

Summit Maguire LineMaster Extrusion Control - Payback Examples

Return on Investment for LineMaster Control in Film Extrusion

1. Extrusion Line Operation Time

Days of week production	5	Days
Average number of Hours of production per day	20	Hours
Working Weeks per year	48	Weeks
Total number of production hours per annum on one line	4,800 Hours	
Typical Production Run Duration - Hours	10	
Production Running Hours per Annum	4,800	
Number of Production Changes (Average) per Annum	480	
Material as percentage of end product selling price	40.0%	

2. Extrusion Line Sample Materials Costing

Total Kg per hour output of one production line	100 Kg/Hr			
Total Kg consumed on 1 line per annum	480,000 Kg/Annum			
	Material	Kg used	Price/Kg	Total Price
	% Setting	per Hour	per Kg	per Hour
Natural - One or Two Naturals blended together	96	96.00	£1.00	£96.00
Masterbatch Colour	2.0	2.00	£4.00	£8.00
Additive 1 - Anti Block	1.0	1.00	£6.00	£6.00
Additive 2 - UV Additive	1.0	1.00	£0.00	£0.00
	100.0	100.00		£110.00

3. Reduced Startup Time and Scrap

Before - Typical Time to Startup Line (Mins)	60	
After - Typical Time to Startup Line (Mins)	30	
Reduction in Startup Time (Mins)	30	200.0%
Cost of Materials per hour	£110.00	
Savings in Scrap per Production Job	£55.00	
Annual Savings	26,400.0	

4. Savings from Gain in Yield Control during Production

By automatic regulation of the line once up and running ensuring product remains on target further savings can be made by ensuring product is always on target. A 4% Yield is typical for many types of extrusion lines..

Actual Kg/hr Production pre Linemaster	104.0 kg/hr
Target Kg/hr Consumption	100 kg/hr
Typical Yield Gain from using LineMaster during Production Run	4 %
Actual Kg/hr Production post Linemaster	100.0 kg/hr
Saving Per Hour post	4.0 kg/hr
Money saved per hour post Linemaster	£ 4.40
	£ 1,760 per mth
	£ 21,120 pa

5. Savings Summary on Raw Materials by using LineMaster

Cost of LineMaster	£ 12,000
3. Reduced Startup Time and Scrap	£ 26,400 Per Annum
4. Savings from Gain in Yield Control during Production	£ 21,120 Per Annum
Total	£ 47,520 Per Annum
Return on Investment Period - Months	3.03 mths

6. Other Savings and Cost Factors to consider

Reduced labour requirement & associated cost
 Automatic control of extrusion line
 Quicker production changes
 Easier operation and setup
 Increased line productivity
 Reduced product scrap and material waste
 Enhanced product quality and consistency
 Accurate documentation of production
 Removal of line variables in production