Frequently Asked Questions

- Q Who invented this technology?
- A Michael Zimmer is the sole inventor. You can read his patents (one of his many patents on the process) 6,068,692 by searching www.uspto.gov, the US government patent database.
- Q If he invented it, how can you be selling it?
- A Enduring Images is the exclusive NA source for Michael Zimmer's licensed patented technology.
- Q I saw a young boy kid making a ceramic decal on YouTube. How can they sell a ceramic printing system if Michael invented it?
- A There are people who drive their car without a drivers license and people who rob banks. It is best to check with your lawyer before you decide to buy a system that doesn't include the license rights to Michael's patents. We include those in the system we sell.
- Q Does that system do everything yours does?
- A Love that question. Not even close. Please see the blog on our web site for all of the features of the Zimmer system that make it unique. It is efficient (your decal is ready to apply one minute from printing), clean, safe, flexible, high quality and inexpensive to use. No knock off system will deliver the productivity or decorating flexibility of the Zimmer technology.
- Q Does your system require the use of liquid ceramic materials like all the other ceramic decorating processes such as screen printing?
- A Ceramic decorating processes, except ours, are messy. If you want to screen print or spray the ceramic cover coat that is an option. But the Zimmer system was designed to be hazard free to the environment and hazard free for the user. It is the cleanest and safest ceramic decorating system in the world. It is all dry using no liquid solvents or sprays. It is the only one of its kind.
- Q Aerosol spray seems like a convenient way to apply cover coat. What is wrong with it?
- A The short answer is that it is great for the supplier, bad for you. Spraying aerosol cover coat is very inefficient as much of the material ends up in the air and not on your decal. So, the first problem is that it is wasteful. Second is that it is hazardous. Aerosol spray cans are highly efficient at putting the material into the air and then into your lungs unless you wear a respirator. The solvents in the cover coat are also highly flammable. Finally, applying a uniform thickness of cover coat is important to achieve a high quality finished result. This is difficult to achieve with an aerosol spray.
- Q If I want to experiment with aerosol spraying of the cover coat do you sell it
- A My advice is to buy the pure liquid ceramic cover coat, which is very inexpensive, and have your local paint store put it in a spray can when you want some. Our local Sherwin Williams store does it for around \$9 per can. I can do this for you but of course it will cost more, and you can easily do it yourself.
- Q Do you have lead free toners?

- A We have food safe toners that will meet the food safety standards of the FDA and also of California Proposition 65.
- Q Have you them tested to insure that?
- A Yes. We can provide a certificate of analysis documenting the extractable levels of the toners and demonstrating that they meet all the required safety standards.
- Q What about red?
- A Red is the most difficult of all ceramic colors to achieve. It took a number of years but our Selenium Red pigment is unique and available nowhere other than in the selenium red toners of the Zimmer printing system. They deliver a beautiful red.
- Q How long have you been using digital ceramic technology?
- A We have been manufacturing products with the Zimmer system for 10 years and we have been selling Zimmer digital ceramic printing systems for 9 years. No one in North America has as much experience selling and support digital ceramic printing systems as we do.
- Q My portrait supplier tells me that Enduring Images makes it seem easier than it really is to make my own portraits. Is it really possible for me to make my own?
- A It should not surprise you that all of the commercial memorial portrait suppliers will try to scare you away from making your own. After all, their profits and livelihoods depend on you paying them for portraits. Kodak Corporation did their very best to scare people away from buying digital cameras when they first came out as well. It is a pretty standard tactic when you find your own production technology becoming obsolete.

But back to your question. The real answer is, do you know Photoshop? If you do, then it really is easy. And, by the way, it isn't necessary to believe what we tell you about this any more than you should believe your current supplier. We are happy to give you customer references who will share their own experience with you. They are monument builders who decided to produce their own and ceraic decorators in a variety of other industries. Decide based on their experience. In the end, the printer is a stupid device. It just does what you tell it to do and those instructions come out of Photoshop.

However, if you decide you don't want to make your own portraits, here are some questions for you. Does your current supplier offer one week lead time, low cost, no rush fees, no graphics charges, free proofs and the highest resolution reproduction of any ceramic printing system in the world? If so then they are a good choice. If not, then you might want to give us a try. We offer all of those things thanks to our patented digital portrait production system that is based on Michael Zimmer's digital ceramc process.

- Q Can I use ceramic toners in the LASER printer that I already own?
- A Only if it happens to be a 2 component LASER printer (which it probably is not) and only if it is one of the few two component LASER printers which can be converted to print ceramic toners. Let us know what you have and we'll tell you if it can print ceramic toners.
- Q I understand the ceramic toners are very expensive. How much do they cost?

- A The price is 1.9 Euros per gram but I doubt this tells you much. The important metric is that the finished decal will cost around 6 cents per square inch. This cost includes the toner, decal paper and cover coat the three components of a finished ceramic decal. But more important than that material cost is your production efficiency. How long does it take to clean a screen? What does it cost to wait while a liquid cover coat dries before you can apply the decoration? What does it cost to dispose of screen making and cleaning solvents or pay for respirators, vents etc. Production efficiency is fundamental to the Zimmer system and over time is a far greater advantage to you than any material cost.
- Q If it's so good, why isn't everybody doing it?
- A The short answer is time. Consider how long it took you to buy your first digital camera. It's likely that digital cameras had been around for a number of years before you bought your first one. Why did it take you so long? Part of the answer is that you were waiting to be convinced that digital cameras are as good as film cameras. But the other part is simply "emotional inertia", the tendency for people to keep doing what they've always done for as long as they can.

The same things apply to making your own porcelain portraits. The quality of digital ceramic printing surpassed film ceramic "printing" several years ago. How do we know that? Because DuPont invented the film used in the traditional porcelain production process and they concluded that the product was obsolete a number of years ago. As a result, they discontinued its production in 2006. The majority of commercial portrait producers have now converted to digital. You can do this too and eventually you probably will but why wait? What advantage is there in waiting?

- Q What is the cost of a system and what kind of training is needed?
- A. For the typical monument shop the system cost is very low. A typical system for the monument builder is around \$10,000 including kiln. Pretty inexpensive especially in comparison to a LASER which only puts a white image on black granite and can cost over \$30,000. For specific pricing please call us and let us quote a system for you. We configure each one to your requirements.

As for training, we provide individualized training, one customer at a time. One day is all that is needed. We recommend that you come to our facility in Golden, Colorado so you see how we manage the entire process. This is the best way to have the most robust training experience. We have trained customers at their shop and on one occasion have performed computer training but this option is not recommended. In the end, it's 80% Photoshop. The rest anyone one can do.

- Q Can you provide me with some references?
- A. If you are seriously considering producing your own portraits we are happy to give you references that cover all sizes or operations; from small family 4 person monument shops up to large multi location distributors. The financial opportunity and customer service benefits are compelling for the overwhelming majority of monument suppliers, regardless of size. Call us. We'll show you how easy it really is to improve the value you enjoy from porcelain portraits and the benefit to your bottom line.