "Stress Interface" and type in the name of the pipeline and name of the Neutral File in the form and click "Apply". This will create a Neutral File at the specified location.
8. Thermal Anchor Movement (TAM) values extracted and written to stress neutral file through "LNOD" or "MLNOD" with type value as "MV" in global X, Y and Z directions can be transferred to CAEPIPE. TAM values should be defined in "mm" for PDS projects in SI units and in "Inch" for PDS project in English units.

9. Equipment Nozzle Allowable Loads (forces and moments) provided by the equipment manufacturer or calculated using Applicable codes / Finite Element Methods should be entered in PDS at Equipment. They are then to be extracted and written through "LNOD" and "MLNOD" with type as "AL" in global X, Y and Z directions the format FX, FY, FZ, MX, MY and MZ. These values should be separated using ",". Please note, the force values should be entered in "lb" for English units and in "N" for SI units. Similarly, the moment values should be entered in "ft-lb" for English units and in "Nm" for SI units.
10. Run the Translator PDS2CAEPIPE to create CAEPIPE (*.mbf) file. This .mbf file can be read by CAEPIPE through "File->Import..." option.