Jim Compton for ABRN, August 2014

What is Lean Material Management? Simply stated for those of us in the Auto Body Repair Industry it is the application of lean management principles to paint and material usage for body shops. With the advent of Lean Processes as applied to auto body repair there seems to be one area left out of many if not most body shops lean initiatives or programs. That is paint and material management.

With P&M making up about 10% of the average R.O. sale the effective use of material and therefor the P&M profitability can have a significant effect on the bottom line. It is my contention that to be truly lean, every area of the business needs to be lean or working toward lean.

We will outline six steps to Lean Material Management:

1. Establish S.O.P.s.
2. Less materials *(reduce part #s)* Authorized List
3. Ongoing Management Involvement.
4. Training and Input from all Employees.
5. Measure and Share the Results.
6. Repeat As Needed.

Most of these steps look familiar and are also very similar to steps taken with other Lean evaluations and implementations. For example many shops have established S.O.P.s, and involve employees in the process of continuous improvement *(Kaizen Japanese for "good change")*. Let's take a look at these steps in a little more detail.

1) Standard Operating Procedures

Having Standard Operating Procedures are more than just a method of doing repairs. It also establishes a set of rules that enable a shop to have a firm grip on Quality and Costs. For example when all work is finished with the same grit as it moves from body shop to paint shop, the paint shop can apply the appropriate amount of primer surfacer. Material usage becomes a more defined quantity *(two coats vs. four coats)*. Establishing who is responsible for each procedure and quality control during the repair process helps to eliminate re-work. While every repair is slightly different the significant steps in a repair can be standardized. There are plenty of sources for S.O.P.s for body shops that can easily be modified to suit, each shops particular practices. Many of these are free from jobbers and the paint manufacturers.

2) Less Materials

Using Less Materials starts with an authorized stock list: This is as simple as having a pre-printed order form. Where employees, management and the jobber/supplier work to create a list with the understanding that ONLY the products are needed on a regular ongoing basis can be purchased and shipped by the jobber/supplier. Anything that is not on this list needs shop management approval. A simple hand write in area on the form with a place for the manager to sign can keep this from becoming cumbersome.

Obviously there needs to be a well-organized and labeled stock area and work carts, *(not all carts are created equal, see photos)*. All too often a shop is sold on a new "super duper, money saving, more efficient, easy to use poly-razzmatazz".

Many times these new "innovative" products are better and some even save the money or labor time they claim to. Sometimes it is just a great new sale for someone else, and may not be a great benefit for the shop. Do they fit into our established S.O.P.s? Do we have a method to analyze and review their impact of quality and production?

Sometimes this analysis is a matter of perception and opinion, but shouldn't we make changes for the right reasons? If we have good measurement tools in place we should be able to measure the impact of significant changes in material. If the claim is that this new product will reduce your per RO material cost by $2.00 then you should be able to see those results after implementing the new product into the shop system *(SOP)*.

3) Management Involvement

Ongoing Management Involvement: All too often we find ourselves working with shops on Lean Material Management only to find the shop manager or production manager is too busy to be involved or make material management a priority. This process doesn't have to be an added burden for management on an ongoing basis. Yes there will be an initial demand for added time and effort as the shop first embarks on its path to Lean Material Management, but this will become less over time.

If all levels of shop management are not involved and committed to the ability to achieve a leaner material processes will suffer. For example as a manager walks through the shop if they can comment on a particular process or part # with employees, they reinforce the commitment to Lean Material Management. We have found that most employees want to win; they want the approval of their boss. This does not need to be difficult, a simple comment, or question about material from a manager alerts the employee that it is still an important issue.

4) Training and Input

Training and Input from all Employees: This starts with the formation of S.O.P.s and the Authorized Stock List. Reinforcing that employees are part of the solution and not merely a part of the problem is a great start. Again we have found that the employee training stops with certain level of employees. Even tasks performed by entry level employees can have a big impact on material usage and quality. Let everyone have a voice and everyone can be part of the team.

5) Measure and Share

Measure and Share the Results. Again we are reminded of several implementations of Lean Material Management where the tools and reports we create to help with the process never make it out of the managers in box. The employees are left in the dark as to results of their efforts; this is the quickest way to slow down the process of Lean Material Management.

This is one of the pet peeves of several people involved in performance reporting, results don't get shared. Imagine going to a baseball game with no scoreboard, many will be able to keep score in their head, not so easy at a basketball game or in the work environment with dozens of cars in production and hundreds of parts and materials involved. The point is people want to know the score. The score or measurement of their work is just as important in their work life. Withholding the score is one of the quickest ways to have employee's lose focus, and to derail the progress. What tools do you need to measure material performance?

What tools are available? Simply stated you can't manage what you don't measure. Accessible timely actionable reports are critical to both management and staff in order to best manage results and make corrections where needed. Several jobbers across the country have embraced Lean Material Management, either with internally created reports or third party reports. The advantage of third party reports is in comparative data, the sharing of ideas, results and methods can more comfortably be done with other shops that are not your direct competitors but are your peers.

Several body shop "20 Groups" have added Lean Material Management to their reporting programs. A quick note on these reports; they need to contain actionable information and it needs to be broken down so that both management and the technicians can understand and use the information to make improvements. While management may be content to look at a larger picture, productivity, margins etc. the technicians thrive on a more detailed view, a view that relates to what they do or contribute, often down to the specific part number level. *(Such as Shop-A is using two times more XYZ product per RO or per refinish hour as other shops in their peer group)*.

Better formatted reports can provide a snap shot or overview for management, "the ten thousand foot view", and still provide more specific details for the production leaders and technicians. Whether presented as different pages or view or providing a drill down to more detail. Be sure to select or work with a report that provides actionable information to levels or staff.

Some KPI's are great to look at but have little value to helping the technician make improvements. An example is clear usage, refinish hours per gallon of clear. This might be a benchmark that shop owners can compare and talk about, but it provides little in the way of actionable information for the technician. Turning this calculation around slightly and measuring ounces of clear per refinish hours provides a benchmark that the technician can use monitor and work with to make improvements.

6) Repeat As Needed

Repeat As Needed. This is an ongoing evolving process as new materials move into the shops *(through regulation or innovation)* we need to adjust the processes *(SOPs)* and material needs. Last and probably the most important step in the Lean Material Management process. Change is hard, only through continuous repetition and adjustment can any improvement process succeeds long term. *(Kaizen)*

What to look for in reports? Reports need to be simple. Graphs, tables and charts are great, but don't get carried away with too many KPI's or calculations, especially when you first embark on the quest of Lean Material Management. A good suggestion is to start with three to five calculations. For example, calculating total liquid material cost per refinish hour along with total non-liquid costs per refinish hour. How does your total material cost compare to your material door rate, or better yet your actual material rate? Other break downs that can help with easily controllable costs lie in the areas or non-liquids such as masking materials, comparing tape cost per hour vs. other masking products.

When it comes to body technicians the simplest calculation is total material cost per body tech divided by flagged hours for the same period. This takes a little setup to get started, with separate cabinets/stock for each tech, replenished separately and of course the taking of flagged hours for the same period. Many jobber systems can provide individual technician tracking as sub-accounts while still providing good simple overall statements and reports.

Pictures notes:

Bad Cart: Not all carts are created equal; neither is the house keeping of all employees.

Good Cart: There needs to be a well-organized and labeled stock area and work carts, not all carts are created equal the right cart will provide easily organized and ample storage for the task. This is an example of a non-structural repair cart.

Stock Area: Here is an example of a clean well organized stock area. Note the magnetically attached bar code labels for each product. A Place for everything and everything in its place with an easy method to rearrange when the time comes.