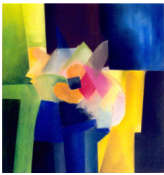


EcosimPro Libraries Facts Sheet

www.ecosimpro.com



PHENOMENA\LIBRARY	ECLSS	PROCESS	FLUIDAPRO	PROPSAT/ PIPELIQ	THERMAL- BALANCE	ESPSS	TURBO
FLUID PROPERTIES							
Multi-fluid properties	√	√	√	√	√	√	
Fluid mixtures	√	√				√	√
Liquid+ non-cond. mixture				√		√	
Two-phase flow & cavitations			√		√	√	
Chemical equilibrium	√					√	√
Chemical reaction	√	√					
FLUID SYSTEM CAPABILITIES							
1D Pipe (variable nodal discr.)	√		√	√		√	
Water-hammer			√	√		√	
Reverse flow calculation	√		√	√		√	
Tank temperature distri.						√	
Molecular flow calculation	√		√				
Splitter & collectors	√	√	√	√	√	√	√
Wall friction calculation	√	√	√	√		√	
Pressure drop calculation	√	√	√	√	√	√	√
Wall heat exchange	√	√	√	√		√	√
FLUID DEVICES							
Valves orifices and filters	√	√	√	√	√	√	
Actuator & pres. Regulators			√			√	
Pump devices	√	√	√	√	√	√	
Heat exchangers	√	√	√	√	√	√	√
Boiler & pressurizes devices			√		√	√	
Tank devices	√	√	√	√	√	√	



EcosimPro Libraries Facts Sheet

www.ecosimpro.com



PHENOMENA\LIBRARY	ECLSS	PROCESS	FLUIDAPRO	PROPSAT/ PIPELIQ	THERMAL- BALANCE	ESPSS	TURBO
BURNERS							
Combustors & Preburners					√	√	√
1D Combustion Model						√	
Emission calculation							√
NOZZLES							
Nozzles						√	√
1D Nozzles & cold thrusters						√	
Cooling jackets (two-phase flow)						√	
TURBOMACHINERY							
Turbines & compressors					√	√	√
BETA /ZETA/MFT Maps							√
Gamma / Reynold corrections							√
Secondary Air System bleeds							√
Variable Stator Vane Angle							√
Cooled turbines							√
INDUSTRIAL DEVICES							
Industrial reactors	√	√					
Column distillation		√					
Furnaces & dryers		√					
Cabin & crew	√						
Absorber & separators	√						
Electrolyser	√						
Steam turbines					√		
Moisture separators					√		
Evaporators and boiler steam					√		
Cooling towers					√		
OTHERS							
Direct steady calculation	√	√			√		√