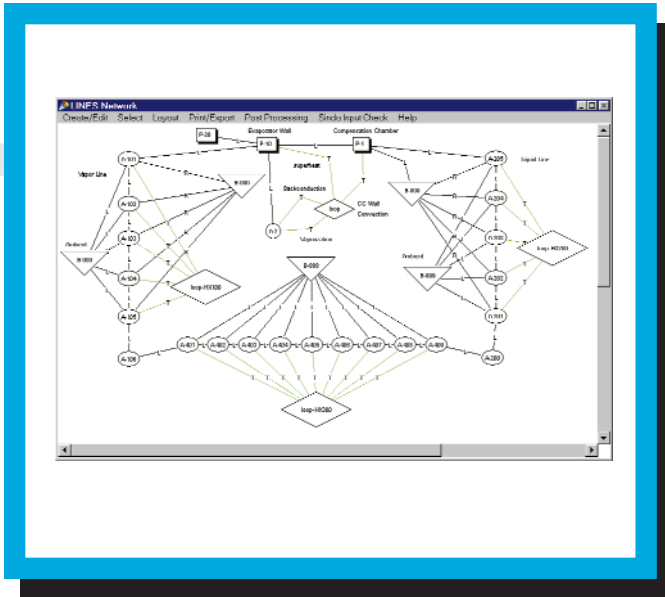
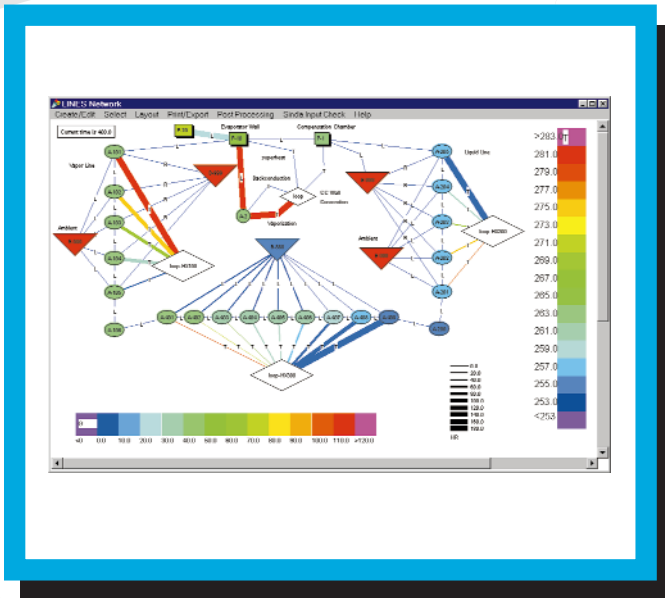




C&R TECHNOLOGIES



Sketch networks on the screen...



...then post-process directly on your diagram

SinapsPlus® is a graphical user interface for developing SINDA/FLUINT models and for viewing and reporting the results. SinapsPlus® makes model preparation and results interpretation easier and faster, shortening training time and reducing modeling errors.

SinapsPlus® allows you to work with your SINDA/FLUINT model visually, reducing the learning curve and speeding the model building process. Because it is a complete pre and post-processor, it facilitates the reporting of results and the sharing of models between engineers. SINDA/FLUINT networks are sketched on the screen using pop-up menus and fill-in forms to quickly build and maintain complex models. Models can be validated, SINDA/FLUINT runs can be launched, and results can be displayed directly on your sketch via coloring and other postprocessing operations, all without leaving the SinapsPlus® environment.

FEATURES

- Read in existing SINDA/FLUINT input files.
- Verify inputs, validate models, and launch a SINDA/FLUINT run.
- Use algebraic inputs and expressions to facilitate parametric analyses.
- Use advanced tools to organize and maintain large, complicated diagrams including:
 - multiple copies of any node or lump ("clones")
 - super-imposable drawing layers
 - temporarily collapsed subnetworks ("collections").

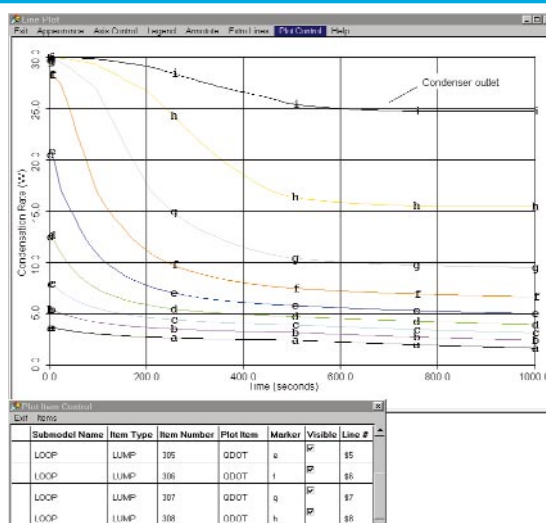
SinapsPlus®



- Color/shade nodes and lumps and thicken connections (conductors, ties, etc.) to visualize flow rates, temperatures, pressures, heat flows, pressure drops, vapor/gas qualities, etc.
- Create X-Y, bar, and polar plots and apply extensive customizations, including:
 - legend, title, labels, colors
 - compare results of multiple runs
 - rescale axes and apply unit conversions
 - add user lines generated by algebraic manipulations of other lines (e.g., "the difference between line #1 and line #6").
- Print or export plots and network diagrams for report generation.
- Use color-coded forms to distinguish common from advanced options.
- Export a traditional input file to transfer to other SINDA/FLUINT users.
- Prepare an executable version of your model to provide living documentation.
- Generate freely distributable interactive design tools for use by third parties.

Int	Name	Expression	Comment
	poro	1.2E-6	Wick pore size unit meter
	porom	4.8E-14	evaporator wick permeability units: mDm2
	poromax	0.60	Wick porosity (used in look & conduct term)
	power	(incase -1)/tmin*(incase1)/pnewpinf	actual power (dissipation) into source node: Watts
	Gr/DH	4*(1.5e-3)*a-3)/(2*2.5e-3)	Hydraulic diameter of evaporator grooves. These are assumed
	Gr/diam	8.8	Number of radial grooves in the wick (percentage) (%) F
	volCC	0.1e-6+27.6e-6	volume of the composition chamber including available liquid
	wickCap	0.983-wicklook*poromax*485*7800	evaporator capillarity
	ccCap	3.9E3	cc capacitance
	pCap	5*983	payload mass
	Tsink	783	ambient temperature unless below 0 (in significant connection)
	tsink	256	condenser sink temperature unless below 0 (do not set below the
	Tinit	Tsink+10	initial temperature of the loop units: kelvin: faster convergence

Built-in spreadsheet for fast model changes, easy parametric analyses and sensitivity studies



Highly customizable X-Y, bar, and polar plotting of virtually any entity

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