



Conical Vacuum Dryer Application Process Data Questionnaire

Submitted for: ? Budget Quote ? Firm Quote ? Testing ? Rental

Date _____ 200____
Company _____
Contact _____
Title _____
Address _____
City _____ St _____ Zip _____
Country _____
Phone _____
Fax _____
Email _____

Are liquids or solids added during drying? _____

MACHINE CAPACITY

Material Batch Size _____ Cubic Feet/Liters

PRODUCT CHARACTERISTICS

Initial Moisture Content _____ %

Final Moisture Level Required _____ %

Dried Material Characteristics: ? Powder ? Flake
? Granule ? Friable
? Sticky ? Cohesive ? Aerates ? Agglomerates
? Hygroscopic ? Other _____

Bulk Density Dried _____ lbs/ft3
Angle of Repose _____ °from horizontal
Particle Size _____ mesh or µ

DRYING EXPERIENCE

How do you presently dry this product? _____

Is this method performing satisfactorily? Explain: _____

PRODUCT CHARACTERISTICS

Chemical Name (s) _____

MSDS Attached: ? YES ? NO

Liquid to be removed is ? Water ? Solvent
(specify) _____

Solvent Heat Capacity _____ BTU's/lbs.
Solvent Heat of Vaporization _____ BTU's/lbs
Percent Water or Solvent _____ %
Percent Unbound (free) Water or Solvent _____ %
PH _____
Maximum Drying Temperature Allowed _____ °F °C
Vacuum Level Required _____ Hg

Initial Product Characteristics: ? Toxic ? Flammable
? Explosive ? Corrosive ? Abrasive ? Sticky
? Cohesive ? Slurry ? Lumpy ? Paste ? Fibrous
? Crystalline

Do agglomerates form during drying? ? Yes ? No

MATERIALS OF CONSTRUCTION

Product Contact: ? 304 ? 316
? Hastelloy ? Inconel ? Monel
? Other _____

External: ? 304 ? 316 ? Other _____

SURFACE FINISH

Product Contact: _____
External: _____

UTILITIES AVAILABLE

Steam: _____ lbs/hour, _____ psig
Cooling Water _____ °F °C, _____ gpm, _____ psig
Air _____ psig, _____ cfm
Electrical _____ Voltage, _____ Phase, _____ Hz

Enclosures ? NEMA-12 ? NEMA-4 Washdown
? NEMA-7, X-P ? Other _____

Motor Classification: Class _____ Div., _____, Grp _____

CONTROLS & SUPPORT EQUIPMENT

- ? Basic Controls ? Automation ? Vacuum System
- ? Solvent Recovery ? Dust Collection ? Sifting
- ? Delta V Controls ? Heating Skid ? CIP
- ? Sample Taking ? Lump breaker/chopper
- ? Other _____

PROJECT SCHEDULE

Start-Up Scheduled for ? 1st 2nd ? 3rd 4th Qtr. Of
Year: 200____

Project is Funded? ? Yes ? No

Installation Location (state or country) _____

GASKET, SEALS & O-RING MATERIALS (please advise your required material)

- ? Perlast G70 ? Silicone
- ? Viton ? FEP Encapsulated
- ? Kalrez ? Viton
- ? Chemraz ? NBR
- ? Other _____

SOLVENTS IN PROCESS

Please list all solvents that will be used in the process and cleaning _____

Design Temperature Min. & Max. (Vessel – Jacket)

Design Pressure Min. & Max. (Vessel – Jacket)
