

Class Result using Daring Method for Industrial Automation Q Class- 14 April 2020

[07:42, 4/14/2020] Pak Yudha Prasetyawan: Good morning everyone. Sorry for late start for the class today

[07:43, 4/14/2020] Pak Yudha Prasetyawan: Hoping all of you in very good condition

[07:43, 4/14/2020] Charles Liunardi - 011: Yes mr, it's okay and thank you

[07:44, 4/14/2020] Pak Yudha Prasetyawan: Today we discuss about the concept of your project. First. Could I have the group representative to describe their project. Within the first 30 minutes. You may start

[07:48, 4/14/2020] Akhdan Muhardi - 121: Good morning, sir. We are assigned to propose some improvements for our visited SME regarding to the automation aspects that are needed to be improved in order to increase the production rate. For group Q1, we have gathered several ideas about that, such as merging the mixing, shaping, and cutting machine into one compatible machine to reduce the material handling carried out by the worker to move the material from one workstation to the others.

[07:48, 4/14/2020] Pak Yudha Prasetyawan: Sorry to interrupt. For students with different time zone may have the respon later

[07:50, 4/14/2020] Akhdan Muhardi - 121: the model of the machine would be like this, sir. But we still to give some adjustment regarding to its dimension and the materials that are being used

[07:51, 4/14/2020] Gabriel Angelo Clarence - 096: As for the mixer, we do not change the mechanism and would only stack the machines so that the mixing procedure could be followed by the shaping procedure and eventually then cutting procedure in a continuous process

[07:52, 4/14/2020] Gabriel Angelo Clarence - 096: we are also thinking about applying the same technology and setting of the conveyor belt into the sliding part from the shaping to the cutting

[07:52, 4/14/2020] Pak Yudha Prasetyawan: Could you please explain further about the function of your shaper

[07:54, 4/14/2020] Sebastianus Y. S. - 073: Good morning, sir. For group Q2, we try to improve the safety of the worker which have high risk due to the repetitive work for inputting and stacking the pallet in the process of cutting. We propose some ideas to solve the problem by using the concept of karakuri, especially for the hydraulic concept.

[07:55, 4/14/2020] Thiffa Azzahra D. - 088: the shaper function here is to shape the dough into a cylindrical shape sir

[07:58, 4/14/2020] Nabila Ramadhandi D. - 195: The dough before should shaped into long roll in certain diameter and will be cut into flat round for the cracker. Here is the existing shaper in the SME, Sir.

[07:58, 4/14/2020] Veronica Chai - 116: Another problem is that our SME is too depending in the presence of worker. For the existing condition, it needs 2 workers to always standby before (to insert the tray on time) and after (to receive the tray and put in the the stack) the cutting machine.


The problem also arise when the worker is late to insert the tray. Later on there will be many dough fell onto the conveyor belt and ground but not in the tray (which it needs to be reprocess).

[07:59, 4/14/2020] Herzani Diva Eltari - 014: In the initial machine that the SME use, the shaping machine is the same one with the mixing one but the workers need to setup the machine first to do the shaping process.. therefore we integrate the machine so it become a continuous process

[07:59, 4/14/2020] Pak Yudha Prasetyawan: Oh okay...

[08:08, 4/14/2020] Aini Milania A. - 005: Here's a simple illustratiin of the tool using the hydraulic concept, sir. As the worker stacks the pallets, the base of the tool will eventually become lower. After reaching the maximum number of pallets, the worker then move the tool to another station

[08:20, 4/14/2020] Pak Yudha Prasetyawan: Ok. I see good

[08:20, 4/14/2020] Pak Yudha Prasetyawan: Could we have the rest of the class have the opinion about other group project  you may start now

[08:23, 4/14/2020] Samuel Adrian - 123: Hi, i'm from Q1, regarding to the hydraulic setup, do you have a specific number of stacked pallets that it could contain?

[08:23, 4/14/2020] Arnoldus Arkkawimba A. - 106: From the concept given by group Q1, would the mixer be positioned too high? Do you guys have estimate height of your system?

[08:24, 4/14/2020] G. M. Arya Bangsawan - 178: While safety is importanta due to repetitive work, another factor may affects the general wellbeing of the workers themselves. For example in my opinion, the cleanliness of the workplace

[08:24, 4/14/2020] Nadhifa Q. A. - 026: Is the flour being manually added? So how tall does the mixer 1?

[08:24, 4/14/2020] Hidayah Binti Mohd Ali Piah - 002: Is it possible for the worker to pour the ingredients if it's high?

[08:25, 4/14/2020] Hidayah Binti Mohd Ali Piah - 002: For the mixer

[08:25, 4/14/2020] Godieuil Colin - 002: How the shaped dough goes from shaper to automatic cutter ?

[08:25, 4/14/2020] Charles Liunardi - 011: Could you please explain more about the hydraulic concept?Is it like spring concept for stacking?

[08:26, 4/14/2020] Andyna Aulia Rahma - 009: can i ask about the automatic cutter? will it change the current cutting machine? and how does it work?

[08:26, 4/14/2020] Sebastianus Y. S. - 073: I am from Q2, i want to ask, whether the machine for cutting is changed, because from what i know, the machine that our group see has a different shape with this machine. thank you

[08:26, 4/14/2020] Charles Liunardi - 011: By gravity, by set up the angel become lower than cutter area

[08:26, 4/14/2020] G. M. Arya Bangsawan - 178: A journal which I have read mentioned that the flour dust would cause severe respiratory problems. Now, the picture has shown contained an excessively amount of flour dust. Strengthening my opinion, the place was filled with dust everywhere that some of us must go outside. Now, how will the machine ensure that the flour dust will be mitigated ?

[08:26, 4/14/2020] Gabriel Angelo Clarence - 096: it is slided through the slide part, and we are proposing to implement the same conveyor belt technology and settings as the existing conveyor belt in the machine

[08:26, 4/14/2020] M. Daffa Rizdhiya Sadek - 104: I'm from Q1 also, I have a question about this, can this machine be used throughout the industry? Since empty trays and trays with crackers weigh differently

[08:27, 4/14/2020] Godieuil Colin - 002: You mean the shaped dough will slide on a surface ?

[08:27, 4/14/2020] Charles Liunardi - 011: *i'm sorry, higher i mean

[08:27, 4/14/2020] Gabriel Angelo Clarence - 096: no it will not change the existing cutting mechanism. our improvement would only combine the existing machines

[08:27, 4/14/2020] M. Daffa Rizdhiya Sadek - 104: The mechanism itself is quite similar, but we plan on reducing the number of moving parts

[08:28, 4/14/2020] Godieuil Colin - 002: You mean the shaped dough will slide on a surface ?

[08:28, 4/14/2020] Pak Yudha Prasetyawan: The group who have been asked may answer or respond

[08:28, 4/14/2020] Sebastianus Y. S. - 073: actually the cleanliness of the workplace is also important, it has more complicated factor that affect the condition, such as human behaviour, so we cannot consider that as one that can be solved by machine itself

[08:28, 4/14/2020] Rafli Muhammad R. K. - 85: Yups

[08:28, 4/14/2020] Gabriel Angelo Clarence - 096: here is the mechanism of our machine

[08:29, 4/14/2020] Gabriel Angelo Clarence - 096: the sliding process is not a new thing, we just want to improve it with an additional conveyor belt

[08:29, 4/14/2020] Sebastianus Y. S. - 073: from what i observe, the process of moving is not that long, and sometimes the process is also stopped(not operated every time) so i think it is okay to not reduce the moving parts

[08:29, 4/14/2020] G. M. Arya Bangsawan - 178: Disagree. The machine contributed to the inefficient process in which resulted with the dirtiness. Take an example that the funnel was too small. Flour was scattered everywhere

[08:30, 4/14/2020] A.A.A. Arini Utari S. - 170: Hi, I'm from Q2, does the conveyor work manually or automatically? how do you determine that it would fill the whole tray before it leaves to the next station?

[08:30, 4/14/2020] M. Daffa Rizdhiya Sadek - 104: And about the height, it was brought up already in our discussion. It's not going to be that high, the placement isn't gonna be like that

[08:31, 4/14/2020] Sebastianus Y. S. - 073: I think, the differences is not that much, even if that is different, we can use median of the weight to calculate the weight of the tray.

[08:31, 4/14/2020] Arnoldus Arkkawimba A. - 106: Could you elaborate more about your actual design so it doesn't make further misconception?

[08:31, 4/14/2020] Gabriel Angelo Clarence - 096: please refer to the video that i sent ya. the system is already up and running and we did not plan on changing the existing machines

[08:32, 4/14/2020] Akhdan Muhardi - 121: the conveyor will work automatically, using electricity. we will adjust the speed of the conveyor to make sure that the trays are fulfilled with the cutted dough to maximize the space owned by each tray

[08:32, 4/14/2020] Charles Liunardi - 011: Why do you prefer using median of the weight? Not mean or mode?

[08:32, 4/14/2020] Pak Yudha Prasetyawan: You can explain is there any additional equipment

[08:33, 4/14/2020] Sebastianus Y. S. - 073: then how about yours, isn't the flour dust also not mitigated because when we input the dough, flour, we still brought is by hands, and also the tools is higher, so the chance of flour getting spread is also higher, how about it

[08:33, 4/14/2020] Stolz Mark - 001: I am from Q1,

Do you know the weight of a pallet and crackers? Because I'm not sure that a hydraulic system such as a hydraulic jack will be able to descend sufficiently when adding a new pallet

[08:34, 4/14/2020] Dyahayu Raditasari R. P. - 085: as an addition to the dirtiness, the layout of the SME's machines was not in sequences. by integrating the existing machine into a one piece flow will reduce the dirtiness and the inefficient time

[08:34, 4/14/2020] M. Daffa Rizdhiya Sadek - 104: The mixer is actually sideways, parallel to the shaper, but we just put it above so the illustration is clearer

[08:34, 4/14/2020] Yudhistira A. S. - 066: That's all are a bit similar. Actually central tendency. I think mean is managable since we just need to measure the weight and divide by its amount

[08:34, 4/14/2020] Gabriel Angelo Clarence - 096: no sir there won't be any additional parts. however, we are planning on combining the whole process into one continous process, hence the installation of the mixing and shaping machines in the cutting one

[08:34, 4/14/2020] Veronica Chai - 116: Actually the concept is simple. As the tray is on top of that, it will lower its height and make way for the other tray to stack on. It will goes on until the maximum amount of trays is reached. Then the workers will use the pallet jack to move the stack of tray to the steamer.

[08:34, 4/14/2020] Andyna Aulia Rahma - 009: we're going to use this for the trays filled with crackers after the cutting process, because it needs a lot of movement for the workers. for moving the empty trays we're not going to use the hydraulic

[08:35, 4/14/2020] Sebastianus Y. S. - 073: because it is the most stable one, to avoid for example the big differences in weight

[08:35, 4/14/2020] Charles Liunardi - 011: Yes, i suppose mean of the weight will be better for your group, just opinion hehehe

[08:35, 4/14/2020] M. Lokman Bin Jalaludin - 001: We are using the hydraulic concept after the cutting process

[08:35, 4/14/2020] Arnoldus Arkkawimba A. - 106: Will the output of the mixer automatically goes into the shaper? If yes, how?

[08:36, 4/14/2020] Anandito Ridho R. - 146: So when we take the tray off from the pallet jack the height will goes back on top or stays below?

[08:36, 4/14/2020] Rafli Muhammad R. K. - 85: Furthermore, we integrate the speed of material in inclines surface with the speed of cutting and the movement of conveyer. So it will ensure that all trays will be fulfilled

[08:36, 4/14/2020] Sebastianus Y. S. - 073: I think the layout of the machine is still in sequences, because the range from one station to another is not that far, only need like 2 or 3 steps

[08:37, 4/14/2020] Nabila Ramadhani D. - 195: There is an automatic presser that would push the dough output automatically to the shaper, and later on it will be shaped into long roll

[08:37, 4/14/2020] Veronica Chai - 116: It will go back

[08:38, 4/14/2020] M. Daffa Rizdhiya Sadek - 104: Yeah, if you were to look at the picture, we press the mixed dough into a shaper. It's basically the exact same process in mixing and shaping, just a different shape

[08:38, 4/14/2020] Gabriel Angelo Clarence - 096: and this is not an innovation from us. the mechanism existed already and is currently used in the SME

[08:38, 4/14/2020] M. Lokman Bin Jalaludin - 001: It will go back to original

[08:38, 4/14/2020] Arnoldus Arkkawimba A. - 106: Well it all makes more sense now. Thanks for clarifying

[08:39, 4/14/2020] Charles Liunardi - 011: Yes, and then we propose to install some conveyor in the transport area. It will make the movement become faster

[08:39, 4/14/2020] Hidayah Binti Mohd Ali Piah - 002: Is the dough will be pressed continuously or at certain time?

[08:39, 4/14/2020] M. Daffa Rizdhiya Sadek - 104: Guys, our machine just combines 2 machines so there aren't any need for travelling between them

[08:39, 4/14/2020] M. Daffa Rizdhiya Sadek - 104: Continuously

[08:40, 4/14/2020] Stolz Mark - 001: I am not an expert in hydraulic systems so I wanted to know if your system would be fully loaded on the cart? Because you plan to move it when it is full so it means that you do not need to connect the hydraulic system with something else that is not on the cart

[08:40, 4/14/2020] Nabila Ramadhani D. - 195: Continuously as long as there is dough output remaining

[08:43, 4/14/2020] Akhdan Muhardi - 121: sorry, but how did you know that the layout in our SME is in sequence? the existing condition of the facility layout is still considered as not efficient because it is not in sequence, there's also overlapping way for the worker to move the material from one workstation to the others between the processes. It will certainly affect the dirtiness of the SME. Therefore we propose the machine to be more compatible that can cover up to 3 processes into one so that it will minimize the usage of space and also the layout of the workstation

[08:44, 4/14/2020] M. Daffa Rizdhiya Sadek - 104: This is literally one part of our machine, we just push those round things in the lower left corner into cylinders

[08:44, 4/14/2020] M. Daffa Rizdhiya Sadek - 104: We just combine this and the cutting machine into one

[08:44, 4/14/2020] Charles Liunardi - 011: Yes, especially in material handling. In existing condition, the material handling is so excess and the layout is very narrow, so it's inefficient. We propose the improvement to reduce that

[08:45, 4/14/2020] Gabriel Angelo Clarence - 096: as you can see, the machine is not very tall, so the installation of this thing above the cutting machine won't be a problem

[08:45, 4/14/2020] M. Daffa Rizdhiya Sadek - 104: How is it so difficult to understand

[08:45, 4/14/2020] Sebastianus Y. S. - 073: but, in My SMEs the layout is already in sequence, no overlapping, even if there is overlapping, the process of production is not done simultaneously, like the worker sometimes rest for a while, and then after that only continue after like 2 minutes to set the machine

[08:45, 4/14/2020] Nabila Ramadhani D. - 195: Here is the existing mixing machine in the SME, so we would like to use the same mechanism with some modifications as shown on the picture.

[08:46, 4/14/2020] Sebastianus Y. S. - 073: we use 2 worker for cutting machine, one for moving and one for setting the machine, so i think there is no overlapping

[08:46, 4/14/2020] Charles Liunardi - 011: Yes, so we proposes the 'sequence' to our sme because the current condition is not like that

[08:46, 4/14/2020] Sebastianus Y. S. - 073: so, in conclusion, our SME have different condition. thats all

[08:47, 4/14/2020] Charles Liunardi - 011: Is it will affect different MTBF and cause bottleneck between setting and moving?

[08:47, 4/14/2020] Charles Liunardi - 011: Yes

[08:47, 4/14/2020] Charles Liunardi - 011: *setting

[08:48, 4/14/2020] Sebastianus Y. S. - 073: nope, there is no correlation between mtbf and the overlapping and that bottleneck

[08:50, 4/14/2020] Sebastianus Y. S. - 073: yes, only with the observation, we can know whether the tools is fully loaded or not

[08:50, 4/14/2020] Rafli Muhammad R. K. - 85: Or if we feel like its too tall, we can shift the mixer to adjust the high

[08:52, 4/14/2020] Yudhistira A. S. - 066: Yeah, the hydraulic machine is independent. It only concerns in cutting station

[08:53, 4/14/2020] Rafli Muhammad R. K. - 85: I want to ask how many hydraulic material handling you need to assist overall process ?

[08:56, 4/14/2020] Yudhistira A. S. - 066: Two

[08:56, 4/14/2020] Anandito Ridho R. - 146: I also want to ask for Q2 is there any specific reason of using hydraulic or is it just the first thing that comes to mind?

[08:56, 4/14/2020] Samuel Adrian - 123: The current layout and mechanism in Q1 observation

[08:58, 4/14/2020] Almas Sabrina A. - 053: because that way the worker does not have to move the tray into the pile of trays one by one

[08:59, 4/14/2020] Charles Liunardi - 011: Reduce bending right?

[08:59, 4/14/2020] Charles Liunardi - 011: *bend down i mean

[09:00, 4/14/2020] Rafli Muhammad R. K. - 85: I dont know if this question has been already asked or not, How can two material handling be effective to move all trays ?

[09:00, 4/14/2020] Almas Sabrina A. - 053: yeah that and also the motion of turn the upper body sideways multiple times is kind of tiring

[09:00, 4/14/2020] A.A.A. Arini Utari S. - 170: frequent Bending and uncomfortable body rotation

[09:02, 4/14/2020] M. Lokman Bin Jalaludin - 001: Actually the trays are stacking up one another until certain height after that we move it to another station so that is why we using two material handling

[09:03, 4/14/2020] Yudhistira A. S. - 066: The two MH here which utilizes hydraulic system only operates before and after cutting machine to transport the trays. Later on the trays will be moved by pallet jack to the steam machine

[09:03, 4/14/2020] Rafli Muhammad R. K. - 85: Oh ok I understand thank you guys

[09:04, 4/14/2020] M. Lokman Bin Jalaludin - 001: No problem👍👍👍

[09:12, 4/14/2020] Pak Yudha Prasetyawan: Within your own group. What is the possibility of being firm/success with current system

[09:14, 4/14/2020] Pak Yudha Prasetyawan: I mean member of the group may comment on their own design about it's limitation

[09:17, 4/14/2020] Gabriel Angelo Clarence - 096: i think the limitation is mostly on the cost, sir. the implementation of the installment would need a set of expenses. we don't know whether the sme would want to implement it or not based on the existing cost, even though we believe it would not cost a fortune

[09:18, 4/14/2020] Azam Shah Bin Ahmad - 003: Also i think the limitation is the possibility of one component/machine is broken will stop the whole process for awhile as it is a continuous process

[09:19, 4/14/2020] M. Daffa Rizdhiya Sadek - 104: For the mechanical limitation, it has the same limitation as the previous machines. We don't know exactly how to synchronise and how often the maintenance should be between the two machines.

[09:19, 4/14/2020] Rafli Muhammad R. K. - 85: Yes the cost will be felt in short term. But it is really beneficial for long term investment

[09:20, 4/14/2020] Rafli Muhammad R. K. - 85: *Sir

[09:20, 4/14/2020] Yudhistira A. S. - 066: The limitation of Q2 groups i think is the capacity of trays to be stacked in hydraulic. The higher stacks desired needs higher conveyor and cutting machine. It is hard to adjust the machine if it is too high. If it is designed low, maybe the stack of trays can't be too much.

[09:20, 4/14/2020] Charles Liunardi - 011: And i want to add, there is maybe other kind or more energy needed, such as electricity. So may be there is a need to install the power source (power supply) in specific area

[09:21, 4/14/2020] M. Daffa Rizdhiya Sadek - 104: Synchronizing production will be meddlesome, but it is doable since we have the sme's production data for both machines. How many flours to input and the new machine's production data however requires real life testing

[09:22, 4/14/2020] Rafli Muhammad R. K. - 85: Yes about synchronizing pace of each process is the limitation

[09:29, 4/14/2020] M. Dwiki Aqsa Y. P. - 198: Maybe the SME should give a guideline to the worker about the new operation. This is to decrease the probability of the worker didn't know what to do when something bad happened to the machine

[09:29, 4/14/2020] G. M. Arya Bangsawan - 178: a proper workshop would be sufficient

[09:34, 4/14/2020] Pak Yudha Prasetyawan: Other students?

[09:35, 4/14/2020] A.A.A. Arini Utari S. - 170: i think the limitation for the SME would be the cost of the new idea or the machines for them to fix to

[09:37, 4/14/2020] Arnoldus Arkkawimba A. - 106: I think another limitation is we have to make a machine or system that could be utilized by the workers. We need to know the capabilities of the workers that will operate the machines. What is the use of we making complex machines if it could not be utilized to its maximum potential.

[09:38, 4/14/2020] Stolz Mark - 001: I agree with my group Q1, I think that our idea can represent a significant cost to be implemented: machines, electricity, new components! That said, if we manage to use existing machines, we can find an effective and not too expensive solution to combine everything.

We must also pay attention to the size of such an installation and plan for easy maintenance in the event of a problem.

[09:38, 4/14/2020] Bagus Hadi - 177: I agree with Gabriel Angelo Clarence - 096 and aqsa if the SME want to implement it the cost of the initial investment will need to be considered and after the investment there will be period of time of adjustment from the worker because a new machine being implemented

[09:38, 4/14/2020] Godieuil Colin - 002: The limitation is maybe the hydraulic systems, I'm not sure if it's possible because of the small weight of tray

[09:39, 4/14/2020] Godieuil Colin - 002: And I agree with the cost and the big changes that this ameliorations involve

[09:39, 4/14/2020] Achmadi Noor Dzaky - 067: Q2's drawback is that most likely the real life implementation of the machine would have less capacity than on the blueprints, because the oven's capacity is relatively huge, and i personally don't believe that it would be realistic to move such amounts of pallets to the oven, compared to the manual loading or unloading 1 pallet at a time to the oven

[09:40, 4/14/2020] Samuel Adrian - 123: The limitation in my opinion is the initial investment costs. However if the SME manage to pass through it, it will be profitable in the end

[09:40, 4/14/2020] Veronica Chai - 116: Yeah i think the limitation is on the cost. And our improvement may seem like small improvement, but for us it will give a great impact. And we are not sure that the SME will invest on the improvement proposed.

[09:40, 4/14/2020] Dyahayu Raditasari R. P. - 085: in my opinion, the biggest obstacle would lay on the cost. the SME has to spend money on the installment of the machines and the SME also has to teach the workers about the procedure of new machine that might cost more money.

[09:42, 4/14/2020] M. Daffa Permana - 128: In my opinion for the Q1 group, the limitation is the machine itself, why? Because it is the combination between 3 processes, and there is a possibility if one machine is broken then it will stop the whole 3 processes

[09:43, 4/14/2020] Aini Milania A. - 005: In my opinion, the limitation for the SME is the cost required for the installation of this concept. Moreover, the SME owner will also need to train the workers about the new tools so that I believe it will eventually requires more time and cost for the owners.

[09:43, 4/14/2020] Nadhifa Q. A. - 026: Other than cost i think it will be hard for the sme to adjust to the new techonology we propose. Because they already use their machine for almost 10 years since 2011. They already used to the mechanism they had

[09:44, 4/14/2020] M. Lokman Bin Jalaludin - 001: Yes the limitations is on the cost because SME is not a big company to handle the equipment and need to train the workers so that it will need more money

[09:44, 4/14/2020] Gabriel Angelo Clarence - 096: Excuse me Mr. Yudha, pardon me for asking, but could we design the 3D model for our big assignment using SketchUp software? @Pak Yudha Prasetyawan

[09:45, 4/14/2020] M. Daffa Rizdhiya Sadek - 104: Or do we have to use solidworks or fusion 360

[09:45, 4/14/2020] Nabila Ramadhandi D. - 195: in my opinion, there will be a few obstacles in accepting improvement by SME. the improvement we provide is more directed to the reduction of workers to speed up the process. on the other hand, the SME recruits people around to help with their daily income.

[09:45, 4/14/2020] Pak Yudha Prasetyawan: Yup. You can have any kind of software

[09:45, 4/14/2020] Gabriel Angelo Clarence - 096: Thankyou sir

[09:45, 4/14/2020] Pak Yudha Prasetyawan: Due to our limitation to access computer lab

[09:45, 4/14/2020] Pak Yudha Prasetyawan: Lab computer

[09:46, 4/14/2020] Hidayah Binti Mohd Ali Piah - 002: In my opinion, the limitation is the principles work well with the machine we are going to make

[09:46, 4/14/2020] Fuad Azaim S. - 133: yeah, the cost. I think that's why we have to gather enough existing data (about the productivity, cost to make and maintenance the machine and technicians) as the basis comparison before and after we implement the tools in the sme.

[09:47, 4/14/2020] Rana Dinah N. - 169: Generally, the main limitations will be regarding the cost of the machine itself, maintenance cost and a new operation procedure for the machine should be clearly explained to the workers

[09:49, 4/14/2020] Anandito Ridho R. - 146: I think the limitation is not only about the cost but also how the workers adapt to the new production system

[09:51, 4/14/2020] Akhdan Muhardi - 121: I agree with Nabila Ramadhandi D. - 195. The implementation of the machine that including automation in it will give tradeoff to the SME because they have to reduce the number of worker needed to operate such machines. In addition it will affect the economic condition of the surrounding environment of the SME itself and it will lead to chaos of protests amongst the workers, i guess

[09:53, 4/14/2020] Almas Sabrina A. - 053: in my opinion, the limitation of Q2 idea is the motion of the tray from the cutting machine to the hydraulic system because the tray is made of bamboo which has rough surface, i personally think that the the flow would not be as smooth as what we expect.

[09:59, 4/14/2020] Gabriela Tesla S. - 113: I think the limitation of the machine implementation would be the cost and the worker capabilities to operate the machine itself

[10:03, 4/14/2020] Pak Yudha Prasetyawan: Ok guys. Thank you very much for your significant progress

[10:03, 4/14/2020] Pak Yudha Prasetyawan: You may continue your project. Very good

[10:04, 4/14/2020] Khalisya G. A. U. - 148: and also, the limitations would be the cost, because the machine changing would take a high cost, it's hard to see them take a risk for it

[10:06, 4/14/2020] M. Lokman Bin Jalaludin - 001: Thank you Sir

[10:06, 4/14/2020] Rafli Muhammad R. K. - 85: Thank you Sir

[10:06, 4/14/2020] Aghnat Rhaka A - 161: i think the main limitation is the cost, followed by technological barrier as there are no guarantee that all the worker would understand it considering their age. cost restriction is also known as the main technological barrier in developing countries.

[13:47, 4/14/2020] Touraille Maximin - 003: Good afternoon everyone, I will now answer the questions asked this morning:

First of all, I am in Q2 group and the question I have is about the design. You talked about dimensions of your new machine, which is a very interesting machine by combining 3 older machines into only one, and when I see your drawing I cannot stop asking myself if the height of your machine won't be an issue because It seems to me that you will need quite height for your machine to do all the processes. Moreover, as I said earlier, your concept is very interesting and could fasten a lot the crackers production time.

Moreover, to speak about our group's concept limitations we could say that the cost of implementing could be too expensive and it could also lead to reduce the number of employees because the main idea is to reduce the energy spent by humans to bring the dough to the cutting machine and then to the heating place. And about the hydraulic system, I also don't know if the weight of the trays will be enough to make the plate goes down.