

Date \_\_\_\_\_ 20\_\_\_\_

Company \_\_\_\_\_

Contact \_\_\_\_\_

Title \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ St \_\_\_\_\_ Zip \_\_\_\_\_

Country \_\_\_\_\_

Phone \_\_\_\_\_

Mobile \_\_\_\_\_

Fax \_\_\_\_\_

E-mail \_\_\_\_\_

How did you learn about PAUL O. ABBE? \_\_\_\_\_

### MILLING EXPERIENCE (describe your present milling method)

Type of Mill & Size \_\_\_\_\_

How is this method performing? \_\_\_\_\_

### SOLID & LIQUID PRODUCT CHARACTERISTICS

Will milling be performed:  WET or  DRY ?

### QUANTITY TO BE MILLED

\_\_\_\_\_  ft<sup>3</sup> or  liters per \_\_\_\_\_ hour(s)

\_\_\_\_\_  lbs. or  kgs. per \_\_\_\_\_ hour(s)

### SOLID COMPONENTS

Name(s) \_\_\_\_\_

Bulk Density \_\_\_\_\_  lbs./ft<sup>3</sup> or  g/cc

Mohs Hardness (1-10) \_\_\_\_\_

**INITIAL** Particle Size Distribution:  mesh or   $\mu$  microns

\_\_\_\_\_ % less than \_\_\_\_\_

\_\_\_\_\_ % less than \_\_\_\_\_

\_\_\_\_\_ % less than \_\_\_\_\_

\_\_\_\_\_ % less than \_\_\_\_\_

**FINAL** Particle Size Distribution:  mesh or   $\mu$  microns

\_\_\_\_\_ % less than \_\_\_\_\_

\_\_\_\_\_ % less than \_\_\_\_\_

\_\_\_\_\_ % less than \_\_\_\_\_

\_\_\_\_\_ % less than \_\_\_\_\_

### LIQUID COMPONENTS

Name(s) \_\_\_\_\_

Percent Liquid \_\_\_\_\_ %

Viscosity \_\_\_\_\_ cps @ \_\_\_\_\_  $^{\circ}$ F /  $^{\circ}$ C

pH \_\_\_\_\_

### TEMPERATURE

**MAXIMUM** allowable temp. during milling \_\_\_\_\_  $^{\circ}$ F /  $^{\circ}$ C

### HEATING/COOLING JACKET

Required for cooling \_\_\_\_\_  $^{\circ}$ F /  $^{\circ}$ C

Required for heating \_\_\_\_\_  $^{\circ}$ F /  $^{\circ}$ C

Medium:  water  steam  oil

Jacket Rating:  14.7 psig non-code

ASME code stamped for \_\_\_\_\_ psig

### LOADING & UNLOADING

How will solids be loaded into the mill? \_\_\_\_\_

Where will milled product be discharged to? \_\_\_\_\_

### CLEARANCES

Clearance below discharge valve \_\_\_\_\_ "

Height/ceiling restrictions \_\_\_\_\_ "

### PRODUCT CONTACT MATERIAL

**Steel:**  abrasion resist steel  stainless steel

**Ceramic:**  alumina ( $\approx$ 90%)

**Lined:**  rubber  polyurethane  other \_\_\_\_\_

### GRINDING MEDIA

Is grinding media required?  Yes  No

Type of Grinding Media:

**Steel:**  hardened steel  stainless steel  chrome

**Ceramic:**  alumina ( $\approx$ 90%)  yttria stabilized alumina

zirconia  **Other:** \_\_\_\_\_

### EXTERNAL & SUPPORT MATERIALS

mild steel  304  Other \_\_\_\_\_

### UTILITIES AVAILABLE

Electrical \_\_\_\_\_ voltage, \_\_\_\_\_ phase, \_\_\_\_\_ Hz

Water \_\_\_\_\_  $^{\circ}$ F /  $^{\circ}$ C \_\_\_\_\_ gpm, \_\_\_\_\_

psig

### ELECTRICAL CLASSIFICATION

Will mill and controls be in different areas?  Yes  No

Motor Classification:

non-classified TEFC

Class:  Cls. I (gas/vapor),  Cls. II (dust)

Division:  Div. 1 (Class substance is present in normal conditions)

Div. 2 (Class substance is present in abnormal conditions)

Electrical Enclosures:  NEMA-12,  NEMA-4 (washdown)

NEMA-4X (washdown & corrosive),  NEMA-7&9 (XP)

NEMA-4,7&9,  other \_\_\_\_\_

### SUPPORT EQUIPMENT REQUIRED

Cooling

Liquid Addition

Inert Gas Purge

Loading/Unloading

Controls

### PROJECT SCHEDULE

Start-Up Scheduled for  1<sup>st</sup>  2<sup>nd</sup>  3<sup>rd</sup>  4<sup>th</sup> Qtr., 20 \_\_\_\_\_

Is Project Funded:  Yes  No

Installation Location (State or Country) \_\_\_\_\_