



A New Solution For An Age Old Problem

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It was in late fall when I talked to Ric Lange, superintendent at Meadowbrook Country Club in Racine, about repainting Blackhawk's cast aluminum ballwashers. This was the first time that I had heard the words *powder coating*. Powder coating is a new alternative to solvent based painting. The process bakes a powder (ground resin plus pigment) onto the part. Given the alternative method, which was automotive paint either sprayed or brushed on, it sounded very appealing to me.

It turns out that quite a few things around the maintenance building are powder coated. Most office furniture

is powder coated as well as some of Ransome's equipment. In fact, if you buy anything from Par-Aide in 1997, chances are it has been powder coated. Anything that can withstand high heat and conduct electricity can be powder coated. It is a growing industry.

Here is a brief explanation of the process. The part must be clean and free of any rust or previous paint. Next, the part is prebaked for a period of time at 450 degrees F. The grounded part is sprayed with an electrostatically charged powder. The charge keeps the powder in place and distributes the exact amount

needed. The part is then cured at 450 degrees F again. This baking makes the powder melt and "coat" the part.

Powder coating is becoming popular because it can actually be cheaper than conventional painting, while providing a superior finish. There is no overspray loss because the excess powder is collected and reused. There is no reason to ventilate the building which saves on heating and cooling costs. The finish has the hardness of automotive paint without the runs, drips, and brush marks associated with liquid paints. Ric claims powder coating lasts



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longer than the automotive paint he was using. He is able to get by with waxing his ballwashers yearly, and only recoats every three years.

After learning more about the whole process we decided to give it a try at Blackhawk. Our first task was getting the 10+ years of paint off of our parts. It could either be blasted off or chemically removed. I was unable to locate any places or products that could chemically strip off our finish; blasting the paint off was our only alternative. When it comes to having your parts blasted—beware and shop around!! I couldn't believe the differences in prices out there.

The preferred way to strip aluminum parts is bead blasting; small plastic beads blasted onto the surface chip away the paint. These beads are round and resilient. They will not open the pores of a cast part and they provide a very smooth finish. The only problem is that these beads are then filtered and reused making it expensive. As a result, this method isn't the most economically feasible.

We opted to have our parts sand blasted. The sand works faster than beads and can be discarded or reused as decided by the operator. The size, shape and how hard the sand is thrown determine how rough the finish will be. Generally the smoother the finish, the longer it takes and the more expensive it is.

The powder coating is extremely thin and will not hide any surface imperfections so the smoothest finish possible is the real goal. It is important to find a happy medium between price and finish. The people who sandblasted our parts were experienced with powder coating so they knew how to provide the best finish while keeping the cost low.

In order to compare, I dropped parts off at two different places to be coated. The price was about the same at around \$13 for a complete ballwasher. But the finishes, however, were drastically different. It turns out that casted aluminum releases gas when it is heated. If it isn't pre-baked properly the gases will release through the coating, creating bubbles in the finish. One company knew about this and the other did not. Needless to say we picked the more experienced company who knew what they were doing.

I arranged to have all of our parts sand blasted and dropped them off on a Monday. At the same time, I arranged to have the parts coated. So that Wednesday I picked the parts up and dropped them off at the powder coaters. They were done that Saturday, a total of 6 days. The longest part of this whole job was doing all of the leg work!

Overall, our 28 ballwashers and 12 litter caddies were blasted and painted in one week for \$1,234. This is probably cheaper than we could have done it ourselves when considering they should last for three years. We are extremely pleased with the end result. The pieces all look brand new. Thanks to Ric we were able to spend a minimal amount of time and money on our tee equipment, while providing a fantastic finished product. I encourage the rest of you to discover powder coating and see the results for yourself! 🌟



The ballwasher station on the left is new; the one on the right was sand blasted and powder coated. The refurbished station looks new despite its age of 25 years!

