

# Manufacturing

From pre-formulation and clinical supply to commercial drug product manufacturing and packaging, Cambrex delivers your complex dosage forms with expertise.

With specialized teams and full service FDA, EMEA, Health Canada and DEA (CI-CV) approved facilities, Cambrex is equipped to meet your commercialization needs, manufactured to the highest standards of product quality and regulatory compliance.

## Scale-up & tech transfer

Our development and testing capabilities offer seamless, efficient transition to full commercial scale-up. Development, scale-up and commercialization can be easily facilitated and performed in the same location. If you need to change your manufacturing supply chain for an existing product, our experts can manage all aspects of the technology transfer process.

## Supported dosage forms

- Compressed tablets
- Micro & mini tablets
- Aqueous & solvent film coated tablets
- Capsules
- Controlled release beads
- Powders
- Liquids, suspension
- Creams
- Ointments
- Sterile semi-solids
- Suppositories

Tricie Moore  
Operator, Sterile



## About Cambrex

Cambrex is a leading global contract development and manufacturing organization (CDMO) that provides drug substance, drug product, and analytical services across the entire drug lifecycle.

With over 40 years of experience and a growing team of over 2,200 experts servicing global clients from North America and Europe, Cambrex is a trusted partner in branded and generic markets for API and finished dosage form development and manufacturing.

## Solid dose

Dispensing booths	Granulation	Drying	Lubrication	Compression	Coating	Encapsulation
Vertical laminar flow booths	High shear and low shear granulation  Aqueous and ethanolic  Wet sizing	Fluid bed drying  Static tray ovens	Bin and V blenders match a variety of batch sizes	Kilian, Korsch and Fette single & double rotary  Bi-layer tablets  Drum, bin and gravity feeding	Different size of coating pan: 22", 28", 38", 48" and 60"	IMA, i90 and Bosch encapsulators  Capsule sorting  Bosch KKE and Quali-caps

## Liquid/semi-solid dosage

- Oral liquids
- Oral suspensions
- Creams & ointments
- Aqueous & solvent based systems
- High shear homogenization
- Top driven & inline homogenization
- Topical gels of low to medium viscosity
- Jacketed vessel; product heating & cooling
- Full packing capabilities into glass or plastic; bottle or tube

## Sterile semi-solids

- Sterile suites offer through the wall sterile filtration at 0.2 microns
- All compounding is carried out in a class C area
- Ability to add sterile API via an aseptic transfer vessel using glove ports
- Gamma irradiated sterile components transferred via aseptic processes through transfer docks into filling area
- Components are filled under Class A conditions

## Packaging

We package solid, liquid, and semi-solid, non-sterile and sterile dosage forms into a variety of final packages - customer-ready or in custom forms. Primary packaging is conducted in enclosed rooms isolated by air pressure differential from secondary packaging operations.

- Bottles with regular & child resistant closures
- Tamper evident seals
- Plastic & glass bottles
- Slat counters on all solid dosage form lines
- Blister packs with PVC, PVDC, Aclar & other flexible materials
- Aluminum & child resistant blister liddings
- Hospital unit dose & physician samples
- Plastic, aluminum & laminated tubes
- Low volume powder filling in glove box/ isolator

Joseph Cipollone  
Warehouser

