

Dear Kennedy,

SUBJECT: WAREHOUSE LAYOUT PLAN, MIXER INSTALLATION AND OPERATION

WAREHOUSE LAYOUT PLAN

In general, the flow of production moves from offloading of input materials, storage, processing, offloading of finished products from machine and storage pending outward movement. The actual movement between any two of the above should tend to zero distance to minimize energy extended on movement in order to minimize cost. Thus, the optimal go down layout must take into account the expected maximum and minimum input quantities, types mode of delivery (e.g. bags, containers etc) versus output max and minimum output quantities with a regard to the surface area occupied per unit quantity. These factors will dictate the positioning of the plant (mixer). Thus, for example, if the plant is forced by these factors to be positioned along one side of the warehouse, then it will be a straight line configuration on the other hand if it is forced to be at a corner, then it will be in “L” shape configuration.

The configuration may even be “U” shape but in our case, the plant (9m) is less than 14m of the go-down in length.

The flow of processing may be clockwise or anticlockwise depending on go down inlet position, internal dimensions, how materials are delivered and removed, and general site factors.

Therefore, in order to come up with an optimal layout flow plan, we will need more information or discussion to conclude on the above issues.

With regard to mixer installation, it is difficult to advice accurately on the cost before seeing the state of the individual machines involved. Although we are familiar with the machines involved, we cannot for example tell in advance the state of screw conveyors, sprockets, chains, body sizes, weight,,need for repainting etc.

For elevators, we do not know its bearing condition, belt condition etc.

Even for actual mixers, we do not know the thickness of the plates (gauge used to fabricate it, inclined screws, conveyor size and thus the weight, Also for the electricals, we cannot tell the length of main cable to bring power to the plant before agreeing on the actual position of the machines.

Customization of the mixer plant is of great importance to increase efficiency and reduce cost of production. In particular the lowering the feeder inlet point to floor level, we will need to have a pit below the ground level and therefore we need the owner’s permission and to estimate the cost, we need to know what lies below the ground level.

As to the proposal that your staff operate the mixer plant, you are best placed to advice.

In conclusion, we await the arrival of the mixer plant and further meeting before advising on costing from plant installation up to commissioning.

Thank you,

Eng. Muketha,
EUROAFRIC ENG.