





- what is the size limitation of products handled? Size and weight of product handled is a wide range: 4" x 4" up to 36" x 36". However, the size is typically dictated by the size of the tote that the case is being emptied into. The case size being emptied must be smaller than the tote dimension.
- What is the weight limitation? The weight is dictated by the weight limitation of the automation the tote is being stored into. The PRODecant cell can easily handle case weights up to 45 lbs.
- Can it be implemented into an existing operation? Yes, the cell can
 be configured to fit into an existing operation. Our Engineering team
 can work with you to determine the best layout and implementation
 strategy.
- Does PRODecant prevent cutting and damaging product? The unique aspect of PRODecant is the ability to cut a case on the bottom without damaging the product. We have done extensive studies and run thousands of cases to verify the positive results. We are extremely confident in safely cutting the bottom of the case without damaging product.
- What is the throughput rate? The rate is between 4-7 Cases Per Minute. Picking off pallet 240-300 CPH. Picking off conveyor 360-420 CPH. Full or partial layer of pallet handling, cell can adjust to pallet height up to 101".
- What is the investment for PRODecant? Depending on the application, the number of cells needed and your specific requirements, the range for a PRODecant cell is between \$450K \$700K. This includes everything associated to the robot cell and excludes any conveyor.



• What is cutting the case? A proprietary technology has been developed by DLN to use a standard fixed blade to perform the cutting. The blade can adjust up, down, in, out, and at a specific angle. The case is passed along the fixed blade. The cut can be adjusted for different SKU's to handle variations in the packaging material. Some case are cut on all (4) sides, some are cut on all sides with the exception of a small tab that can stay with the carton when delivered to a trash system. Some cases only require (3) sides cut because of the content.



• How often do the blades need to be replaced? The cutter has a magazine of (75) blades that is easy to exchange when needed. Typically each blade can last approximately 7,000 linear feet of cutting but this can easily be configured by an operator. The cutter automatically swaps out the blade when the pre-determined linear feet of cutting is reached. This takes less than 5 seconds.



- What products don't work well with PRODecant? Glass or fragile products. With gravity playing a key role in PRODecant, the exceptions include extremely light product that won't fall out, product that can get stuck to tape inside box and product that is too tight in the box and won't fall even when base of the box is cut away. This solution cuts cardboard only, so shrink wrap is out of spec. Damaged cases are also a challenge for any automated equipment.
- Can multiple cases be placed into one tote? Yes. The system can change the drop location of the case within the tote.







- How many of these cells are in operation? We have a large grocery company that has a pilot cell that has been running for approximately 6 months with positive results and plans to roll out more PRODecant cells this year.
- How do I see PRODecant run in person? We have a demo cell set up at our facility in Grand Rapids. We can set up a demo test to run any product you send.
- **Does it use vision?** It can. Vision is typically not necessary when picking cases off a conveyor. Vision is used if we need to pick cases directly off a pallet.
- Can the tote be segmented into multiple compartments to handle multiple SKU's? There is a limit to how many locations are in the tote which would typically be (4) zones. Keep in mind that the size of case cannot exceed the compartment size in the tote.

TECHNICAL SPECS



- Throughput: 4-7 Cases Per Minute
- Case Size: Min: 4"x 4"x 4", Max: Size of tote
- Weight Handled: Typically up to 45 lbs. (Could be more if necessary)
- Footprint: 12' x 10'
- Power Requirements: 30 AMP 480V
- Height: 11' Clear
- Operator Interface: Intuitive and customized
- Config: Stand-alone cell or can be integrated into existing system
- Duration of Cutting Blade: Standard 7,000 linear feet but configurable
- Blade Cartridge Capacity: 75 Blades
- Tote Size: No specific size
- **Depalletization:** Several options including layer picker with descrambler, single carton pick with robot solution or pick directly off pallet.

REAL TEST CASE





- 3 shift operation 24/7
- Currently run 22-30 manual decant stations
- Labor shortage continues to be a major challenge
- Strenuous and tedious work
- Employees can do an average of 6 Cases Per Minute
- Approximately 16,000 SKU's total
- Currently decanting 30,000-50,000 Cases Per Day
- Customer had a target of 3,000 SKU's being good candidates for PRODecant. They are seeing closer to 3,500 being good candidates.
- Current PRODecant pilot cell does average of 4 Cases Per Minute (new cell will do 6+ Cases Per Minute)
- One operator can run up to (6) PRODecant cells

