

## Liquid-Liquid Extraction Specification Data Sheet

Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 Title: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Company: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City, State, Zip: \_\_\_\_\_  
 Country: \_\_\_\_\_ Email: \_\_\_\_\_  
 Your Reference No.: \_\_\_\_\_ End User, Location: \_\_\_\_\_

### Quotation

Date Quotation Required: \_\_\_\_\_  
 Date Equipment Required: \_\_\_\_\_ Firm Price \_\_\_\_\_ Budget Price \_\_\_\_\_

The following will assist in the design of an economical liquid-liquid extractor solution to your application. Please provide all known information in the spaces provided and/or attach any supporting documentation. Please email or fax to us for prompt response.

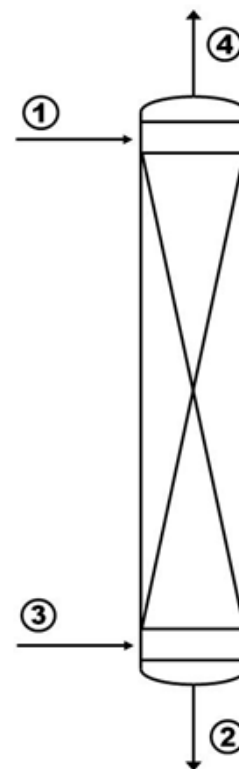
### Stream Properties

Stream #	1	2	3	4
Fluid Name				
Throughput	GPM			
Viscosity	cP			
Density	lb/ft <sup>3</sup>			
Pressure	psia			
Temperature	°F			

	Top	Bottom
Interfacial surface tension	dyne/cm	
Dispersed phase	Light	Heavy

Solute to be removed	1	2	3	4
Solute concentration (mass %) in stream				

Nozzles	1	2	3	4
Nozzle size	in.			



**Other process conditions (if known)**

**Do you have previous experience with this application?** Yes No

If yes, please attach any pertinent information or provide details below.

**Is a particular type extractor preferred?** Tray Packed Other  
Agitated, KARR™ column, etc.<sup>2</sup>

**Fouling Tendency** High Low None

**Are there any suspended solids present in feeds** Yes No

If yes, concentration (mass %) Approximate size (micron)

**Mechanical data**

**Are there any space limitations?** Yes No **What are the allowable/  
preferred materials of construction?**  
Internals/Trays  
Packing

Column I.D. (existing column)<sup>1</sup> ft

Column manway I.D. in.

Welding to shell permitted? Yes No

Vessel body flanges? Yes No

Corrosion allowance for internals in.

Design temperature °F

**Special uplift requirements**

Internals only

Complete extraction column (shell and internals)<sup>2</sup>

Modular extraction system including column installed in a structural frame with all of the required tanks, heat exchangers, pumps, piping and instrumentation.<sup>2</sup>

(1) If vessel is existing, please provide a copy of the vessel drawing.

(2) For a scope of supply beyond internals, we will refer the inquiry to Koch Modular Process Systems.

**Comments:**

Please provide any additional information that will help with your design and describe any documents you will send. Include relevant drawings of existing equipment so that we may design a compatible solution.