PSVPlus +

Relieving the pressure of PSV design

- designed to help users size pressure safety valves (PSVs) and associated inlet and outlet lines.
- designed in full accordance with the API RP 520, 521 and 526 standards for gas, liquid, steam and two-phase scenarios.
- designed for use by engineers involved in chemical/petrochemical plants, gas plants, refineries and similar industrial applications.
- proven application that can generate savings of up to 60% of man-hours spent on PSV calculations and process specification activities.
- provides for standard calculation codes and data consistency in reporting.
- concurrent multi user operation allows easy handling of large projects

Features

➕ **PSV Calculations to API standards**

➕ **Inlet and outlet line sizing**

➕ **Calculation of emergency relief rates**

➕ **Preparation of all data sheets**

➕ **Integrated Fluid properties**

➕ **Integration with** – **AspenHysys**
  – **AspenFlarenet**
  – **SmartPlant- Intools**

➕ **Comprehensive Online help system**

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Features

Calculations

PSVPlus calculations are carried out in full accordance with the API RP 520, 521 and 526 standards for gas, liquid, steam and two-phase scenarios. The program also assists the engineer to select and calculate the correct relief valve parameters and type.

Preparation of documents

The calculation modules of the software can be linked to an integrated database to help users prepare key documents such as:

* Process specification sheets – normally used as the basic information when purchasing PSVs

* Summary calculation sheet for PSV sizing – normally required by authorities and certifying agencies

* Relief load summary table – required for sizing and designing flare headers.

All these reports are generated automatically, and can also be exported to an Excel spreadsheet.

Fluid properties

PSVPlus can use the internal FluidProp software to model the properties of fluids under relieving conditions, using more than 150 components and five different thermodynamic models. Alternatively users can use a direct interface with AspenHysys or Aspen Flarenet to import the fluid properties .

Determining emergency relief rates

Calculation of the rate of discharge from a PSV in emergency situations can be a time-consuming task requiring significant experience and intensive manual calculations.

PSVPlus provides routines that quickly guide the user towards the correct discharge rate by advising on a range of typical engineering parameters and procedures to consider.

Defining Calculation parameters

Specifying required PSV back-pressure settings, line sizing velocity and pressure-loss design criteria give users full control over the sizing for PSVs and associated inlet/outlet pipes.

Integration with Access

Using Microsoft Access open database environment allows users to customise reports, add company logos and make modifications to the datasheet layouts.

Integration with AspenHysys and AspenFlarenet

Fluid data can be imported directly from Hysys.PSV and backpressure data can be transferred between PSVPlus and Flarenet in either direction. The combination of these data transfers results in total consistancy throughout the life of the project.

Integration with SmartPlant Intools™

Using the open database environment allows users to directly transfer data to Intools for further use in the project design.

Inlet and outlet line sizing

Users can size inlet and outlet lines from PSVs based on specified back pressures and pressure-drop and velocity criteria.

User defined calculation parameters

PSV back-pressure settings, line sizing velocity and pressure-loss design criteria give users full control over the sizing for PSVs and associated inlet/outlet pipes.

Online guide

PSVPlus has integrated online help and a comprehensive quick-start section to guide the user through the program's main functions. Using this tutorial, experienced engineers should be able to use the software effectively in just one hour.

The user documentation also contains background and full technical reference information.

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For further information on how to order PSVPlus, got to www.softbits.com or phone us on +44 (0)1420 561511.

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