Jet Pulverizer
Increases its Capacity and Capabilities
to Exceed Clients' Demands and Expectations

APPLICATION NOTE *Infrastructure & Equipment | January, 2018*

INDUSTRY: *PHARMA, COSMETICS, ABRASIVES, CHEMICALS, FOOD, 3D PRINTING*

LOCATION: *MOORESTOWN, NJ*

KEY CHALLENGES: *DEVELOP INFRASTRUCTURE TO MEET CLIENT CHALLENGES*

SOLUTION: *EQUIPMENT, INFRASTRUCTURE INVESTMENTS*

BENEFITS: *COMBINE 75 YEARS OF JET MILLING EXPERIENCE WITH STATE OF THE ART EQUIPMENT*

Since 1946, Jet Pulverizer has been responding to customer demands with high quality, engineered solutions. Over the past decade, increasing volume demands and meeting a growing client base's challenges in milling difficult materials and size reduction expansion, Jet Pulverizer has increased its capacity and capabilities.

The Challenge

As Fred Surville, VP of Sales & Marketing noticed "We are no longer working on 5 to 6 generic abrasive materials which were the bedrock of the Jet Pulverizer business for the past few decades, but are now receiving at least 10 new projects a week which increases our exposure to new and challenging materials with varying particle size reduction requests, and increased workload. This has been met seamlessly by the incredible infrastructure in place at Jet Pulverizer."

The Solution

Rick Pottieger, VP of Processing, usually puts it this way "We are essentially a large compressed air production facility. We are very unique in that we have **12,000 SCFM of Oil-Free Air** on site and are able to operate 24 hours a day, 7 days a week." This is the engine behind our processing business, where we operate a 15,000 square foot facility with 16 stations built exclusively for particle size reduction services using jet mills.

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APPLICATION NOTE | *INFRASTRUCTURE & EQUIPMENT*

*Jet Pulverizer has been milling clients' materials since the 1970s, but has recently met this new challenge by increasing its capabilities in the form of **cryogenic grinding**, utilizing nitrogen to increase friability in materials in order to meet tight specifications. We now have **6,000 gallons of nitrogen gas** on hand to work around the clock and meet these demands.*

***Safety** has always been a priority at Jet Pulverizer, and milling very fine particles can be a dangerous process, increasing flammability and explosive concerns. Jet Pulverizer operates its own Nitrogen Processing Unit (NPU) in its facility which produces **1,000 SCFM of nitrogen gas**, enough to power four 12" jet mills, or process 1,000 lbs/hr. of material. This nitrogen is used as the motive gas to power the mills, creating a safe, inert atmosphere.*

*Although we have experienced increased workload, we have not taken any shortcuts in the procedures, quality or lab work. Each project is still analyzed pre and post processing, typically in our state of the art **Horiba LA-960**, which is the reference for laser diffraction particle size analyzers with wet and dry modules. Each production run continues to be monitored at a minimum hourly for quality and particle size in the Horiba, continuing the tradition of "Finest Quality Service".*

List of Equipment:

Qty	Volume	Description
2	2,2400 CFM	Oil-free Atlas Copco compressors driven by a natural gas powered 650 hp Caterpillar engine
1	5,300 CFM	Oil-free Ingersoll Rand Centac compressor driven by a natural gas powered 1,250 hp Caterpillar engine
1	1,200 CFM	Oil-free Variable Speed Atlas Copco ZT250VSD electric compressor
1	350 CFM	Oil-free 100 hp Ingersoll Rand Sierra compressor
1	900 CFM	Air Liquide Nitrogen Production Unit
1	6,000 Gal	Storage tank of surgical grade liquid nitrogen

The Impact

Austin Fay, President of Jet Pulverizer, puts the emphasis on the client when discussing the plant's infrastructure and equipment: "We are proactive and try to respond to the market, anticipating where our clients will need us is what keeps us competitive. Our impressive infrastructure is a fundamental strength to our processing business; we will only grow as far as our strengths will take us."

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