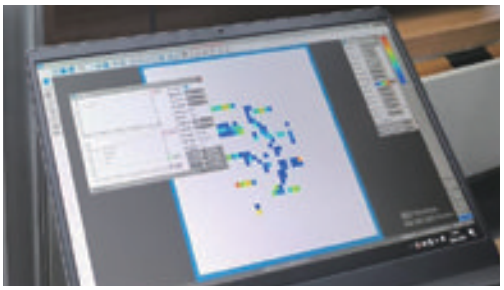
STRESS TEST SCHEME FOR PACKAGING CARTON ITEMS STACKING

PROJECT INTRODUCTION

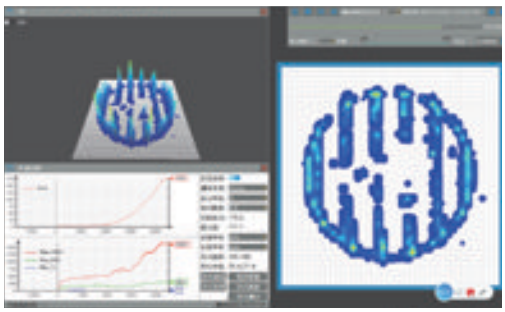
A daily product company needs to optimize its product packaging. Carton is a widely used packaging product. The film pressure measurement system can test the pressure distribution data of the products in different cartons, analyze the force of the products in different positions in the carton through the data, choose the most suitable carton to protect the products, and help customers to better store and transport the products in different environments.



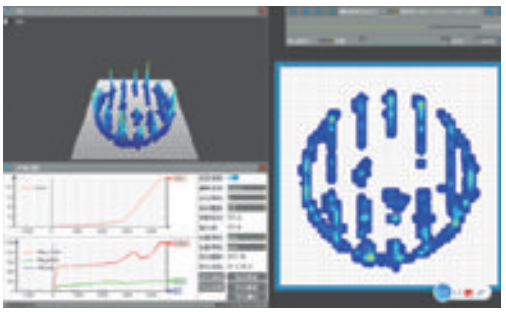
MEASURING METHOD

When customers store and transport their products, they will pack them in cartons, and when they are placed in multiple layers, the lower layer of the carton will bear more pressure. We use a press to individually pressurize a single carton to simulate actual working conditions. A membrane sensor is attached to the top of the product, such as the top of a canned laundry press head, and connected to a computer for data collection.

MEASUREMENT RESULT



Side by side middle position data



Central location data

From the data can be obtained from the box product stress situation: the middle position of the product against the side of the maximum pressure, the center position of the product pressure is the smallest. According to the results of the selection of suitable materials, specifications of the carton for product packaging.

USE

Product packaging optimization

ADVANTAGES

Safe storage, transportation
Avoid damage

EQUIPMENT: D2

General Purpose
Distributed Pressure
Measurement System
DPM-G

MODEL	CN2211
Sensing area	225mm*117mm
No. of sensing points	2288, 44rows*52columns
Point density	8.4points/cm^2
Pressure ranges	50/500/600psi

MODEL	CN3825
Sensing area	381mm*257mm
No. of sensing points	2288, 44rows*52columns
Point density	2.3points/cm^2
Pressure ranges	50psi