



Pharmaceutical Sciences

FACTSHEET



Formulations – Solids, Liquids and Parenterals

Oral Solid Dosage Forms

- Extensive Experience in Formulation and Process Development of Products for Global Markets.
 - Compressed Tablets (Wet Granulation, Direct Compression, Film Coating, Roller Compaction – US, Press Fit- UK)
 - Chewable Tablets
 - Fluid Bed Technology
 - Capsules – Powder Filled, Bead Filled
 - Bead Manufacturing using Extrusion / Spheronization and Powder Coating
- Extensive Experience in the Development of Immediate, Modified and Sustained Release Products
- Extensive Experience in the Transfer of Products to Full Scale Manufacturing and the Use of Statistically Designed Experiments to Establish Critical Process Parameters, Operating Ranges and Set Points
- Extensive Experience with Designing and Conducting Process Validation and Pre Approval Inspections
- Extensive Experience of Comparator Manipulation including Matching Placebo, Over-Encapsulation, Sugar Coating, Film Coating and De-Inking

Oral Liquid Dosage Forms

- Extensive Experience in Formulating and Process Development of Products for Global Markets
 - Oral Liquids, Solutions, Suspensions and Emulsions
 - Powders for Oral Re-constitution for Adult and Pediatric Formulations
 - Liquid Fill Hard Gelatin Capsules (LEMS Technology)
 - Taste Masking and Flavor Optimization
 - Use of Preservatives
 - Package Development

Parenteral Dosage Forms – US Facilities

- Extensive Experience in Formulating Drug Products for Global Markets
 - Liquid Filled Vials and Ampoules
 - Lyophilized Vials and Ampoules

Equipment – Manufacturing

United States

- Solid Dosage Capabilities
 - Tablet Presses: Speeds up to 150,000/Hour
 - Encapsulation: Speeds up to 25,000/Hour
 - Tablet Coating Pans up to 48-inch, 1 kg to 120 kg
 - Wet and Dry Granulation Sizing Mills
 - Vertical Granulation: 3 to 300 L
 - Fluid Beds (1 – 40 kg)
 - Bead Extrusion/Spheronization
 - Blending (V-Blenders 2 qt to 10 cu. ft, In-Bin- Bohle 200 – 1400L)
 - Spray Dryer (HT and Production Minor Units)
 - Autodose's Powdernium™ - Excipient Compatibility Studies
- Liquid Dosage Capabilities
 - LEMS® –liquid encapsulation up to 30,000/Hour
 - Mixing Tanks up to 2000 Liters with Heating and Cooling Capabilities
 - Complete Liquid Filling Line, In-Line Ancillary Equipment (Vacuum Feed System, Homogenization, Milling)
- Parenteral manufacturing in ampoules and vials
 - Liquid filled, sterile filtered or terminally sterilized
 - Lyophilized
- Semi-Solid Dosage Capabilities to 50 L
 - Bulk Manufacturing, Jar and Tube Filling

United Kingdom

- Solid Dosage Capabilities
 - Tablet Presses: Speeds up to 200,000/Hour
 - Press-Fit: up to 25,000/Hour
 - Encapsulation: Speeds up to 40,000/Hour
 - Tablet Coating Pans up to 150 kg
 - Wet and Dry Granulation Sizing Mills
 - Granulation: up to 150 kg
 - Blending (Drum Blenders (0.1 – 120 kg, Bohle Blender PM1000)
 - Fluid Beds (1 – 120 kg)
 - Bead Extrusion/Spheronization (up to 12 kg hour)



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Formulations – Solids, Liquids and Parenterals cont'd

- Spray Granulation up to 10 kg
- Xcelodose™ – precision automated powder dispensing system up to 600/Hour
- Liquid/Semi-Solid Dosage Capabilities
 - LEMS® – encapsulation up to 30,000/Hour
- Microfluidiser – Continuous Feed

Additional Aptuit Capabilities

Aptuit offers a comprehensive array of services and a proven track record in preformulation, formulation, method development, analytical chemistry, physicochemical analysis, stability testing, technology transfer,

manufacturing, clinical packaging and distribution across a wide range of compounds, dosage forms and delivery systems.

For information about Aptuit's services, please call or email:

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