

85 Northpointe Parkway STE 2
 Amherst, NY 14228-1886
 Ph: 716.691.3291 / Fax: 716.691.3294

SEPARATION DESIGN QUESTIONNAIRE

Please supply as much information as possible.
 Thermal Kinetics will supply typical values based
 on experience when missing data is encountered.
 Inquiry Date: _____

Your reference: _____
 Thermal Kinetics quotation required by: _____
 Price Basis: _____ Order of Magnitude _____ Budget _____ Firm _____
 Approximate installation date: _____

Company	
Address	
Telephone	Contact
Fax	Position
E-mail	Department

Test facilities are available for determining physical properties of process fluids and if needed pilot testing can be arranged.

PROCESS LIQUIDS FOR DISTILLATION, ABSORPTION, OR OTHER MASS TRANSFER OPERATION			
Feed Composition:			
Scaling Tendency?		If so, what type?	
Foaming Tendency?			
Is solution corrosive?		Describe:	
Is this a new or retrofit project?		Add description:	
Preferred materials of construction (CS, 316L, etc.):			
SPECIAL PHYSICAL PROPERTIES		Feed	Bottoms Product
Total Non-volatile solids content		%	%
Specific Gravity			
Viscosity		cps at °F	cps at °F
Specific Heat in Btu/lb °F			
Thermal Conductivity (Btu/hr ft °F)			
Are quart samples available?			
COMPOSITION OF PRODUCTS		Overhead Product	Bottoms Product
Component and purity: Separation #1		%	%
Component and purity: Separation #2		%	%
Component and purity: Separation #3		%	%
Component and purity: Separation #4		%	%
PROCESS DUTY, RATES, CONDITIONS			
Feed rate		lb/hr	Feed temperature °F
Operating time: hrs/day		hrs/yr	Turn-down required: % design capacity
Are products to be cooled? Temp: °F		Maximum processing temp: °F	
UTILITIES			
• Steam pressure available: psig		• Accounted cost per 1000 pounds:	
• Cooling water available: @ °F		• Source: • Pressure:	
• Is cooling tower required?		• Max. wet bulb temp. °F	
• Electricity: 3φ/ V/ Hz or 1φ/ V/ Hz		• Average cost/kWh:	
PUMPING DELIVERY HEADS			
Product pumps: ft		Cooling water return pump: ft	
Steam condensate pump: ft		Process condensate pump(s): ft	
INSTRUMENTATION AND CONTROLS			
Local control panel required?		Preferred model controllers:	
PLC to be used?		Preferred model PLC:	
Tie into existing DCS or PLC?		Comments?	
SITE			
Location:		Altitude above sea level:	
Headroom available:		Space available: (send sketch)	
PROCESS PIPING			
Sanitary: Bevel Seat Tri-clamp Other _____		Industrial: 150# ANSI Flg NPT Other _____	
Pumps: Block valves In-line Spares		Control Valves: Block and bypass valves	
Cleaning: Manual Clean-in-place system		Comments:	