

# ZEA

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The ZEA is a new sensor based sorter for Seed Corn producers to sort/grade by husk, defect, disease and size. It is the ideal efficiency, quality and cost reduction tool for processors where capacity, husk and defect sorts are critical. It is a low cost of ownership machine that is built to last.



### DETECTION

The ZEA uses top mounted Color & NIR optical sensors to scan the surface of each individual item 'in flight'. This allows for an unobstructed view of the product with a high capacity sort. The color vision sensors analyse for size, shape and color etc. The NIR sensors (Near Infra Red) analyse for gross defects and foreign materials.

### REJECTION

Gentle product handling is assured by design; the 1st grade produce gently pass through the machine while 2nd & 3rd grade are redirected into individual streams by intelligent paddle ejectors with precision and accuracy.

### APPLICATIONS

\*Seed Corn

### BENEFITS OF THE ZEA

- +Unrivalled husk removal
- +Superior defect removal
- +Significant labor reduction
- +Reduced operational costs
- +Easy to install
- +World class service, support & expertise

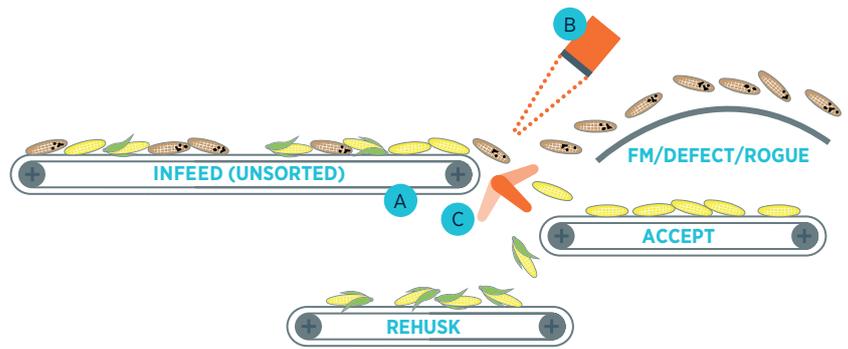
Gentle product handling  
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The ZEA's NIR optical sensors sort seed corn.

## WORKING PRINCIPLE

The product is spread uniformly onto the infeed belt in an aligned & channeled fashion and will be scanned by cameras. A few milliseconds later one type of material will be diverted into the correct direction by a bank of paddles positioned at the end of the infeed belt while the good produce continue their way along the sorting line.



- A** Infeed (unsorted)
- B** Pulsed LED technology, VIS/NIR image sensor array
- C** Intelligent paddle ejectors

### 1 HIGH CAPACITY & LOW MAINTENANCE

High capacity and low maintenance are guaranteed by a simple belt/shaker feed system. This keeps installation and running costs low and reduces the risk of stoppages.

### 2 FLEXIBILITY & GENTLE HANDLING

Flexibility and gentle handling are given by design. Accept product passes smoothly through the sorter while intelligent low wear ejectors manage the other grades.

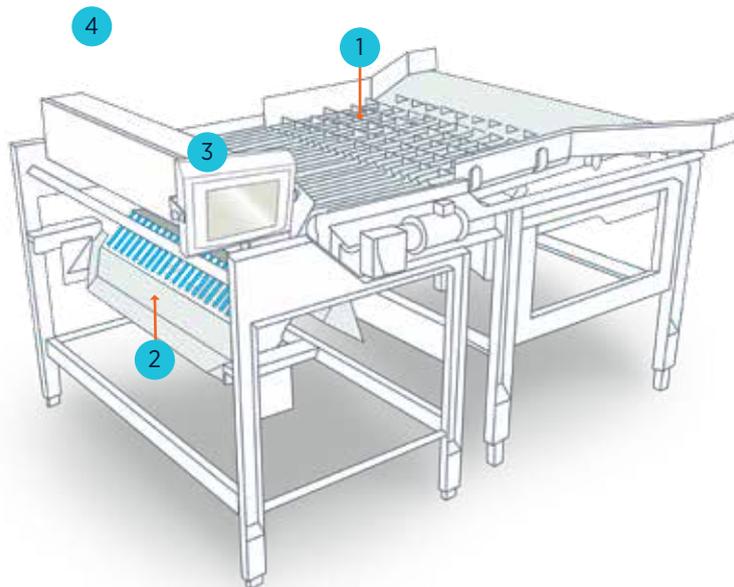
### 3 SIMPLE CONTROLS & FEEDBACK

Simple controls and feedback are provided by the robust touch screen. This makes it easy to call up set sorting criteria and to adjust the parameters to get the result you need.



### 4 CONSISTENT LONG LIFE ACCURACY

Consistent long life accuracy is guaranteed with the strong rugged construction with robust electronics and rejector. The 'off-belt' view guarantees a clear view and low maintenance.



### ADVANCED SORTING PARAMETERS

- Size
- Husk
- Gross Defect
- Foreign Material



## DIMENSIONS AND SPECIFICATIONS (Including Feed Shaker)

Model	Dimensions				Utilities (avg. consumption)		Capacity
	Width	Length	Height	Infeed Belt	Power	Air	Pieces per minute
<b>ZEA 32</b>	1598 mm (63")	1850 mm (73")	1850mm (73")	812 mm (32")	3 Kw	2.5 scfm	1500
<b>ZEA 48</b>	2004 mm (79")	1850 mm (73")	1850 mm (73")	1219 mm (48")	3 Kw	3.75 scfm	2250
<b>ZEA 64</b>	2410 mm (95")	1850 mm (73")	1850 mm (73")	1625 mm (64")	3 Kw	5 scfm	3000

\* Capacity will vary depending on the average piece length



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TOMRA Sorting Solutions Food unites two strong brands in the food industry to become the leading provider of sensor based sorting, peeling and processing technology for the fresh- and processed food industries.

Turning yield into usage, profits into progress, TOMRA transforms the way the world obtains, uses, and reuses its resources.

**If you are interested in a free demonstration with your own product or if you need more information, please contact us directly.**



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