"Do you know why you rear-ended that car in front of you? Someone said you were texting!"

"No, officer, I wasn't texting. I was just dialing a number, and, it only took about four seconds. I didn't take my eyes off the road, anyway." "What? You're traveling 55 miles per hour and your head is facing the road in front of you, but both your eyes are looking AT your phone for four seconds while your two thumbs are tapping in the number. At 55 miles per hour, your car traveled the length of a football field in four seconds!" "But I wasn't driving on a football field, officer." "You got that right. You were driving in traffic, driving distracted! And you rear-ended that car. Now, hang up and drive! Here's your citation."

Well beyond the cell phones of yesteryear, today's "smartphones" allow us to do many of the tasks we previously had to do while seated at a computer in our home or office. Some will say that this "super-tasking" is a way of life in our information-rich, fast-paced, hyper-technology society. But don't be too quick to explain this one away so simply. The unintended consequences associated with smart/cell phones are increasingly dangerous.

Similar distractions in today's technology-rich, fast-paced workplace not only cause injuries but contribute to equipment problems and failures. Equipment setups, operations, maintenance and repairs can be compromised by people who are "distracted" from their work. It's not that they're merely multitasking. They're asking their eyes, hands, and minds to do completely different tasks—*competing tasks*—at the same instant. At times, these tasks are MORE complex than making or answering a phone call while driving.

Smart phones are not intelligent phones

University of Rhode Island Professor of Systems and Industrial Engineering Manbir Sodhi may have said it best:

"*The issue isn't about holding the phone or not holding it. It is one about being involved in an intense task while being involved in another intense task. It's about thinking.* "

Dr. Sodhi's study found that drivers having conversations on cell phones (including hands-free types) in moving vehicles, often suffer from "tunnel vision." They don't notice what's going on around them as well as drivers who are exclusively paying attention to driving do.

Hang up and drive! There, I've said it again. The AAA Foundation for Traffic Safety points out that driving while distracted contributes as many as 8000 vehicle crashes daily. According to the National Highway Traffic Safety Administration (NHTSA), each day more than 15 people are killed and more than 1200 people are injured in crashes that were reported to involve a distracted driver. And the *New England Journal of Medicine* notes:

"*Current data suggest that each year, at least 1.6 million traffic accidents (28% of all crashes) in the United States are caused by drivers talking on cell phones or texting.* "

It's not that the cell phone itself is the major distraction. It's what people are doing with these devices as they drive that causes the distractions. There are three main types of cell-phone-related "distractions" while driving:

- **Visual**—taking your eyes off the road (looking at the key pad)
- **Manual**—taking your hands off the wheel (steering with forearms and knees)
- **Cognitive**—taking your mind off the roadway and traffic (recalling numbers and text)

The NHTSA further states that:

"Distracted driving activities include things like using a cell phone, texting, emailing and eating. Interacting with GPS navigation technologies can also be sources of distraction. While any of these distractions can endanger the driver and others, texting and emailing while driving is especially dangerous because it combines all three types of distraction—visual, manual and cognitive."

Most people are NOT capable of simultaneous multitasking to the level required to drive and interact with their smart/cell phones. A recent study conducted on this subject at the University of Utah (Salt Lake City) found that:

- Over 97% of the population cannot successfully perform two attention-demanding tasks.
- Only 2.5% of the sample population showed absolutely no performance decrements (losses) with respect to performing single and dual tasks. (Researchers referred to this 2.5% as "super-taskers.")

This may help explain why preventable accidents have steadily increased as increasing numbers of drivers choose to fumble with their smart/cell phones.

Smartphones and smart machines

Similar situations occur every day in our plants and facilities: distractions, inattention, interruptions, tunnel vision, trying to do way too much at any given time. "Smart machines" (highly automated equipment), faster production paces, multiple changeovers, more things to pay attention to and fewer people to do the jobs combine to compete for our immediate attention in the workplace. Here are a few in-plant experiences:

"*Sure made a huge pile of scrap! Just couldn't stop it fast enough*." (**Distracted**: operator NOT paying attention.
Interruption
: doing reports, quality checks or reading while machine was running.)

"*That blower smells like hot burning oil. But it's been doing that for a long time… since we installed these two grease fittings last year. Had to replace it twice.* " (**Distracted**: not enough time [or interest] to study the OEM manual that says "don't install grease fittings."
Inattention
: burning oil smell NOT normal.)

"*It caught fire right there in front of me in that control cabinet! Apparently there was way too much dust inside. I suppose we need to do the PM more frequently.* " (**Distracted**: two-panel locking screws NOT engaged/door ajar for six months.)

"*We've had to run flat out all week to make up late orders from last week. Because the motor failed we have to work even faster.* " (**Distracted:** Didn't pay attention to smoke coming out of the motor until too late. **Interruption:** PM postponed for over a month.)

"*We don't have a spare motor in stock. Neither does the supplier or the manufacturer here in the States. They tell me it'll be here in three days.* " (**Distracted:** reducing inventory of critical spares on the new machines to save money.
Tunnel vision:
thinking new units shouldn't break for a few years.)

One of the most basic techniques, a fundamental of equipment reliability, is "paying attention" to your equipment—*noises, temperature, smells, vibration, alignment*. These are the early warning signs that something isn't right. Right along with that is reading and understanding the OEM manual and not making assumptions on how the equipment should be operated and maintained or what it takes to assure reliable performance.

Let's get our priorities straight
What the heck IS the priority when we drive our cars and trucks? Why, it's driving of course. Anything that takes our attention away from driving is considered a "distraction." And, distractions often lead to incidents, accidents, crashes or near-crashes. Smart phones will not make any of *us* any smarter! In fact, when used during inappropriate situations, they can make *us* look (and act) pretty stupid.

The priority of today's equipment and facilities is cost-effective and efficient performance—*doing what they're supposed to do, the first time, every time*. That's what reliability is all about. We, the people who touch this machinery and those of us who make decisions that affect its performance and reliability, MUST pay attention. We have to avoid becoming distracted by competing activities when it comes to managing our capital assets: our equipment and facilities. After all, we are in the age of the "smart machines." These machines, however, can't do all our thinking for us.
As Shoshana Zuboff wrote in her 1989 book *In the Age of the Smart Machine,*

"There are often unintended consequences of the addition of new technologies."

Let's make sure we don't overlook the causes of an ever-increasing list of unintended consequences behind the wheel…or in our plants and facilities. Here's wishing everyone a very safe, happy and prosperous 2012**. MT**

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