

## **Understanding a PSG NOW Check Weigher**

### **Definition of a Check Weigher**

A check weigher is a kind of production automation machinery to be installed at latter part of producing lines like production machinery, auto packaging machinery etc. And its purpose is to prevent any unnecessary material loss by checking every weight of previously produced goods so that shipments of under or over-weight products are prohibited and at the same time, it could control produced goods by either analyzing measured data or feeding back revised data to the production machine.

### **Function of a Check Weigher**

It is widely used to either check or reject the weight of various products not only for packed goods like detergent, bakery, grocery, bags, vinyl packs, bottles, boxes etc., but also unpacked bulk products.

### **Structure of a Check Weigher**

#### **In-feeding Conveyor**

It is a back-up conveyor to be placed before a weighing conveyor for smooth weighing works and has the following three functions.

- Gap Maintaining Function
- Entry Shock Prevention Function
- Certain Speed Maintaining Function

#### **Weighing Conveyor**

It is a precise device equipped with both a conveyor and an operating motor on load cell and its purpose is to check the weight of products. Therefore, any discrete remodeling of weighing conveyor could result in serious damage to the load cell, so this part has to be treated with caution. The point of weighing is as soon as the product goes into the weighing conveyor and the judgment of weighing is made in system set up time after checking entry of the product by a transmission photo sensor installed at entry of the weighing part.

#### **Reject Conveyor**

Any signal perceived by rejecting conveyor is sent to the control part and judging signal is created according to previously setup value in the control part. This signal makes the rejecting conveyor make multilevel rejection of products such as under, over, pass, metal detection etc. Various rejecting methods can be adopted depending on characteristics of the product to test, conveyor speed etc.

(Flip Bar, Air, Pusher and Up/Down)

#### **Control Part**

A control part is composed of various assemblies such as operating motors of the in-feed weighing conveyor, a load cell, a transmission photo sensor, an operating motor of a reject conveyor and a keyboard for operating signal of an air cylinder, setting value for showing weighing, product number etc.