

### Metrics' Potent and Cytotoxic Drug Development Facility.

With our state-of-the-art potent and cytotoxic pharmaceutical cGMP suites, Metrics can provide its renowned reliability, flexibility and client services for your potent drug products. Our dedicated facilities, equipment and containment technologies make this one of the most technologically advanced potent facilities in the United States. We've employed many of the design concepts from the *ISPE Baseline Pharmaceutical Engineering Guide* for new and Renovated Facilities in order to make our facility truly exceptional. We can accommodate Phase I through III projects up to 10 kilograms in size.

### Total Engineered Containment of Processes

Our dedicated facility provides total engineered containment of processes with hard-wall isolation technologies. Within the processing areas, there are no open processes, eliminating the need for powered air purifying respirators. Equipment and change parts are dedicated exclusively to the potent suite. And containment is achieved at levels of approximately 30 nanograms per cubic meter of room air. There are two processing rooms designed for the one-way flow of materials, personnel and equipment.

In addition to a broad range of custom engineered equipment, a dedicated air handler brings in 100- percent outside air with HEPA-in and HEPA-out filtering at the rate of 11,000 cubic feet per minute. Pass throughs allow for the export of product and waste and there is dedicated equipment storage. After every campaign, Metrics conducts comprehensive healthbased cleaning verification of shared surface areas.



### One of the Most Technologically Advanced Potent Facilities in the United States.

- Independent Entry Double Airlocks
- Independent Decontamination Showers and Exit Airlocks
- Independent Equipment Airlocks
- Dedicated Washroom

### Full Containment, Expanded Services

- micronization
- impact milling
- conical milling
- high shear wet granulation
- fluid bed granulation
- fluid bed drying
- Wurster coating
- roller compaction
- tumble blending
- fully instrumented tablet compression
- capsul filling
- film coating

## Equipment List

The following pieces of equipment have been integrated into a unique system of isolators that allow for rapid plug-and-play process-train construction:

### Hard-Wall / Rigid Isolators:

**Multi-use hardwall isolators (3);** Integrated design; House up to three pieces of processing equipment; Getinge/LaCalhene

**Tablet Press Isolator;** Integrated design; Howorth Inc.

**Fluid Bed Dryer Isolator;** Integrated design; Vector

**Powder Dispensing/Sampling Isolator;** Integrated Containment Systems

### Blenders

**Blender, V-shell;** 1qt. to 16 qt. with intensifier bar; Globe Pharma

### Granulators/Mixers

**Granulator, Vertical Shaft, High Shear;** 1 L – 8 L bowls; Fluid Air Pharm X

**Roller-Compactor;** TFC-Lab Micro; Vector

### Mills/Micronizers

**Conical Mill;** Quadro Comil Model U-5

**Impact Mill;** Fitzpatrick Fitzmill L1A

**Micronizer, Jet-type;** Development Scale; Fluid Energy Jet-0-Mizer

### Fluid Bed Processors/Dryers

**Fluid Bed Processor (Dryer/Top spray granulating/bead coating)** up to 2 kg capacity; Vector FLM-1

### Tablet Production

**Rotary Press;** 10 Station; B-tooling; Riva Picolla; Fully Instrumented

**Perforated Pan Film Coater;** 8-15" Pan inserts; Ohara Labcoat M

### Capsule Fillers

**Manual Capsule Fillers;** 100 capsules per tray; Sizes 0,1,2,3,4,5; Fetton Inc.

**Semi Automatic Capsule Filler;** 100 Capsules per tray; Sizes 0,1,2,3,4; Dott Bonapace

