

# PILOT COATER & ANALYTICAL LAB SERVICES

Raise the bar with innovation and  
best practices at Appvion, no matter  
the size of your project



APPVION

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# World-Class Pilot Facility

We're proud to exceed industry standards for our rapid design capabilities. Appvion offers expert pilot coating and analytical lab services in our pilot facility at our Development Services Center. Our pilot coater simulates full-scale commercial coaters, offering formulation and integration opportunities for entirely customizable solutions. Together with our customers, we offer the opportunity to develop the best possible solution under realistic conditions, enabling speed-to-market.



## Product Development

In today's market, industry insights are essential. Appvion's research and development capabilities include product design, lab prototyping, custom testing, formulation, custom mixing, technical service, application development engineers, and others.

## Pilot Coater

We apply aqueous-based coatings ranging from 1-20 gsm with multiple interchangeable coating head modules that mimic Appvion's and the industry's units to coat paper, paperboard, and film. Our pilot coater includes air floatation ovens, a chilling section, and steam decurling.



## Coating Kitchen

Chemistry is key for innovative coating solutions. Our pilot facility provides a fully operational coating preparation area for blending, cooking, filtering, deaeration, and testing.

# At a Glance

## SERVICES

New Product Development  
Pilot Coater Trials & Testing  
Small-Volume Production  
Scale-up Services  
Toll Coating

## PILOT COATER SPECS

Widths up to 32 inches  
Rewinder widths up to 40 inches  
Speed up to 1,500 FPM  
Diameters up to 59 inches  
Air floatation ovens  
Chilling section, steam decurling

## COATING APPLICATION METHODS

Coating stations to match each full-scale method: multi-layer curtain, rod, blade, flexo (offset gravure), twin HSM

## BASESTOCK SUBSTRATES

2-24 mil fiber substrates  
1-10 mil film substrates

## FINISHING CAPABILITIES

Offline pilot calendar  
Widths up to 38 inches  
Slitting and rewinding

## ANALYTICAL LAB

TAPPI and analytical chemistry laboratories

## A Trusted Partner

At the heart of our success is our Development Services Center team that possesses unparalleled experience and technical expertise. Appvion has a long history of developing relationships that deliver world-class solutions. We continue to raise the bar with innovation and best practices to provide unique solutions. No matter the size of the project, our team is committed to delivering your vision and exceeding all expectations.





## Experience

As your partner, our expert chemists and scientists can assist in product development, including formulating, compounding, and mixing specialty coatings. Examples of our coating experience include:

**THERMAL RESPONSIVE**

**CHEMICAL RESISTANCE**

**ENVIRONMENTAL RESISTANCE**

**DIGITAL RECEPTIVE**

**BARRIER PROPERTIES**

**SOFT TOUCH**

**ANTIMICROBIAL**

**PRESSURE RESPONSIVE**

**RECYCLABLE**

**HEAT SEALABLE**

**FDA-COMPLIANT**

**FLUORO-CHEMICAL-FREE**

**RELEASE COATINGS**

**HEAT-ACTIVATED ADHESIVES**

**NON-CONTACT PRINTING**



## Finishing Capabilities

Calendering, rewinding, and slitting rolls are available on site for product finishing. Rolls are rewound to make composite rolls of the various trial points or slit down to narrower rolls to fit a variety of converting operations.

## Analytical Lab

We provide the optimal analytical technology for chemical, physical, and performance attributes of product coatings and substrates. Analytical chemistry testing capabilities include XRF, FTIR, and SEM to analyze product layers and materials at the atomic or molecular level.



## Product Analysis

Our team intimately understands how molecules work, not just what they do, allowing each layer to be optimized. We can analyze basestocks, coatings, defects, debris, build ups, and coated and base substrate, surface and cross section views.

## Benefits of our Approach

Our development approach aims to create solutions that represent your project drivers, while addressing functional and performance requirements. The results provide you with a dependable and conclusive foundation for decision-making to support your process investments. Our team can assess product designs and competitive products, or resolve issues in raw materials, process, and performance.



# Our Competitive Advantage

Appvion's development services team has the experience and technical know-how to deliver projects ranging from toll coating to turn-key solutions. Appvion's ability to immediately analyze, test, and review each product attribute provides the benefit of an experienced workforce — one that will exceed your expectations in regard to both schedule and quality — all while keeping safety at the forefront. We are committed to providing a work environment that is not only healthy and productive, but free from hazards.

## TO ACHIEVE A SUCCESSFUL PROJECT, WE:

- Hold safety as our highest priority
- Maintain a highly skilled and experienced workforce
- Ensure confidentiality
- Draw on deep knowledge of coatings, substrates, application technology, and converting
- Factor in speed-to-market
- Identify, understand, and follow project specifications and project drivers

**It's easy to get started.  
Contact us today.**

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