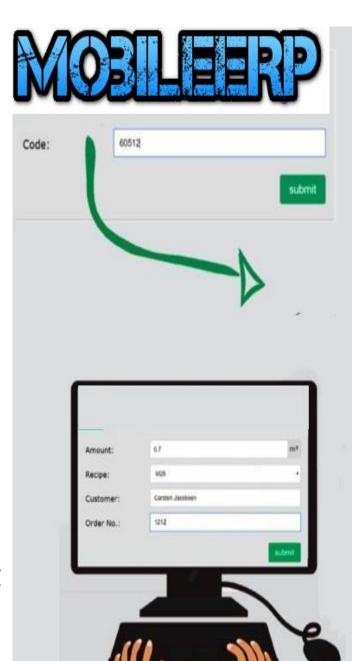
# Batching Plant Software

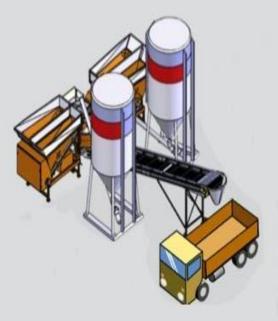
MobileERP

### **Production of Concrete**

- Stay in control of your concrete production reduce operational cost, improve productivity and make more money.
- Concrete2Collect allows you to use your batching plant as a mix and collect service. You can sell concrete to your customers/Site using the design mix and quantity they need for your project.
- The customer buys the design mix and quantity and is given a receipt with a code on it. The customer then drives over to the batching plant with his trailer or wagon. They enter the code into the batching plant control panel. The batching plant will then mix the concrete and discharge it into the awaiting transporter.

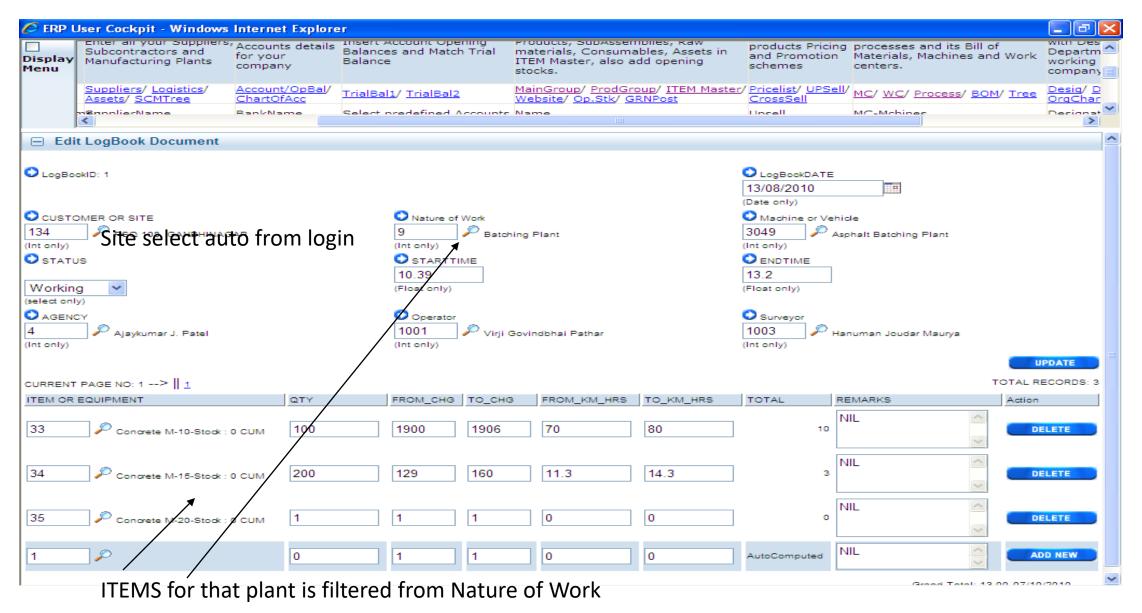


Customer given code to enter into the batching plant



Customer collects the concrete from the batching plant

## **Production Entry**



Plant, Operator, Surveyor filter by site

## Change Recipes Easier Than Ever!

- Software makes access to your batching plant very simple.
- With Software you can change your mix recipe without having to leave your office. The changes can be made using the internet. This means you can control your batching plant where ever you have internet access. You can access it from your PC, Pad or Mobile.

# **Live Quality Control**

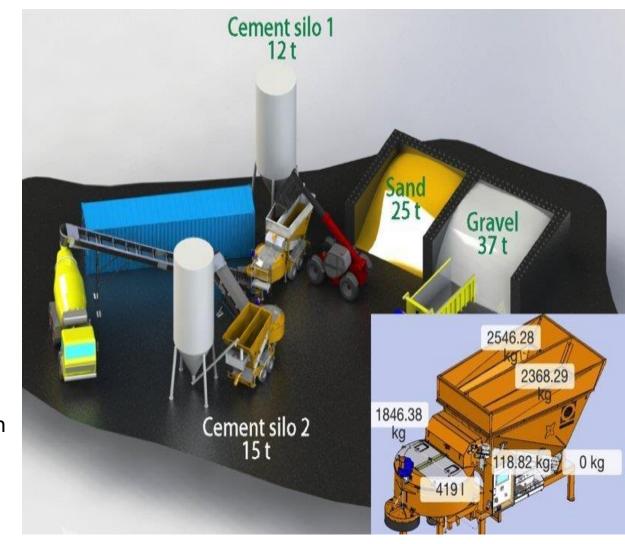
Software allows to continuously enter the concrete mix tolerances and sends out quality alerts. When a material, for example, the cement goes out of tolerance software sends you an alert on your mobile, pad or PC.

This means you can quickly adjust the batch by adding more cement, sand, aggregate or water to get the batch back into tolerance. This live interaction can save you thousands of rupees in lost or rejected concrete from customers.

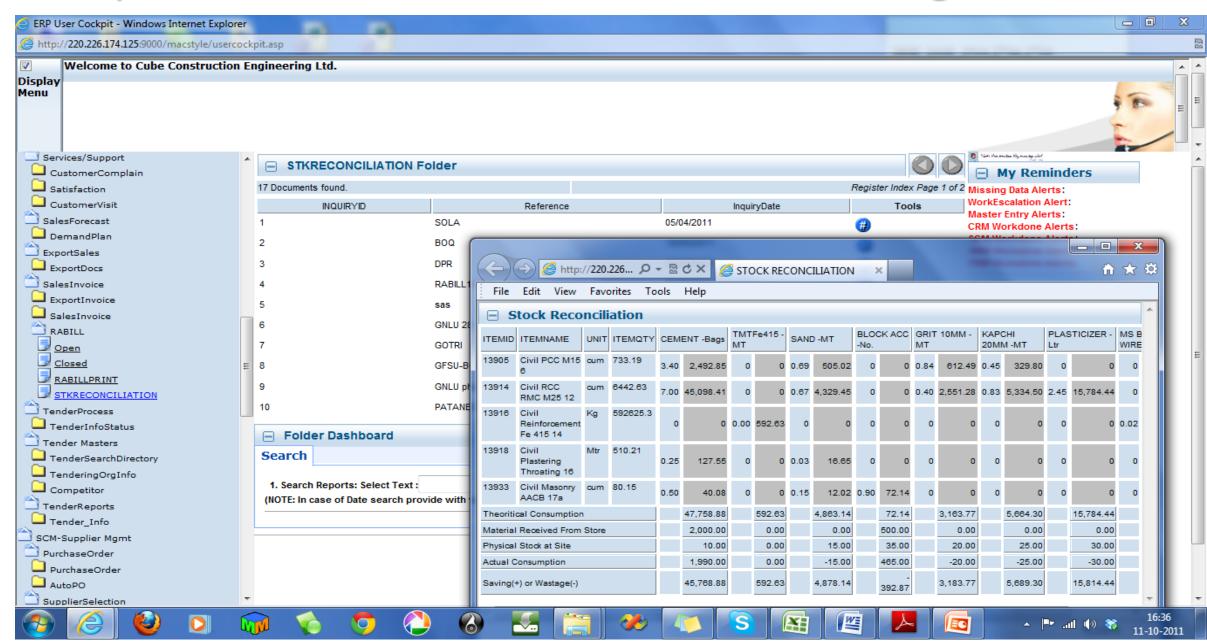
### **Stock Control**

Never run out of sand, cement, aggregates, chemicals again.

- Downtime is expensive, and some downtime is due to running out of materials.
- With MobileERP you can input your delivery of raw materials into the system.
- MobileERP with deduct materials being used from stock and will send you an alert when you have a minimum stock level.



### Recipe and Stock Reconciliation for Batching Plant



# Preventive Maintenance of Batching Plant

Plan your services to fit your schedule and minimise the downtime! Advanced calculations, collection of data and the expertise in software's makes us able to calculate when critical components needs to be changed. Software will message you when service is needed, and is able to minimise production stops based on faulty equipment.

### Service Reminder

Service is important to extend the lifetime of your batching plant.

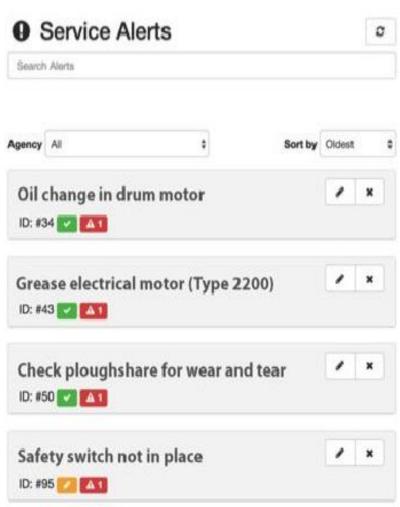
Service reminders are built in the software. The service reminders are setup in accordance with the plant manual. This means you will not forget to service your batching plant, giving to continued production with low downtime.

The value of your batching plant will be much higher if you service it in accordance with the manual.

## Security For Manager

As a manager, you want to know what has been produced and the quality that has been produced. Software gives you total control of what the batching plant has been producing.

If faults occur or the quality of the batch is not within the tolerances, you will receive a message so you are able to react fast. The feature makes long distance management easy because you always know what is going on in Batching Plant on Construction Site!



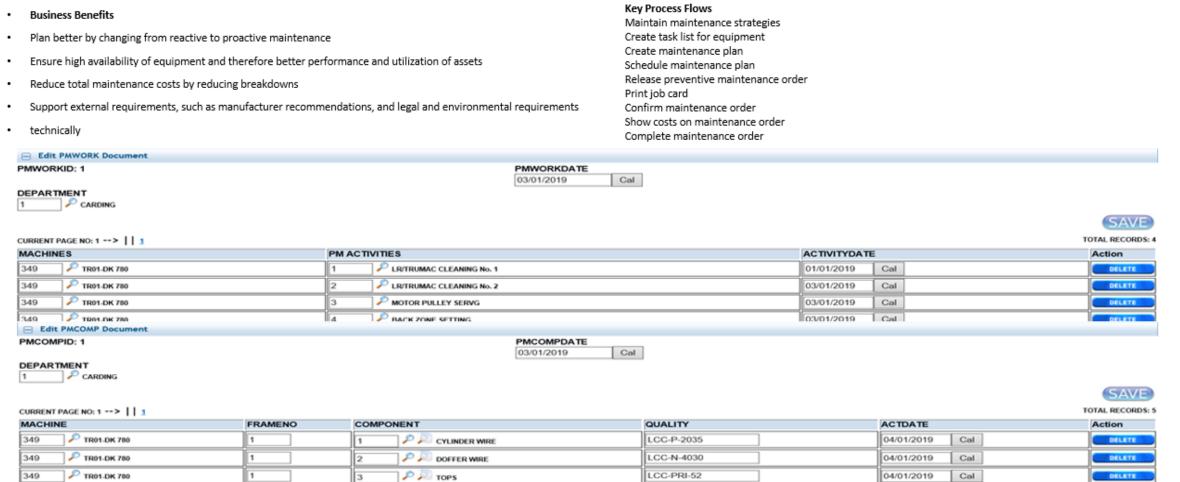
### Preventive Maintenance

P TR01-DK 780

P TR01-DK 780



This scope item describes the processes for preventing system breakdowns that have high repair and production breakdown costs. This scope item describes the processes you perform to prevent system breakdowns or breakdowns of other objects that have high repair costs. Such breakdowns result in greater costs due to production downtime. Preventive maintenance support processes to plan the scope and time of maintenance work for inspections, maintenance, and repairs, in advance. The quality of products manufactured is substantially affected by the operational condition of the production plant. There is a requirement for quality assurance to be more cost effective to maintain objects regularly, and in return avoid a more expensive breakdown. You determine the data required for preventive maintenance by using previous data supplied by the system. In addition to internal company aspects for planned maintenance, you should consider external factors due to an increasing number of conditions set by legislative bodies demanding more stringent requirements on planned monitoring and maintenance of objects.



LCC-E-5510

🔑 🔎 FLAT CHAIN

P D LICYERIN WIRE

Grand Total: 0.00

04/01/2019

04/01/2019

04/01/2019

Cal

Cal

Cal

DELETE

• Add

### MACHINE BREAKDOWN Maintenance



This indicator is a measure of availability of machine for Production i.e. value addition activities.

▶ This indicator should decrease over time.

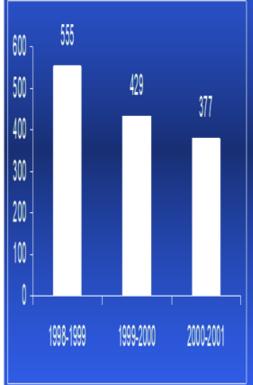
#### Breakdowns include machine stoppage due to :

- a) Mechanical faults
- b) Electrical faults
- c) Electronic faults

Unit for this indicator is Hours.

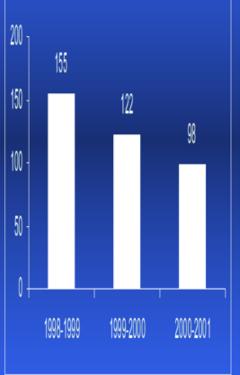
Unit for this indicator is Frequency.

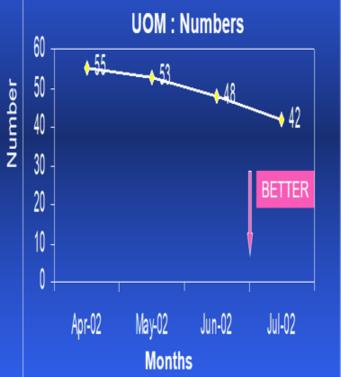
### **PAST TREND**





#### PAST TREND





### Accident Management and Maintenance

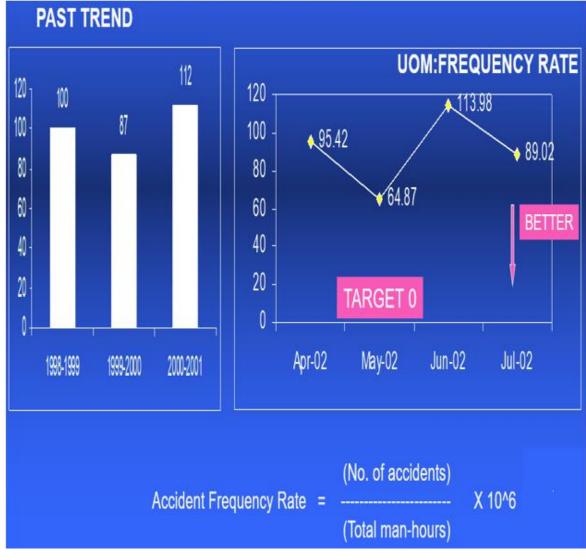


Severity: This indicator is a measure of loss to the company in terms of man-hours due to unsafe operations.

Frequency: The Indicator is a measure of no. of accidents occurring in the company due to unsafe practices.

Company should make a monthly trend graph for it. Both parameter should decrease over time.



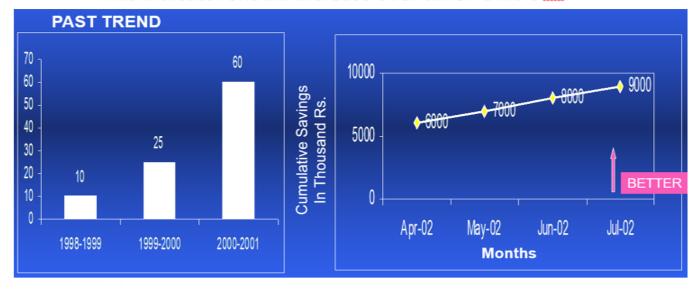


#### **ENERGY COST SAVINGS MONITORING**



- ▶ This indicator is a measure of energy input cost reduction on the working of the whole organization. Unit of this indicator is "Rupees".
- ▶ Energy Savings may be achieved in office areas, shop floor operations, stores, ware house, pantry, etc.
- ▶ Energy Savings may be due to :
  - a) Electrical Energy Savings
  - b) Fuel savings e.g. Diesel, petrol, Gas. etc.
- ▶ Electrical Energy savings may be due to :
  - a) Reduction in compressor working time due to reduced air leakages / reduced use of compressed air.
  - b) Reduction in working time of Electrical Heating devices such as Industrial heaters, induction heating machines, air conditioners.
  - c) Running the machines at Standard Speed / Cycle Time
  - d) Use of Energy efficient electrical <u>lamps,tube</u> lights, air conditioners, heating systems, etc.
  - e) Use of appropriate rating of electrical motors, pumps on the machines and equipments.
- ▶ Fuel Savings may be due to:
  - a) Reduced use of Forklifters
  - b) Reduced use of Gensets

#### ▶ This indicator should increase over time. Unit is Rs.



#### OEE

Α	Available time					eduled luction
В	Running time			Failure Idle time		
С	Theoretical production					
D	Real production		Minor Stops Speed loss			
E	Real production		OEE = B/A x D/C x			
F	Good products	Scrap Rework	Avail	ability Perfo	rmance	Quality

Overall Equipment Effectiveness	Recommended Six Big Losses	Traditional Six Big Losses	
	Unplanned Stops	Equipment Failure	
Availability Loss	Planned Stops	Setup and Adjustments	
Dorform and Lone	Small Stops	Idling and Minor Stops	
Performance Loss	Slow Cycles	Reduced Speed	
Quality Loss	Production Rejects	Process Defects	
Quality Loss	Startup Rejects	Reduced Yield	
OEE	Fully Productive Time	Valuable Operating Time	