ZEA
OPTICAL SORTER

Interested in a free demonstration with your own product or require more information?
Please contact us directly.

The Zea is a sensor based sorter for seed corn producers. It grades corn by husk, defect, disease and size. It is the most efficient, qualitative and cost reducing tool for processors where capacity and husk sorts are critical. It is a low cost of ownership machine that is built to last.

TECHNOLOGICAL ADVANTAGE

The Zea uses dual mounted color and **NIR (Near InfraRed) optical sensors** to scan the surface of each individual ear **in flight** and provide the operator with a full object analysis. Even when handling multiple product varieties or high levels of incoming defects, the sorter provides a **consistent quality at high capacity**. The color vision sensors analyze for size, shape and color etc. The NIR sensors analyze for gross defects and foreign materials. The machine can be equipped with a 2- or 3-way rejector system.

FUNCTIONAL DESIGN

Optimum inspection and maximum rejection efficiency are guaranteed by a shaker/ belt feed system, aligning the ears. This keeps installation and running costs low and **reduces the risk of stoppages**. Thanks to the strong rugged construction with **robust electronics and rejector** consistent long life accuracy is guaranteed. Flexibility and gentle handling are given by design. Accept product passes smoothly through the sorter while intelligent low wear ejectors manage the other grades.

CONNECTIVITY

Multiple sorters can be controlled via a single user interface. This simplifies the set-up, and reduces operational and training costs, in the end maximising your yield. **Local and remote support** are available, shortening the response time and avoiding unnecessary service visits.

BENEFITS

- High capacity
- Defect classification
- Increased product quality and yield
- Low maintenance
- Stable and reliable solution
- Reduced labor requirements
- High performance

WORKING PRINCIPLE

The Zea is positioned at the discharge of the husker beds where the ears are spread out, aligned and carried away by the integrated shaker/ sorter infeed belt. At the end of the infeed belt the ear passes across a scanning zone where sensors classify the whole ear of corn. Milliseconds later a signal is sent to the three position paddles, resting in the center position to allow accept to pass through, up to redirect the FM/ defects/ rogue, and down to redirect the rehusk.

DIMENSIONS AND SPECIFICATIONS*

Model	Dimensions				Utilities		Capacity**
	Width	Length	Height	Infeed elevation	Power	Air	
ZEA 32	1598 mm (63")	1850 mm (73")	1850 mm (73")	812 mm (32")	3 ph+N 2.5 kVa	100 psi 7 bar	1500 pcs/min
ZEA 48	2004 mm (79")	1850 mm (73")	1850 mm (73")	1219 mm (48")	3 ph+N 2.5 kVa	100 psi 7 bar	2250 pcs/min
ZEA 64	2410 mm (95")	1850 mm (73")	1850 mm (73")	1625 mm (64")	3 ph+N 2.5 kVa	100 psi 7 bar	3000 pcs/min

*Information shown for reference and may change depending on the actual application.

** Higher capacities per sorter possible in some cases. Rate in weight units can be determined directly with representative.