

6 STEPS TO STREAMLINE MOBILE PROCESSING

by Paul Smith



Six simple solutions to enhance culture, improve safety and increase profits.

Have you ever found yourself waiting impatiently at a traffic light when there were clearly no cars coming in the other direction? Do you ever find yourself looking for something that you use almost every day, such as your car keys or your cell phone? Have you ever spent a few minutes going through your closet looking for a favorite shirt, only to find yourself filling up a large bag full of clothes destined for Goodwill?

Develop teams of individuals with fresh ideas to conduct hands-on workshops.

We deal with wasteful activities like these on a daily basis. And if you are engaged in mobile processing, you are acutely aware of the many challenges with which you're faced. Below are common challenges portable producers face:

- Equipment that must be highly efficient and reliable while producing maximum volumes and having the flexibility to produce an array of product specifications or adapt to any material condition.
- The loss of revenue associated with downtime between moves to prep, clean, tear down, load, set up and wire equipment.
- Working in jobsites that are often too constrained for the footprint of the equipment spread needed.
- Unpredictable and often volatile fuel costs and trucking expenses.

Fortunately, the same principles that lean professionals employ in equipment manufacturing can also be applied to those who manufacture a product on the run. While there is no substitute for taking advantage of a lean certification course yourself, here are just a few principles that can allow you to employ some common sense fundamentals to your operation in an effort to improve efficiencies.

1. Appoint a value stream team. Identify employees from all areas of your operation, including production, maintenance, the office, safety or other non-production-related areas. The idea is to find people who have fresh ideas who are not pre-disposed. These small teams should

address the needs of individual work areas in hands-on proactive workshops focusing on quick and easy ideas as opposed to groundbreaking solutions. The mindset should be continuous improvement.

2. Apply the 5S's. Once the team has selected the first workstation, it is recommended that it applies a "5S" process to that workstation. This includes sorting, straightening, standardizing, shining and sustaining. It's sort of like cleaning out the pantry. Empty everything out, clean it, throw away what isn't needed, assign everything a spot, label its place, and make sure it is returned back to that place every time and kept clean.

3. Identify and analyze the system. Recognize that each component often works at a different rate, and that optimum production is achieved by balancing the system. For example, how is the jaw crusher set relative to the secondary crusher? How is the cone performing? Are there any issues? How much is it costing to operate? Is it a bottleneck? If the 5S process was thoroughly performed in step two, then this third step should be easier to address.

4. Identify a focus area. The status of the 5S system and identification of bottlenecks will indicate where to improve a specific area of the system. Some common opportunities include: crusher configurations, screen configurations (throw / speed / media), conveyor flashing, transfer chutes / liners, safety / inspection reports, and calibration / controls / connections.

5. Count and reduce the number of pieces. Many plants have excess processing equipment needed to fulfill their core material demand. This might create an opportunity to reduce waste by decommissioning unnecessary equipment from the plant. Ask yourself: Do you really need that extra chip screen and additional material handling equipment that was installed for the runway project back in 2003 that only produces 37 tph of a product that we could make by changing wire and flopping a chute once or twice a month?

6. Accelerate flow. Accelerating flow is one of the main objectives. Just like your car burning fuel at the stoplight, material retained in your processing circuit is costing money. The quicker you can get

it out of the circuit and into the stockpile, the less it will cost to produce and the more profit you will make. Ultimately, what we are really talking about here is identifying and relieving production bottlenecks. Use a stopwatch and time how long it takes for your feed material to get from the bucket to the stockpile, and then start to collaborate with your value stream about how to shorten the distance.

This systematic approach may sound complicated, but all it takes is a group of people dedicated to making small, incremental changes on a daily basis in pursuit of a continuous improvement.

While we all dream of making the large groundbreaking change, I have seen how dozens of small ideas tend to have a viral effect on an organization and provide even greater rewards over time through a stronger culture, improved safety and increased profits.