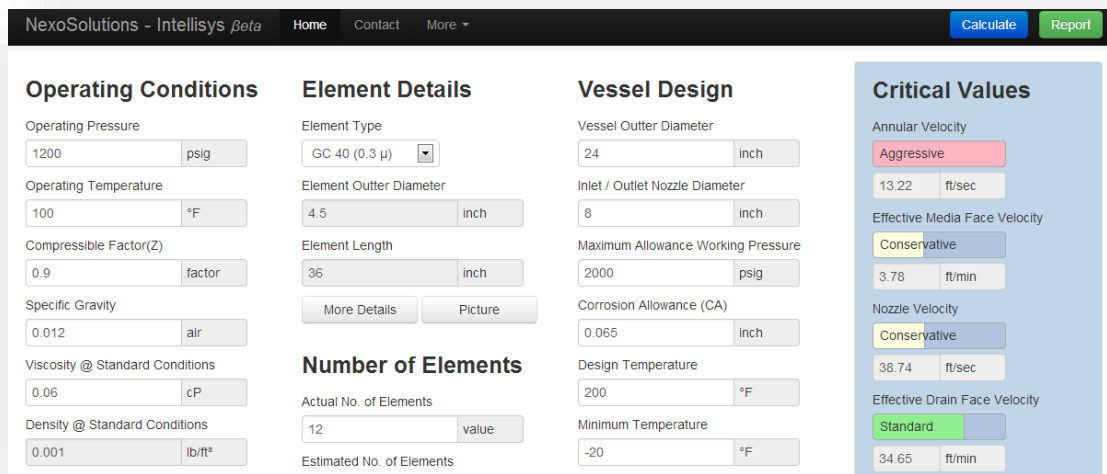


Intellisys™ Advanced Separator Vessel Simulator (Gas & Liquid)

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:



The screenshot shows the Intellisys simulator interface with the following sections:

- Operating Conditions:** Operating Pressure (1200 psig), Operating Temperature (100 °F), Compressible Factor(Z) (0.9 factor), Specific Gravity (0.012 air), Viscosity @ Standard Conditions (0.06 cP), Density @ Standard Conditions (0.001 lb/ft³).
- Element Details:** Element Type (GC 40 (0.3 μ)), Element Outer Diameter (4.5 inch), Element Length (36 inch). Includes 'More Details' and 'Picture' buttons.
- Number of Elements:** Actual No. of Elements (12 value), Estimated No. of Elements.
- Vessel Design:** Vessel Outer Diameter (24 inch), Inlet / Outlet Nozzle Diameter (8 inch), Maximum Allowance Working Pressure (2000 psig), Corrosion Allowance (CA) (0.065 inch), Design Temperature (200 °F), Minimum Temperature (-20 °F).
- Critical Values:** Annular Velocity (Aggressive: 13.22 ft/sec), Effective Media Face Velocity (Conservative: 3.78 ft/min), Nozzle Velocity (Conservative: 38.74 ft/sec), Effective Drain Face Velocity (Standard: 34.65 ft/min).

Technical Information

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
Critical Design Parameter Computing
Design and Operational Optimizations

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

For additional information, please contact us via email at Support@NexoSolutions.com