

The Siburg Company, LLC

ABC Company Countertop Recommendations

by

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Agenda

- Project Objective
- Project Goals
- Key Recommendations
- Key Performance Metrics
- Layouts
- Scheduling
- Next Steps

Project Objective

Identify improvement opportunities for the storage, staging and preparation for installation of countertops.

Project Goals

- Increase countertop installation capacity
- Identify layout improvement opportunities
- Create mechanism to monitor and reduce stock tops
- Identify and create Key Performance Metrics
- Create a simple scheduling system

Recommendation – Finished Goods Supervisor

Observations

- Countertop installers currently spend 1.5 to 2 hours each morning preparing to leave.
- Assuming a 10 hour day (6 AM start; 4 PM return), installer productivity could be increased by 30 – 40% if prep time was reduced to a half hour each morning.

Recommendations

- Hire or designate a full-time Finished Goods Supervisor.
- Hire or designate a full-time Helper to work with the Finished Good Supervisor.
- Both individuals should have a shift end time of 5 PM.

Recommendation – Stock Tops

Observations

- Stock countertops are dispersed throughout the manufacturing facility.
- No mechanism exists to easily identify and reuse stock tops.
- Stock tops can warp or discolor in direct sunlight.

Recommendations

- Place a cover over the white frame on the back of the property and store all stock tops in that location.
- Create a detailed inventory of all stock tops; throw away unusable tops.
- Assign responsibility for stock top usage to the FG Supervisor.
- Review daily production orders (blue sheets) against available stock before releasing orders to the shop floor (Scheduler with the FG Supervisor).

Recommendation – Focus on Remakes

Observations

- 14% of countertop production capacity is lost due to remakes.
- No mechanism exists to capture, classify and reduce the number of remakes.
- Awareness of the impact of remakes is low.

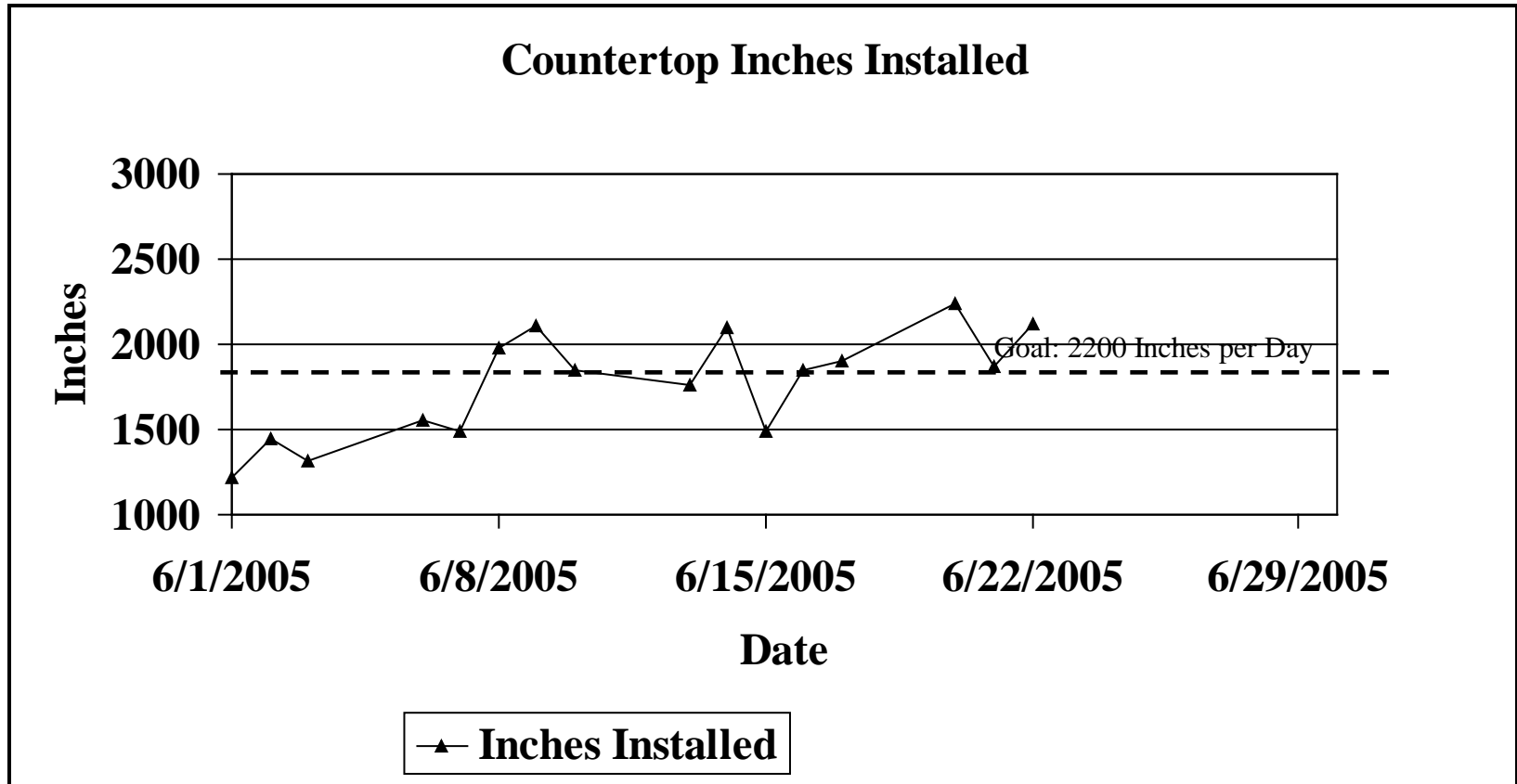
Recommendations

- Require all remakes to be approved on a Scrap and Rework Form before being rescheduled for production.
- Require root cause for the remake to be identified before approval for remake.
- Begin classifying remakes by root cause and initiate separate projects to reduce contributing factors.
- Create a performance metric to track countertop remakes.
- Consider incentives for reductions in the remake rate.

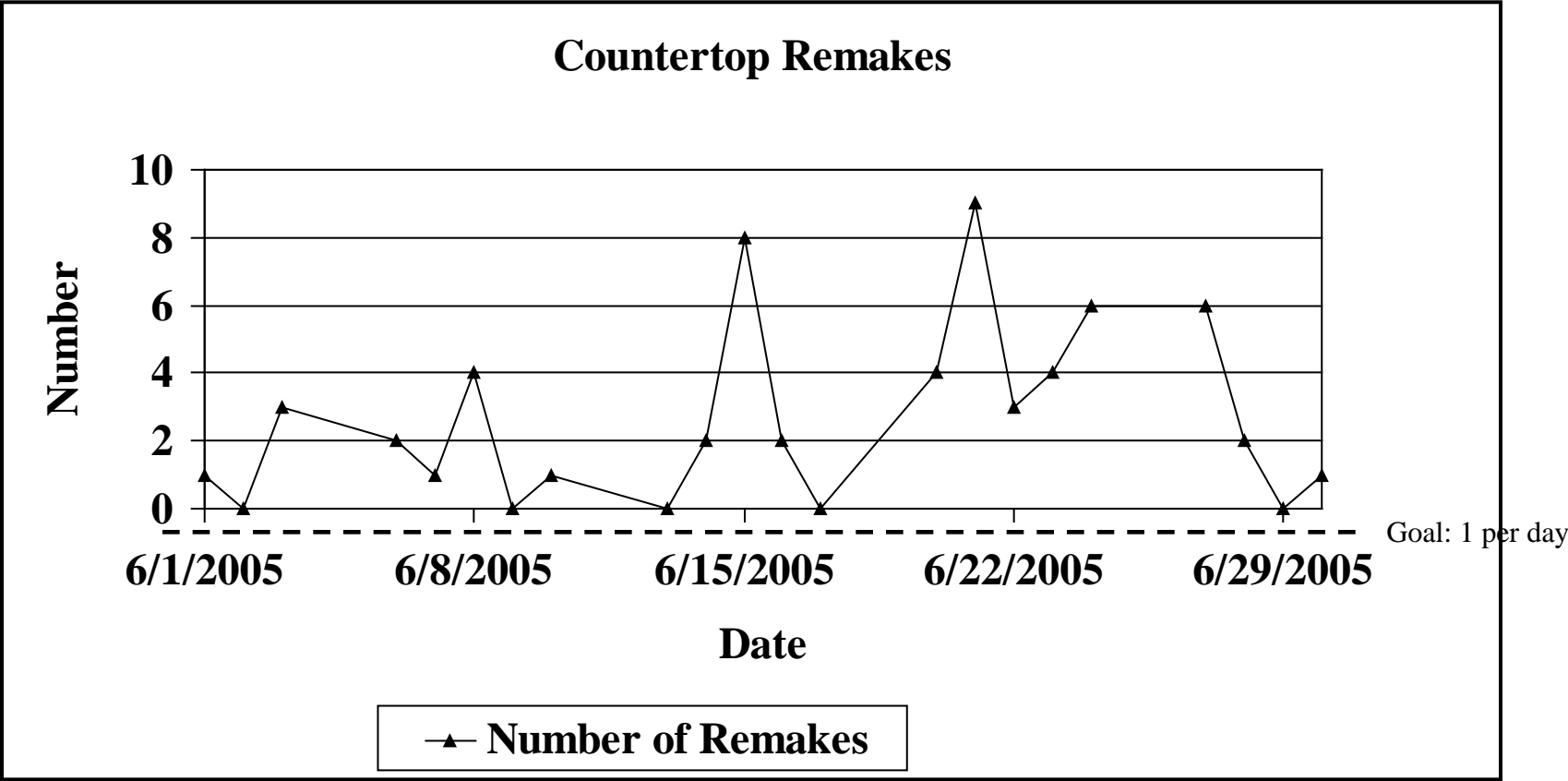
Key Performance Metrics

- **Inches Installed per Day**
 - The same measure by which installers are paid.
 - Add the total for both countertop installation crews each day.
 - Will directly measure increases in countertop installation capacity.
- **Countertop Remakes**
 - The total number of countertop remakes each day.
 - Post on the shop floor to increase visibility and awareness.
 - Will directly measure quality improvements.
- **Countertops in Stock**
 - The total number of countertops in stock.
 - Measured weekly.
 - Will directly measure efforts to utilize stock countertops.
 - Will indirectly measure quality improvements to reduce remakes.

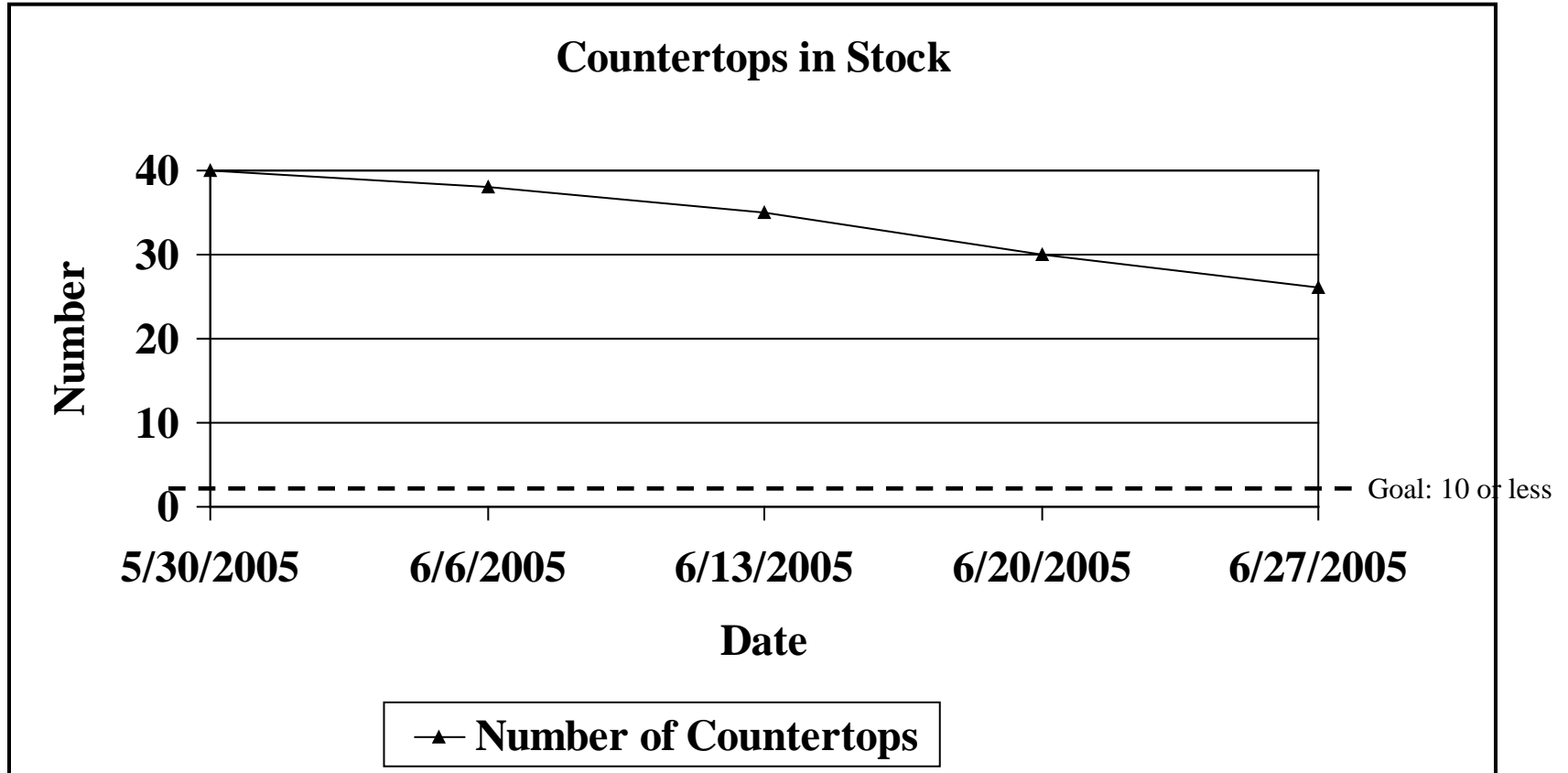
Inches Installed per Day



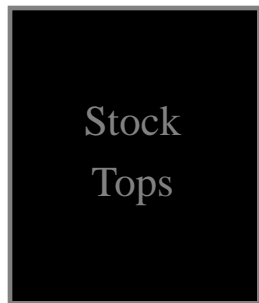
Countertop Remakes



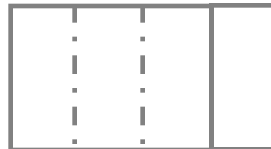
Countertops in Stock



Final Staging Layout

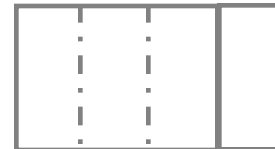


Not to Scale



Day 1

1 Bullnose Rack &
1 Triple Slide-in Rack



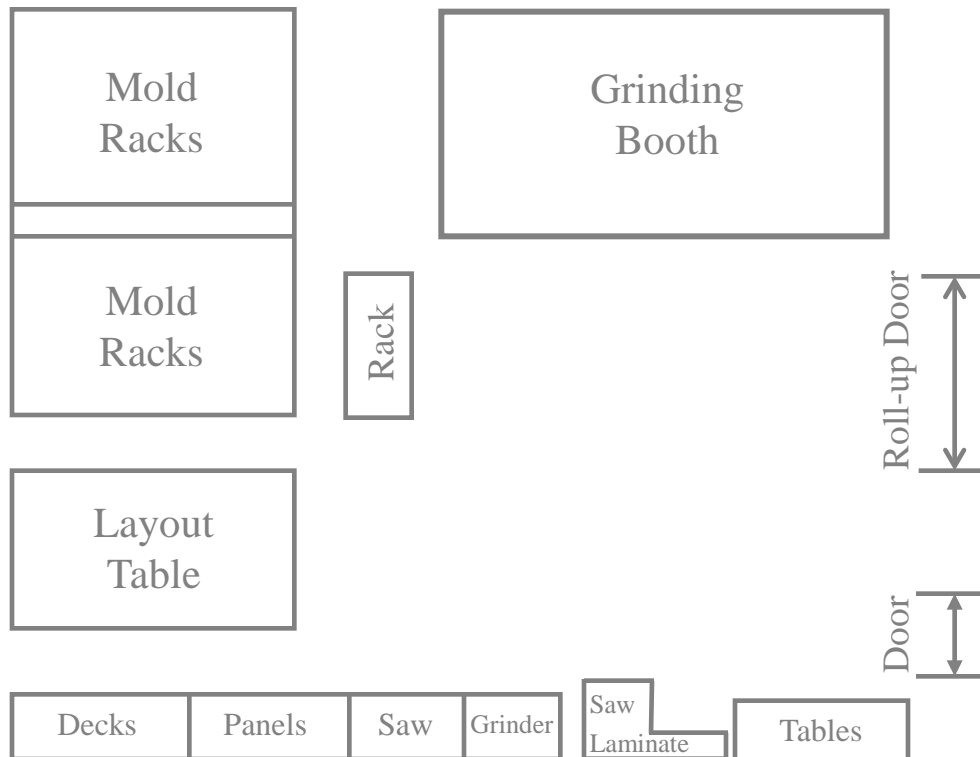
Day 2

1 Bullnose Rack &
1 Triple Slide-in Rack



- 1 set of racks for tomorrow's installations
- 1 set of racks for installations 2 days away
- 1 bullnose rack for returns (the red rack)
- Installation racks rotate between Day 1 and Day 2
- Replace triple slide-in racks with carpeted bullnose racks when convenient

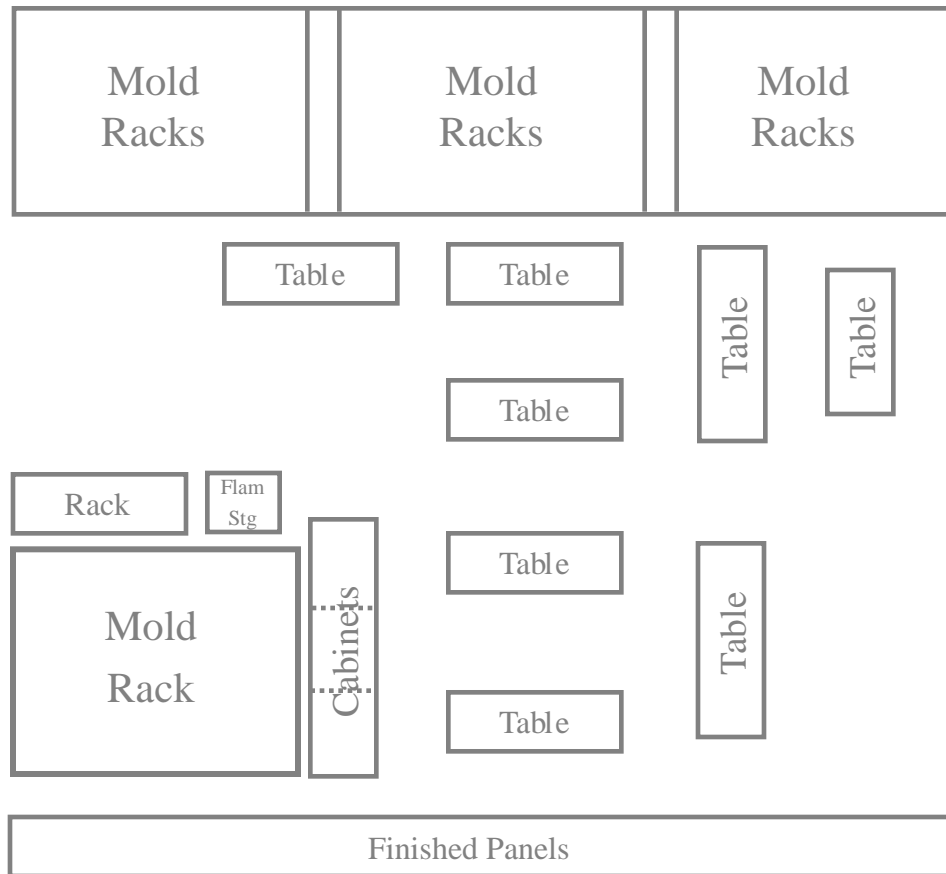
Grinding Shop Layout



Not to Scale

- Move 1 bullnose rack by grinding booth
- Move other bullnose rack to Finishing Area
- Move small grinder, laminate saw and tables against wall

Finishing Shop Layout



Not to Scale

- Move 1 bullnose rack from Grinding to Finishing

Scheduling – 5 Day Rolling Schedule

- Create a 5 day rolling schedule.

Day 1	Day 2	Day 3	Day 4	Day 5
Frozen	Semi-Frozen	Semi-Frozen	Soft	Soft

- Day 1 is in the Finished Goods racks awaiting installation; no changes allowed.
- Day 2 is in the Finished Goods racks and working it's way through the shop; minor changes allowed.
- Day 3 is in the shop or awaiting release to the shop; changes should be limited.
- Day 4 and 5 orders are in the front office and fully flexible for change.

Scheduling Process and Procedures

- The first rule is that countertops will never touch the ground.
- Countertops will move from the mold, to the grinding rack, to a grinding table, to the finishing rack, to a finishing table, to the finished goods staging racks, to the truck.
- A countertop may only progress to the next location (table or rack) if an open position exists.
- Exception: A top may by-pass the grinding or finishing rack in order to go straight to a table. This would normally apply to exception processing (i.e. remakes).

Scheduling Process and Procedures

- A Pour Shop representative will go to scheduler when they need more countertop orders (i.e. empty molds exist).
- The scheduled install date is the only date that will be written on the countertop. (Note: This is a change from current procedures.)
- Countertops will be loaded in the bull nose racks such that the install date is easily visible from the front of the rack.
- Countertops will be worked by the earliest installation date in queue (rack or table).

Scheduling Process and Procedures

- All Supervisors will continuously monitor to ensure tops are worked in earliest date sequence.
- The FG Supervisor will be responsible for retrieving tops from the Finishing Shop and loading them in the Finished Goods staging racks.
- The FG Supervisor is responsible for the disposition of all returns.
- Returns will move directly into the Returns rack for rescheduling, stock or scrap as appropriate.

Scheduling Process and Procedures

- Labor should shift to the bottleneck process(es) as required (i.e. Mold Prep, Pouring, Finishing) to create openings for countertops to progress.
- To accommodate expedited remakes at least one countertop mold should remain unused. (Note: This should only occur after the root cause has been identified and the remake has been properly authorized.)
- The last rule is that countertops will never touch the ground. If a top is found on the ground, then the integrity of the scheduling system has been compromised.

Next Steps

- Approve the recommendations.
- Hire or designate a Finished Goods Supervisor.
- Review the plan with all key personnel.
- Initiate remake analysis and control procedures.
- Initiate performance metrics.
- Agree on date to move countertops and racks.
- Create initial 5 day schedule.
- Relocate countertops, racks and designated equipment; pre-load all racks.
- Inventory and disposition all stock tops.

Questions and Comments

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