

An Investment to Obtain Savings

Click on the content you want
to know more about.

MENU.
Click to return
to this page.

THE COMPANY

**AREA
OF OPPORTUNITY**

THE DECISION

2-SP17-06-176

Publication date: September 13, 2022

Last review: September 13, 2022

THE COMPANY

Empaques Versatech de México, S.A. de C.V., is a company located in Ahualulco, San Luis Potosí, engaged in the production, as stated by its name, of packaging for the automotive sector.

The company is of Canadian origin, and when they went bankrupt, the owners decided to find a Mexican partner. It is thus that in 2009 they move down to Mexico. Since they began operations and up to 2022, the company has had a positive positioning in the market. They have succeeded in growing, and have purchased several cutting machines such as laser machines, a CNC router, and sewing machines. Nevertheless, due to the necessity to increase the production capacity, the director has decided to buy a new cutting machine.

Image. Freepik, 2022.

The company has celebrated agreements with several industries which in turn are suppliers of automobile assembly plants in the Central and “Bajío” regions. Signing commercial agreements between Mexico and several countries has favored the auto parts market growth, and with it, the expansion of the automotive market.



AREA OF OPPORTUNITY

Versatech is considering having a machine made to improve the cutting line and streamline the process in time and quality. Before making a final decision, the director wants to make an analysis to choose the best purchase option. His purchase will help to streamline the cutting process, reduce costs, reduce error margins in cuts, improve quality, and avoid accidents.

The machine that they want to build will substitute manual cutting of fabrics, tarpaulins, plastics, and other materials.

1 million pesos

is the cost of the construction of the machine (including installation costs).

10 years

is the expected lifespan of the equipment.

3 thousand pesos(MXN)

for monthly maintenance are required for the efficient operation of the equipment.

2 operators

will be needed for the new machine. Currently, the manual cutting process is operated by six workers, and their weekly salary is of \$1,210 net pesos (MXN).



M
E
N
U

CIC



On the other hand, it is known that the company is facing cash flow problems as they must pay taxes, the employees' social security contributions, payroll, benefits, accounts payable, and financial credits. It is known that the gross profit margin is of about 55%, with annual sales of \$27 million pesos (MXN) in 2021. By the month of May of 2022, they have around \$1,100,00 pesos (MXN) in the bank. The accounts payable are around \$900,000 pesos (MXN) in 30 days; the accounts receivable are approximately of \$2,400,000 pesos (MXN) in 30-45 days. It is also known that the monthly payroll is of approximately \$540,000 pesos (MXN) (administration expenses, \$110,000 (MXN), and workforce \$430,000 pesos (MXN), and that the fixed operation expenses are \$55,000 pesos (MXN) per month. Since the beginning of the pandemic, the industry suffered a setback in sales.

COSTS OF MANUAL WORK PLUS OPERATORS	AMOUNT	CURRENCY
Weekly payroll per operator	1,210.00	MXM
Monthly MDF spreadsheets (raw material) Savings	1,000.00	MXM
Monthly <i>cutter</i> tool (precise) Savings	1,000.00	MXM
Raw material SCRAP 3 % per project	(Savings)	

The options of the company to purchase the machine are the following:

- A single payment.
- One year monthly payments (12 months with no interests)
- A bank loan with a TIIE (equilibrium interbank interest rate) interest rate of 28 days+6 which covers 40% of the needs of fixed assets and work capital of the

project, as well as the remaining 60% through the contribution of the company's partners and/or profit reinvestment. According to a study by a consulting agency, the demanding profit rate to the shareholder equity investment and/or retained earnings is calculated as follows: the current government bonds rate in 10 years plus a surcharge that is calculated by multiplying a 1.1 factor by the risk rate of the market, which is calculated in 6.5 per cent.

THE DECISION

To sum up, the company is looking for the best option to purchase the machine; and not to be affected in their capital or cash flow. Investing on the new machine will help the company to have savings and an increase in sales. It is known that, once they have the equipment, the cutting time will be less than manual cutting and there will be less waste of material as cuttings will be much more precise.

The tax rate is of 30% and Versatech normally evaluates its investment projects with the finance rate. Should the company have the machine made?

Images. Eucalyp, Freepik and Noomtah in Flaticon, 2022.



Savings: 4 workers (the staff would be reduced from six to two).



Cutting times: the cutting area is the longest of the productive process, today there is a machine that takes 13 minutes, the new machine will only take three.



This machine will enable them to streamline their processes, which will allow for the generation of new projects. It is expected to have:

CONTEXT	INCREASE IN SALES
Base	8 %
Pesimist	0 %
Optimist	15 %



Having an automated productive process will enable to improve the image of the company before transnational companies, and this will ease implementation of a higher number of contracts. Additionally, delivery times to current customers will be improved.