Elisam Grading and Packing

The new challenge in fruit grading and packing
ELISAM GOALS

- Quality of facilities, care and passion in details
- Great enthusiasm for our work
- High technological standards, performance and reliability
- Speed and efficiency in customer service
Customized systems

- Customized systems designed and manufactured for its clients following their needs and requirements.
  - Analysis and solutions for your machine
    - to obtain working area enhancement,
    - to provide nice mobility conditions for workers and analysis of internal logistics,
    - quality of the real Made in Italy.
- Consulting and design based on customer needs
- Fitting of system according to the available space
- High customization level
- Possibility of changes on existing systems
- Possibility of software upgrades on existing systems
Gran Torino Grading Machines
Gran Torino Graders - Features

Working method: weight, size, color, internal quality, external quality
- Products: onions, citrus, tomatoes, kiwi, apricots, peaches, pears, melons, mango, dates, cucumbers ...and delicate fruits like apples
- Number of lanes: from 1 to 8
- Cup size: 76, 95, 114, 152, 190, 228 mm
- Kind of trolley: cup and roller
- Electronic: Ellips TRUE SORT
- Max working speed: 18 tr/sec
Gran Torino Graders – Strong Points

**Delicate**
- Gentle fruit drop onto soft brushes or flaps
- Friendly use thanks to the synergy with Ellips electronics

**Accurate**
- Top quality materials and high standards of assembly combine noiselessness with extreme accuracy on size at high speed (max 18 tr/sec)

**Reliable**
- Mechanical solutions with proven efficiency, designed to maintain over time high quality standards of the electronic calibration
- Electronic: Ellips TRUE SORT

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Gran Torino
different kinds of trolleys:
- CUPS
- ROLLERS
Gran Torino Sizer for Tomatoes: a complete solution from the loading of the product into the machine until the packing tables
Gran Torino Sizer for Apricots and Plums: high capacity combined with an extreme care in the treatment of the product
Gran Torino Sizer for Onions:
- new developed Internal Quality System for internal defects detection

Gentle drop of the onion with our innovative Telescopic Flaps system
Gran Torino Sizer for Citrus, Kiwis and Dates
Gran Torino Sizer for Mandarines with or without leaves

Automatic carton fillers
Gran Torino Sizer is also designed for long products such as pears, eggplants, peppers, cucumbers.
MultiHead Weighers
Products: Apples, cherries, kiwi, peaches, plums, mandarins (also with leaves), tomato cherries, carrots, potatoes, celery root salad, onions

Possibility to work with 2 different weights on the 2 sides of the machine at the same time; fruit counter Option

Number of exit belts: 2 or 4

Performance: More than 100 punnets per minute

Accuracy: Minimum Tolerance in comparison to the established weight

Device for fast, easy cleaning and sanitization
MultiHead Weighers:
- Multiple exits
- Punnets, bags and pitufo cartons
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Bin Tipper - Buffalo
Huge production capacity and delicacy in the emptying of the product

All types of products: peaches, citrus (also with leaves), kiwi or apricots

Possibility of combination and customization
- It can be completed with bin stacker and detacher to create a buffer and to avoid a constant presence of an operator for loading and emptying operations

Simultaneity and control
- Great control of the fruit flow without interruption until the end of the bin
- Ability to handle different types of bins simultaneously
- 55° angle of Bins rotation for easier flow control
Continuous Bin Tipper Buffalo with or without stacker and destacker

Max capacity 100 bins/hour
Palletizer: elegant and quiet

Handling of different types of pallets or cartons

Equipped with security fall arrest system

Speed: up to 1000 cartons/h

ROZER Palletizer
Drying Tunnel - TTE

- High Capacity
- High Efficiency
- Perfect Drying
- Elegant Design

Drying Tunnel after washing and/or waxing

Suitable also for products with leaves

Easy cleaning

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Manual Packing Tables

Possibility for customized packing tables:

Packing in punnets, clamshells and/or tray pack

Best design for production maximizing

Gentle with products and ergonomic for the staff

Possibility to add
Grading Methods

Integration between Elisam and Ellips

- Best performance and reliability
- Advanced algorithms for color analysis
- Advanced algorithms for External and Internal Defects detection
- Analysis of every characteristic of the products
- Simple and intuitive Ellips software

Complete solutions in a single system

- Medium weight accuracy 0.1 gr
- Size accuracy 0.1 mm

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Intelligent quality model:
• Color + shape + specific properties
• Individuation of calyx and stem, mold, scratches and other defects
• User-friendly Interface

Defects: loose skin, color and dry matter

Detection of defects and bruises just under the skin with infrared cameras
• Intelligent and smart algorithms
• Different classes for different types of defects
• Possibility to detect defect by %, absolute extension and quantity
• Possibility to separate fruit with superficial defects from dark defects
Ellips & Elisam = our own internal quality unit:
- Special light projector to shine light straight through the product
- Revolutionary module that reduces flaws in the sorting process

Widely tested especially on **onions** and **apples**
Measured parameters: rot, brix, dry matter, acidity and ripeness

High performance results
- No needs of training of the unit
- 10 measurements for each product at 10 tr/sec
- Mechanical and electronical devices are pollution protected

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Machines

• GRAN TORINO SIZER
• BIN TIPPER
• WATER LINES
• MULTIHEAD WEIGHER

Sorting Equipments

• PREGRADING
• TRACEABILITY
• PACKING

Apples
an extremely delicate fruit

Grading by

Weight

Color

Diameter

External Quality

Internal Quality
Gran Torino sizer for apples
External & Internal defects detection

Apples on rollers

Hydro Bin dumper

Water channels and Bin stacking
Water infeed system

Water channels

HydroBin Filler
Battery belt 90° with no drops

Packing into cartons

Exits on water channels
INTERNAL QUALITY
- Up to 10 measurements per apple
- Optimized results for:
  - Batches with small to medium apples
  - Batches with medium to big apples
- Sensor mounted above the lanes to avoid pollution of the sensor and the chain/chain guide
- No need for calibration thanks to our software’s shape recognition signal
- We use the 5D technology, which means the best results obtained by 3D and 2D systems
User friendly software!
Measurements and Images of the apple can be viewed in real-time allowing to control and modify the grading process.
Visit our WEBSITE!

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ELISAM Workshop

Work in progress