



## Whitby Key Equipment List – Development Scale

Equipment (Features / Scale)		GMP
Blending	V-Blender (1 – 60 L)	●
Granulation	Gerteis Macropactor (with side feed port for small scale)	●
	High Shear Granulator (Key KG-5 / 1 – 5 L bowls – PMA 65)	●
	Mill	●
Drying	Fluid Bed Dryer/Granulator (Aeromatic Fielder STREA-1, Aeromatic S2)	●
Compression	Korsch XL100 10 Station Tablet Press	●
Coating	Tablet Coater (12" – 30")	●
Encapsulation	Encapsulators (2- Manual) Size 00-4	●
Packaging	Blistering	●
	Bottles	●
	Bulk	●
	Sachet	●
	Non-sterile liquid filling	●
Non-sterile compounding	Mixing / Holding tanks	●
	Homogenizer	●

## Whitby Key Equipment List – Commercial Scale

Equipment (Features / Scale)		Capsules	Powders & Granules	Solutions & Suspensions	Tablets
Blending	Ribbon Blender (425 – 1800 L)	●	●		●
	V-Blender (60 – 850 L)	●	●		●
	Tumble Blender (283 – 4000 L)	●	●		●
Granulation	Roller Compactor (Alexanderwerk, Gerteis)		●		●
	High Shear Granulator (PMA600, PMA1200)	●	●		●
	Mill	●	●		●
Drying	FBD/Granulator (Aeromatic T8A, Niro S6, Vector, Glatt)	●	●		●
	Drying Ovens	●	●		●
Compression	Tablet Presses (Korsch, Hata, Fette)				●
Coating	Tablet Coater s (48" Accela-cota, 60" Accela-cota, O'hara)				●
Non-sterile Compounding	Mill			●	
	Jacketed Tanks (100 – 8,000 L)			●	
	Mixing/Holding Tanks (500 – 8,000 L)			●	
	Homogenizer			●	
Filling	Liquid Filling Line (Cozzoli)			●	
Encapsulation	Encapsulators (H&K1200, H&K1500, Anritsu checkweigher)	●			
Packaging	Blistering	●			●
	Bottles	●		●	●
	Bulk	●	●		●
	Sachet		●		

\* For detailed equipment information please contact your Thermo Fisher Scientific representative.

\* Minimum and maximum batch sizes are not necessarily related to scale, batch size requirements are dependent on the project details.