Intellisys™ Advanced Separator Simulator (Gas & Liquid)

Intellisys™ simulator provides engineers and operators with a means to correctly design or evaluate process separation equipment. The advanced algorithms and evaluation criteria utilized within the software allows plants to accurately calculate, compute and determine expected performance of their systems and then improve those systems with the results and interpretation provided. Intellisys™ not only simulates models and tracks separation system performance. It also provides additional key parameters of the system and reveals areas of deficiency in both vessel design and operating efficiency. This output gives users the knowledge and information as well as the data and justification needed to optimize and improve upon their equipment and operations. It also calculates a series of limitation parameters for systems design and equipment costing. The Intellisys™ simulator includes:

### Operating Conditions
- Operating Pressure
- Operating Temperature
- Compressibility Factor
- Specific Gravity
- Viscosity @ Standard Conditions
- Density @ Standard Conditions

### Element Details
- Element Type
- Element Outer Diameter
- Element Length
- More Details

### Number of Elements
- Actual No. of Elements
- Estimated No. of Elements

### Vessel Design
- Vessel Outer Diameter
- Inlet / Outlet Nozzle Diameter
- Maximum Allowance Working Pressure
- Maximum Allowance Corrosion Allowance
- Design Temperature
- Minimum Temperature

### Critical Values
- Annual Velocities
- Effective Media Face Velocities
- Nozzle Velocities
- Effective Downstream Velocities

### 2- and 3-Phase Separators & Demisters
- Liquids Settling Efficiency / Vessel Sizing
- Mesh Pad / Vane Pack Evaluations
- Erosional Flow Tendency Simulations

### Gas and Liquid Coalescers
- Vessel Design and Sizing Simulations
- Flux Calculations, Clean Pressure Drop
- Extensive Filter Specification Databases
- Vessel Design and Sizing Simulations

### Activated Carbon Adsorption Beds
- Vessel Sizing and Utilization Evaluations
- Equipment / Adsorbent Specifications
- Efficiency and Lifetime Computing

### Gas and Liquid Particle Filters
- Element Lifetime Computing
- Flux Calculations, Clean Pressure Drop
- Extensive Filter Specification Databases
- Vessel Design and Sizing Simulations

### Specialized Evaluation Features
- Personalized User Inputs and Interfaces
- Data Manipulation and Tracking Capabilities
- Pressure Drop Calculations at Specific Locations
- Several Vessel and Internal Designs
- Tailor-made for Specific Requirements
- Customized & Adjustable Optimization Criteria
- Individual or Company-wide User Licenses
- Reporting using electronic PDF format

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