



# MILLGRAIN MACHINERY INDUSTRIES



**FRUITS & VEGETABLES  
GRADING MACHINE**



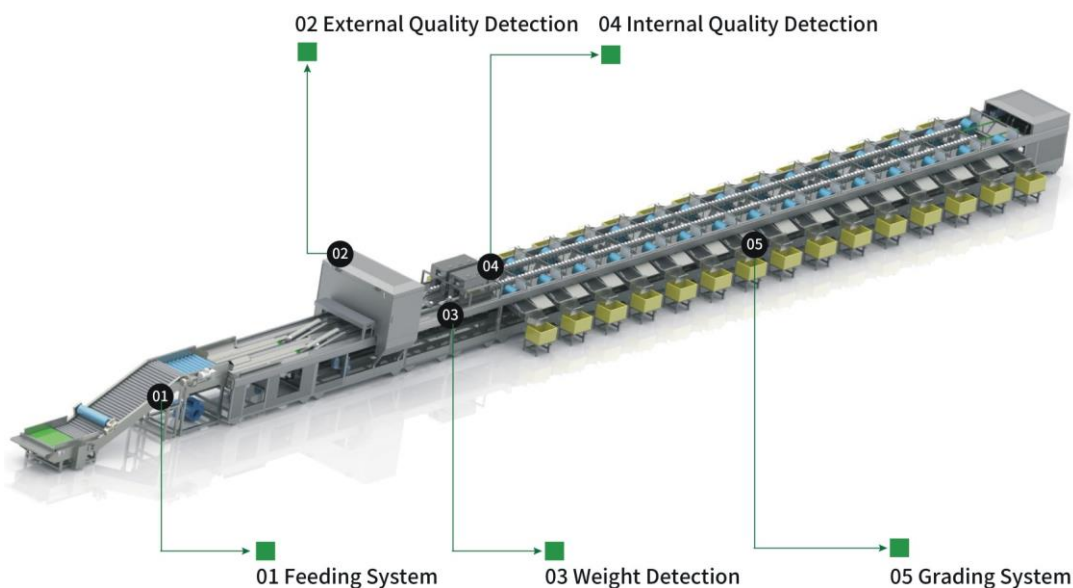
## Scope of Application



Its widely used in the real-time detection and grading of various kinds of spherical or spherical - like fruits and vegetables such as citrus, apple, kiwi,navel orange,tomato,potato



## FRUIT AND VEGETABLE GRADING SYSTEM



MILLGRAIN MACHINERY INDUSTRIES have fruit and vegetable grading system in FG series. Using the computer vision and nondestructive detecting technology, the system classifies fruits and vegetables by shape, color, defect, internal quality and weight comprehensively and accurately, and is very competitive in the marketplace. The system mainly comprises a feeding machine, a conveyor belt, a hoist, a fruit arranging machine, a visual inspection line and a weighing line. The fruit and vegetable grading system in FG series can provide a corresponding system solution scheme tailored individually to each customer according to his or her actual needs on the spot, which reduces human costs, improves work efficiency and maximizes the interests of enterprises.

# Performance Characteristics



## Top Chip Intelligent Image Processing

### Highly qualified, Carefully selected

External quality: detecting by the appearance index such as shape, color, weight, size and defects on the surface and the like; internal quality: non-destructively detecting by the internal index such as mould core, sugar degree and acidity and the like.

### Detecting comprehensively, Enjoying perfection

The conveyor system with a unique design can simultaneously complete selecting one of fruits (or vegetables), turning the fruits over quickly and conveying it, and then make fruits (or vegetables) appear in field of view of a camera at an appropriate angle and scanned omnidirectionally by the camera. The ability of micro-chromatic aberration is beyond imagination and the real storing without dead corner is achieved. The system brings customers more benefits.

### Grading with high speed, Flexible and changeable

Grading Speed: 5-10/second. The grading speed and the quantity of the exits on the production line are adjusted according to the actual needs of customers to adapt to different product characteristics.

### Individually tailored, Considerate service

According to customer requirements, the following schemes are individually tailored: single channel, dual-channel, multi-channel and so on.

### Automatic statistics, Intelligent management

Every grade and the number of fruits (or vegetables) at each grade exit are automatically recorded and it's convenient for statistics and easy to manage.

### Simplified demonstration, Easy to learn

The operation interface is programmed and compiled, which is simple, convenient and easy to use.

# TECHNICAL ADVANTAGES



## Ultra High Definition Camera

Be able to provide HD image as high as 190 million pixels per second; 0.06mm ultra-high resolution in maximum.



## HD Lens

With high-end customized HD lens, the resolution is improved over 30%.



## SOC

With outstanding high performance and low power consumption, highest bandwidth and integration density in the industry, the processing ability is improved for 5 times.



## Panoramic imagery

Multiple cameras and various visual angles make defect and foreign bodies have no place to shelter.



## Illumination System

Even illumination: accurate dimming, power and energy saving, long service life, free of maintenance



## Artificial Intelligent

Red, green, blue+ shape 4D data integrating technology, intelligent study, intelligent recognition, intelligent classification, intelligent positioning

# PRODUCT SPECIFICATION

Model	Covering area (m)	Output (a/h)	Grading qualified rate	Power input	Whole Machine Power(kw)	Number of channels	Number of exits	Weighing line(piece)
<b>MG-1022</b> Apple grading equipment	10*25	21600	≥95%	380V/50hz	14.1	1	5	4
<b>MG-1023</b> Navel orange grading equipment	10*25	36000	≥95%	380V/50hz	14.1	1	10	4
<b>MG-1024</b> Tomato grading equipment	10*25	21600	≥95%	380V/50hz	14.1	1	5	4
<b>MG-1025</b> Potato grading equipment	10*25	36000	≥95%	380V/50hz	14.1	1	5	4
<b>MG-1026</b> Kiwi grading equipment	10*25	36000	≥95%	380V/50hz	14.1	1	5	4





# Millgrain Machinery Industries

Reg Off: No. 312, Arani Main Road, Thuthipattu, Vellore-632011, Tamilnadu, India

Mobile: (+91) 8778201289 / (+91) 8105566637

E-mail: [millgrain2000@gmail.com](mailto:millgrain2000@gmail.com)  
[kumarvinayagam79@gmail.com](mailto:kumarvinayagam79@gmail.com)

Website: [Www.millgrain.in](http://www.millgrain.in)