

GRINDING PROJECT APPLICATION CHECKLIST

We Make Your Particle Size
Reduction Project a Big Deal



Proper planning is the key to any successful project. And that's magnified even more when it comes to grinding/milling. Taking a few minutes now to evaluate your upcoming particle size reduction project and provide CPS with the basics will pay off down the road.

This checklist covers the most important factors that influence cost, timeline, scope, and the overall success of your project. The questions with an asterisk (*) are especially valuable to us at this stage. We'll be asking you for more details after we review your information, but this will get us off to a great start!



SCOPE/MATERIAL EVALUATION

What is the overall scope of your project? _____

What type of process are you looking to have completed? _____

What material are you looking to process? _____

*A Safety Data Sheet (SDS), or technical data sheet, allows us to evaluate a material's hazard information and safety/health data. Can you provide us one for this material? _____

*Is the material combustible? If so, have you conducted dust explosion risks analyses, including Pmax, Kst, and Minimum Ignition Energy (MIE)? _____

The Globally Harmonized System (GHS) helps classify and communicate the hazards of a product. Are there any GHS issues associated with this material? _____

In what industry is the material being used? _____

Have you had a company reduce this material's size before? If so, on what equipment? _____



MATERIAL DETAILS

What color is the material? _____

What would the starting feed size of the material be? _____

What is your estimated hardness of the material? _____

*Bulk density determines the final packaging required. What is the material's bulk density (also called apparent density or volumetric density)? _____

Moisture content largely determines a material's physical properties (strength, stiffness, elasticity, etc.) What is the incoming moisture level? _____

*Food-grade and pharmaceutical processing (cGMP) demand different production requirements than technical processing. Is this material technical grade or cGMP? _____

If the material is cGMP, at what level does it require processing?

Cosmetic

Food

Excipient

Active

Is this material an allergen? _____



PACKAGING

In what packaging would the raw material be provided to CPS? _____

In what packaging do you need CPS to provide the processed material? _____



TRIAL & TIMING

*Running the material through a pre-production trial is the only way to really know how grinding equipment will perform. What is your timing to get the initial trial/campaign completed? _____

*What material volume do you have available for the trial? _____

*Can you provide samples of the raw material and final product to CPS prior to processing? _____

What are the estimated volumes and campaign sizes moving forward (pending a successful trial)? _____



SIZE SPECIFICATION

Fine grinding reduces material to the single-digit micron level and requires mills specific for reduction to that size. How do you measure fine grinding particle size?

- Air jet sieves
 Laser diffraction
 Other

* What is your particle size specification? _____

Are other considerations an issue?

- Fines
 Top size
 Tightness of distribution

What lot integrity standards do you have? _____

Coarse grinding reduces larger particle materials, some often shipped via rail or truck. These may be abrasive and/or be a challenge to simply feed into a grinding mill. What level of contamination (if any) can the material handle? _____

How abrasive is the material? _____

Is the material arriving and shipping out via bulk (rail or truck)? _____



GENERAL

How can CPS improve your supply chain (capacity, price point, R&D, lead time, etc.)? _____

How did you hear about CPS? _____

Congratulations! This is a great first step. After we've evaluated your input, we'll likely schedule a meeting to discuss the project in detail. There are more areas to cover in order to ensure a successful project, and we'll do our best to keep things moving forward.

For more information on our grinding/milling services, visit customprocessingservices.com/services.



2 Birchmont Drive
Reading, PA 19606
610-779-7001

customprocessingservices.com

