

SCOTIA PLASTICS

EQUIPMENT PURCHASE DECISION

JANUARY 2016

Scotia Plastics Inc. is a manufacturer of plastics bottles for the dairy and bottled water industries. The bottles are made from food grade HDPE (High Density Polyethylene) resin. The plant also makes drainage pipe with any scrap that is produced by bottle production.

Resin is purchased by the rail car load from brokers in the US. It is purchased in \$us and by the LB.

The company has recently started supplying a new dairy customer and this has increased the usage of the machine that makes 2 litre bottles. Management is going through various analyses to determine whether or not they should purchase a new machine. The existing machine is fully depreciated and is a 2 head machine (produces 2 bottles per cycle). The new machine is a 4 head machine (drawings and pictures attached along with the quote). The quantitative information is as follows:

US exchange rate	1.43
LBS – KG Conversion	2.2046
Bottle Resin	\$.61 \$US per LB
Packaging per 1000 bags	\$392.00
Utilities per hour	\$18
Combined labour per hour	\$30.68
Pipe resin	\$1.98 per KG
Number of bottles per bag	108
Production per hour – current	800 bottles
Production per hour – new	1,600 bottles
Capital cost – new	\$425,000 \$US (see attached)
Lead time	4 months
Financing cost	4.75% for 60 months
Depreciation rate	20% Declining Balance
Capital Cost Allowance rate	30% Declining Balance (15% in first year)

Annual Sales	27,000 bags
Selling price	\$.20 per bottle
Access to capital	Partially restricted
Financing percentage	75%

What should we do?