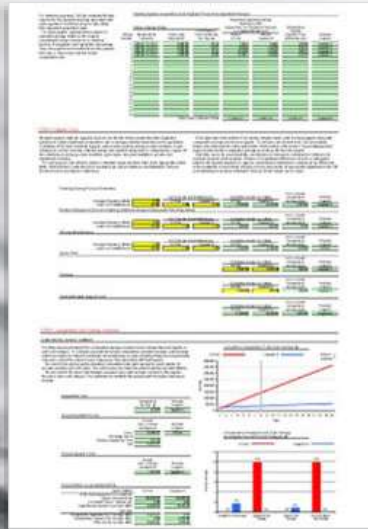


*TrueCost*TM **Savings Comparator**



Improve the purchase decision process by identifying, analyzing and comparing lifecycle costs of candidate feeding systems

Overview and User Training

This presentation provides essential training to processors using the Coperion K-Tron Savings Comparator

TruCostTM Savings Comparator

What is TruCost?

The TruCost Savings Comparator is a Microsoft Excel based tool developed by Coperion K-Tron as part of its Total Savings Solution concept:

Total Savings Solution =

Comparative Acquisition Cost Savings
+ Comparative Ingredient Cost Savings
+ Comparative Support Cost Savings
+ Comparative Intangible Cost Savings

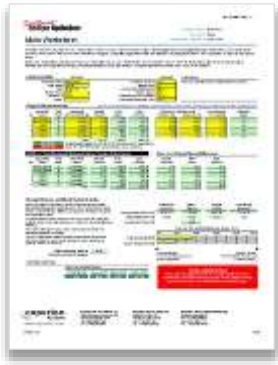
TruCost is distributed as part of the free FeedSmart tool which also includes the FeedSmart Recipe Optimizer tool.



TruCostTM Savings Comparator

Total Savings Solution Tools

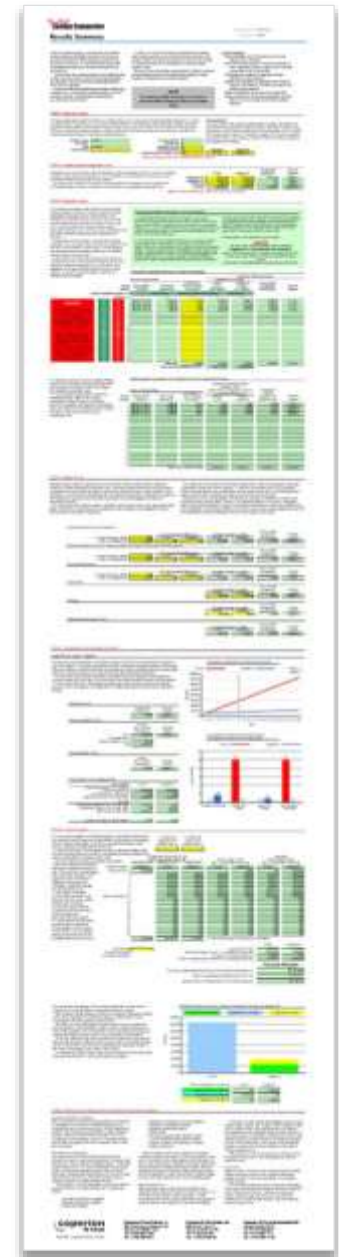
1 *FeedSmart*TM Recipe Optimizer



Based on the costs, proportions, tolerances and feeding accuracies you enter, FeedSmart minimizes total ingredient cost by strategically replacing expensive ingredients with less costly recipe components, all without violating quality limits.

2 *TruCost*TM Savings Comparator

TruCost combines data from as many as twenty FeedSmart Recipes with Acquisition and Support Cost data

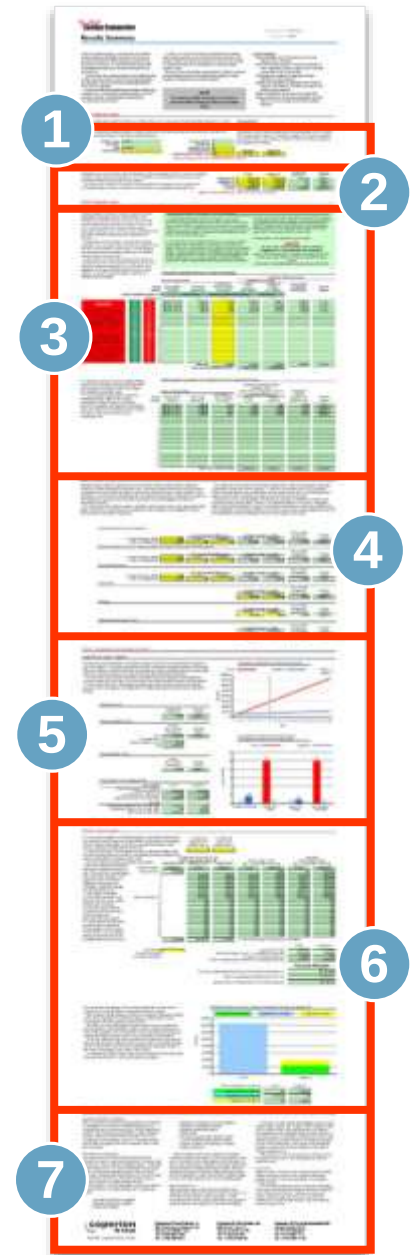


TruCostTM Savings Comparator

The TruCost Worksheet

TruCost analysis consists of 7 steps:

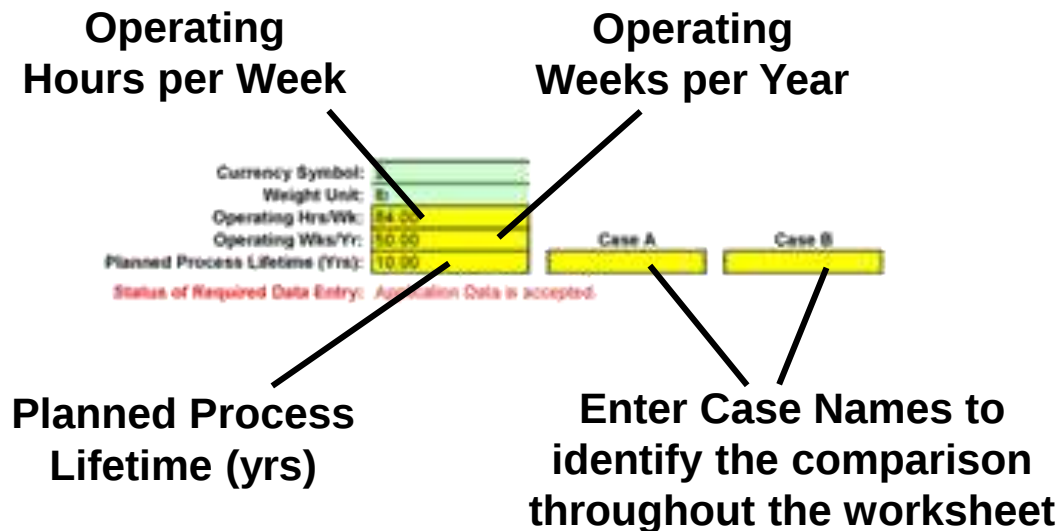
- ① Application Data
- ② Acquisition Costs
- ③ Ingredient Costs
- ④ Support Costs
- ⑤ Comparative Savings Summary
- ⑥ Process Lifetime Projections
- ⑦ Purchase Decision Perspective



TruCostTM Savings Comparator

The TruCost Worksheet

Step 1: Enter basic Application Data



TruCostTM Savings Comparator

The TruCost Worksheet

Step 2: Enter Acquisition Cost Data

Equipment, Installation
and Initial Training Costs
for Case A

Equipment, Installation
and Initial Training Costs
for Case B

	Supplier A	Supplier B	Comparative Savings (\$)	Favored Supplier
Equipment (\$):	110,000.00	100,000.00	20,000.00	Supplier A
Installation (\$):	10,000.00	10,000.00	0.00	Neither
Training (\$):	2,000.00	2,000.00	0.00	Neither
Total (\$):	122,000.00	142,000.00	20,000.00	Supplier A

Status of Required Data Entry: Acquisition Cost Data is accepted.

Total
Acquisition
Cost for
Case A

Total
Acquisition
Cost for
Case B

Comparative
Acquisition
Cost Savings

Identification
of Favored
Case



TruCost™ Savings Comparator

The TruCost Worksheet

Step 3: Ingredient Costs

3



FeedSmart Recipe Profile
automatically appears in
TruCost

Case A and B hourly
ingredient costs

Favored
Case by
recipe

Comparative
savings by
recipe

Case A and B
average
hourly
ingredient
costs

Case A and B total
annual ingredient costs

Total annual
comparative
savings

Overall Favored
Case

Comparative Ingredient Savings by Recipe and Supplier

Process Recipe Profile				FeedSmart Optimized Recipe		
Recipe Number	Recipe Name / Variation	Processing Rate (lb/hr)	% of Process Time Producing This Recipe	Ingredient Costs (\$/hr) Supplier A Case A (Materials)	Ingredient Costs (\$/hr) Supplier B Case B (FFP Waste)	Gross Annual Comparative Savings (\$/yr)
1	KPZ Broom 10	100.00	100.00	4,412.22	4,107.81	304.41
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
Total / Avg		100.00		4,412.22	4,107.81	304.41
Gross Annual Ingredient Costs (\$)				16,519,288.88	15,418,248.88	1,101,040.00

TruCostTM Savings Comparator

The TruCost Worksheet

Step 3: Ingredient Costs Payback Times

FeedSmart Recipe Profile
automatically appears in TruCost

Case A and B Payback
Times by recipe

Feeding System Attribution Cost Payback Times from Ingredient Savings

Process Recipe Profile		FeedSmart Operating Recipe		FeedSmart Operating Recipe		Competitive Supplier Payback Time Differential (yr)	Favored Supplier
Recipe Number	Recipe Name / Variation	Processing Rate (ton/hr)	% of Process Time Producing this Recipe	Attribution Cost Payback Time (yr) vs Original Recipe Cost	Case B Supplier		
1	XXX Blend 1.0	100.00	100.00	1.1713	1.2200	0.0487	Supplier B
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total Process Recipe Profile				8.3713	8.3800	0.0087	Supplier B

Favored
Case by
recipe

Payback
Time
Comparison
by recipe

Case A and B Process-wide
Payback Times

Process-wide Payback
Time Comparison

Overall
Favored
Case



TruCostTM Savings Comparator

The TruCost Worksheet

Step 4: Enter Support Cost Data

Enter frequency and hourly labor cost for Cleaning, Changeovers and Maintenance operations

Enter estimated Case A and B time per event

Enter Case A and B Spare Parts and Training annual cost estimates

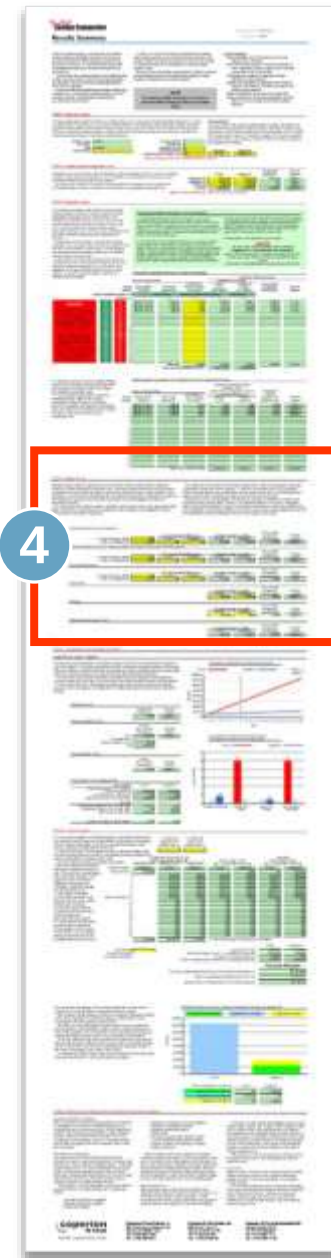
Total Annual Case A and B Support Costs with Comparative Savings

Favored Case by element

Comparative Savings by element

Overall Favored Case

4



TruCost™ Savings Comparator

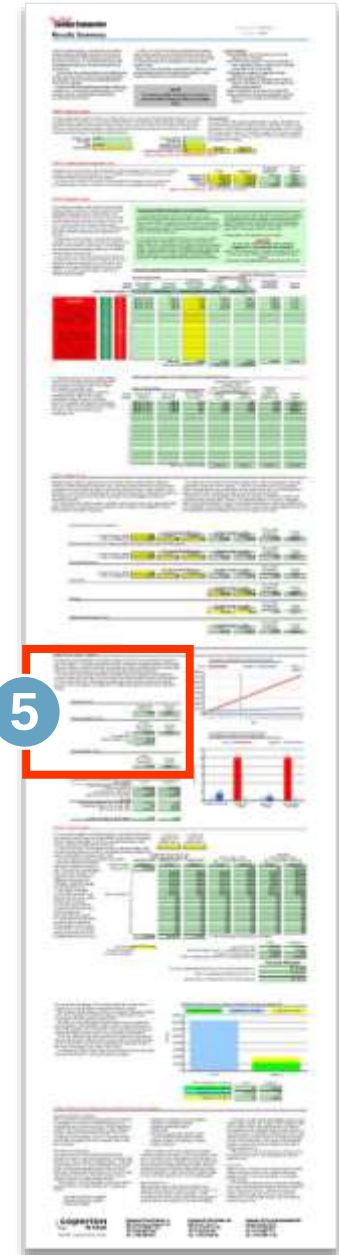
The TruCost Worksheet

Step 5: Comparative Savings Summary Cost Summary

Acquisition Cost		
	Comparative Savings (\$)	Favored Supplier
	60,000.00	Supplier A
Annual Ingredient Costs		
	Annual Gross Annual Comparative	Favored Supplier
	42,336.00	Supplier B
Gross Shrinkage Due to Recipe Changeover Time	-6,350.00	
Net	35,986.00	
Annual Support Costs		
	Annual Gross Annual Comparative	Favored Supplier
	8,125.00	Supplier A

Computed results from Steps 2-4 are summarized in this table, showing the comparative savings and Favored Case in each cost area.

Note that Annual Ingredient Cost Savings are reduced to account for the changeover time associated with the Favored Case.



TruCostTM Savings Comparator

The TruCost Worksheet

Step 5: Comparative Savings Summary *Cumulative Savings Trendline*

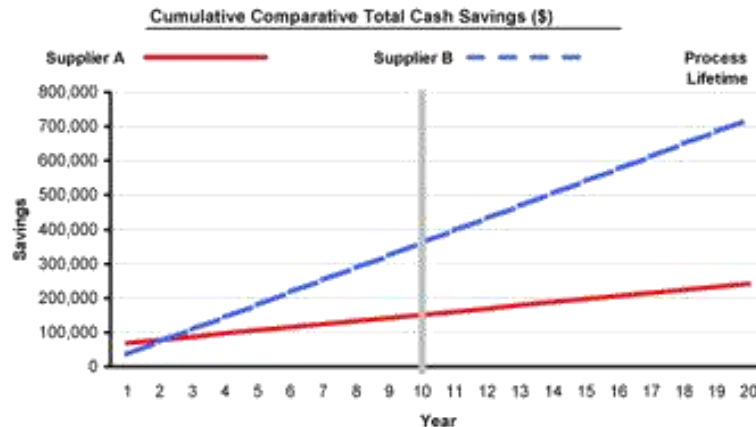
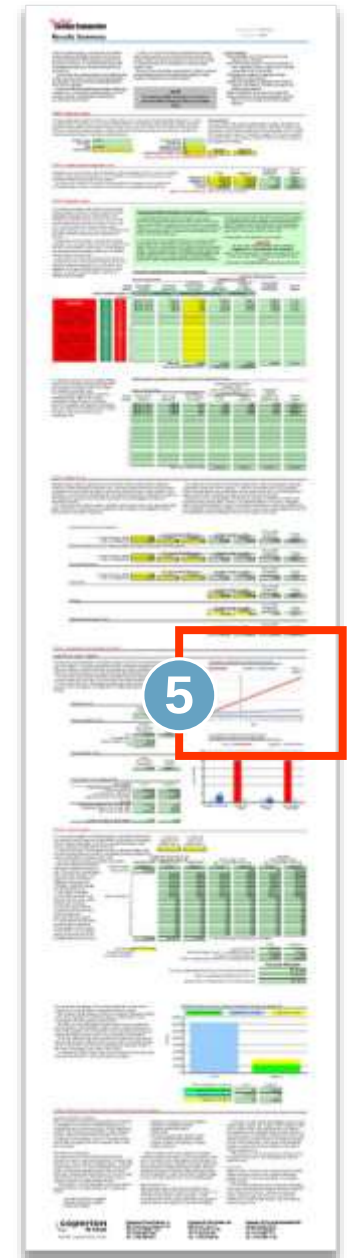


Chart plots Case-versus-Case comparative savings for total of all Acquisition, Ingredient and Support Cost elements by year. Process lifetime is indicated by gray bar.



TruCostTM Savings Comparator

The TruCost Worksheet

Step 5: Comparative Savings Summary *Annual Return on Investment (ROI)*

Annual Return on Investment (ROI)		
	Supplier A	Supplier B
INVESTMENT		
Total Initial Equipment & Installation		
Capital Investment (\$)	150,000.00	150,000.00
Assumed Process Lifetime (yr)	10.00	10.00
Apportioned Capital Investment (\$/yr)	15,000.00	15,000.00
RETURN		
Comparative Ingredient Cost Savings (\$/yr)	0.00	38,036.00
Comparative Support Cost Savings (\$/yr)	8,125.00	0.00
Total Annual Savings (\$/yr)	8,125.00	38,036.00
ANNUAL % RETURN ON INVESTMENT		
	51.25	225.23

Comparative annual return on investment (ROI) calculations are made for each Case.

The 'Investment' portion excludes initial training costs and is apportioned over the full process life.

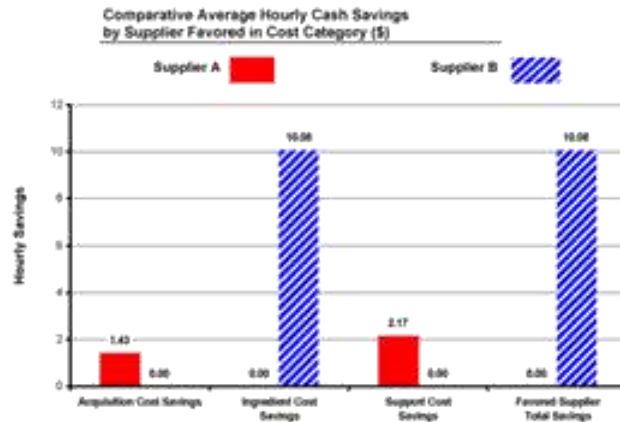
For the 'Return' portion, since Ingredient and Support Cost Savings are comparative, computed results are assigned only to the Favored Case in each instance.

5

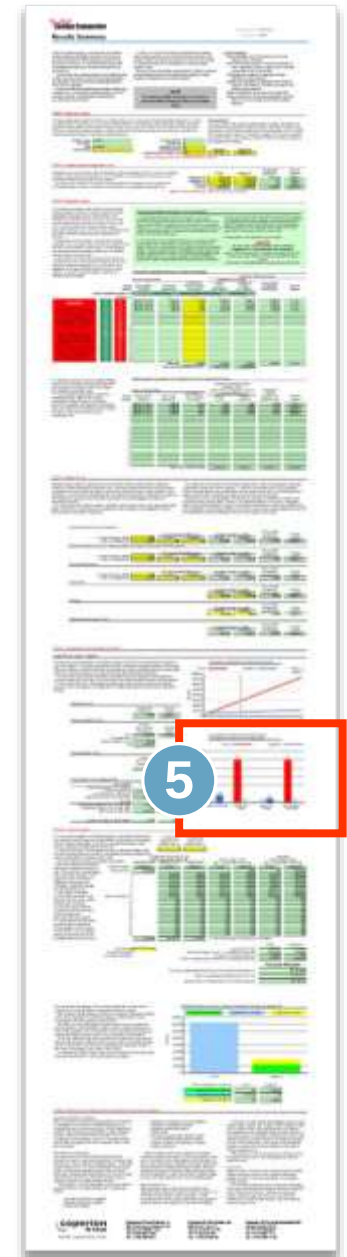
TruCostTM Savings Comparator

The TruCost Worksheet

Step 5: Comparative Savings Summary *Comparative Savings by Category*



Comparative hourly savings by cost category are charted for Favored Case in each cost category to graphically depict where and how much savings are provided in each Case.



TruCost™ Savings Comparator

The TruCost Worksheet

Step 6: Process Lifetime Projections

Optional entry of ingredient and support cost inflation rates

Comparative savings from Favored Case by year in each cost category

Optional entry of discount rate for net present value (NPV) calculation

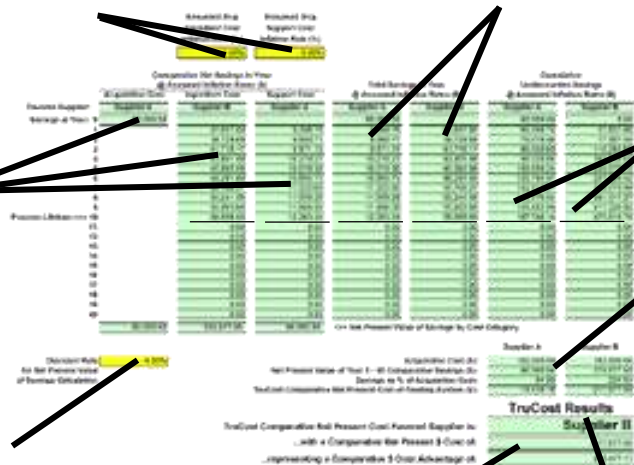
Favored Case Net Present Cost advantage

Total savings by Case by year

Cumulative savings by Case by year

Feeding System Net Present Value by Case

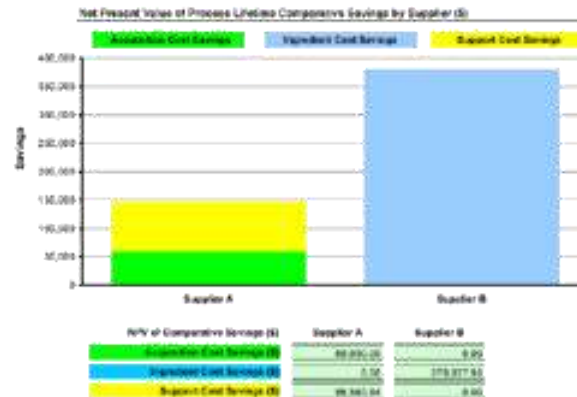
TruCost Favored Case Result



TruCostTM Savings Comparator

The TruCost Worksheet

Step 6: Process Lifetime Projections *NPV of Lifetime Savings by Case*



Net present value of comparative savings in each cost category is charted for each Case. Difference in column height between Cases equals the overall (NPV) savings advantage of TruCost's Favored Case. Color indicates source of savings.



TruCostTM Savings Comparator

The TruCost Worksheet

Step 7: Purchase Decision Perspective

The last step to your TruCost solution may be the most challenging: Making the purchase decision itself.

Step 7 shows how to use TruCost to evaluate multiple suppliers, and suggests how you might include intangible factors into your decision.

Taken together, FeedSmart and TruCost are powerful Total Savings Solution tools that can help guide you in choosing the best feeding system for your specific application.

Nobody ever said good decision making was easy. But in the end, you'll have the confidence you made the right decision... *and* you'll have the evidence to back it up!



TruCostTM **Savings Comparator**

Thanks for Using TruCost!

**We'd be happy to hear your comments
and answer any questions you might have.**

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engineering office, or to find the
Coperion K-Tron Representative
serving your area, go to...**

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