

onCore®

Lettuce Core Removal System



Key's new integrated core removal system revolutionizes the processing of iceberg and romaine lettuce for bagged salads. This patented system combines the strength of **Smart Shaker**® vibratory conveyors with state-of-the-art camera/laser sorting, enabling processors to:

- Eliminate manual coring
- Reduce labor costs
- Increase yields
- Enhance appearance / shelf-life / safety

Manual coring and wrapper leaf removal requires costly manual labor, and causes yield loss. In addition, the shelf-life clock starts ticking once the core cut is made, and the highly nutritional outer leaves are lost.

Now you can bring uncored lettuce into the plant and slice it using the same cutting technology traditionally used on cored product. Then, with powerful, dual-technology **onCore**, you automatically remove not only core, but leaf defects, animal material, insects, stones, sticks and dirt - anything your consumer doesn't want to see in the bag.

How it works

Step 1 – onCore's 3-deck **Iso-Flo**® **Density Separation Shaker** uses gravity and directional airflow to remove 85 to 90% of the core and heavy foreign material from cut iceberg and romaine, while spreading product for presentation to the optical sorter.

This reduces the volume of core being fed to the sorter, freeing it to focus on removing smaller core pieces along with foreign material and other defects.

Step 2 – onCore is equipped with a **Key Optyx**® or high-capacity **Manta**® sorter, depending on volume, and includes a combination of Key's **Raptor** laser technology and tri-chromatic color cameras.

The laser detects differences in structural properties of objects to remove pieces of core and FM; cameras determine each object's size, shape and color to target and remove defects.

How you benefit

Yield – by eliminating manual coring and retaining dark outer leaves, less good product is removed and yield increases.

Shelf life – potential for contamination is reduced, product degradation is slowed and shelf life increases.

Consistency – when slicing whole romaine heads, a more uniform cut is achieved and product appeal increases.

Safety – camera/laser sorter removes dangerous foreign material and objectionable leaf defects along with remaining core.

Current use in harvest and plant operations in the U.S., Canada and the U.K. shows that based on enhanced yield and labor cost reductions alone, onCore achieves payback in a rapid 4 to 16 months.



Key Technology BV
Beijerdstraat 10, 4112 NE Beusichem, The Netherlands
Phone: +31 (0) 345-509900 • Fax: +31 (0) 345-501594 • keybv@key.net • www.key.net



Engineered to fit

Key has built a reputation for custom-engineering creative solutions for fresh-cut challenges. For instance, onCore's remote-access, icon-based graphical user interface (GUI) is easy to learn and use, reducing operator training and simplifying operation. Real-time and on-demand diagnostics help minimize downtime. We invite you to investigate our complete line of reliable fresh-cut processing solutions, from washers to packaging, at www.key.net.

onCore detects and removes core, foreign material, and leaf defects such as:



Pinking and oxidative browning on aged, wounded or cut surfaces



EVM including core, outer wrap, stalk, stem, pod and weeds



FM such as metal, rock, plastic, glass, pallet wood and feathers

Throughput when onCore uses...

	Optyx 3000	Optyx 6000	Manta 1600	Manta 2000
Chopped Iceberg	5,000 lbs/hr 2,275 kg/hr	10,000 lbs/hr 4,550 kg/hr	13,300 lbs/hr 6,050 kg/hr	16,000 lbs/hr 7,275 kg/hr
Chopped Romaine	4,000 lbs/hr 1,820 kg/hr	8,000 lbs/hr 3,625 kg/hr	10,500 lbs/hr 4,775 kg/hr	13,200 lbs/hr 6,000 kg/hr



Call Key for price and delivery information

Patented under one or more US patents.