

COATING WORLD®

SPECIAL REPORT ON THE USE OF FLUOROPOLYMER COATINGS IN THE INDUSTRIAL WORLD

New Metallic-Pearlescent Colours Convert Boring Black Vehicle Surfaces Into Fashion Items

Fashion has become an ever-increasingly important part of our lives. Today, computers, mobile phones, watches and many other utilitarian items have turned to fashion to attract the consumer's eye.

Fashion is not new in the field of consumer vehicles (automobiles and motorcycles). The use of chrome, several colours on the same body, brightly painted designs, burl walnut panels, leather seats and "designer" editions have been around for years.

Nevertheless, there are a few areas that, until now, have been left untouched by fashion.

Motorcycle seats, for example, have almost always been black. So have the strips of rubber and rubber-like materials that hold automobile windshields tightly in place, or surround car windows that glide up and down, or line the door frames to keep the weather and noise out.

But no longer.

The magic of colour

Whitford, manufacturer of the largest, most complete line of fluoropolymer coatings in the world, has just introduced a new line of premium coatings that revolutionize these forgotten items.

Introduced at the 2003 SAE show in Detroit, the coatings are marketed under the name of Xylan® 2222.

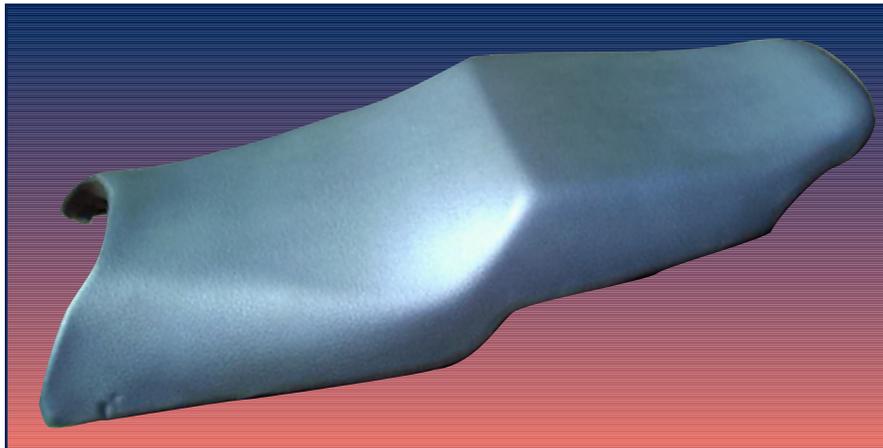
These new coatings take colours

to a new level. Metallic and pearlescent, they are also iridescent and, under changing light, will shift shades accordingly. These coatings are waterborne and environmentally friendly. Whitford also offers Xylan 2322, the solvent-borne equivalents.

These new coatings are available in everything from silver to bronze,

violet light, excellent freeze-release, low friction, and superb resistance to abrasion.

These coatings are environmentally friendly (they are compliant with Volatile Organic Compound restrictions) and are single-component products. They are easily applied (by conventional spray meth-



New Xylan 2222 offers designers an almost unlimited range of decorating possibilities to turn something as ordinary as a black motorcycle seat into a fashion statement.

ods) on to many different types of substrates including EPDM, natural rubber, NBR, TPVs, vinyl, etc. (Note: With some substrates, a primer is required.) They are cured thermally, online or offline. Once cured, they can be used at temperatures from

from metallic reds to greens and blues and yellows.

These coatings can be colour-matched to any of the items on the car or motorcycle. So a dashboard surround, for example, can be coloured to match the dash exactly. So, of course, can all the strips and patches of flexible rubber and EPDM.

Motorcycle seats can be coloured to match — or to contrast in a special fashion statement with — the colours of the bike itself.

A lot more than colour

New Xylan 2222 and 2322 coatings were born out of Whitford's experience with weatherstrip coatings, so they offer protection from ultra-

-40°C (-40°F) to +230°C (+450°F).

For more information on the new Xylan 2222 and 2322 coatings, please contact Whitford (for the office nearest you, please see addresses on the back). And please visit us at: www.whitfordww.com.



Shades of grey, green, red, blue — many different colours are available with Xylan 2222.

Xylan Coating Extends Service Life Of Metal Moulds By A Factor Of 33

One of the most important manufacturers of abrasive cutting disks in Spain was suffering a problem in the manufacturing process.

The disks are made of epoxy resin, which is heated, then poured into moulds. The moulds are closed and tightened to form the disks under pressure, then put into a curing oven for 28 hours at 180°C/355°F.

The epoxy resin, however, tends to stick to the moulds — so that the moulds must be cleaned after three cycles. This slows production and adds considerably to labour costs.

“Hey Whitford, Here’s a problem: Can you solve it?”

The manufacturer called Whitford Spain and asked for help. So Whitford technicians visited the factory and studied the process. Taking some sample moulds and disks back to the laboratory, the technicians formulated Xylan 8870 and coated the moulds on both of the interior sides, using conventional spray application.

The coated moulds were returned to the factory, and were tested



The Spanish manufacturer moulds 12,000 of these disks every day. Xylan 8870 makes it possible to speed up the manufacturing process by 25 percent (for significant cost savings).

in the customer’s laboratory. Then, with favourable test results, the coated moulds were put into the production process under normal manufacturing conditions.

33 times the service life and still going

Typically, the manufacturer was able to get only three cycles from the uncoated moulds before they had to be removed so that the metal interiors could be cleaned of the epoxy resins that had stuck.

As of this writing, the moulds coated with Xylan 8870 have gone more than 100 production cycles with no problems of the epoxy resin sticking to the interiors — and are still going.

Excessive downtime for cleaning of the moulds has been eliminated, labour costs have been reduced, and the manufacturing process has been accelerated by 25 percent — all because of a thin-film coating called Xylan 8870.



On the left: A new mould. On the right: An uncoated mould after three cycles, showing the refuse that renders it unusable. Moulds coated with Xylan go more than 100 cycles.

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