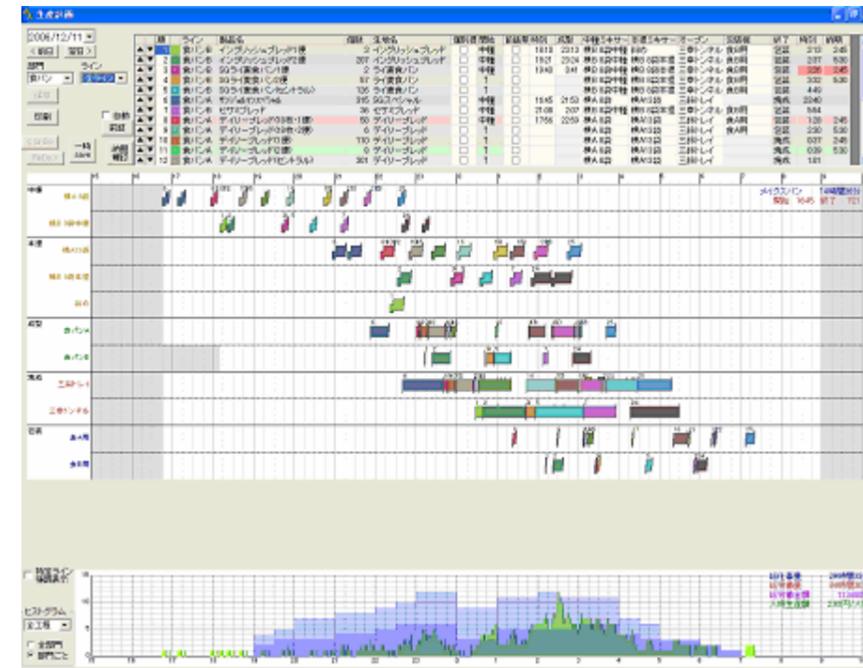


*Solution for the food factory*

*To scientific production from the experience and feeling*

“Ad Libitum”, affordable even for small/medium factory and to collect an initial cost certainly.

**Scheduling display :** The process optimized by visualization is displayed

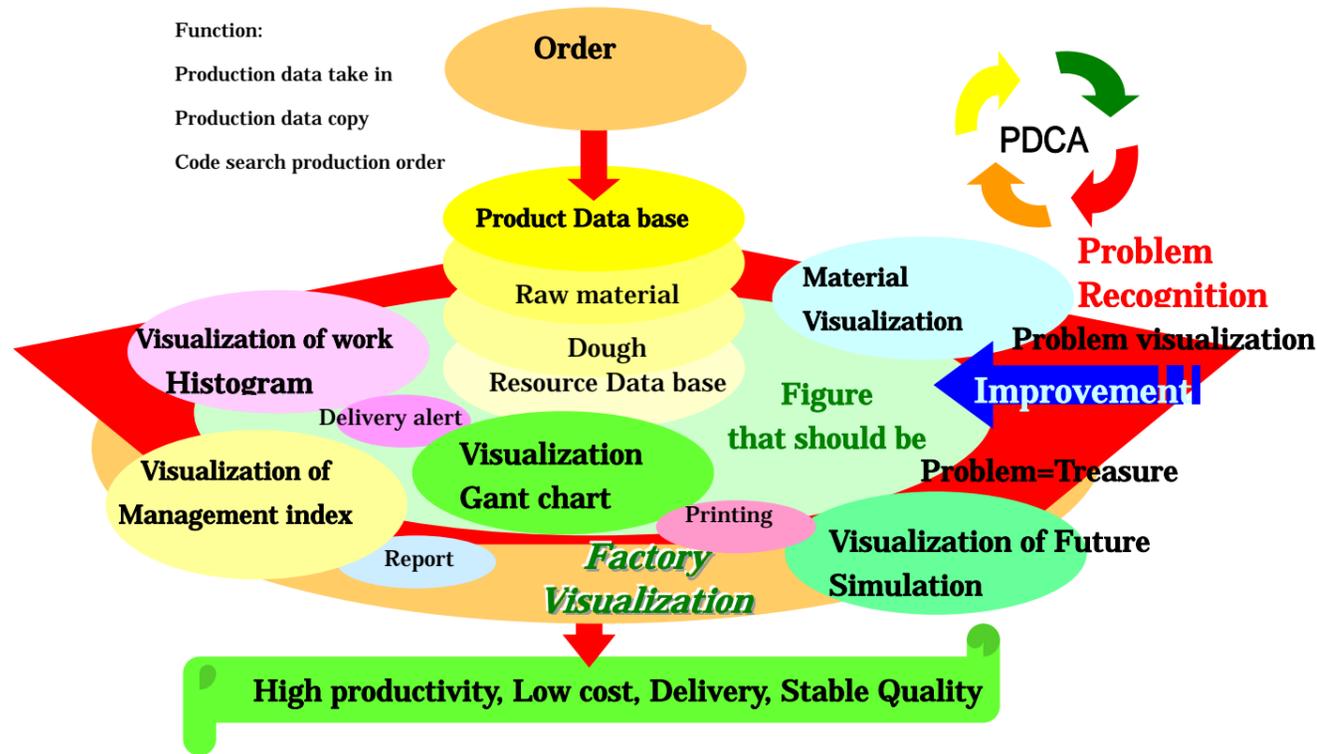
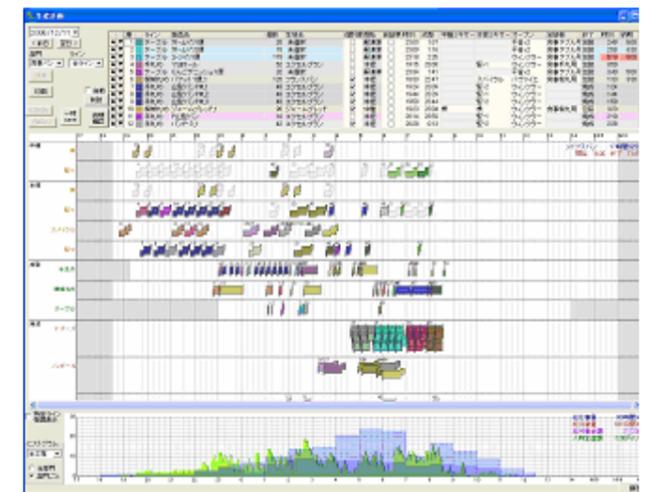


**“Ad Libitum” that visualize complicated factory and control production optimized**

The daily food of the big demand fluctuation is suffered from the poor production efficiency. The long life foods and the big industry foods in the seasonal fluctuation are produced inefficiently in order to prevent over and less stock. “Ad libitum” has been developed, which is able to be introduced with a low cost, so as to avoid such a problem and make the rational production schedule not to cause to excessive stock without hand waiting, hand vacancy. It is possible to make an optimal “Ad libitum” with an order maid for an every factory. It is corresponding to LAN.

**Correspondence in a hand-made factory**

“Ad Libitum” is corresponding to the factory where equipped with the batch oven such as the French oven.



## Effect of “Ad Libitum” introduction

**Able to grasp the figure of each process of a line that should be (Factory Visualization)**

- The rational and possible detailed schedule is visualized at the production start
- The delivery delay is gone by the delivery alert function in time for delivery time
- Change of the schedule is possible easily to the change of situation
- Matching of the load fluctuation and labor is possible by the scheduling at the plan stage
- The continual improvement system taken the thought of the TOYOTA production method

**Preparation of the schedule that makes the most of the production resource**

- The schedule preparation that is not impossible, wasteful and unstable utilizing resource
- Able to pursue higher productivity catching the equipment and labor status at a glance
- Exact detailed material usage is calculated instantly without waste of the material
- Able to study in advance with the simulation function to the big fluctuation of production amount

**Factory status is turned in to the numerical value instantly for the management by objectives**

- The material usage, labor cost, man-hour productivity etc. of the day are indicated
- The quality of the product is stabilized as the production condition is stabilized
- The material cost, the labor cost, package material cost for each product are displayed
- The price and standard usage of all materials including processing materials are

**Customers** Bakeries, Food, Frozen foods, Frozen dough, Ice cream corn, Confectionary, Flour mixes, Fillings, Premixed flour, Beverage, Chemical products, Cardboard container, Glass container, Concrete, etc.  
“Ad Libitum” can be easily customized for almost all customers.

TECHNOVA, CO. LTD



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## Equalization of the worker number

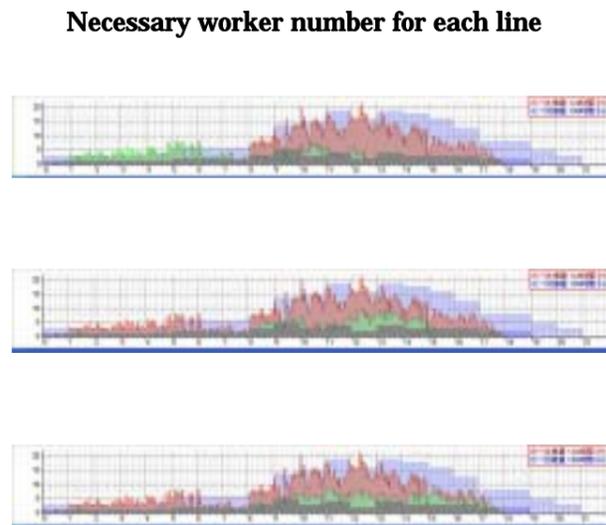
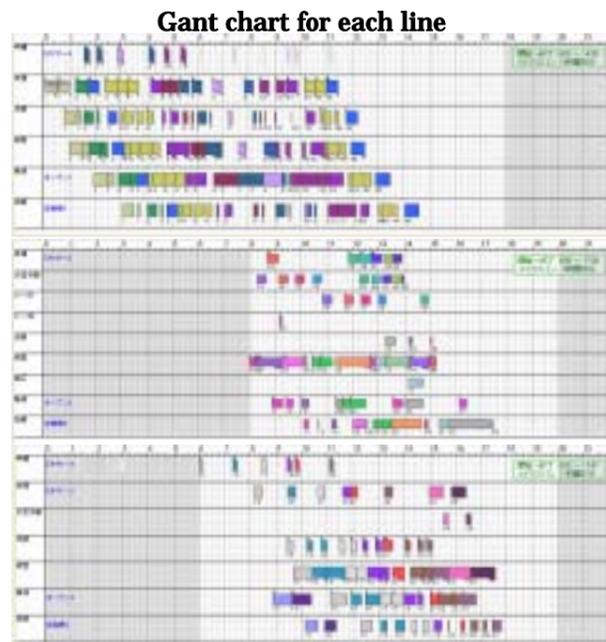
A necessary worker number changes during production in the multiple kind productions. In the case of the multiple lines the worker total number fluctuates more largely. As the “Ad libitum” overlays to detailed histogram the change of work quantity and the supply labor quantity in the monitor, a planner is able to judge the excess and deficiency of a labor at a glance. As the production order can be changed easily, a workload is adjusted by the combination of work and the labor quantity and work quantity can be matched.

This factory is composed of 3 lines of a divider, HM, and AD and a vertical axis is time and a horizontal axis is a worker number. The pink part is the change of the job quantity for each after one minute based on production command. The supply labor quantity of the blue part is shown with the number of persons. The place where job quantity and regular worker overlapped is changing in gray color. The worker number of the green part of the right histogram becomes needed every time at the time of the production of a left Gantt chart, if the divider line is taken as an example. All the necessary worker numbers that combined A, B, C line are shown with a pink part. Accordingly a blue part increases when labor force is supplied excessively. If it adjusts between lines not to an independent line like this, it can decrease the labor force of the whole factory.

Divider

HM line

AD line



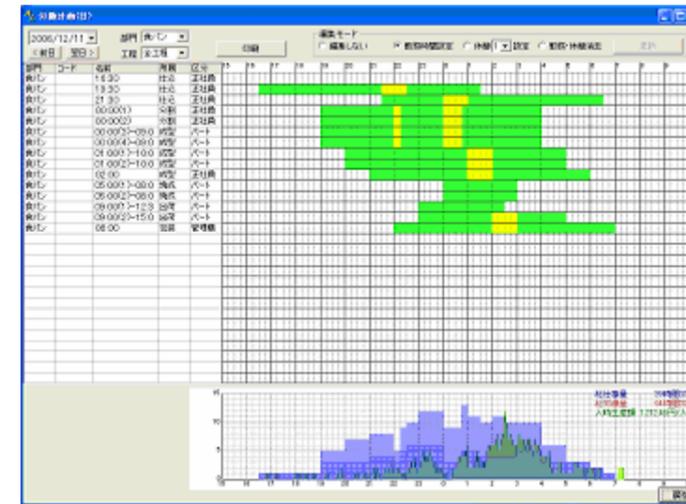
Pink: Total work quantity Green: Line work quantity  
Blue: Supply work quantity

## Main page Summary of daily status, Warning a lack of stock, Show stock amount(\$)

The daily work situation is displayed in this page. The important counting such as the production quantity/amount/used material amount of the product is displayed. It is displayed and is warned that delayed in the setting time for delivery.



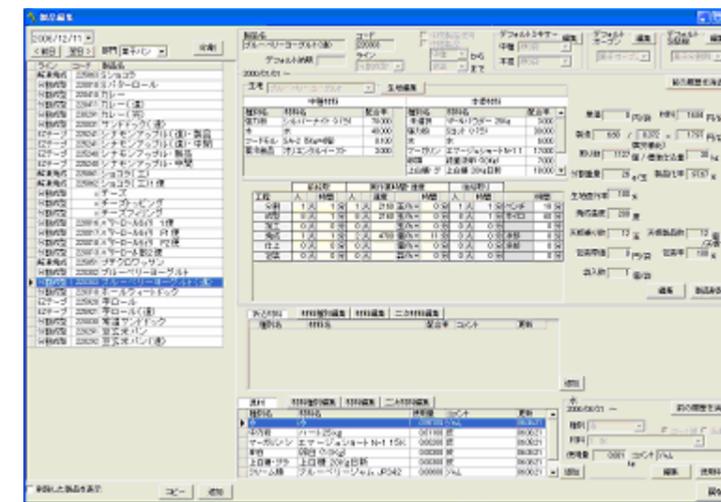
## Worker/time setting: Worker plan set up easily, Display load change, the excessive and lack of labor



In the figure yellowish green is on duty and yellow is a rest. A rest can be set up to 3 times per day. When this is shown with a histogram the number of persons for each 10 minutes becomes a lower graph. Blue deep is a regular worker and thin blue is a part worker. The job and labor quantity are shown as total hours, which is effective for the factory management. The service of worker can register weekly base, special cycle, a working time in a lump. The registered working times can be changed easily in the personnel set screen.

## Easy input data base : Easy handling, Complete cost control and Reduction of raw materials loss

One of the “Ad libitum” characteristic is the data base where summarized accurately the information of a complicated factory. The dough, compound, production condition, work condition of a product can be edited/input easily in the product editing page. The real time cost management is possible. The usage and dollar amount of all the raw materials are displayed and even printed. The comparative function with the inventory prevents the loss of the raw materials, decreasing useless work and contributes to the productivity growth.



## Product Standard • Production data is controlled certainly and a desk work even reduction

The work of the preparation/change of the standard of the product is stagnating in many factories or be not made. When the “Ad libitum” is used, the latest product standard is always made as it is renewed at any time. Because the product standard can be printed by each item, each line and the whole, it is saving the administrative work in the factory. There are many food factories that have the excessive material stock always and produce their product using necessary material from stock. For example if factory does the lot production like an automobile and electrical machinery company, the current unplanned raw material control does not work because the raw materials must be pulled on the basis of a production plan. The production plan like that is carried out by an experience and feeling at present, comes to be made rationally in the short period and the actual condition of a factory becomes clear and the problem comes to be seen.