ADR EXOS™
Automatic Defect Removal Systems

ADR EXOS™ is the latest advance in Key's nearly 40-year history of automatic defect removal technology for the potato industry. As the only vision system on the market designed specifically to cut out defects from potato strips, ADR recovers french fries with defects and turns them into "good" product, directly increasing yield.

Featuring a new cutterwheel design and intelligent software, the next-generation ADR EXOS better manages strip quality and length while improving product recovery to maximize process profitability.

ADR EXOS improves your bottom-line through increased recovery, more throughput, increased cutting precision, higher reliability, lower maintenance costs and more uptime.

Save BIG on Maintenance

Trade off-line time for more uptime spent producing superior product:

- **Optimal performance** while reducing the maintenance cost with the CleanBelt CIP system
- **Air-actuated knives;** valve lifetime is multiplied
- **Decrease cutterwheel overhaul frequency**
- **No Racking** with pinned carousel
- **Long-life, solid state LED lighting;** No bulbs to change, calibration is practically eliminated
- **Protected electronics;** fully sealed camera/lamp housing prevents accidental misalignment or damage
- **Simplified touchscreen user interface;** easy to train operators
- **Continued easy/economical upgrades** with modular vision platform

Gain Excellent Quality Control

G6 vision technology means you take only your best product to market:

- **Remove smaller defects** - G6 trichromatic Vis/IR cameras provide high-resolution, 1024-pixel vision
- **Assure quality faster** - identify peel, good flesh & defects simultaneously at 4,000 scans/sec... performance unmatched in the industry today
- **Get the green out** with Vis/IR technology that can also work efficiently on peel-on product
- **Variable Aggression Cutting (VAC)** allows dynamic management of the ADR cut location relative to defect position on the strip offering opportunities to further improve product recovery.

Increase Capacity

See greater throughput compared to other systems:

- **Step up product flow** - process up to 17,000 lbs (7.7 metric tons) every hour
- **Control quality** without overloading ADRs, even during late storage processing
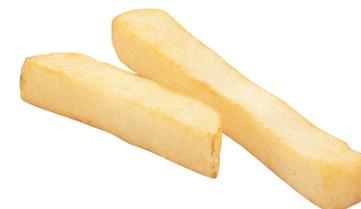
Improve Yield with "SmartCutting"

Precision, single-knife accuracy lets you save (and sell) more good product:

- **Eliminate waste** - throw a single knife to remove end defects and to selectively cut good fries in half without waste*

- **Reduce white cut rate** - up to 50% decrease in white cubes

- **Reduce downstream breakage** of overlong fries

- **Eliminate wounded steak cuts** - ADR®5 uses 2 side-by-side blades where needed

CleanBelt Reduces System Sanitation and Maintenance Work

- Interval between cutterwheel rebuild doubles

- Eliminates the need for manual starch removal between belt lanes

- Reduce the need to re-calibrate ADR due to background variations caused by a dirty belt

- Reduced Cutterwheel Maintenance Costs - savings of between 125–200 hours per year

- Save on Replacement Parts – Fewer damaged knives

- Operational Performance – Fewer normalizations required

- Higher Quality Product – Cleaner belt ensures high product contrast for optimal detection
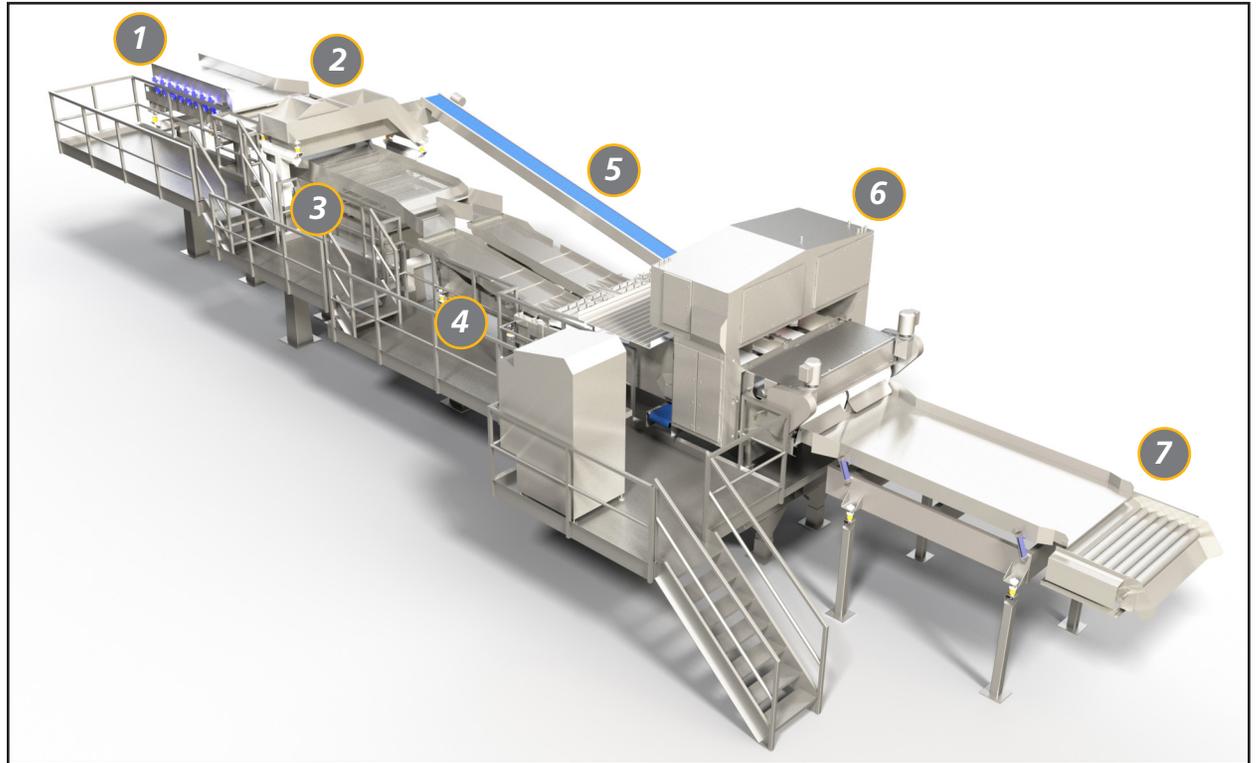
A System That Make Sense

Key knows that, at the end of your day, you measure your investment's value by your bottom-line results. The ADR System enhances your profitability through increased productivity, more consistent quality, improved yield, and reduced costs. Can you afford not to have an ADR?

1: Dewatering Shaker – Separate & Recover water from strips

2: Sliver Sizer Remover – Precisely separate slivers and grade by diameter

3: Size Grader Conveyor – Grade strips by length removing shorts

4: Alignment Conveyor – Singulate and align strips for optimal detection and cutting

5: ADR Brush-off Recirculation Belt – ADR brushes off mis-aligned strips for recirculation

6: ADR EXOS™ – Capacity up to 7.7 Metric Tons per hour (17,000 lbs/hr)

7: Size Grader & Rotary Nubbin Remover – Working in tandem to optimize nubbin removal and recovery of good product

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