



mantis associates, inc.

examples of

PHARMACEUTICAL & PACKAGING EXPERIENCE

Developed Internal Barrier Coatings
Designed Novel Cleaning Processes
Developed Solid Lubricants for Impact Extrusion



Improved Natural and Synthetic Gel Formulation
Developed Sealing Processes
Developed Drug-safe Printing Inks

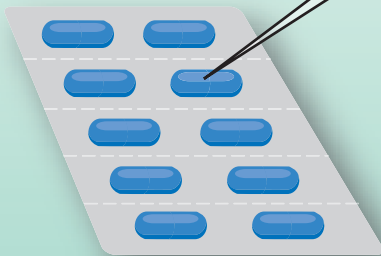


Incorporated Novel Binders
Developed Low Release Parenterals
Development of Natural Ingredients
Wet, Dry Granulation Process Development

Developed and Specified:
• Polymer/Fabric Laminates
• Antistatic Agents
• Pigments
• Absorbents
• Semi-permeable Polymers
• Release Coatings
• Non-wovens

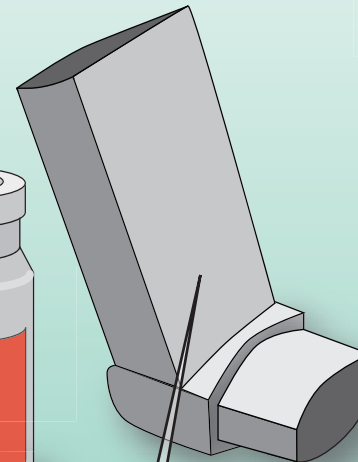


Novel Low Temperature Adhesive Systems Designed
Novel Zero/Low Release Polymers Selected
Drug-safe Inking Systems Developed

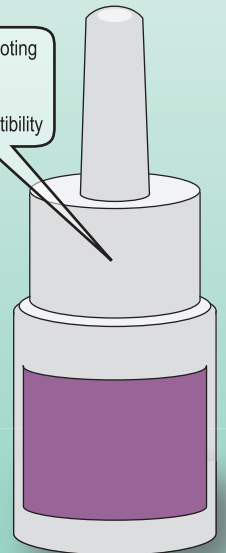


Patented Novel Valve Designs
Improved Elastomer Formulations and Processing
Improved Stem Materials
Assembly and Testing Improvements
Performance Improvements

Low/Zero Extractables Internal Coatings Developed
Low Surface Energy Coatings Developed
Designed Drug-safe Cleaning Processes
Improved Anodizing and Other Surface Treatments
Selected Alternate Alloys and Materials



Performed Assembly Troubleshooting
Specified Materials, Design,
and Processing Improvements
Improved Materials/Drug Compatibility



Low Extractable Rubber Formulations Developed
Eliminated Talc in Rubber Processing
Ferrule Cleaning and Treatment Processes Conceived



Development of Low Extractable Plastics
Low Surface Energy Internal Coatings Developed
Blow and Injection Molding Process Developed
Drug-safe Release Agents Incorporated
Protective Agents Formulated

Alternate Plastics Formulations Implemented
Improved Molding Process
Anti-microbial Formulations and Coatings Conceived



Reformulated Piston to Eliminate Drug Contamination
Reformulated Rubber to Avoid Bonding
Patented Specialized Lubricant
Developed Barrel Plastics to Protect Drug Integrity