

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?

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) _____

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 tanks Feed Pump(s)
 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 _____