

**This is a case from an actual company with a normal mix.
We calculated these results 12 months after installation.
Details for that company can be released with consent.**

Case Study

Case Study

Location: AmeriPride, Phoenix

Case #00001

Vision Statement:

To find the best possible method for automating the Soil Room. Best methods would include highest production numbers, lowest number of employees, improving accountability and more accurate counting and segregation of the Soil Room. Customer's estimated future growth is in the double digits.

Current Conditions Before System Installation:

Customer was using a Semi-Automated Counting System using keyboard activated digital capture to feed info to their route accounting software system. 8 operators were being used for sorting and counting manually. Tables were rail-fed.

Statement of Current System Functionality Before System Installation:

Customer was using a Semi-Automated System to feed their route accounting software. Operators were counting/sorting off of tables, bunching like-type items and sliding the grouped items onto a sweeper belt conveyor.

Current Production Before System Installation:

8 FTE Operators, 2 Sweepers, 1 Cart Director (total of 11 FTE)
Using 8 FTE Operators they were averaging around 450-500lbs per employee per hour. Overtime was necessary to complete daily requirements.

Proposed Changes:

Equipment:

6 Vacuum/BULLET Count Stations

This includes 6 Ergonomic Stainless Steel Workstation Tables, 6 Vacuum Receiving Bins. Vacuum greatly enhances production rate by pulling product away from operator and delivering it at nearly 70mph to a vacuum bin.

BULLET System Operation

This is a positive displacement system which means the system sucks at the table end but blows into the receiving bin at the delivery end. This is a big deal! Operators do not have to stop for system to dump meaning they have continuous use. This can average 100lbs or more per operator per hour over a bulk type system that is vacuum driven and has to stop to dump. It is proposed that a BULLET tube with 6 sorts be implemented into the system to increase productivity and improve wash load efficiency. The BULLET allows the high volume items to be delivered directly into the sling cart and can track the poundage via an assigned weight. The system will then alert the operator when the sling is full (default weight assigned by operator) and ready to send with correct load weight to the wash aisle.

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Functionality Statement of Proposed System:

Using a Vacuum/Bullet combination system, operator will have 1 tube dedicated to the vacuum bin and 1 tube dedicated to the 6 Bullet sort bins.

It has been pre-determined that the 8 highest volume items will get through the Bullet with 2 bins having 2 items each.

With this hybrid system, our production goals are 900-1000lbs per operator per hour with the benefit of counting and the accountability counting brings to the overall system.

Recommended FTEs

6 Table Operators, 1 Sweeper, 1 Cart Director

Case Study Results:

With the benefit of looking backward over the last year and gathering real current data, we can see how successful and how close we came to our system estimations.

The following is a report from Plant GM:

Textile Savings:

They are currently averaging \$32,000/month (approx. \$384,000/year) in linen replacement savings compared to the same month last year when they did not have the system.

Abuse Charges:

He has increased his abuse charges \$5000/month (approx. \$60,000/year) since the system went in.

FTE Manpower Levels:

They currently have 6 counters working 40 hours per week with no overtime sorting approximately 800 pounds per hour. They have grown 4.5% (approx. 430,000lb growth/year) without having to add any employees in the soil sort/counting area.

Management has indeed been able to decrease labor by 2 FTE's (approx. \$38,400) since our system went in.

"It is a great system!"

ROI Information:

This system paid for itself in just over 8 Months! (ROI 8.1 Months)

Benefit	Monthly Savings	Yearly Savings
Linen Replacement Costs	\$ 32,000.00	\$ 384,000.00
Abuse Charge Increase	\$ 5,000.00	\$ 60,000.00
Decreased labor (2 FTEs)	\$ 3,200.00	\$ 38,400.00
Total	\$ 40,200.00	\$ 482,400.00