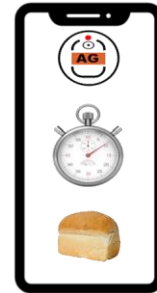


## Bread baking production tracking made simple with AGen.

Bread baking production tracking is the process of monitoring and recording the different stages of bread production, from the mixing of the ingredients to the packaging of the finished bread. The objective of the tracking is to improve the quality of the bread from time to time.

The main key information for tracking is to measure and record:

- Ingredient weights and volumes recording
- Mixing times and speeds
- Fermentation times and temperatures
- Proofing times and temperatures
- Baking times and temperatures
- Product quality data



For the explanation of this solution, we will summarise the bread making process into 4 stations, 1 day only have 2 bread making process circle at this factory, may add on in future. The factory will use AGen to track the whole bread making period and produce daily report for improvement purposes.

How AGen work with bread backing tracking?

Process 1 (Station 1)– Raw powder mixing process.



Mixer supervisor will Push start button on the android tablet after key in all the required parameter to indicate the process start. The counter on the Android LCD to display the countdown timing. Once the counting is near to finish, AGen will have 1<sup>st</sup> indicator sound. Then the last final sound will be emitted if the total mixing time is reach. The indicator sound will be continuous emitting until someone disable it. Now the bread dough is ready. And the station 1 key in information will be transfer to the server for reference purpose.

Process 2 (Station 2) – Bread dough fermentation starts waiting time and end of fermentation time.



The worker on this process will bring the bread dough to the dedicated place for fermentation. The worker will press another start button on the Android touch panel. This process cannot be start if process 1 is not started. The indicator will be display on the terminal 2 after the terminal 1 is started as well as terminal 1 counting information and starting information. Again, another timer counter will be started with 2 users define alarm sound to be ring once the time up. During the bread dough waiting time, worker will also split the dough to smaller size and put inside the baking mold.

Process 3 (Station 3) - Bread dough baking time and oven preheat temperature recoding.



This process is bread baking process, the ready bread dough inside the mold will be loaded into the preheated oven and oven preheat temperature will be recorded. This process will be running at the mobile phone and the message box indicator will be popup on the baker mobile device on the time reach the preset timing. The process 3 will need to continuous from process 1 and process 2. The baking process will be started after the baker press the start button. The same requirement needed for this process where prepare to take out the bread and final notification to take out the bread from the oven.

Process 4 (Station 3) - Bread sampling photo taking.

The worker will randomly take the ready bread photo as record keeping process. This is to record the final bread colour versus station temperature and ingrediency for future process improvement.