

The Western States Machine Company

Centrifuge Application Questionnaire

for Batch and Continuous Centrifuges

Date _____
 Company _____
 Contact _____
 Title _____
 Address _____
 City _____ State _____ ZIP _____
 Country _____
 Phone _____ Fax _____
 Mobile _____ E-mail _____
 How did you learn about Western States?

Rheological Characteristics Newtonian
 Thixotropic Dilatant Pseudo-Plastic
 Viscosity (cps) _____ @ _____ °F °C pH _____

THROUGHPUT

Gallons or lbs./hour: _____
 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, _____ psig _____ gpm

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 designation) _____
 Motor Classification: Class _____ Div _____ Grp _____

CONTROLS & INSTRUMENTATION

Controls: None Basic Controls Automation (PLC)
 Instrumentation: Temperature Pressure pH
 Fluid Flow Viscosity O2
 Other _____

Signal: 0-20 mA 0-10 VDC HART
 Fieldbus Other _____

MATERIALS OF CONSTRUCTION

304 304L 316 316L Hastelloy C276
 Inconel Titanium Other _____

ANCILLARY EQUIPMENT

CIP Pre-Mixers Feed Pump(s)
 Feed tanks Vapor Control Discharge Chute
 Solids Conveyor Other _____

PROJECT SCHEDULE

Start-Up Scheduled for 1 2 3 4 Qtr 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 (lbs/Hr) _____
 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/ft³) _____
 Angle of Repose (° from horizontal) _____
 Description of Flowability _____
 Filtering/Drain Rate (gallons/minute/ft²) _____
 Particle Size Distribution
 _____ % less than _____ mesh or micron
 _____ % less than _____ mesh or micron
 _____ % less than _____ mesh or micron
 Solids Form: Crystalline Colloidal Gelatinous
 Cohesive Foaming Fibrous Abrasive Friable
 Liquid Name(s) _____
 % Solids (normal) _____ (max) _____
 Feed Temp(normal) ° F / °C _____ (max) _____