

Stesalit Automation

A deep technology driven company, creating and implementing automation in the process industries for decades

Core competency in design, development and manufacturing of sensors and micro controller based automated systems for process industries like Coconut, Tea and others

Provides the whole suite of products from Dehusking to packing for Coconut Processing Industry

Winner of several International Awards including RED HERRING 100 ASIA

Multi City R&D Center for product design and development

A SEI - CMMI Level 3 Organisation

ISO - 27001:13 & ISO 9001:15 Certified

Stesalit offers 'Stesalit Coconut Automation System' (SCAS) which is a Centralized Monitoring and Control System for Coconut Processing Unit.

Using special sensors, the operations of the Coconut Processing Unit are monitored and recorded on a computer screen in the factory. **This data can further be stored for Data Analytics in the future.** The operation details of individual equipment can also be seen individually and collectively. Automation by this system gives better efficiency and control of the process resulting in highest quality of the final product.

Superior quality of the final product is achieved by maintaining desired temperature control and other parameters in the Blancher and Dryer. The Desiccated Coconut Powder produced through our **SCAS** is totally contamination free and milky white product of highest quality resulting much higher price realization. Our system also provides exact yield of each batch of coconuts fed in the unit. Some of the features and advantages of our **SCAS** are given in the following pages.

Existing System

Proper control of temperature in the Blancher is not possible

Disadvantages of Existing System

- Without proper temperature control, production of total contamination (Bacteria) free coconut is not possible
- This adversely affects the quality of final coconut product produced and the whiteness of the final product
- Uncontrolled steam consumption results in higher fuel consumption

Our Automation System for Blancher

- SCA system for Blancher, uses special sensors and ensures the maintenance of desired temperature in the blancher throughout the operation
- Ensures total contamination (Bacteria) free coconut production in the blancher

Advantages of our Automation System

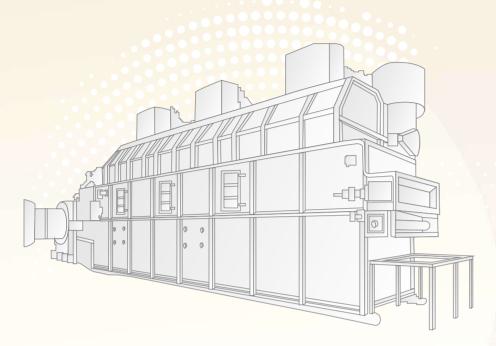
- Through Automation ensures production of total contamination (Bacteria) free coconut in the final product
- Ensures milky white coconut in final production
- Saves fuel consumption due to controlled steam consumption





Blancher





Combination Dryer

Existing System

Proper control of temperature in the dryer is not possible

Disadvantages of Existing system

- Due to fluctuation in temperature in the dryer, there is possibility of under / over heating of coconut in the dryer resulting in under / overcooked product
- Due to fluctuation in temperature in dryer, production of contamination (Bacteria) free desiccated coconut powder and milky white desiccated coconut powder is not possible
- There is no control over steam consumption resulting in higher fuel consumption

Our Automation System for Dryer

• In our offered automated system for Dryer, the system using special sensors, monitors and ensures the maintenance of desired temperature and other parameters in the dryer throughout the operation

Advantages of our automation system

- •The temperature control in the dryer results in total contamination (Bacteria) free milky white Desiccated Coconut (DC) in the final product
- •The final milky white Desiccated Coconut powder gets better price realization
- Our automation system will also provide savings in fuel consumption due to controlled steam consumption



Weighment of Final Product (SCW)

Our Automation System for Weighment (SCW)

 Our automation system for Weighment (SCW), using microcontrollers, provides very accurate, online weighment of the final product, during the production process itself

Advantages of our automation system

• The system gives accurate weighment of the final product on real time basis. The system records and monitors actual online real time weight on hourly/ daily/ monthly basis and also controls the losses in the process before and during final packaging

Existing Systems

 In the existing system, the weight of Final Product is taken only after packaging of final product

Disadvantages of existing system

 This does not give the accurate weight of the final product produced because of possibility of wastage before and during the packaging process





Deshelled Nut Bin



Existing Systems

 There is no possibility of counting and knowing the exact quantity of coconuts loaded in individual bins and collective De-shelled storage Nut bins

Disadvantages of existing system

- Opening & closing of conveyor gate and related conveyor operation is done manually requiring large number of Manpower
- There is no system by which exact quantity of de-shelled nuts by individual workman and in the entire de-shelling process can be monitored and recorded in each shift and the efficiency of each workman and the entire process can be monitored

Our Automation System for De-shelled Nut BIN

 Our system for nuts BINS, the quantity of de-shelled nuts in each BIN can be recorded and number of de-shelled nuts by each workman in each shift can be monitored. This can be displayed on screens placed above/near BINS, and work efficiency of individual and collective workman can be monitored and recorded

Advantages of our automation system

- By using special sensors, our system gives the quantity of production of each de-shelled nuts in individual BIN and in all BINS collectively. This can be monitored and recorded for each shift / each day / each month, thereby determining the efficiency of the individual and for the entire process
- Our system also provides higher production of de-shelled nuts in each shift because of proper monitoring of whole operation with data available at every step
- The opening and closing of conveyor gate for each bin is done automatically thereby saving substantial man power and improving efficiency manifolds

Coconut Storage Bin





Existing Systems

It is not possible to know the exact quantity of coconut stored in storage BINS due to which
the efficiency of the entire coconut production process in the factory cannot be determined

Disadvantages of existing system

 Opening & closing of conveyor gate and related conveyor operation is done manually requiring large number of manpower

Our Automation System for Coconut storage BIN

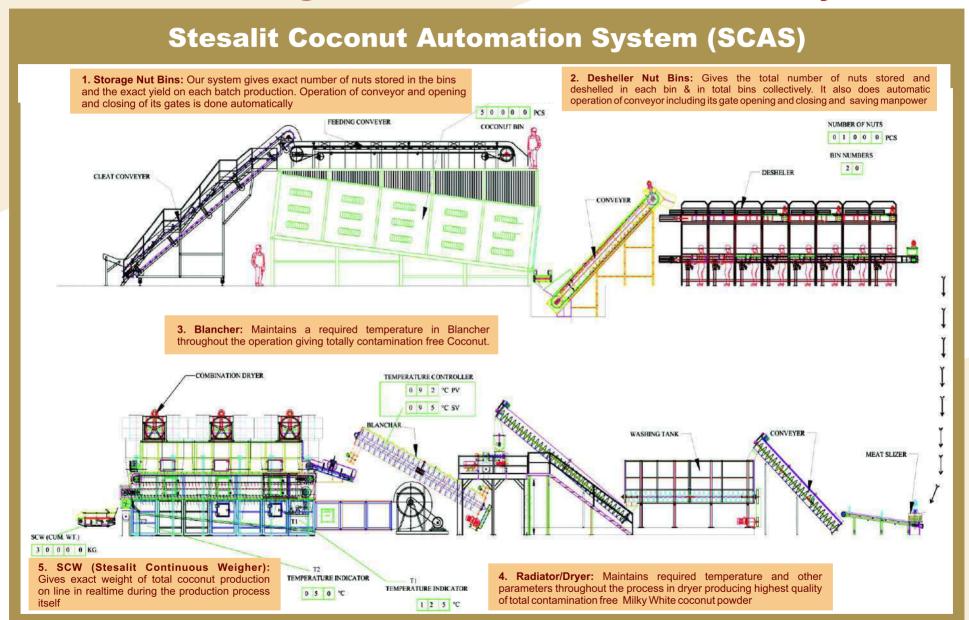
 In our offered system by using special sensors, the exact number of nuts stored in BINS is counted, and demonstrated on the screen

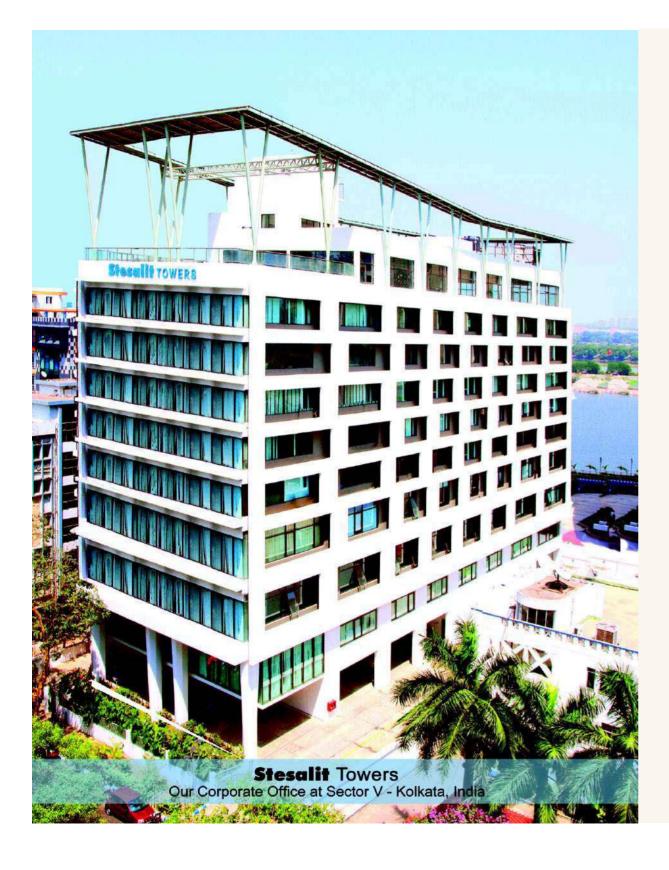
Advantages

- The conveyor gate and related conveyor operation is done automatically saving substantial manpower and giving better efficiency
- The efficiency of the entire system for Coconut production of the factory can be determined and improved
- The system also gives the exact production yield of each batch



Introducing Automation in Coconut Industry





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