

# Equipment

## Equipment

To ensure optimal quality for every customer, we work with state-of-the-art, automated machinery and high-quality coatings. The following list details our primary equipment, raw materials we work with, and the various coating and lamination products we often manufacture.

### Coaters & Laminators

Coating and laminating create the core of our business. At Sierra Coating Technologies, we operate three different coating machines. These coating machines are used in our made-to-order manufacturing, contract and toll manufacturing, and product development services.

- Two 62-inch coaters with wet and dry lamination capabilities
  - Gravure, offset, and slot die coating as primary methods
  - Two-zone flotation drying method
  - Product coating width between 25 inches and 62 inches
  - Roll outside diameter of up to 60 inches (weighing up to 3,500 pounds)
- One 47-inch hot melt coater with lamination capabilities

<https://www.sierracoating.com/capabilities/equipment/> > Page: 2

- Gravure – two roll offset as primary method
- Roll outside diameter of up to 50 inches

This equipment can accommodate material rolls with core sizes of 3, 4, 6, 8, or 12 inches. Finished products can be delivered in any of the following formats:

- On the master roll
- In small slit rolls
- In sheeted form

Project lead times are planned at 10 working days from receipt of raw paper material.

## Raw Materials

We work with a range of different roll-to-roll raw materials — including a variety of papers, paperboards, films, and nonwovens.

We can accommodate rolls of the following measurements:

- Roll lengths of greater than 2,000 linear feet
- Minimum thicknesses of 0.48 gauge for PET films
- Maximum thickness of 40 pt. paper boards
- Product coating width between 25 inches and 62 inches
- Minimum order of one master roll or dictated by raw material ordering

## Paper Products

We can work with coated and uncoated paper.

Lightweight papers, 20-120 pounds, are commonly used in:

- Tapes
- Silicone release liners
- Pizza labels
- Food packaging with barrier coatings
- Food packaging with heat-seal coatings
- Inkjet and digital grades/applications

Uncoated and coated papers for laminations are commonly used in:

- Aisle banners — light blocking signs
- Cover stock
- Card stock
- Store cards
- Duplex color applications

## Paperboard Products

Sierra also works with paperboard, solid bleached sulphate (SBS) board, and linerboards. These popular raw materials are commonly used in the following applications:

<https://www.sierracoating.com/capabilities/equipment/> > Page: 4

- Metalized film laminated to paperboard for:
  - Folding cartons
  - Paper plates
- Blister cards
- Folding cartons with oil and grease (OGR) barriers
- Folding cartons with decorative and printable coatings

## Specialty Film and Nonwoven Products

Our team works with a variety of specialty materials, including:

- Films for laminations and coatings
- Nonwoven materials often used in laminations and products such as dry wipes

## Coatings

Sierra has trialed and has samples of over 750 product variations. Our team has access to the latest and best variety coatings, many of which we have tested and can recommend.

At Sierra, you will receive our best ideas for solving your product problems. Our technical staff has worked with many vendors coatings in the following areas.

Water-based coatings are commonly used for:

<https://www.sierracoating.com/capabilities/equipment/> > Page: 5

- Lamination adhesives
- Blister and heat seals
- OGR barriers
- Water and moisture barriers
- Barrier and heat seals
- Top-coat printing for:
  - Digital and inkjet
  - UV offsets
  - Flexographics
- Silicone releases
- Tape releases
- Removable adhesives
- Protective coatings

Hot melt coatings are commonly used for:

- OGR barriers
- Lamination adhesives
- Food-grade direct-contact barriers
- Blister cards and tags

## **Getting Started with Sierra**

At Sierra, our state-of-the-art equipment is complemented by a variety of services — such as careful documentation and compliance with a range of

industry standards — to help protect the quality of our products.

We conduct the following standard testing procedures for all Sierra products:

- Basis weights
- Coat weights
- Moisture
- Barrier testing
- Kit testing
- Tape pulls
- Adhesion testing
- Color matching
- Gurley
- Heat seals

We can perform and provide product specification, certificate of analysis, food safety, and lot tracking documentation.

We regularly meet cosmetic-grade and FDA food-grade standards, National Sanitary Foundation requirements, and Good Manufacturing Processes (GMP) requirements, as well as Tappi and TLMI standards.

To learn more about our equipment and capabilities, or to discuss how we can assist in creating innovative, reliable solutions for your packaging products, contact the Sierra team today.