

Synchronous Solutions

The continuous pursuit of excellence

Quality at the Source ***“A novel idea”***

Do you want to improve the quality of your product? This is how to do it.

The mentality of each and every operation in a business must be that the product cannot move to the next step unless it is within the quality tolerances established by the company. This means that every operations employee should be held accountable for their own quality and should be responsible to their downstream “customer” before any piece can move.

Final inspection alone of the finished product will not suffice to achieve excellent quality.

The quality of the product must be the responsibility of each employee who works on the job. It is important for the business owners to establish and maintain this principle within the company.



“Quality
is not an
act, it
is a habit.”

Aristotle

A personal signature should be required on the paperwork and/or on the actual piece indicating that each production operator at every step has confirmed that the product is within tolerance. The personal signature will add to the level of accountability and will help to assure that errors are not compounded by additional labor on a piece that may not meet the standards. The objective should be to find errors *before* they are moved through the manufacturing process. No piece should be worked on unless it has a signature from the proceeding operator indicating that the quality has been checked.

Any production operator who notices an error should be authorized (and encouraged) to stop the movement of that piece to assure that the error will be corrected. Job descriptions should be available for all jobs to assure that the desired method is followed. Quality specifications, including tolerances, should be provided for each process. These methods and specifications are available from the MIA and other sources. The appropriate document pages should be copied and laminated for posting near each operation in the process. Each employee should understand the quality standards of the job and should be held accountable for meeting them. As errors are noted, a discussion should be held with the employee involved to assure that a lesson has been learned.

Checklists. An airline pilot is required by law to complete a checklist on every takeoff and landing. After several of these every day, the pilot probably knows the checklists by heart. Nevertheless, they are required to complete the drill every time. That same logic should apply at several steps in the countertop process including:

- Templating
- CAD
- Programming
- Fabrication final
- Installation

Examples of these checklists are available upon request from Synchronous Solutions.

It all starts at Sales. The role of the salesperson is much larger than just securing the close of a deal. The task also includes gaining market intelligence regarding what trends exist and what each customer sees in demand forecasting. Moreover, once a sale is closed, it is important that the salesperson gather all the needed information for the job. Correct understanding of what the customer expects is critical to customer service and that begins at the initial sale. The salesperson should be held accountable to accomplish this.

Templating. The first operational step in countertops is templating. If a job is not templated correctly, it does not matter how good and careful the remainder of the processing steps are...the job will still be unacceptable.

It is important that the Measure Tech review the details of the job with the customer to assure there is complete consensus on how the finished product will look and what is to follow. The Measure Tech should use a prepared checklist to assure that every detail has been covered and the job can proceed.

When the Measure Tech is satisfied that all necessary templates are completed for each room and that the customer is fully satisfied with the plan, he/she should add a signature on the job paperwork indicating that operations can proceed with confidence that the template is correct. Many companies require a customer signoff at this point as well.

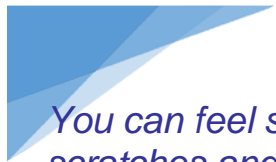
Cutting. Once each piece is cut, the finished piece should be checked to the template to assure a match. This is a critical step. It is important that each template and cut piece is matched before proceeding. When the worker is satisfied that it is perfect, a signature should be applied directly on each cut piece and/or on the paperwork.

Each piece should be labeled 1 of 5, 2 of 5, etc. There is a new product from The Countertop Factory Midwest called SPEEDlabel. It provides a solution to track each cut piece in your shop. It maintains accountability for quality control, piece by piece. It ensures entire job is kept together – no missing pieces. It is an excellent tool to address

many of the problems countertop fabricators experience. Visit www.speedlabel.net and check it out.

Fabrication. General quality standards are the responsibility of each employee who works on the job. Employees should look and *feel* each piece throughout the process to assure the correct finished texture. Any scratches or incorrect appearance should be addressed at that time and before the piece is allowed to move to the next step.

Final Inspection. Before the finished product is loaded on an A-Frame, a final Quality Assurance Inspector should follow a checklist to assure each piece is consistent with the quality standards. This check should include *feeling* each edge and the top surface. Ideally,



You can feel some scratches and chips that you cannot see.

the pieces of the job should be moved together as they will fit in the final installation. This final check will also assure that all pieces are done, including all backsplashes, and that all paperwork, etc. is available.

When the inspector is confident that all pieces are done, that each piece fits the template within tolerance and that the surface quality of each piece meets the company standard, the Quality Assurance Inspector should sign the paperwork that goes with the Installer.

The final inspection should be a *quantity and quality* check. All pieces needed for a job should be confirmed and should be of acceptable quality.

Once approved, the pieces for a job should be placed together on the same A-frame so that the Installer will have all the pieces necessary to complete that job. The A-frames should be loaded such that the first job to be done is on the outside and readily available. The Quality Assurance Inspector should be responsible for the *quality and quantity* of the final load onto the A-frame.

Installation. At loadout each morning, the installation crew should *quantity check* each job. The *quality check* should have been

completed, so the installer should be responsible for a final quantity check to assure all needed pieces are present. Each piece being labeled (1 of 5, 2 of 5, etc.) will help to assure this.

Generally, installation is “where the cash register rings” for the countertop fabrication company. All process steps are important, but it all comes together at installation for quality and customer satisfaction. Only when that is accomplished can the fabrication company receive final payment.

The Installer should complete a final *quality* check of the finished job with the Customer perspective in mind before leaving the job site. It is essential that a detailed checklist be used for this purpose. Once the Installer is satisfied that the appearance and structure of the job is acceptable, he should apply his signature to the paperwork for that job indicating that he is accountable for the quality.

At least 10% of all installations should be reviewed by a Manager before the Installer leaves the job site. These visits should be random and unannounced. The objective should be to assure that consistent quality standards are understood by all employees and managers rather than to catch someone doing something wrong.

These are fundamental concepts to assure acceptable quality. If you can set up this process and follow it diligently, your quality problems should diminish significantly. Remember, *quality* is not an act, it must be a *habit*.

If you want more information on how to do all this, please contact me directly.

Ed Hill
Synchronous Solutions
www.SynchronousSolutions.com
704-560-1536