SOLID LIQUID SEPARATION QUESTIONNAIRE

CleaNsep systems pvt ltd
Quality comes with Commitments
An ISO 9001:2008 Certified company

Company: _____

Address: _____

Filled in by: _____

Date: _____ Project: _____

Phone: _____ Fax: _____

Product / Suspension: _____

Temperature: _____ °C (norm.) _____ °C (max.) _____ °C (min.)

pH: _____ Density: _____ g/cm3

Liquid phase: _____

Liquid viscosity: _____ cPs _____ °C Density: _____ g/cm3

Solids phase: _____

Solids content: _____ % w/w _____ % v/v _____ g/L

Sedimentation speed: _____ cm / sec. Density: _____ g/cm3

Particle size (microns): _____ max. _____ average _____ min.

Nature of solids: ☐ crystalline ☐ colloidal ☐ thixotropic ☐ hygroscopic ☐ abrasive

Crystal shape: _____ Bulk density of cake: _____ kg dry matter per L of wet cake

Soluble in: _____ solubility: _____ g/L at °C Melt temp. °C _____

Product in solution: _____ g/L Toxicity: _____ Flammability _____

Crystallization temp.: _____ °C Solubility in wash liquid: _____ g/L at °C

Production: ☐ continuous _____ **m3/h** _____ hours/ day

☐ batch wise _____ **m3/batch** _____ batches/ day

Desired total cycle time for batch filtration: _____ minutes _____ minutes filtration time

Process information _____

Suspension is coming from: _____

Filtrate goes to: _____

Solids go to: _____

Is it possible to return the heel volume and filter with the next batch? ☐ yes ☐ no

Must filter cake be washed ? ☐ yes ☐ no

if yes, with what? _____ temperature °C: _____

to meet which criteria? _____ or wash ratio: _____ vol. / vol. of cake

Desired solids discharge:

☐ as thickened slurry at which solids content: (%w/w) _____

☐ as slurry by back washing liquid for backwash: _____

☐ as dry cake at which solids content: (%w/w) _____

Cake drying with:

☐ Air _____ Nm3/h at _____ barg

☐ Nitrogen _____ Nm3/h at _____ barg

☐ Steam _____ kg/h at _____ barg

Additional information: _____

SOLID LIQUID SEPARATION QUESTIONNAIRE

CleaNsep systems pvt ltd
Quality comes with Commitments
An ISO 9001:2008 Certified company

Type of filter used up until now: _____ **Brand:** _____

Size (m2): _____ **No. of units:** _____ **Capacity:** _____ m3/h

Do you precoat your filters? ☐ yes ☐ no if yes, with what? _____ kg/m2

Do you use body feed? ☐ yes ☐ no if yes, with what? _____ g/L

differential pressure: _____ barg cycle time: _____ minutes

cake thickness: _____ mm cake solids: _____ % w/w

Construction Construction code: _____

Recommended materials	Vessel	grade	Jacket	Vessel	lining	coating
carbon steel	☐		☐	Hard rubber	☐	
stainless steel	☐	1.4435 / ss 316 L	☐	PVDF		☐
stainless steel	☐	1.4571 / ss 316 Ti	☐	Teflon® FEP	☐	
stainless steel	☐	1.4539 / ss 904 L	☐	ECTFE (HALAR®)		☐
Titanium	☐			Glass	☐	
other materials	_____			other materials	_____	

special construction req.: _____

Jacket required on cylinder: ☐ yes ☐ no Jacket on cone: ☐ yes ☐ no Jacket on cover ☐ yes ☐ no

Jacket pressure / temp.: _____ barg / °C Insulation supports: ☐ yes ☐ no

Recommended materials for	Internals	grade		Filter media
stainless steel	☐	1.4571 / ss 316 Ti	PP (Polypropylene)	☐
stainless steel	☐	1.4539 / ss 904 L	PVDF (Polyvinylidenfluoride)	☐
PP	☐	Polypropylene 20% GF	PTFE (Polytetrafluorethylene)	☐
PVDF	☐	Polyvinylidenfluoride	PPS (Polyphenylensulfide)	☐
PPS	☐	Polyphenylensulfide	others	_____

Plant informations: Control air : _____ barg Electric power: _____ V/Hz

Ex-protection required? ☐ yes ☐ no If yes,which type _____

other informations: _____

Scope of supply: ☐ Filter ☐ Valves ☐ Instruments ☐ Piping

☐ Control system ☐ Flowsheet and sequence ☐ Complete skid