

SUMMARY

Industry

Production Monitoring System for Vials & Ampoules.

Challenge

Monitor production quantity of vials & ampoules, monitor waste using intelligent recycle bin.

Solution

Microcontroller is used to monitor, production & wastage using retro fitment of capacitive sensors, infra-red sensors.

Results

- Increase the scalability of production.
- Improve asset utilization.
- Automate the process of monitoring production line.

Benefits

- Production floor gets IoT enabled.
- Data security on cloud.
- Production, machine maintenance can be plan.
- Automatic report generation

IIoT enabled Vial & Ampoule manufacturing plant

Production monitoring systems playing vital roles in manufacturing industries. These systems are useful to reduce the human efforts & provide analytics to manage the maintenance & production.



Vial & Ampoule Manufacturing Unit

Vials & ampoules are used in medical industries to fill the vaccine. Microcontroller based solution is used to monitor the production. Capacitive & IR sensors are used to monitor the production.

Intelligent recycle bin embedded with IR sensor is used to monitor wastage or discarded vials while manufacturing.

Energy meter is used to monitor the electricity consumption of every machine available on floor. Using power factor the lifecycle of motor can be monitored. Using this data we can future plan for the maintenance of the machine.

Oxygen & LPG used for vials cutting is monitored using LPG meter & oxygen sensor.

Contact Us

Web Site

<https://www.grandes-mentes.com/>

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Address

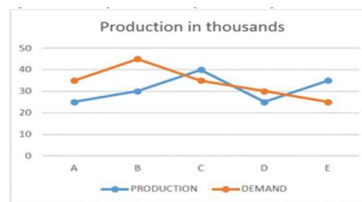
17, Aarambh, 4th floor, Beside Datta Mandir, Wakad, Pune-411057



Analytics

All the data shared by microcontroller using Wi-Fi or Ethernet is visible on platform. Production count, wastage, electricity consumption is visible in different charts with proper date & time. By using this data & analytics we can plan the future production. We will be able to identify the wastage of material. Energy meter data is used to calculate the electricity. Also we can monitor the ideal time of machine for which machine was not in production. We can plan the machine maintenance using energy meter data. Machine Operator person efficiency, machine efficiency can be identified using the analytics. All the data can be available in excel or pdf file for record purpose. Various reports are generated using the available data.

Production Vs Demand

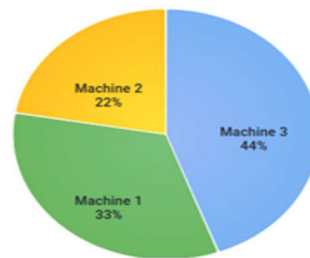


Operator Vs Production



Machine Vs Machine Production Production Reports per Month

Percentage of pieces produced per machine



Daily Production Report															
Date of Report	5/1/2021	Casting			Shifting			Packing			Shipment				
Order No	Stat	Color	Order QTY	Part QTY	Tube Cutting	Total Casting	Percentage	Tube Shifting	Total Shifting	Shifting Salans	Tube Packing	Total Packing	Total Shipment	Remaining Shipment	
1	Stat	Blue	1000	1000	1000	1000	100%	1000	1000	1	1000	1000	1	1000	0
2	Stat	White	2000	2000	2000	2000	100%	2000	2000	1	2000	2000	1	2000	0
3	Stat	Blue	1000	1000	1000	1000	100%	1000	1000	1	1000	1000	1	1000	0
4	Stat	Blue	1000	1000	1000	1000	100%	1000	1000	1	1000	1000	1	1000	0
5	Delivered	Blue	2000	2000	1000	1000	50%	1000	1000	1	1000	1000	1	1000	1000
6	Stat	White	2000	2000	2000	2000	100%	2000	2000	1	2000	2000	1	2000	0
7	Stat	Blue	1000	1000	1000	1000	100%	1000	1000	1	1000	1000	1	1000	0
8	Stat	Blue	1000	1000	1000	1000	100%	1000	1000	1	1000	1000	1	1000	0
9	Stat	White	1000	1000	1000	1000	100%	1000	1000	1	1000	1000	1	1000	0
10	Stat	Blue	1000	1000	1000	1000	100%	1000	1000	1	1000	1000	1	1000	0

We build robust, end-to-end IoT products & solutions for our clients. Our solutions are custom-made, cost effective & highly scalable.