

# BETTER safe THAN SORRY

with *sherlock*  
safeguard



[www.insort.at](http://www.insort.at)





We do not reinvent existing standards, we change the game. The new generation of Chemical Imaging Technology (CIT®) is years ahead of current standards. We make the invisible visible. Inline and in real time.

**SHERLOCK SAFEGUARD offers the most versatile inspection technology that combines uncompromising food safety with automation and product quality monitoring in one device:**

The high precision, advanced Chemical Imaging Technology (CIT® Gen3) is a real novelty in the optical sorting and monitoring of food. With the latest generation of hyperspectral cameras – developed specifically for Insort – full spectrum real-time analysis is even more precise. Combined with high resolution cameras and optional conductivity sensors the Sherlock Safeguard classifies food based on chemical composition, color, shape, pattern, conductivity and much more. This results in unprecedented performance of detecting ALL foreign material – organic or inorganic - at lowest possible product loss. The Zero Touch Reject Technology ensure maximum safety in removing the detected foreign material.

**It's not just a sorter. It's your FOOD SAFETY GUARANTEE.**

**LEARN MORE**



Any bulk food product – big or small.  
Any critical defect – big or small.

# WE CATCH ANY FOREIGN MATERIAL – ORGANIC OR INORGANIC

Chemical Imaging Technology - CIT® Gen allows us to provide you with a to this day unattainable standard of detection for defects and foreign bodies of all kinds. We are ready to take on any challenge and look forward to speaking to you about your requirements.

## SOME APPLICATION EXAMPLES



Nuts



Potato Products



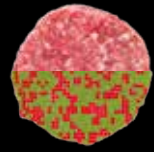
Fruits & Vegetables



Fruit Gum



Petfood



Plant based meat

AND MANY MORE ...

## SOME DEFECT EXAMPLES



Wood



Carton



Rubber



Foil



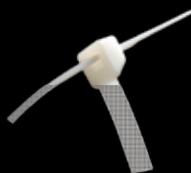
Insects



Cigarettes



Rodents



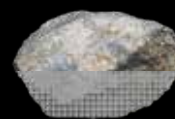
Plastics



Metal



Glass



Stones



Fat clumps

AND MANY MORE ...

Sensor Technology

# CHEMICAL IMAGING TECHNOLOGY - CIT<sup>®</sup>Gen3

Where we initially used the human eye, and then optical sorting technologies such as monochromatic cameras, color cameras, laser systems and X-ray; Chemical Imaging Technology (CIT<sup>®</sup>) is now setting the benchmark for the optical sorting and monitoring of food products. Full spectrum real time analysis makes the invisible visible. Process control and sorting based on the chemical composition of food products and foreign bodies delivers unprecedented performance.

## Quality Management:

Sherlock Safeguard reliably removes any foreign material – organic or inorganic – due to chemical imbalances. Furthermore color defects, incorrect cuts or deformations can be detected.

## Real-time Artificial Intelligence

Natural food products are showing all kinds of variables in chemical composition, shape, color, size and more. Human beings have their limitations in building the right classification algorithms for proper decisions between good and bad. Nowadays, the computer can make it faster and better. Our realtime A.I. tools provide algorithms with the highest complexity and multidimensional parameters to enable solutions, which never have been imaginable before.

## InlineFOODLab 4.0

InlineFOODLAB 4.0 allows processors optionally to get quantitative chemical data of the product and the most reliable real time inline quality data available in the industry. Drymatter values in potato products, rancidity in nuts, amygdalin in almonds, oilcontent in pumpkin seeds or Brix level in fruits are just some examples. They can be delivered combined with color or shape defect levels as well as with size values of the objects. Additionally any Foreign Material can be recorded with a picture and delivered to your data base. Thus quality managers have better tools to control the incoming raw material as well as the outgoing final product in order to reduce product rework and claim rates or to prevent product recalls better than ever before.

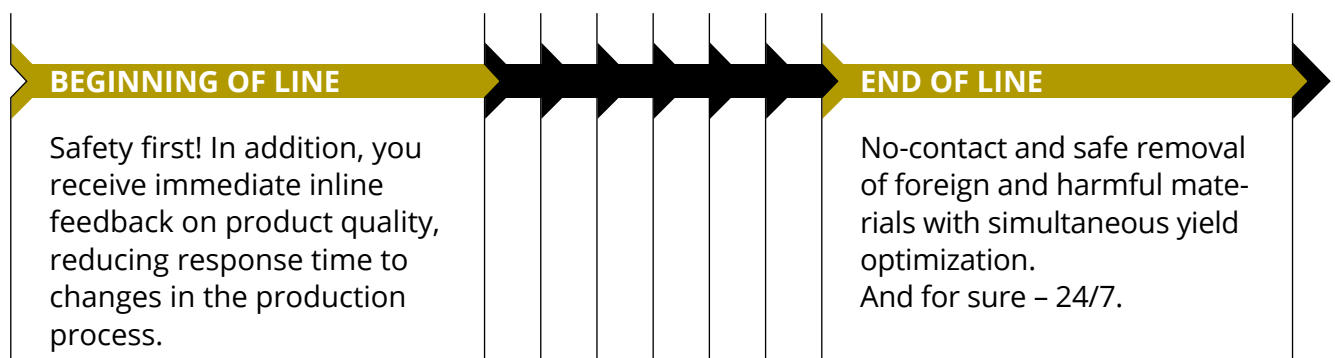
Effektorics

# ZERO TOUCH REJECT TECHNOLOGY

The Safeguard Zero Touch Reject Technology drops foreign bodies down through a trapdoor. No active mechanical touch or air blast needs to be applied to foreign bodies to remove them from the product stream, which guarantees removed with the highest reliability. Critical (or hazardous) foreign materials like broken glass bottles, rodents, plastics and many more do no longer get the opportunity to enter the plant or make it into the final product for the customer. Difficult objects such as large or heavy stones, sticks or metal parts, and very light parts such as plastic film, cardboard and paper are all removed with highest reliability, compared to trying to remove these defects with air jets. Depending on the size and location of foreign materials, the system will automatically open one or multiple high-speed reject gates. This zero touch removal technology personalizes the opening time to remove these hazardous materials without striking with strong paddles or high pressure air.

Application area

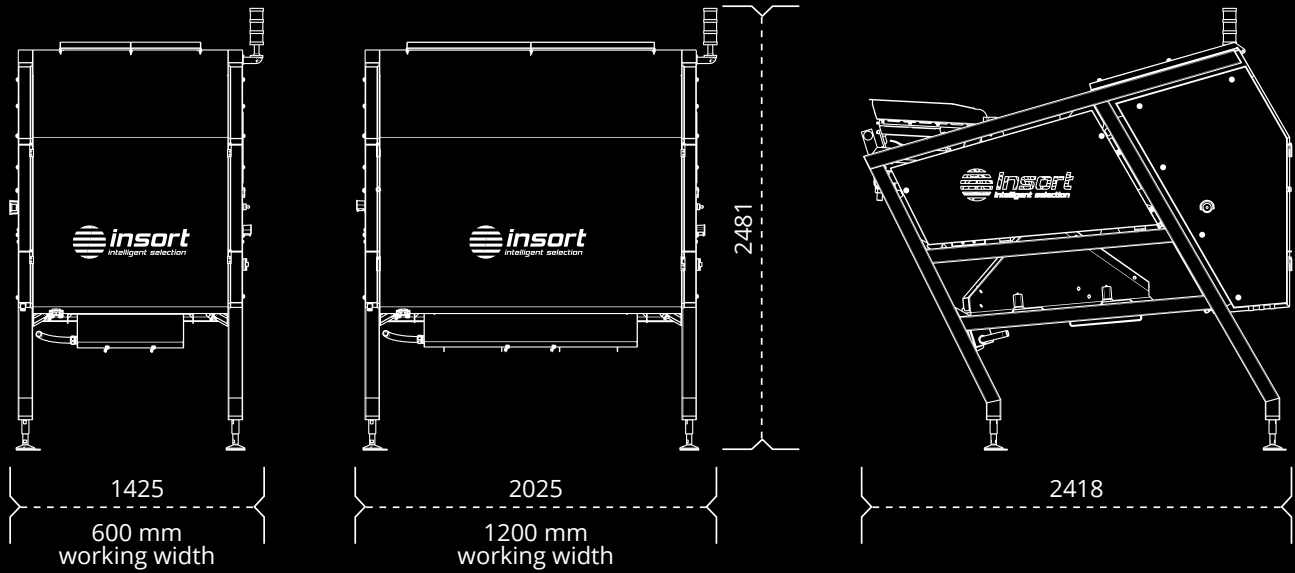
## “BEGINNING OF LINE” AND “END OF LINE”





Sherlock Safeguard is available in stainless steel, hygienic design and fully wash down cleanable. The space requirement is small and the integration into existing lines is simple.

The available working widths of 600 mm and 1200 mm assure throughputs for any industrial scales.



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