



Top 14 Ways to Reduce Changeovers

If you are looking to boost your output or increase your responsiveness to customer demand but want to avoid the significant capital costs of purchasing new equipment, take a look at reducing your changeovers or setups. If you typically spend one hour to changeover a machine and run 8-10 setups a week, you are wasting a whole day a week or up to 52 days a year of potential machine time. Try focusing on these few things and you can spend less time in your changeovers almost immediately.

1. Have Everything Ready for the Changeover Next to the Machine Ahead of Time. This means everything- material, tooling, tools, fixtures, paperwork, check gages, etc. Our goal is not to leave the machine to search for anything while doing a changeover. No more walking around and searching. Create a home location staging area for these items or use a tool setup cart and make it easy to find these items in order of need during the set up all within reach. Anyone can really lead this activity once trained in what needs to be collected up-the machine operator, the setup person, the leadperson, the supervisor, a temp employee, or even one of the office employees. Even if you don't do any of these others items list below, DO THIS ONE.

2. Use a Checklist. The easiest and simplest way not to forget any items needed for each changeover is to list everything on a checklist and use this list to verify things are not missing ahead of time. A pencil and paper is all you need to create a checklist.

3. Fix Broken Equipment. What gages, tools and equipment are broken and we force the setup operators to workaround these problems? Find what is broken and repair it.

4. Keep up with Current Events. Make sure all the data (program numbers, machine settings, etc) are the latest and greatest. The only thing worse than not having information is to have conflicting or wrong information. Review all the standard set up documents and make sure all the right information is recorded and consistent.

5. Just Ask. By simply talking with the set up operators and asking what would be helpful to make setups easier, you can find out what they need. If you ask, be prepared to act on this information fast. If not, you will be sending a message that management doesn't care and this valuable source of information can be lost in the future.

6. Look for Cheat Sheets and Share the Knowledge. Some operators who perform changeovers have a log book or set up notes to help them remember setup information. Use this information to look for helpful "tricks"

or techniques that is undocumented. Officially record this information to eliminate the need for having personal notebooks and share it.

7. Improve Homemade Work

Aids. Perhaps the setup operator has made up some cool homemade work aids to position, lift, gage hold, align or perform some other function in a setup. How can we improve this homemade devices?

8. Double up the Changeover

Team. Most setups are done by a single person which can add to the wasted time in a setup especially when we need to work on both sides of the machine. What would happen if we used a two person team for changeovers? More likely we can cut our setup time in half and do tasks in parallel.

9. Don't Skimp on the

Tooling. Invest in additional sets of tool holders so the tooling can be pre-set ahead of time. But before you wake up your purchasing person to start ordering all this brand new tooling, do a plant wide sort (step 1 from 5S) and see if there are any underutilized tooling that can be used. Check the auction pages for potential sources of used tooling. Go to local shops or manufacturing facilities to see if they are willing to sell any of their tooling. You don't have to duplicate all the tooling immediately to make a big impact, target a few critical setups and concentrate on getting a few holders to start.

10. The Best Changeover is No Changeover at All.

What opportunities are there to dedicate equipment to certain parts thereby eliminate the setup completely?

11. Don't Screw Around. How much time are we spending bolting, fastening, blocking and clamping the

tools? Can we reduce the number of bolts and clamps? Can you use ¼ turn bolts or other quick clamps? Can we replace manual tools with an air ratchet?

12. Throw Away your Hand

Tools. Taking the last step a bit further, can we eliminate the need for hand tools all together? Instead of using allen head screws or bolts, can we use hand twist ¼ turn fastener?

13. Put it Away Later. Sometimes in our eagerness to maintain an organized workplace, we have conditioned ourselves to put things away immediately. This is a great behavior but don't delay a setup with putting items away. Wait until the machine is up and running and then put everything back in it's home location.

14. Don't Go the Mountain; Make the Mountain Come to You. What resources demand the setup operator leave the machine? For example, do we have to take the first piece parts to a Quality Lab for approval? Instead of going to the Quality department what if we had the Quality department came to us? Take a close look at our quality procedures and requirements with the goal of approving the part at the machine with no waiting. What do we need to make this happen? Can't we get the quality inspector to be at the machine when needed? Do we really need to use that monument QA equipment instead of portable check gages or go/no-go gages?

13 Things Mentally Strong People Don't Do

Mentally strong people have healthy habits. They manage their emotions, thoughts, and behaviors in ways that set them up for success in life. Check out these things that mentally strong people

don't do so that you too can become more mentally strong.

1. They Don't Waste Time Feeling Sorry for Themselves

Mentally strong people don't sit around feeling sorry about their circumstances or how others have treated them. Instead, they take responsibility for their role in life and understand that life isn't always easy or fair.

2. They Don't Give Away Their Power

They don't allow others to control them, and they don't give someone else power over them. They don't say things like, "My boss makes me feel bad," because they understand that they are in control over their own emotions and they have a choice in how they respond.

3. They Don't Shy Away from Change

Mentally strong people don't try to avoid change. Instead, they welcome positive change and are willing to be flexible. They understand that change is inevitable and believe in their abilities to adapt.

4. They Don't Waste Energy on Things They Can't Control

You won't hear a mentally strong person complaining over lost luggage or traffic jams. Instead, they focus on what they can control in their lives. They recognize that sometimes, the only thing they can control is their attitude.

5. They Don't Worry About Pleasing Everyone

Mentally strong people recognize that they don't need to please everyone all the time. They're not afraid to say no or speak up when necessary. They strive to be kind and fair, but can handle other people being upset if they didn't make them happy.

6. They Don't Fear Taking Calculated Risks

They don't take reckless or foolish risks, but don't mind taking calculated risks. Mentally strong people spend time weighing the risks and benefits before making a big decision, and they're fully

informed of the potential downsides before they take action.

7. They Don't Dwell on the Past

Mentally strong people don't waste time dwelling on the past and wishing things could be different. They acknowledge their past and can say what they've learned from it. However, they don't constantly relive bad experiences or fantasize about the glory days. Instead, they live for the present and plan for the future.

8. They Don't Make the Same Mistakes Over and Over

They accept responsibility for their behavior and learn from their past mistakes. As a result, they don't keep repeating those mistakes over and over. Instead, they move on and make better decisions in the future.

9. They Don't Resent Other People's Success

Mentally strong people can appreciate and celebrate other people's success in life. They don't grow jealous or feel cheated when others surpass them. Instead, they recognize that success comes with hard work, and they are willing to work hard for their own chance at success.

10. They Don't Give Up After the First Failure

They don't view failure as a reason to give up. Instead, they use failure as an opportunity to grow and improve. They are willing to keep trying until they get it right.

11. They Don't Fear Alone Time

Mentally strong people can tolerate being alone and they don't fear silence. They aren't afraid to be alone with their thoughts and they can use downtime to be productive. They enjoy their own company and aren't dependent on others for companionship and entertainment all the time but instead can be happy alone.

12. They Don't Feel the World Owes Them Anything

They don't feel entitled to things in life. They weren't born with a mentality that others would take care of them or that the world must give them something. Instead, they look for opportunities based on their own merits.

13. They Don't Expect Immediate Results

Whether they are working on improving their health or getting a new business off the ground, mentally strong people don't expect immediate results. Instead, they apply their skills and time to the best of their ability and understand that real change takes time.

~by Amy Morin, LCSW

Six Ways to Make Continuous Learning Part of Your Daily Routine

Learning is the key to success—some would even say survival—in today's organizations. Knowledge should be continuously enriched through both internal and external learning. For this to happen, it is necessary to support and energize organization, people, knowledge, and technology for learning. A learning organization values the role that learning can play in developing organizational effectiveness.

A constant quest for learning provides the means to always be moving forward, to conquer new frontiers and achieve new and exciting goals. Make a point to learn something new every day. Learning new things brings more exciting experiences your way. It allows you to meet other people who can bring further knowledge or learning opportunities.

Learning needs to become part of your daily routine. You are most likely to succeed if you consistently pursue a learning activity each day. Even five minutes a day can make a tremendous difference.

So how do you make learning continuously part of job? Here are six ways to get started today:

1. Pursue ways to develop and apply specific skills. The most effective way to develop your skills is to make it part of your daily routine. Each day, identify where you can practice new skills and behaviors. Compile a list of people who can support your development. Observe people who are skilled in the areas you are trying to improve.

2. Get the most out of readings and seminars. When you are reading or are attending a seminar, take notes. Search for one insight or application in everything you read. Decide what you will do differently.

3. Involve others in your development efforts. Effective development rarely happens in isolation. Instead, successful learning occurs through a continuous process of feedback and support. Learn from people outside of work and realize that no single person will fill all your needs. Use resources available through professional associations, Web sites, blogs, and so forth.

4. View mistakes as learning opportunities. Mistakes are a problem if you repeat them or don't learn from them. When you make a mistake, ask yourself what you can learn from it.

5. Stay informed about industry practices. Industry practices and standards change so you need to keep up-to-date on developments. Visit other companies and talk with their employees. Attend industry or professional meetings, conferences, seminars, webinars, and other educational events. Join a group of professionals who get together to discuss issues of common interest.

6. Seek out and learn from others who are different from you. Getting input and advice from a wide range of people will provide you with new ideas. Develop a habit of identifying what you can learn

from each person you meet. Realize that to keep learning, you need to put yourself into unfamiliar situations. Network with others to learn needed information.

Everything can contribute to our experience of learning. But as you may realize, learning is incomplete if we don't listen to the voices of those whose background and experiences are different from our own. Part of our learning continuously is opening our minds and hearts to those who propose a different way.

A good manager is acutely aware of what they know and why they know it, as well as what they don't know. They understand the difference between opinions, hunches, and objective facts. A good manager knows that their job is to fill in these gaps in knowledge, not to defend them. Good managers don't ruin their credibility by over-stating their knowledge.

Walt Disney, The Lean Thinker

One of the most successful people that we all know and love is none other than Walt Disney. Walt Disney is the famous voice and creator of Mickey Mouse and the founder of Disneyland. The Father of Mickey Mouse was a Lean Thinker before Lean became well known. Here are five valuable lessons of competition, the impossible, bias for action, curiosity, and improvement that demonstrate Disney was a Lean Thinker

Competition is Good

"I have been up against tough competition all my life. I wouldn't know how to get along without it."

Competition makes you stronger, it makes you better, it keeps you on your toes. Never shrink away from competition; never fail to see the value of competition. Your competitors can provide you with more value than your

friends. Learn from the competition, and you will grow.

It's critical that you embrace competition as well as adversity, Walt Disney said, "All the adversity I've had in my life, all my troubles and obstacles have strengthened me... You may not realize it when it happens, but a kick in the teeth may be the best thing in the world for you."

Do the Impossible

"It's kind of fun to do the impossible."

Walt Disney said, "If you can dream it, you can do it." Life is too short to spend it doing the possible. Learn to pursue the impossible, pursue what others say can't be done, pursue what has never been done before, pursue your dreams, and turn them into a reality.

You must believe in the beauty of your dreams. Walt said, "When you believe in a thing, believe in it all the way, implicitly and unquestionable." If you're going to believe, you might as well believe all the way.

Action Always Trumps Inaction

"The way to get started is to quit talking and begin doing."

I always say that "well done" is better than "well said," so quit talking and start doing! Quit planning and start practicing; a plan is good, a good plan is even better, but if that plan doesn't get put into action it's as useless as a four fingered glove. Learn to get into action, start today, whatever you've been postponing ...just do it. If you wait for the perfect time, you'll never accomplish anything.

Curiosity Brings New Solutions

We keep moving forward, opening new doors, and doing new things, because we're curious, and curiosity keeps leading us down new paths.

I don't believe in shortcuts because they take too long.

But if there ever was a shortcut, it's asking for advice from people who are further down the path to you. Find others who do what you want to do, and seek support from them. Let their past mistakes and failures guide you towards your dream.

If the thought of reaching out scares you, remember that they are a lot like you. At some stage, they've also asked for help on what to do next. Don't be afraid. Be nice and show them respect. It works.

Get Better Daily

"Whenever I go on a ride, I'm always thinking of what's wrong with the thing and how it can be improved."

Every day you should become a little better than you were the day before. If you can become one percent better daily, you can recreate your life every 100 days. Learn to get better daily; look for ways to improve, to be kinder, more intelligent, and more helpful.

Disney's work continues to inspire us and his world-famous cartoons live on. But some of Disney's best lessons are about how he approached life with an endless dose of curiosity and determination to entertain and awaken the child within us.

Wouldn't you say these are the mark of a Lean leader? Do you think Walt Disney demonstrated such?

Lean Tips:

Be Transparent to Gain Trust

If your company is doing well and goals are being met, let your employees know. Likewise, if the company is lagging behind in a few areas, make sure employees see the big picture. If an employee has questions about his or her standing, be frank. In short, be trustworthy. How can you expect your employees to trust you if you don't trust them with certain information?

Listen To Your Employees

It can be hard to hear what others have to say if you're constantly touting your accomplishments and barking orders. Listen to your employees' suggestions, then do something about it. Continue to encourage, support, and implement their ideas whenever possible. You're a team, after all.

Look Beyond Technical Know-How

Skills can be taught. Character can't. When you're vetting potential employees, look for those people who can provide additional value to the company. That doesn't mean you should overlook technical aptitude, though. Encourage current employees to keep learning in order to stay ahead of the technical curve. Keeping their skills sharp and learning new ones won't only help them do their job now, but will help prepare them for the future.

Respect Your Employees' Ideas

The real expert at a job is the person doing the job. Your employees will often have ideas to improve the product, service or processes that managers may not spot. But this means that managers and senior leaders need to be enthusiastic about the idea and committed to it.

Ask "Why?" Five Times and Seek Root Causes.

The question "why?" is extremely powerful. If a person has a strong enough "why", he or she can accomplish anything. The question "why?" can serve to either strengthen our conviction about something, or help us to discover that it really wasn't as important as we thought it was. At a minimum, it helps us to get to the root of the issue.

Each time you ask "why?", you reveal a new layer. You go deeper, and deeper. Then, after four or five answers, you'll get to the real one. Try it!