

DUAL-P for Intergraph® PDS®



PIPING ANALYSIS FOR DESIGN AND MAINTENANCE

DUAL-P promotes piping analysis for design and maintenance in both plants and ships. EPC piping engineers can take advantage of this innovative pre- and post-management graphical tool for piping data exchange, verification, and adjustment. Automate and enhance data exchange, saving valuable engineering time. DUAL-P provides a standalone 3D viewer to see the line and enables you to add connection data before writing the input deck. DUAL-P improves data quality for the pipe analysis workflow.

This program uses a neutral XML notation; user-defined, rules-based catalogs; and “plug-in” architecture. Easily customize the software and better communicate with plant design databases. DUAL-P is particularly well adapted for the design of new plants.

DUAL-P provides graphical user interface (GUI) and catalog features to effectively set up piping analysis projects for engineering companies. Visualization and rules-based editing capabilities enable a variety of benefits.

MODULES

The solution works in conjunction with your existing software investments:

- PDS is a CAD/CAE solution for plant design, construction, and operations offered by Intergraph Corporation.
- PIPESTRESS is a piping analysis solution offered by DST Computer Services S.A.
- CAESAR II is a piping analysis solution offered by COADE, Inc.

Choose the DUAL-P solution that meets your needs:

- DUAL-P for PDS and PIPESTRESS interfaces PDS to PIPESTRESS. The module includes PIPESTRESS and PDS dictionaries. It also loads the PIPESTRESS input and results files.
- DUAL-P for PDS and CAESAR II interfaces PDS to CAESAR. The module includes CAESAR and PDS dictionaries. It also loads the CAESAR neutral file.

PRE- AND POST-PROCESSING TOOLS

DUAL-P offers a wide range of tools accessible from a standalone GUI. Pre-processor tools are organized to work with the main data preparation process used by piping analysis

ENJOY THE BENEFITS

- Reduce costs
- Save time by automating data exchange
- Improve user understanding of exchanged data
- Improve the loop back procedure
- Boost industrial process productivity through improved workflows
- Perform more efficient data exchange
- Standardize the engineering process
- Meet your company's engineering process quality assurance standards
- Reduce data errors
- Increase data quality
- Automate CAD data capture from PDS/MDP with available information
- Automate the PIPESTRESS input file generation or CAESAR neutral file generation with available information
- Manage data transactions between PDS/MDP and PIPESTRESS or CAESAR
- Maintain data transfer integrity
- Manage and integrate libraries regrouping numerical data such as material, section, supports, and fittings for mechanical purpose
- Standardize the GUI
- Compare and check project revisions

engineers. Post-processor tools can load results for visualization and report printing. DUAL-P graphically relates the link between geometry, load definitions, and results calculated by your analysis software.

PIPING GEOMETRY

- Import piping model from PDS
- Import piping model from PIPESTRESS input file (FRE)
- Generate PIPESTRESS input file (FRE) or CAESAR neutral file
- Import, export, and merge piping models
- Edit, remove, or reorder PIPESTRESS or CAESAR piping members
- Reattach piping elements and renumber piping member identifications
- Customize piping element definitions from type catalogs
- Define rules to map piping element to PIPESTRESS or CAESAR members

PIPING PROPERTIES

A variety of piping properties can be stored in catalog properties to be selected by users, including:

- Materials
- Cross sections
- Mass, linear mass, fitting mass, etc.
- Insulations
- Indices

CALCULATION CONDITIONS

Comprehensive wizard functionality helps you set up one or several calculation conditions based on ASME, RCCM, KTA, or CODETI standard codes. You can then link to a piping isometric model. Predefined load cases and combination cases can be stored in a calculation template to retrieve the same case number for each kind of load case, defining or selecting:

- Segmentation for thermal and pressure loads
- Partition for loads applied on supports and nodes
- Static and dynamic loads
- Stats, load cases, and combination cases
- Fluid, support, or valve properties according to calculation conditions

PIPESTRESS AND CAESAR

PIPESTRESS or CAESAR can be called up locally on a workstation or remotely from a dedicated QA server. When using a server, DUAL-P sends the input file to the QA server and then retrieves the piping analysis result files.

RESULTS CHECK

- Visualize results graphically
- Create result tables
- Export results as mini-reports

ABOUT ADEXFLOW INTERNATIONAL

Adexflow International specializes in data exchanges within industrial projects. The company implements standardized, logical solutions, based on technical innovation and its proven technology: BD-Bridge.

Adexflow International enables industrial clients to optimize their data exchanges, even if they are different formats, without having to modify the existing environment.

For more information, visit www.adexflow.com.

