My Favorite Photograph

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Here's my favorite photo. I took it in Chicago's Millennium Park a couple of years ago during a break from a conference.

It's a little girl playing in a fountain. I have no idea who she is. Look at her face. She's filled with the joy of the moment.

She doesn't know how the fountain's pumps work or how the rebar supports the structure. She doesn't know what the shafts or flanges for the pumping and piping underneath are rated for or if they passed the test.

She doesn't know that my crew and I tested the mechanical properties and proof-tested the piping a couple of years before. She doesn't know that precision machinists made many of the parts needed to make this fountain a reality.

She doesn't know that the steel used in the electricity generating plant, high-voltage poles, structural bolts and balance of plant have test reports with my name on them. Nor does she know the name of the precision machining companies that made the parts out of the steel.

She doesn't know that parts made by our industry (NAICS 332721) are on that airplane high overhead.

She doesn't know that the bolts that held her car seat secure or the bolts that fasten the engine in the vehicle that drove her to the park today are properly heat-treated. She doesn't know that I, or a metallurgist like me, signed off on the macro etch, inclusion content, tensile results or the like on the steel used to make them. She doesn't know that someone signed off on the springs, half shafts, injector bodies, weld studs, fasteners, air bag detonators and a host of other parts that make her car safe.

She has no idea how many skilled machinists it took to make all of these parts. She doesn't know about the fittings that make up her daddy's car's brake or power steering system. Nor does she know how they get machined, crimped and fabricated.

She doesn't know that I was part of the decision to optimize the chemistry so they would machine economically but still crimp successfully without cracking. She doesn't know how many quality checks were done by all of the machinists in all of the shops that made those fittings.

She doesn't know that my crew and I confirmed the melt chemistry of the products that hold stuff at high temperatures and pressures where her daddy works. And she doesn't know that I approved the application of the material for that overhead crane, its hoist and the rigging that her daddy has to use at work each day.

She is just happy to know that daddy came home from work today and took her to the park, where she can do what's important to her, that is, lay down in the fountain and smile. In her world, there is just the joy of the moment.

Because, as an engineering professional, I did my job. Because, as a skilled machinist, you did your job. We did it right. We did it for us. We did it for her. And we do it everyday for 6.6 billion of her closest friends, all of whom want pretty much the same things, regardless of where they live.

This is for me the joy of working in the raw materials and precision machining industry. It's making life better. It's supporting joy. How's that for an engineering payoff?

In the first place, do no harm. That's the story behind my favorite photo. It continues to inspire me.

They say that a picture is worth a thousand words. I think I got 605 words out of this one. It's priceless.