

**High-Tech Engineering Laser Gold Plating, Laser Black Optical Coatings
And Specification Plating Service for Aerospace Companies, Contract
Machine Shops and other High-Tech Applications Globally**



**David Epner
President**

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**Interview conducted by:
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CEOCFO Magazine**

**“And this year, for the first time, we
gold plated The Oscars!”- David Epner**

CEOCFO: Mr. Epner, what is the focus today at Epner Technology?

Mr. Epner: The focus of our company is to expand our market for our unique electroplating processes and capabilities namely, the ability to satisfy the most demanding specification plating requirements of a wide spectrum of customers from NASA, the DOD and the work of some of our greatest sculptors all taking advantage of our more than one hundred years of experience doing plating on all metals and plastics. And this year, for the first time, we gold plated The Oscars!

CEOCFO: Would you tell us about gold plating? There is a wide range of use, but where, how and why?

Mr. Epner: The Company started as a jewelry plater. That is probably the most known use of gold plating; costume jewelry. The electronics market obviously uses it for electrical contacts. The lesser well known use is the niche that we have mined, (and so far own) a process that permits the gold to function as the *most efficient infrared reflective material*. Embraced by NASA and JPL on countless space programs to maintain the thermal stability of a myriad of space craft instruments and closer to home, in a product that everyone probably remembers. It was the Thermoscan ear thermometer that every grandparent bought for their grandchild to take the temperature of a baby. A Laser Gold lined copper tube was inside each of these devices and we plated some 15 million of them for the Braun Division of Gillette. That is the main focus of our operation; infrared reflective gold plating on substrates from plastics to titanium. Of course all the generally deposited metals as well. We do quite a bit of plating for electrical-microwave function and we even still do some for high end jewelry. One of the more interesting markets, for me personally, has been dealing with the great artists of America. Matthew Barney and Jeff Koons are among the more well-known As we speak we are running six Jeff Koons bunnies that someone else had plated poorly and we are repairing the famous little balloon bunny, his “trademark” product. That are our markets. Aerospace and defense, jewelry and electronic function on machined housings for heat sinks and chassis.

CEOCFO: Does the longevity of the company matter in the various industries with which you work?

Mr. Epner: I think it matters because whenever I get to iterate that fact we are over 100 years old I always get a “wow” at the other end! I am not sure if it is a bigger wow than I am getting when I tell people that this year we plated the Oscars! We just redid the website homepage featuring that product alongside a NASA project. That led to a nice article in the Wall Street Journal recently and to my debut on ABC TV. The Oscar was a game changer for us! The notoriety was really fun! We have even gold plated pennies that we hand out to people at trade shows. We now call them “The Oscar Penny”. I recently gave one to Will Smith, who was making a film on my Brooklyn Heights street. I got a chance to meet him and I gave him this penny and I said, “This year is your turn Will, this penny is going to bring you the luck to win!”

CEOCFO: What is it like manufacturing in Williamsburg, Brooklyn today, when the area is quite trendy?

Mr. Epner: It is no different than manufacturing anywhere else, I guess. There is nothing distinctive about this location. We have been in the neighborhood since 1968. Before that we were in a factory loft building on the seventh floor of a

Manhattan building for some thirty years. However, it is nice here because we have a lot of quirky people coming in. The neighborhood is filled up with interesting people and it is often an interesting diversion from talking to engineers at the Jet Propulsion Laboratory about “our Low Emissivity Gold Plating for the mission to Mars”.

CEOCFO: *Where do you see growth? Are there specific industries or services where you see opportunity?*

Mr. Epner: That is an appropriate question! That is because what I am trying to do now is market a new product that we have developed. It's Laser Gold Thermal Foil. What we have done was put a thin layer of our gold process on to copper foil. I am trying to sell this or interest this idea to people that make (as well as the users) of infrared oven systems with lamps. About twenty years ago, the automotive industry, when the water based auto paints came in, converted their curing of the paint with a product that most of us are familiar with; an infrared lamp. It is almost like a quartz heating lamp. Those ovens had stainless steel or aluminum reflectors. In those days we had interested DuPont, the paint people and General Motors in actually coating the drying tunnel reflectors with a thin layer of our Laser Gold. As you can imagine these were frightfully expensive, but they saved *thirty-five percent* of the electric power that these ovens consumed, which is not “chopped liver” as we say in Brooklyn. They had other advantages. The tuning of the wave length of the infrared made the paint dry with higher quality. It dried from the inside out. There were many technical details that made this work. We tested it at Ford on a Lincoln. I will not forget this moment. We had Detroit Edison there. We had the people from the Ford factory of course and management. They ran a white Lincoln through the oven as is, as it existed. Then we worked all night and we refurbished the oven with our gold reflectors and the next day they ran the same white Lincoln through, with the only change being the reflectors. It was an exciting moment! The white Lincoln came out brown! We fried the car! I remember their comment! “Epner, you owe us a Lincoln body!” However, what we did was prove that the thirty five percent number was real and the car heated up quickly. The problem is that these are installed ovens that few companies are going to tear apart and do this no matter how good it sounds. Therefore, we came up with this thermal foil. I have just begun to put my toe in that water, so to speak, of marketing to someone with an existing oven with lamps and reflectors, as a kind of “wall paper.” All you do is remove your lamp, take this foil, spray a little 3M adhesive on, and wall paper your oven with copper foil that is only one thousandth of an inch thick, wrinkles are no problem, and the coating is rugged enough to be cleaned. Then stand back and watch the results. We are at the early stages of this, but this could be a real game changer for infrared industrial heating.

CEOCFO: *Why now? Is it because you have been getting attention?*

Mr. Epner: Why today? It is because I only have a little time left to do it. I have hired a young assistant. Since I am eighty-three years old and “coming to the end of the sidewalk”. Tom Lippens, is giving me a little breathing room. (The fact that he is trilingual doesn't hurt with our growing list of European customers.) The most interesting thing, I think, that has happened to us is how the internet has absolutely changed my job. The company no longer needs the so called “rain maker”, which is what I used to be. Now we need technically grounded people to field these incoming, sometimes “off the wall”, inquiries. Tom is joined by Rob Brueggemann and Paul Brancato, our GM in that role. For me the creative challenge of engineering the solutions to a customer's problem is what really keeps me young. I can remember that our first artist customer was the great wire sculptor, now deceased, Richard Lippold. Lincoln Center has his work. He came to me to gold plate one hundred thousand feet of stainless steel cable for the Jesse Jones Concert Hall in Houston and I remember a conversation with him where I said, “Richard, the artists are creative, yes, but their creativity is often undisciplined. The creativity that happens when we are doing engineering is different. Not only must we make something happen that has never happened before, but we have got to make *within a budget.*” Arguable engineering is man's most creative endeavor. I firmly believe that.

We have many incoming inquiries thanks to our internet web site, which has done well for us. I have the help now, which lets me think about how I am going to create new markets for our diverse processes. It's great fun to be cold calling people on the phone, telling them a brief story and saying, “Who in your company would care about that?”

CEOCFO: *Why choose Epner Technology for plating?*

Mr. Epner: We just published our first print advertisement in a magazine aimed at contract machine shops. Shops that are suppliers to Lockheed, Raytheon, Northrup-Grumman, etc. They are tasked by their customer to supply the part, not only machined, but also plated. The headline on my new ad is, “Have you ever wanted to KILL the plater?” I cannot tell you how this resonates with job machine shop owners. There are a few reasons as to why use Epner. The first reason is that we do not screw up your parts. The second reason is that we are really driven by communicating with our customer before we do the job....so the first reason doesn't happen. We want to know everything about it. The third reason to deal with Epner is because one of our processes cannot be gotten anywhere else on earth and that is our Laser Gold. I was incredibly flattered when one of the aerospace team from NASA-Goddard said, “You guys are a national treasure!” We had just plated sixteen foot long stainless tubing with Laser Gold. Tubing that carries 6° Kelvin helium to cool the detectors on the James Webb Space Telescope's MIRI camera. I am going to put a press release out; “Laser Gold helps

James Webb keep his cool,” or something like that. Another reason why we are different than many of the other platers; we are the “greenest” plater in the business. Nothing goes down the sewer. We recycle all of our water and metals from the closed loop waste stream. The fumes go out through scrubbers, so they are pure as the air outside. The most interesting aspect of our greenness is our co-generation of electricity and heat for the operation, which we use large quantities of both; co-generating driven by *natural gas* generators. It is the smallest carbon foot print possible for that function. There you are. If people care about that stuff we are the boys!

