

COATING WORLD®

SPECIAL REPORT ON NONSTICK COATINGS AND HOUSEWARES FOR RETAILERS

How To Save Time, Money, And Get Precisely What You Want When You Source Cookware Or Bakeware

Product development and direct sourcing are fast-paced and complex processes. In all housewares categories they require knowledge and expertise in several areas — and it is often left up to a single buyer or product manager to make sure all areas are covered. Even with an assistant or two, or an involved DMM or VP, this is a lot for a small group of professionals to take on.

Once the final price is negotiated, everyone shifts into high gear, working to meet that first ship date: making the molds, first product samples for review and approval, testing, packaging, writing and placing the orders, planning the ad schedule, and working it into current assortments. Time is money. A simple problem can set back the whole process — and a couple of problems can mean missing the first ship date and that first ad.

So it is important to find and partner with other industry experts to help avoid common pitfalls, which are often very costly.

First rule of thumb

When developing any housewares product on which a nonstick coating is to be applied, be careful to ask for a “nonstick coating” and not a “teflon coating” — unless you really want a “Teflon®” coating. Teflon is a registered trademark of DuPont and is the brand name used for their nonsticks. If you are sure you want a Teflon coating, fine. DuPont is a reputable manufacturer and makes good products. But if you want to explore all the



Aren't nonstick coatings for cookware (top photo) and nonstick coatings for bakeware (bottom photo) essentially the same coating performing the same functions? Most people would say “Of course!” but these people would be wrong. How bakeware and cookware coatings are engineered and how they perform are worlds apart. Read why (next page).



Is spray the right application system for the nonstick coating you specify? Would coil or roller be better/more economical? We can help.

options available to you that combine your price and performance requirements, you need to make your vendor(s) aware of it. And don't restrict your options.

The nonstick coatings development checklist

By following the Whitford nonstick-coated products development checklist and specifying the applicable information to your vendor(s), you will save valuable time by eliminating the endless back-and-forth that can follow. (The checklist is available online at www.whitfordww.com/retail). You will ensure that you get pricing on exactly what you need to meet your targets — and will be able to compare all quotes accurately, moving through the development cycle faster and more efficiently.

Why are all these details important?

The performance requirements for cookware, bakeware and small appliance coatings all vary, depending on how the products are used and the ele-

ments they will encounter. The more information the vendors and coating suppliers have on a project, the better able they are to recommend the best coating for the job, as well as other options.

The development checklist has been compiled based on real experiences encountered over the years. And for each item on the list, we can provide several examples (more than we would like) showing how costly simple mis-communications can be. Our goal is to help you avoid these mistakes and make it as simple as possible to get the right coating for the job. Below are examples, for each section of the checklist:

- **Category:** Bakeware coatings applied to baking pans or roasters must be able to deal with aliphatic fats (the most difficult) from poultry and sugars from baked goods, while cookware coatings have to withstand higher temperatures, and small-electric coatings must deal with different heating elements. If a vendor uses a bakeware coating on a cookware product,

the coating may not pass release and performance requirements. (There are coatings specially formulated for each product category.)

- **Item description:** Within any category there are always exceptions to the rules. Often a roaster is labeled as bakeware, and a grill pan is a staple in many cookware assortments, both of which can require special coatings due to their unique uses and constructions. If the coating supplier is unaware of the specific applications, these performance requirements may be missed and the wrong coating applied.

- **Color:** Providing a Pantone, RAL or other reference number, as well as any desired features such as level of gloss and metallic finish, allows the color match to be completed as close to the required color as possible. Without a specific guide to color, it can mean several tries, which can slow the color-match process and impact ship dates and production runs.

- **Substrate:** The substrate can change the surface pre-treatments used (blasting, phosphate, etc.). Surface preparation is one of three key factors in ensuring a coating performs correctly. If the surface prep is done improperly, or the wrong coating used for the application, the coating will not perform as designed and, in most cases, encounter severe failures. For example, due to flash rusting, the best surface prep for carbon-steel cookware or bakeware is phosphate and the best coatings are solvent-based (non-waterborne) coatings. If a waterborne coating is used, the surface could rust before the coating is baked/cured.

- **Thickness/gauge:** The thickness or gauge of a pan can impact coating selection. Heat is the number-one enemy of nonstick coatings because the primary ingredients of nonsticks are organic. If the coating is to be applied to a 4-gauge aluminum pan, it allows for more coating options,

because the pan is very thick and will distribute heat efficiently. If the application is for a 10- or 12-gauge aluminum pan, coating options are limited due to potential hot spots or overheating issues.

- **Bottom treatment:** If an exterior coating has to go across the bottom of a pan, a different coating is called for from that used on a pan on which the exterior coating is only applied to the sidewall — affecting both performance and cost. Whether to have a date stamp should also be considered because, if there is a quality problem, the stamp can identify the vendor and the time of manufacture.

- **Target market/retail:** Knowing the target-market level or target retail can influence the coatings recommended for any project. For example, knowing that the project is for a promotional cookware line means that coating options can be recommended to hit the target price points. But: “Promotional” does not have to mean “disposable”. Proper coating selection can assure that you get the best possible performance for the money.

- **Application:** Interior coatings must comply with several regulatory statutes. There is more flexibility with exterior coatings, since they do not come in contact with food. So knowing if a coating is for the interior, the exterior or both is important from the start of the project, for pricing, performance and regulatory reasons.

- **Application method:** Application methods can impact the performance and durability of a coating. The “good-better-best” line-up for application methods is roller, curtain, then spray and/or coil for bakeware. Determining up front which method best meets your requirements is an important detail.

- **Regulatory compliance:** This is an important item to specify, yet is often overlooked. A coating that is FDA-compliant is not always EU- (EEC-) compliant, and vice-versa. It is a top priority to make sure that your vendor knows precisely with which regulations the coatings must comply.

- **Requirements of testing standards:** Every company has its own standards that a coating must meet, and sometimes even its own test methods. So make sure that your vendor(s) is aware of all the performance requirements for the coating, as that can have an

impact on the formulation used.

- **Performance expectations:** Internal expectations are also important. If, for marketing reasons, a specific warranty is desired on the product, this may affect the coatings recom-



Measuring dry-film thickness (Whitford Test Method 114A) is a key part of the QCP testing program. If specified film thicknesses are not met, the coating will not perform up to expectations.

mended. While warranties are more marketing than science, and Whitford does not have suggested warranties by coatings, no reputable coating supplier would suggest a one-coat non-reinforced curtain coating for a product that will carry a 20-year warranty.

- **Manufacturers used:** Never assume a coating will perform a certain way or will achieve your desired results because a similar coating, or a coating from another brand within that supplier’s coating assortment, already meets these requirements. There are too many potential variables in cookware design that can alter test results and performance.

Whitford is here to help

You can take it one step further and include the Whitford retail team from the start of any project, new or redesign. We will help you go through the checklist, especially if there are items of which you are unsure, and identify the exact product or products



Whitford will test your cookware/bakeware products and provide you with this “QCP” seal for packaging that assures customers that the coating has been tested and will perform as designed — all for free.



Pantone and RAL are the two leading international standards for color matching. Providing a specific color from one or the other goes a long way toward simplifying color matches for cookware that Whitford does in our Laboratory. A request for "blue" doesn't help. "Pantone 286 blue" does.

that meet your criteria. We will supply you with exact product codes, so you are sure to get apples-to-apples pricing from your vendors, which will save even more valuable time.

The help of our overseas colleagues will also be made available to you. They can provide technical assistance to your vendors at any stage of the process, which can help avoid costly

delays and prevent problems from hitting the selling floor.

The retail team can also recommend sources by country, substrate, category, and/or application.

Free testing program

Don't forget about our FREE non-stick-coating testing via the Quality Cooperative Program (QCP). By using

the QCP either at the development stage and/or during production, we will check to ensure that the coating was properly applied and, in combination with the checklist, that the coating meets all your requirements.

Further, if you take advantage of the free testing, we provide our "Quality Controlled Product" Seal for all packaging and advertising. The Seal tells your customers that the coating has been tested and will perform as designed, an added bonus in today's market where outside endorsements are valuable marketing tools.

Help is just a click away

We've made it even easier to get help on a project involving a nonstick coating. The Whitford development checklist is now available on-line at www.whitfordww.com/retail/checklist. Just log into the retail site, and click on the development checklist link.

Fill out as much information as possible, and the retail team at Whitford will contact you with recommended product codes and offer assistance on the project. You can also print it out and/or email it to your overseas offices, agents or vendors — so everyone is on the same page.

We are more than just a coating company. We are a partner ready and willing to help you at any stage of the development process — from concept to cash register.

Frequently Asked Questions

Question: "What is the second worst enemy of nonstick coatings?"

Answer: "While high heat is the worst enemy, the second worst enemy is often overlooked. It's the improper storage of the pans themselves.

"Stacking, piling and tossing pans in a cabinet or closet can subject both the interior and the exterior coatings to significant marring and gouging — by other pans, lids, and handles.

"Nonstick fry pans should be stored in such a way that there is space between the coating surface and objects that could mar it.

"A lid rack works great, but even a paper towel between pans will work. All your nonstick fry pans can be stored neatly, maximizing the space used and prolonging the life of the coating."

Send questions with your name, address to: Fran Attilio, Whitford Corp., Box 2347, West Chester, PA 19380-0110, call [1] (732) 833-0986 or email: fattilio@whitfordww.com.

Coming in future issues of CoatingWorld:

- In-depth look at key areas of development checklist. Topics include application methods, substrate restrictions, and regulatory update for Europe and North America.

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