



## CENTRIFUGE APPLICATION QUESTIONNAIRE

for Batch and Continuous Centrifuges

Date \_\_\_\_\_  
 Company \_\_\_\_\_  
 Contact \_\_\_\_\_  
 Title \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Country \_\_\_\_\_  
 Phone \_\_\_\_\_ Fax \_\_\_\_\_  
 Mobile \_\_\_\_\_  
 Email \_\_\_\_\_  
 How did you learn about Western States?

**Rheological Characteristics:**  Newtonian  
 Thixotropic  Dilatant  Pseudo-Plastic  
 Viscosity(cps) \_\_\_\_\_ @ \_\_\_\_\_ °F °C pH \_\_\_\_\_

### THROUGHPUT

Gallons or lbs./hr \_\_\_\_\_

### Process will Operate:

Continuous: \_\_\_\_\_ hours/day  
 Intermittent: \_\_\_\_\_ hours ON, \_\_\_\_\_ hours OFF  
 Final Moisture Level Desired (%) \_\_\_\_\_

### UTILITIES AVAILABLE

**Electrical:** \_\_\_\_\_ Voltage, \_\_\_\_\_ Phase, \_\_\_\_\_ Hz  
**Air:**  Clean  Shop Air \_\_\_\_\_ psig, \_\_\_\_\_ cfm  
**Water:** \_\_\_\_\_ °F °C, \_\_\_\_\_ gpm, \_\_\_\_\_ psig

### ELECTRICAL CLASSIFICATION

*Note if centrifuge and controls are in different areas.*

**Enclosures:**  NEMA-12  NEMA-4 (washdown)  
 NEMA-4X (washdown & corrosive)  NEMA-7 (XP)  
 Other (including IP designations) \_\_\_\_\_  
**Motor Classification:** Class \_\_\_\_\_, Div. \_\_\_\_\_, Grp \_\_\_\_\_

### CONTROLS & INSTRUMENTATION

None  Basic Controls  Automation (PLC)  
**Instrumentation:**  Temperature  Pressure  pH  
 Fluid Flow  Viscosity  O<sub>2</sub>  
 Other \_\_\_\_\_  
**Signal:**  0-20 mamp  0-10vdc  HART  Fieldbus  
 Other \_\_\_\_\_

### MATERIALS OF CONSTRUCTION

304  304L  316  316L  Hastelloy C276  
 Inconel  Titanium  Other \_\_\_\_\_

### ANCILLARY EQUIPMENT

CIP  Pre-Mixers  Feed Tanks  Feed Pump(s)  
 Vapor Control  Discharge Chute  Solids Conveyor  
 Other \_\_\_\_\_

### PROJECT SCHEDULE

Start-Up Scheduled for QTR  1  2  3  4 of 20 \_\_\_\_\_  
 Project is Funded  YES  NO  
 Installation Location (State or Country) \_\_\_\_\_  
 Local Rep \_\_\_\_\_

### SEPARATION EXPERIENCE

Describe the present method of separation.

Centrifuge (type) \_\_\_\_\_  
 Basket Size \_\_\_\_\_ RPM \_\_\_\_\_  
 Cake Thickness (inches) \_\_\_\_\_  
 Actual Capacity/Rate \_\_\_\_\_  
 Filter (type) \_\_\_\_\_  
 Cake Thickness(inches) \_\_\_\_\_  
 Pressure Differential (PSI) \_\_\_\_\_  
 Actual Capacity/Rate (lbs./hr) \_\_\_\_\_

How is this method performing?

### PRODUCT CHARACTERISTICS

**SOLIDS NAME(S)** \_\_\_\_\_  
**Bulk Density** (lbs./ft<sup>3</sup>) \_\_\_\_\_  
**Angle of Repose**(° from horizontal) \_\_\_\_\_  
 Description of flowability \_\_\_\_\_  
 Filtering/Drain Rate (gallons/minute/ft<sup>2</sup>) \_\_\_\_\_  
**Particle Size Distribution:**  
 \_\_\_\_\_ % less than \_\_\_\_\_ mesh or μ  
 \_\_\_\_\_ % less than \_\_\_\_\_ mesh or μ  
 \_\_\_\_\_ % less than \_\_\_\_\_ mesh or μ

**Solids Form:**  Crystalline  Colloidal  Gelatinous  
 Cohesive  Foaming  Fibrous  Abrasive  Friable

**LIQUID NAME(S)** \_\_\_\_\_  
 % Percent Solids (normal) \_\_\_\_\_, (max.) \_\_\_\_\_  
 Feed Temp. (normal) \_\_\_\_\_ °F °C, (max.) \_\_\_\_\_ °F °C