



From coatings for economical to expensive cookware...



To coatings for every kind of appliance...



From a wide range of superb industrial coatings...



To outstanding flexible finishes for automotive...

Whitford

Makers of the world's largest, most complete line of fluoropolymer coatings

- Cookware nonstick/decorative
- Bakeware interiors/exteriors
- Small appliances
- Industrial applications
- Automotive (flexible finishes)

Whitford Worldwide

Whitford formulates and manufactures high-performance fluoropolymer coatings (also known as “nonstick” coatings) for countless applications, including food contact, high-temperature use, decorative, industrial, automotive, etc.



Whitford's largest, state-of-the-art factory is in Singapore.

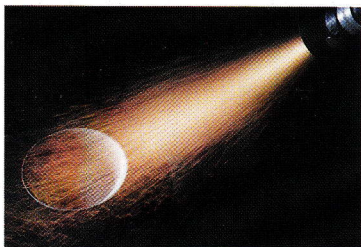
The company manufactures in eight countries, has offices and agents in 32 and sells in more than 50. We manufacture the largest, most complete line of fluoropolymer coatings in the world. But size is not the only thing that distinguishes Whitford from its competitors.

Whitford spends 10 percent of sales on research and development, more than any of our competitors. We run training programs for our people and our customers around the world. Whitford frequently formulates special coatings to solve an individual customer's specific problems. And we provide unsurpassed technical support for all our products.

Here are some of them.



Excalibur® is Whitford's unique nonstick that



The Excalibur arc-spray reinforcing process.

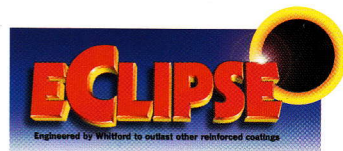
has won the reputation of the “toughest, longest-lasting, most durable nonstick system in the world”. That's because Excalibur is reinforced externally.

A patented stainless-steel alloy is arc-sprayed onto the surface of the pan, forming a series of “peaks” and “valleys” that cool and harden, welded to the surface. Then, several coats of tough nonstick are applied, filling the “valleys” and covering the



Excalibur has carried nonsticks to the top end of the cookware market.

“peaks”, anchored in place. The result: Only Excalibur offers the strength of stainless steel plus the release of the world's finest nonsticks.



Eclipse® is our newest coating. The primer contains a unique combination of resins and unusually hard materials. Because it contains no nonstick (virtually all cookware primers do), it can be dedicated entirely to (a) adhesion and



Internally reinforced Eclipse: best by far for aluminum cookware.

(b) reinforcement. The midcoat also contains the special reinforcements, which permits the topcoat to be dedicated entirely to release.

Together, this integrated system provides resistance to wear that exceeds by far all of Whitford's (and other) internally reinforced systems.



QuanTanium® contains a unique blend of titanium particles that provides unusual durability. QuanTanium's multi-layer internal reinforcement of titanium creates resistance to scratching, abrasion and wear that will stand up to almost anything. QuanTanium's nonstick system has been formulated to create maximum synergy with the titanium, resulting in outstanding resistance to wear with unparalleled release.



QuanTanium is popular in many markets of the world.



Quantum2® was developed to outlast all conventional nonstick coatings (even the latest, most dramatically improved versions). That's because Quantum2 is reinforced internally with a diverse blend of space-age inorganic particles.

Quantum2 offers several advantages. The network of reinforcing elements has been

increased significantly. The fluoropolymers have been altered to create a synergistic effect with the other elements in the coating to achieve maximum durability. And the nonstick surface is smoother, with even higher eye-catching gloss than conventional nonsticks.



Xylan[®] Whitford's largest line of coatings, is specified by manufacturers, importers, exporters, retail chains, etc., for use on a wide variety of products. These include cookware from the most economical to the more expensive, every kind of bakeware, electric griddles and grills, rice cookers, bread-makers, coffee makers, sandwich makers, waffle makers, etc. Xylan coatings come in one-, two- and three-coat versions.



There are Xylan coatings formulated for virtually everything.

Virtually all Whitford interior coatings, solvent- and water-based, comply with the regulations of the USDA, FDA, BGA, JIS and other governmental bodies. Some also meet TUV.

Xylac

Xylac[®] includes a broad range of high-temperature, decorative enamel coatings specifically designed for the exteriors of cookware, bakeware, plus others for use on certain plastics. This line also includes a series of decorative silk-screen inks for top-of-stove exteriors.

Xylac decorative enamels come in almost any color, including bright white.



Xylac decorative coatings include a range of coatings for handles, knobs and silk-screening.

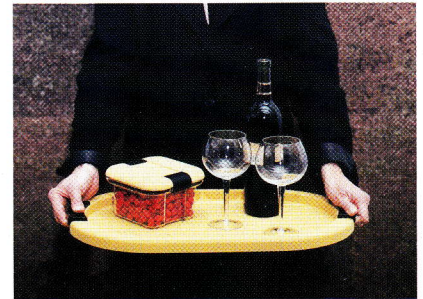
Xylac also comes in a variety of finishes, from extremely high gloss to pearlescent and hammer-tones, offering great flexibility

in design. These coatings have excellent resistance to high temperatures, household chemicals, and solvents.



Suave[®] decorative coatings create a matte, non-reflective surface that helps prevent slipping, not unlike a soft-to-touch rubber effect.

Suave comes in a wide range of colors. And Suave saves money, since it's more economical to coat a small number of standard black handles than to run a small number of colored handles.



Suave on a tray provides a matte, rubber-like surface that helps prevent the bottle, glasses and other items from slipping. And it's colorful!

Suave has good resistance to wear (with limited resistance to scratching) and is ideal for many substrates. Suave is dishwasher- and UV-safe.

Whitford's coatings can be formulated to be easily applied by conventional air spray, electrostatic, HVLP, coil coating, curtain coating, dip/spin and other application systems.

Whitford's QCP

As an additional and important step to expand quality control, Whitford has established the Quality Cooperative Program (QCP).

Its primary purpose is to achieve and maintain the highest quality possible by preventing problems from occurring before any coated products reach point-of-sale.

The QCP establishes certain quality standards that must be met by those who apply Whitford coatings. It also outlines specific test procedures that must be carried out on random samples of all coated products to make sure that these high application standards are maintained. Only members of Whitford's QCP are entitled to use the Whitford trademarks.



Free quality control, courtesy of Whitford Worldwide.

Industrial products

The Xylan line offers a broad range of coatings for diverse industrial applications. These include food processing, garden tools, photocopy rollers, shoe molds, stud bolts for deep-sea oil rigs, chemical processing equipment — the list of applications is endless.

There are special Xylan coatings designed for the automotive industry to solve the problems of corrosion on threaded fasteners and friction on a wide variety of items from pistons and brake shafts to seat-belt brackets and throttle shafts.

Xylan industrial coatings are engineered to perform under heavy loads, at high temperatures, in chemical and corrosive environments and many combinations of these.

These coatings are readily applied by most application systems.



Heavy-duty shears use Xylan for easier cutting, plus good abrasion resistance for longer life.

Whitford's range of industrial products encompasses the Dykor line (which comes in both powder and liquid form). These create a tough, abrasion-resistant barrier which protects storage vessels from extremely hostile environments. Dykor also offers high thermal stability, high dielectric strength, excellent resistance to weathering, ultraviolet rays and nuclear radiation. In addition, Dykor self-extinguishes (it will not burn in air).

Another line of coatings, the Xylar series, is formulated from inorganic materials capable of operating at extremely high temperatures. Xylar is recommended in three application areas: (a) protecting metal from oxidiz-

ing due to water in all forms (salt, ice, steam, subterranean condensation), (b) protecting metal from high-temperature oxidation (535°C/995°F to 870°C/1600°F), and (c) providing a conventional air-spray lubricating coating with nonstick properties at a hardness that far exceeds that of conventional organic coatings (pencil hardness of 6H to 8H).



Xylan offers low friction combined with superb resistance to abrasion and corrosion.

Flexible Finishes

Whitford has developed a new line of specialty automotive coatings that offers a complete range of benefits to solve many problems on flexible substrates.

These include low friction, freeze-release,

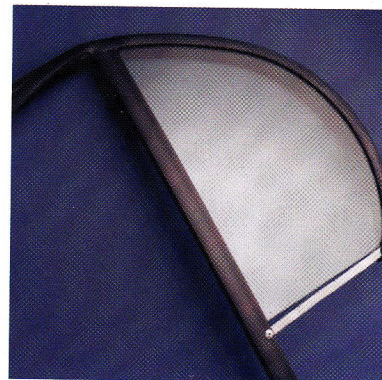


Major manufacturers from Audi to Volkswagen insist on flexible finishes made by Whitford.

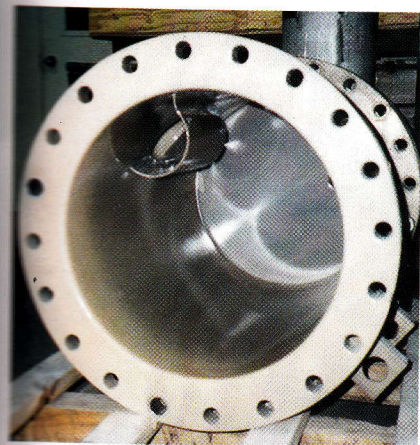
excellent resistance to abrasion, elimination of "itch and squeak". There is improved resistance to weathering and chemicals, plus aesthetics (including clear coatings).

Xylan flexible finishes are easily applied to a variety of substrates, including EPDM, NBR, PVC, ASA, acrylics, ABS and polyester, sometimes in combination with Whitford-provided or Whitford-approved primer systems.

These special finishes are used for glass runs, door, trunk and hood seals as well as for decorative effects.



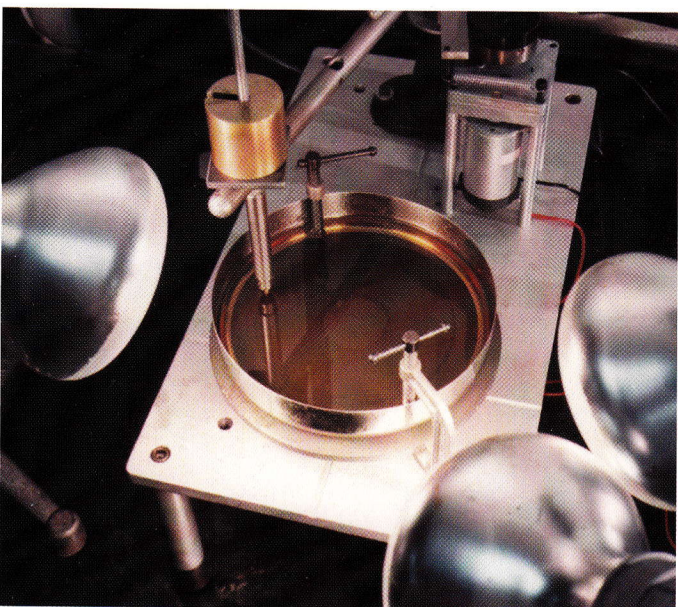
Xylan flexible finishes are ideal for EPDM weatherstripping.



Dykor provides a superb barrier to protect vessels from hostile environments.

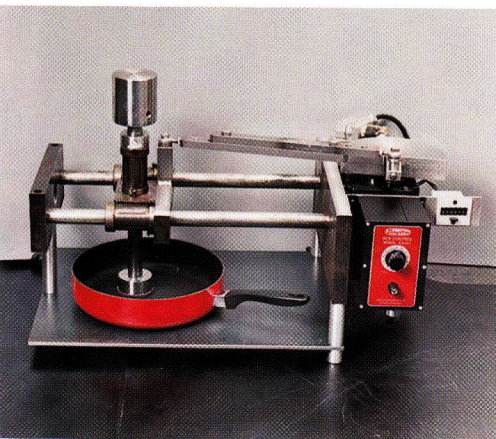
More than 20 major automotive manufacturers worldwide now specify these remarkably versatile flexible finishes.

Test Procedures



Whitford invented the Gyrograph to provide infinitely more sensitive and sophisticated information on intercoat adhesion than was previously available. It has led to significant improvements in coating durability.

Given the significant percentage of our sales that Whitford dedicates to research and development, we have an unusually broad range of test procedures and equipment.



Whitford's Reciprocating Abrasion Tester measures a coating's ability to withstand common kitchen abuse.

We perform more than 100 test procedures on a regular basis to measure such things as film thickness, film cure, gloss, opacity, hardness, adhesion, flexibility, impact, drawability, abrasion, mar resistance, etc.

To share our knowledge with the industry, we have printed a booklet with photographs of the equipment used for each and details of the test procedures. If you'd like a copy, contact your Whitford representative or Whitford (see the back cover).

In fact, our testing program has led to the development of testing equipment that is unique to Whitford.

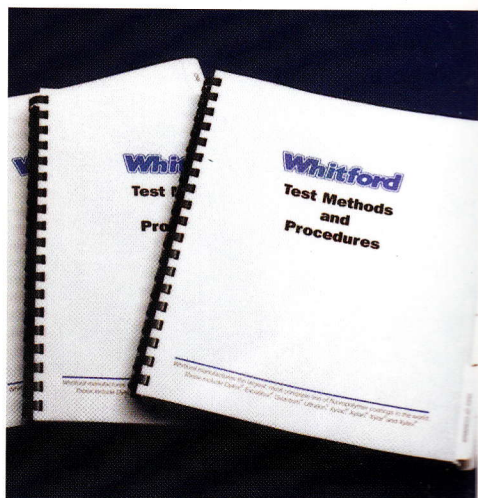
We perform more than 100 test procedures

More information

Whitford has published a vast array of booklets, brochures, charts and data sheets that provide information on all the many products we manufacture.

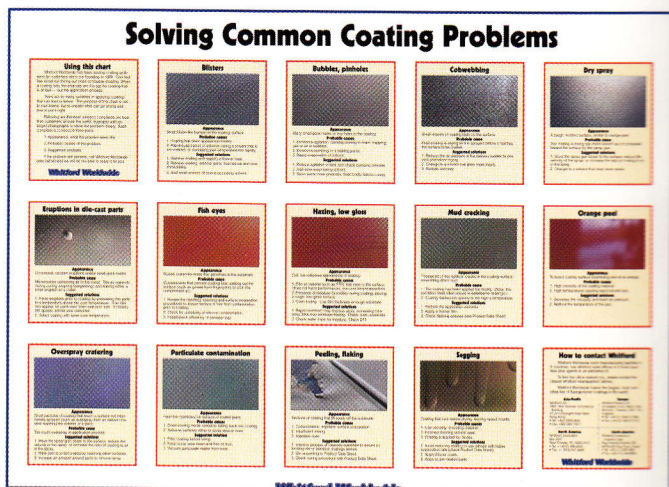
We also have published information on the coating category in general. This includes, for example, the "Engineering Design Guide", a booklet on what the user needs to know about fluoropolymer coatings, how they work, how to apply them, what the differences are, a glossary of common coating terms, etc.

We have printed and offer for free "Solving Common Coating Problems", a large wall chart that lists and illustrates common problems encountered in the application process and provides solutions to them. This wall chart comes in seven languages and is hanging in applicators' coating bays around the world.



Whitford offers detailed descriptions and explanations of our testing procedures to everyone, including our competitors.

If you would like information on any product, product category, specific application or coatings in general, please let us know. Contact us (see addresses on the back cover).



Identify a coating problem and Whitford's chart probably has the solution — in Bahasa, English, French, German, Mandarin, Portuguese and Spanish.