

PRODUCT *Watch*

NEW AND NOTEWORTHY AT ACCESSA

PAGE 7



5 IN-DEMAND FINISHES



HOW TO CUT THE DIRT

ACCESSA

2017 Momentum is High



It's hard to believe we are already into June, as it seems we were just celebrating the arrival of the new year. Accessa's 2017 started with a bang and has not let up since. We continue to see positive changes occurring at the various facilities, including new faces, equipment investments and service expansion.

For our valued customers and friends, here are some of Accessa's 2017 wins, to date, many of which would not be possible without you. Thank you.

HIRING: We continue to add to our team as we commit to our promise of outstanding customer service.

- In late 2016, **Oscar Vasquez** joined the Indy team as a Production Specialist, helping fulfill customer orders for our metal coatings markets, our Accessa Chemical customers, and our central and southern Indiana wood customers
- **Cory Benson** joined Accessa in January and is quickly making his mark with the installation and onboarding of the new Novaflow paint and color dispenser in Elkhart.
- As we increased our service level out of Indianapolis via Accessa truck delivery to southwest Indiana and Louisville, **William "Chris" Hoock** recently joined the team as a Delivery Driver and Warehouse Specialist.
- Finally, **Jeff Troyer** joins Accessa as the new Delivery Driver and Warehouse Specialist for the Elkhart facility.

CUSTOMIZATION CONTINUES: In 2016, never-seen-before high levels of color matching and custom production made life at Accessa incredibly hectic and busy. The hot trends continue to be shades of gray, weathered and "natural" looks, and low to no sheens. In response to the market demands, we continue to roll out new product options and application processes to achieve the desired effects.

TECHNOLOGY UPGRADE BENEFITS: Accessa's most recent investments focus on the new Novaflow base and pigment dispenser in Elkhart. We are now able to fill a 5-gallon pail of tinted Matador, for example, in less than 5 minutes. That's from completely empty pail to completely full, tinted, and ready for quality control, in less than 5 minutes. This speed and efficiency tees us up to handle increased demand while still meeting our goals of accuracy and speedy lead times.

EXPANSION: Accessa's move into Denver last fall required a lot of work, quite a bit of travel, and a whole lot of energy. The result so far? Tremendous. The local team has rocked the operational changes, and it feels like we have accomplished a year's worth of work in just the first six months. We are working diligently to restoke relationships in this community, and have enjoyed meeting past, current and prospective customers.

Another form of expansion is less "new market" and more "go to market." In an effort to better serve our southwest Indiana and northern Kentucky customers, we added Accessa truck delivery service out of Indianapolis.

2017 THEME – KEEP IT SIMPLE & INTENTIONAL:

While 2016 was a really high-pressure year for a variety of reasons, we are focusing on the K.I.S.S. method in 2017. We are keeping our eye on the prize of customer satisfaction, while at the same time avoiding overcomplicating issues.

We're looking at ways to resolve issues faster, more effectively and with less stress through better communication. A small example: Do you prefer a back-and-forth email, or is a phone call a faster path to resolution? Our teams are also working on boosting self-accountability to get across the right messages both internally and externally.

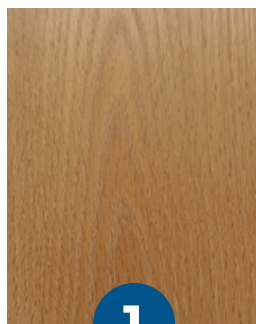
You can help us — and yourself. How well are we setting expectations with you? How can we improve our communication with you? Communication is an exercise on which we can all improve, and in an effort to "Keep It Simple and Intentional" in 2017, I invite you to reach out to us if you ever see a problem or opportunity to be better.

If there is anything I can do to help you, or if you have any feedback, please skip the email and give me a ring. I'd love to hear from you.

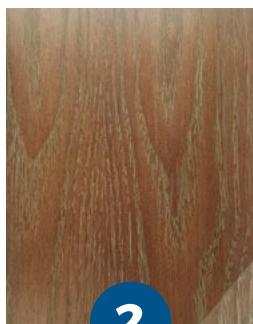
Joe Todd, President, Principal

5 HOT FINISHES

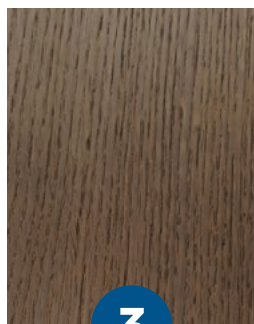
Here are five finishes we're getting lots of requests for this year and how we achieve the look.



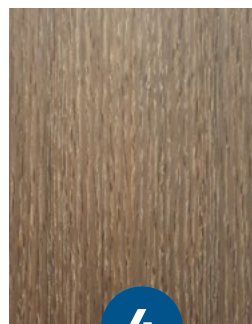
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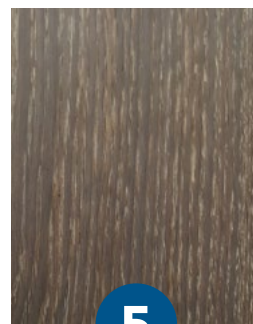
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3



4



5

PANEL 1: CERUSED RED OAK 1

FINISHING PROCESS:

1. Sand with 180
2. Wire brushed
3. Scandia Teak Dye Stain (PLD-117)
 - Dry 30 minutes
4. ICA's OAC363G40 Clear Acrylic Polyurethane (40-sheen)
 - Dry 1 hour, then sand with 220
5. AcromaPro's Antink Tinktur – Antique White
 - Dry 30 minutes, scuff with maroon Scotch Brite pad
6. ICA's OAC363G40 Clear Acrylic Polyurethane (40-sheen)

PANEL 2: CERUSED RED OAK 2

FINISHING PROCESS:

1. Sand with 180
2. Wire brushed
3. Dark English Walnut Dye Stain (PLD-108)
 - Dry 30 minutes
4. ICA's OAC363G40 Clear Acrylic Polyurethane (40-sheen)
 - Dry 1 hour, sand with 220
5. AcromaPro's Antink Tinktur – White
 - Dry 30 minutes, scuff with maroon Scotch Brite pad
6. ICA's OAC363G40 Clear Acrylic Polyurethane (40-sheen)

PANEL 3: RED OAK 1

FINISHING PROCESS:

1. Sand with 180
2. Wire brushed
3. Wood treatment
 - Dry 2 hours
4. Wood treatment
 - Dry 2 hours
5. ICA's OAC363G10 Clear Acrylic Polyurethane (10-sheen)
 - Dry 1 hour, sand with 220

6. AcromaPro's Antink Tinktur – Black
 - Dry 30 minutes, scuff with maroon Scotch Brite pad

7. ICA's OAC363G10 Clear Acrylic Polyurethane (10-sheen)

PANEL 4: RED OAK 2

FINISHING PROCESS:

1. Sand with 180
2. Wire brushed
3. Wood treatment
 - Force dry 15 minutes
4. ICA's OAC363G10 Clear Acrylic Polyurethane (10-sheen) with PO33 Fine Grain Ceramic Texturizing additive (drops sheen to below 5)
 - Dry 1 hour, sand with 220
5. AcromaPro Antink Tinktur – Antique White
 - Dry 30 minutes, scuff with maroon Scotch Brite pad
6. ICA's OAC363G10 Clear Acrylic Polyurethane (10-sheen) with PO33 Fine Grain Ceramic Texturizing additive

PANEL 5: RED OAK 3

FINISHING PROCESS:

1. Sand with 180
2. Wire brushed
3. Wood treatment
 - Dry 2 hours
4. Wood treatment
 - Dry 2 hours
5. ICA's OAC363G10 Clear Acrylic Polyurethane (10-sheen) with PO33 Fine Grain Ceramic Texturizing additive (drops sheen to below 5)
 - Dry 1 hour, sand 220
6. AcromaPro's Antink Tinktur – Antique White
 - Dry 30 mins, scuff with maroon Scotch Brite pad
7. ICA's OAC363G10 Clear Acrylic Polyurethane (10-sheen) with PO33 Fine Grain Ceramic Texturizing additive

OVERHEARD AT CABINETS & CLOSETS

In April, Accessa reps talked shop at the Cabinets & Closets Conference & Expo in Chicago. Here's what we heard:

- The buzz in all of the markets we serve, from Colorado to Pennsylvania, is that the flat, aged look (i.e. driftwood-type appearance) is in demand. People are looking for industrial, weathered, rustic looks. If you go into many furniture stores, or look at closet company displays, while painted variations of whites, grays, and some blues are still quite popular, the flat finish showing a gray-aged or natural colored wood is very much in demand right now.
- We're also seeing more and more interest in polyurethanes. Accessa is developing a more formalized polyurethane product offering/program, so stay tuned.



ON THE HORIZON: Accessa will be fully represented at the AWFS Fair in Las Vegas in July (booth #5808). Our representatives will be there assisting the AcromaPro booth, and Accessa will have its very own booth at this year's show! This is a large show that we're excited to be a part of — check out more at awfsfair.org.

HOW ARE GLOBAL MARKETS TRENDING? WHERE DO OPPORTUNITIES LIE? CHECK OUT OUR INDUSTRY NEWS ROUNDUP.

WOOD COATINGS, STAINS & FINISHES:

The future of the market will center on functional furniture and environmentally-conscious formulations. The global wood coating resins market is projected to reach \$4.24 billion by 2021, at a CAGR of 5.39 percent through 2021, according to a recent report by Markets and Markets. Researchers found that growth in the global wood coating resins market is due to the eco-friendly properties of wood coating resins, healthier coating systems, more durable coating resins with better performance and better aesthetics, the growing demand for waterborne and solvent-free coating resins, VOC regulations driving the demand for waterborne coating resins, and the growing end-use industries. — *Coatings World* (http://www.coatingsworld.com/issues/2017-02-01/view_features/wood-coatings-stains-finishes/)

WOOD STAIN DEMAND TO GROW 4.3% ANNUALLY THROUGH 2020:

According to a new study, demand for wood stain is forecast to rise 4.3% per year to \$1.7 billion in 2020. Furniture and decking applications account for nearly 60% of demand for wood stain. Cabinet applications will see the fastest advances in stain demand, due to the combination of strong gains in cabinet sales and the sustained popularity of solid wood cabinetry. These and other trends are presented in Wood Coatings Market in the US, a new study from The Freedonia Group, a Cleveland-based industry research firm. — *PCI Magazine* (<http://www.pcimag.com/articles/103343-wood-stain-demand-to-grow-43-annually-through-2020>)

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REPORT PREDICTS GROWTH IN GREEN

COATINGS MARKET: According to a new market study by market research firm Lucintel, the global green coatings market is forecast to grow at a compound annual growth rate of 5.1% from 2015 to 2020. The major drivers of growth for this market are growth in end-use industries, stringent environmental regulations and growing awareness of VOC emissions. The emerging trends, which have a direct impact on the dynamics of the green coatings industry, include the increasing use of UV curing coatings and use of plant-based sources to develop wood coatings. — *PCI Magazine* (<http://www.pcimag.com/articles/103358-report-predicts-growth-in-green-coatings-market>)

REPORT PREDICTS GROWTH IN MARKET FOR PRETREATMENT COATINGS:

According to new research by Global Market Insights Inc., the market for pretreatment coatings is expected to exceed \$15 billion by 2024. The report sites a strong outlook for infrastructure spending along with a rise in vehicle sales, particularly in China, India and Japan, as drivers for growth.

The company predicts that the pretreatment coatings market in China could generate over \$2.1 billion in business by 2024. Growth in the aerospace industry is predicted to fuel regional growth. ...

The report predicts that the market for cleaners could generate over 4% growth. ...

Market size for pretreatment coatings market from general industry is predicted to generate over \$4.1 billion in business by 2024 ... Agricultural vehicles, appliances, HVAC, office furniture, manufacturing and architectural aluminum are part of the general industry segment, which uses iron and zinc phosphate coatings. Global pretreatment coatings market size from metal applications could generate over 4.5% gains, according to the report.

According to the report, U.S. pre-paint conversion coatings market size should witness strong gains at 6% and generate over \$850 million in business by 2024. — *PCI Magazine* (<http://www.pcimag.com/articles/103222-report-predicts-growth-in-market-for-pretreatment-coatings>)



INDUSTRIAL COATINGS MARKET:

Global Analysis, Current Trends, Forecast to 2022 The global industrial coatings market is estimated to be USD 74,913.34 million currently in 2016. The market is projected to reach USD 91,330.00 million by 2021, at an estimated CAGR of 4.04%, during the forecast period, from 2016 - 2022.

The major driver for industrial coatings industry is the growing demand for industrial coatings from the automotive sector. This increase in demand can be attributed to the increased production of automotive, as well as the increasing usage of automotive refinishing coatings in the emerging countries. Furthermore, the increasing usage of corrosion coatings in various industries and accelerating demand for eco-friendly coatings is expected to drive the market. The harmful environmental impacts due to VOC emissions from traditional coatings is a major drawback for this market. Factors such as increasing applications of powder coatings and increasing demand for high durable products are anticipated to provide numerous opportunities for the market in the near future.

— *Mordor Intelligence* (<https://www.mordorintelligence.com/industry-reports/industrial-coatings-market-colors-of-the-year-for-2017-300346594.html>)

NEW DELIVERIES TO SOUTHERN INDIANA

Accessa is now making deliveries out of the Indianapolis facility to southwest Indiana on Tuesdays and Thursdays, but that's not all. Within the next 30 days, we will expand that service to the Louisville market for custom deliveries. With the addition of the delivery truck, we welcome William "Chris" Hooch behind the wheel.

The new service is focused on the Washington and Daviess counties area, home of about 30 Accessa customers.

Prior to 2017, orders for these customers had been filled by the Arthur facility. For about four months this year, the Indianapolis location filled orders but we relied on a delivery service to get products to customers. With increasing demand and the opportunity to expand our service area down south, we decided to lease the truck and hire Hooch in April.

WELCOME, CHRIS HOOCH & CORY BENSON



Chris and his girlfriend, Jessica, live in Zionsville with their two dogs, an American bulldog and a beagle mix. He is very much a homebody, spending a lot of his time gaming and watching movies. He also loves the beach and is a huge Indianapolis Colts fan.



Cory started at Accessa in January 2017 and lives in Mishawaka. His busy family includes three kids (ages 9, 7 and 4) and one dog (a "Heinz 57" variety). Cory enjoys working on his truck, riding motorcycles and making people laugh.

NOVAFLOW PERFORMANCE UPDATE

The Novaflow machine was successfully installed in January 2017 at the Elkhart facility and is now up and running, reducing times to dispense colorant and bases, and fill pails in only 4-5 minutes. Completely customized to suit Accessa's needs, the Novaflow is an automatic tinting and filling machine that holds 866 and 844 colorants to cover 24 colors we commonly use, as well as the top eight bases. The machine is being used during orders that call for one of these color lines or bases.

Cory Benson joined the Accessa team to run the machine and we continue to look at ways to make the Novaflow work even better for us and our process. Essentially, the more we use it, the better it gets. During the first quarter of 2017, batch counts were lower than usual, while Accessa's numbers were great. Now that batch counts have rebounded, we're using the Novaflow every day, which allows us and the Novaflow team to fine tune its performance and levels of accuracy.

MEET, JEFF TROYER & OSCAR VASQUEZ



After driving a truck for nine years, Jeff joined the Accessa team on May 1 as our new Delivery Driver and Warehouse Specialist for the Elkhart facility. Jeff enjoys taking care of his yard, golfing with friends, and spending time with his wife of 29 years, two daughters and two young grandchildren.



As a Production Specialist, Oscar started with Accessa in November 2016. He lives downtown Indianapolis, loves the Colts and is a big Harry Potter fan. Soccer is his favorite sport; according to Oscar, the best team in the world is Real Madrid.

PRODUCT WATCH



It's the latest rundown of new and noteworthy products being offered by Accessa. Please contact us to find out more about these products and consider how one might be a good fit for your business.



HitSol HSCC4355 – Acid-based liquid cleaner/coater iron phosphate concentrate designed for use in metal pretreatment applications. HitSol HSCC4355 will also remove rust from iron and steel and brighten soft metals such as aluminum and copper alloys. HitSol HSCC4355 is formulated with foam control to produce fast-breaking foam in high-pressure applications, even at ambient temperatures. The oil-splitting characteristics make it very suitable for cleaning oily substrates and skimming off oil periodically to maintain and extend the bath life.



ACCESSA LINE

Accessa's Wood Bleach Kit – Part-A: HYDRO-1, Part-B: LYE-QT – When used in combination as directed, reacts with the tannic acid content of wood to produce lighter wood tones and achieve uniformity of color. Accessa's Wood Bleach Kit procedures are safe to use on all species of wood; solid or veneer.

ACCESSA'S AQUAMILL LINE

Aquamill Sealer, ACS-AMS8887 – Water-based sealer designed for interior wood articles that will be finished with a recommended Aquamill topcoat. Exhibits fast dry, good sanding, and very fast development of block resistance.

Aquamill Clear Topcoat, ACS-AMCT8891Gxx – Waterborne, self-sealing finish designed for millwork, furniture, cabinets and other wood substrates. Exhibits exceptional hand feel and clarity of finish along with excellent application, sanding and block resistance. It meets KCMA when used with Aquamill Sealer, or used as a self-seal product.

Aquamill Primer, ACS-AMP8832 – White water-based millwork primer for particle board, MDF and natural woods. Compatible with a wide range of common industrial topcoats. This is an economy-level millwork primer. Great for “blow and go” type applications knowing it's going to get topcoated with an opaque, as this primer does not provide 100% hiding in a one-coat application.

Aquamill FD Basecoat, ACS-AMFDB8346 – Fast-drying, white, water-based primer for interior millwork with good block resistance. Exhibits passing edge soak results when used with a recommended topcoat.

Aquamill White Topcoat, ACS-AMWT8840Gxx – High-quality, acrylic, white, water-based topcoat for application to millwork, furniture and various other wood and MDF substrates planned for interior use. Meets KCMA when applied over Aquamill Primer or Aquamill FD Basecoat. For health of the applicator, it does not contain APEO or NMP; it is low in VOC and meets the HAPs requirement of the Federal NESHAP standard for Wood Furniture Operations.

ACCESSA'S PRIMEMILL LINE

Primemill QD Vinyl Sealer, ACS-PMVS7910 – Pre-catalyzed vinyl sealer for natural or stained interior wood. Dries fast, sands easily, contains no HAPs solvents and is very low in VOC as-supplied.

Primemill Sealer, ACS-PMS7851 – Pre-catalyzed, fast-drying lacquer sealer for natural or stained interior wood. Dries fast, sands easily and contains no HAPs solvents.

Primemill HS Clear Precat Topcoat, ACS-PMHS7827Gxx – High-solids, pre-catalyzed lacquer for natural or stained interior wood articles. Produces a high-quality clear finish with faster build and improved sanding properties. Formulated with no HAPs solvents.

Primemill FD Primer, ACS-PMPB7833 – Primemill FD Primer is a fast-drying lacquer, white millwork primer for use on interior wood articles. Contains fewer VOC emissions than conventional products, is formulated with no HAPs solvents, and is phthalate-free.

Primemill Basecoat, ACS-PMB7810 – Primemill Basecoat is a pre-catalyzed white lacquer primer for interior wood articles. Easy application properties and formulated with no HAPs solvents, this is a good general purpose primer for use under recommended topcoats.

PRODUCT WATCH

Primemill White Precat Topcoat, ACS-PMWT7811Gxx

Pre-catalyzed white lacquer topcoat for interior wood applications. Easy application properties and formulated with no HAPs solvents. This base can be tinted to a variety of off-white colors, if needed.

ACROMAPRO

AcromaPro's AKVA LINE™ 813 Sanding Sealer – Akva Line™ 813 Waterborne Sanding Sealer is a fast drying waterborne acrylic sealer formulated for use on interior wood products. This sealer has quick build with excellent vertical hang and excellent sanding characteristics providing a smooth foundation for topcoating with Akva Line™ 814 Clear Waterborne Topcoat. This waterborne technology is formulated for closed or semi-closed grain woods such as maple and alder and is ideal for vertical application. This sealer is low in VOC and VHAPS content.

AcromaPro's AKVA LINE 814 Waterborne Clear Topcoat – A one-component waterborne acrylic topcoat designed for use on interior wood products. Developed for use on properly prepared interior wood as a self-sealing system or over AKVA LINE™ 813 Waterborne Sealer. Has excellent clarity with good build characteristics and good film hardness. When used over AKVA LINE™ 813 Waterborne Sealer, this fast-drying finishing system is designed to meet KCMA test requirements for finishes. AcromaPro's AKVA LINE™ 814 Waterborne Clear Topcoat has an optional catalyst to increase performance. Typical end use applications include cabinetry, residential furniture and architectural woodworking.

AcromaPro's AKVATOPP™ 814 WB White Topcoat - A one-component acrylic/polyurethane topcoat with optional cross linker designed for use on interior wood products as a self-sealing system or applied over Laqva™ Prime Universal. Builds quickly and has very good film hardness and resistance to common household chemicals and moisture. Typical end use applications include kitchen cabinets, residential furniture and architectural woodworking. Low in VOC and is UL GREENGUARD Gold certified for low chemical emissions.

ICA

ICA's OP263 – An economical, self-sealable clear polyurethane topcoat.

ICA's FP281EC – An economical white polyurethane basecoat.

ICA's OP430 – An economical white polyurethane topcoat.

TEAM EDUCATION

Educating customers is part of Accessa's commitment to service. Check out these two articles published on the Accessa blog to bone up on your coatings FAQs.



HOW TO REDUCE DIRT PROBLEMS

Dirt is one of the most vexing and challenging problems encountered in the paint shop. It never seems to end and is often hard to eliminate. Dirt can come from many sources including some that are not even under the direct control of paint line personnel.

WHAT IS DIRT ANYWAY?

Dirt is any visible, objectionable object in or under the paint film. Most people can detect a particle as small as 5 microns (0.2 mils) in the paint. Dirt in the paint is more easily detected in glossy films than in flat (low-gloss) ones.

WHAT SORTS OF PROBLEMS DOES DIRT CAUSE?

Generally only appearance problems arise. Customers just don't like to see particles of foreign material in the paint film.

WHERE DOES DIRT COME FROM?

It can come from many sources. Here is a partial list:

- Filters
- Paint
- Sanding
- Sealers
- Shot blasting
- Sealing
- Compressed air
- Blow-off air
- Dry-off ovens
- Conveyors
- Clothes
- Gloves
- Hair
- Masking tape
- Plant air
- Paint pots
- Gun tips

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WHAT ARE SOME OF THE OBJECTIONABLE COMPONENTS OF DIRT?

Here is a partial list:

- Dried paint
- Bake ovens Wipe rags
- Hooks and hangers
- Cotton fibers Dried sealants
- Sanding dust
- Weld spatter
- Filter media
- Dried chemicals
- Soot
- Grinding
- Booth air

Probably the most common dirt material is natural or synthetic fiber. Cotton gloves and clothing are very common sources of dirt.

HOW CAN PLASTICS ATTRACT DIRT ELECTRICALLY? AREN'T PLASTICS NON-CONDUCTIVE?

They are, and that is the problem. Since plastics cannot conduct a charge to ground, they simply sit in the air charged and induce the opposite charge in nearby air borne dust. The resulting opposite charge attraction pulls the dust to the plastic surface.

BUT HOW DOES THE PLASTIC SURFACE BECOME CHARGED IN THE FIRST PLACE?

Plastic surfaces may become charged by friction. The phenomena is called turbocharging or static electricity. It is what happens when you walk across a nylon carpet on a dry day. Your shoes rub electricity from the carpet, and your body becomes charged. It can be a shocking experience when you reach for a doorknob.

WELL OUR PLASTIC PARTS DO ATTRACT DIRT FROM THE AIR BUT NO ONE RUBS THEM. HOW DO THEY BECOME CHARGED?

Some plastics charge easily with very little frictional rubbing. Dry-off air blowing over the surface may cause some static electricity, especially on dry days when there is too little moisture in the air to allow the charge to leak off onto the moisture. Actual rubbing is a more likely cause of the static electricity in most cases.

What can we do to reduce the charge on the plastic surface?

One way is to keep the humidity up. More moisture in the air means the electrical charge can more easily leak off into the air. That is pretty much the same as saying the surface won't become charged in the first place.

Another approach is to blow ionized (electrified) air over the surface. The charged particles (ions) in the air neutralize the surface charges on the plastic and the problem is solved, or at least greatly reduced.

To read the full article, visit the [Accessa blog](#).

FAQS ON PAINT & TEMPERATURE CONTROL



Temperature control is a critical aspect of high-quality finishing. Temperature influences how easily the paint pumps, atomizes and flows out. It affects how quickly the coating dries (or cures) and how hard the film becomes. Often the exact temperature at which something in the paint shop happens is less important than the consistency of the temperature. Let's dig in with our FAQs.

WHAT TEMPERATURES ARE IMPORTANT?

At least five temperatures are important enough to monitor:

1. Paint
2. Booth air
3. Compressed air
4. Bake ovens, if used
5. Pretreatment chemicals, if applicable

WHAT HAPPENS IF THE PAINT IS TOO WARM OR TOO COLD?

Cold paint will be too viscous (too thick). It will pump, atomize and flow-out with difficulty. Also, the rate of solvent loss from cold paint on the part will be reduced. The retained solvent will keep the paint runny, and sagging may result. This effect usually overcomes the reduced flow from higher viscosity. The result is more sags on cold mornings. The retained solvent may also lead to popping in the oven.

Warm paint flows too easily. When warm, more paint than is needed will flow at a given pump setting. Atomization will require more air pressure and a larger paint cloud will form. The result will be wasted paint and more mess.

In some cases, paint temperature variation may influence color.

HOW CLOSELY SHOULD THE PAINT TEMPERATURE BE HELD?

This is not an easy-to-answer question. It depends on the solvent blend (fast or slow) and the skill of the operator. Skillful painters can compensate for considerable variation in temperature, line speed, solvent blend, etc. Manual application can usually accommodate a plus

or minus 5 degrees Fahrenheit temperature variation without much problem. Automatic applicators work best if the paint varies no more than 3 degrees Fahrenheit from the recommended value.

HOW CAN I CONTROL PAINT TEMPERATURE?

The best option is to use a paint heater.

HOW DO PAINT HEATERS WORK?

There are at least four ways to heat paint before application:

1. **Non-circulating (dead-ended) systems** use a warm liquid pumped through a special hose inside the paint hose. The circulating warm liquid is heated electrically and it warms the paint.
2. **Circulating systems** usually use an electrical resistance element in a cast aluminum body through which the paint is pumped. This is the most common approach to heating paint.
3. Sometimes an electric **liquid-to-liquid system** heat exchanger is used to heat the paint. These systems are somewhat complex, but they can be used to cool as well as heat. That might be a useful feature for catalyzed systems.
4. You can also use an **electric drum or pail heater**. This heater uses a belt that wraps around the drum. Plug in an set thermostat to what you want.

WON'T THE PAINT VISCOSITY DROP IF I HEAT THE PAINT?

Sure, but so what — at least the viscosity will be consistent. If the viscosity is too low, you can simply spray at higher solids. In fact, some high-solids paints are heated mainly to drop the viscosity into a sprayable range. The paint supplier may want to change the solvent blend to accommodate a higher spray temperature.

What's the problem if the parts are too warm or too cold? Cold parts present two problems. The first is that they cool the paint, with the result being that the paint may sag in the booth or pop in the oven (due to retained solvent). Second, if the parts are cool enough, they may condense water vapor from the air and coat the surface with a film of water prior to painting. The water film reduces adhesion and may cause the paint to slide off the surface.

Warm parts may dry the paint droplets as they strike the surface and prevent good leveling. With waterborne warm parts may reduce the paint viscosity and lead to sags.

To read the full article, visit the [Accessa blog](#).