



*Some key equipment and instrumentation in our laboratories:*

**Formulation Development**

Vector FLM-1 and FLM-3 fluid bed processors  
Planetary Mixer - 20 liters (~8 kg) and 4 qt. (~2 kg)  
Baker Perkins high shear granulator/blender - 7 liters  
PK "V" blenders: 2, 4, 8, 16 quart and 1, 3 cubic foot  
Single station tablet press  
Instrumented sixteen station rotary tablet press (B Tooling)  
Four station, laboratory tablet press  
Sixteen station rotary tablet press (D Tooling)  
Benchtop encapsulation machines (2 pc. Hard-shell)  
Two piece encapsulator (Powder, Beads and liquid fill)  
Two piece capsule bander  
Side vented coating pans (15", 19", 24" & 36")  
20" solid (sugar) coating pan  
Dome extruder  
120 mm and 240 mm spheronizer  
Comil 197  
Vortisiv classifier  
Wurster columns - 4"  
Tablet micrometers  
Tablet hardness testers  
Homogenizer  
Tap density tester  
Powder flow testing apparatus

**Analytical Methods Development and Testing**

Waters HPLC with Photo Diode Array Detector  
Gas Chromatograph  
Differential Scanning Calorimeter (DSC)  
UV Spectrophotometer  
IR Spectrophotometer  
Texture Analyzer  
Sonic sifter  
Moisture Balance  
Karl Fisher Titrator  
Disintegration baths  
Dissolution Apparatus  
Surface Analyzer  
Stereo Microscope with camera  
Automated Tablet Characterization Instrument  
Colorimeter  
TOC (Total organic carbon) Instrumentation  
Stability Chambers (Various environmental conditions)