

About AkshayaPatra Mega Kitchen:

Most of its kitchens are fully mechanized. It is also started using the latest technologies such as data analytics, blockchain and Internet of Things (IoT) to speed up the quantity of its operations while ensuring the quality control. By using such technologies, the data is then analyzed for the improvement in the production planning, meal delivery and menu for the next day.

What we learn?

AkshayaPatra, also known for its Mega Kitchen which has large automated machineries which cooks meals for millions of students across India. On 4th April, 2019 we reached The AkshayaPatra, Bengaluru at 12:30pm. There were various departments in the kitchen which is as follows:

- 1. Rice cooking machines**
- 2. Sambur cooking machines**
- 3. Vegetables washing and cutting**
- 4. Roti (flat bread) making in North Indian Kitchens**

1. Rice cooking machines

The Rice cooking machines consist of huge containers in which the rice is cooked. The cleaned rice is poured through a duct in the huge containers which is then cooked by passing pressurized hot steam into it. These huge containers can cook rice for 600 students at a time in just 15mins.



2. Sambar cooking machines

The Sambar cooking machines are also of huge containers in which the freshly cut vegetables, fresh ingredients and spices are poured through the ducts into it. The sambar is also cooked by the pressurized hot steam which is passed into the containers. These containers cook about 5000 liters of Sambar in just 30mins



3. Vegetables washing and cutting

All the vegetables are washed and other fresh ingredients are prepared for making the curry. The vegetables are chopped and washed by the automated machines. Few vegetables which can't be cut by the machines, are then cut by the workers.



4. Roti (flat bread) making in North Indian Kitchens

Due to increased demand of Roti's in the North India schools. AkshayaPatra has also come up with a Roti (flat bread) making machine, which has the capacity of making thousands of roti's in 30mins. When the dough is feeded through the duct, it is made round in shape and passed through the flames by a conveyer belt. The roti's are then cooked and packed for the delivery. Though there is very less supply of roti's in South India, thus we got a glimpse of the machine.



Conclusion

From this visit, we got the information and practical knowledge of automation in automated food preparing industries. We got the knowledge of how the food is prepared in a large quantity by keeping it clean and nutritious. We also got to know the working of different cooking machines which are used in the industries.

About 50 students of 6th Semester Mechanical Engineering of NHCE, Bangalore and faculty named Prof. Kemparaju & Prof. Hanumanth are benefited from this visit as they got the chance to discuss the working principles of the machines used in the Mega Kitchen. Students are requesting for more industrial visits for the practical exposure of the industrial world. As this visit was a success and everyone has gained knowledge about the automated works performed in the industries.

