

Global Sourcing Decision Tool

For Calculating and Comparing the Total Cost of Acquiring a Part Domestically vs. Overseas

EXECUTIVE SUMMARY

Purpose of the Tool

The Global Sourcing Decision Tool is designed to assist a sourcing decision maker in the selection of the best source for a part based on a comparison of the total cost of acquiring the part from a current domestic source vs. a proposed overseas source. The spreadsheet-based tool, while likely requiring some customization to support the unique requirements of a particular company's part sourcing situation, is intended to provide a model for guiding a global sourcing decision, to ensure that the major components of total acquisition cost are considered, to enable the calculation of total acquisition cost for the same part sourced from two potential suppliers, and to facilitate comparison of the total acquisition cost of the part under each scenario.

Why it is Important

The cost of a globally-sourced part goes beyond the total landed cost of the part. While most outsourcing analyses include a comparison of total landed costs, other implicit - or hidden - costs must also be factored into the decision. Costs such as additional in-transit inventory, engineering changes, new tooling, increased travel expense, regulatory compliance, and others can add significantly to the cost of acquiring a part overseas, sometimes outweighing the advantage of a lower per piece price. For this reason, it is critically important that a company consider the total acquisition cost of an overseas-sourced part.

Scope of the Tool

This tool enables the comparison of a current domestic part source with a potential overseas source on the basis of the impact on cash flow resulting from differences in material, logistics, inventory, and other costs. The tool is designed to compare a part currently sourced domestically and shipped via ground carrier with the same part sourced overseas and shipped via ocean carrier.

Intended Audience

This tool is intended for use by sourcing decision makers, as well as others who wish to understand the total acquisition cost of a globally-sourced part.

How to Use the Tool

The spreadsheet-based tool is composed of four data input worksheets - one for each major component of acquisition cost (material cost, working capital, and logistics cost), as well as for the net impact of the differences in these costs on cash flow. In addition, a summary worksheet is included that displays the results of the total cost analysis. On each worksheet, cells that require data to be supplied by the user are colored yellow. To use the tool, select each of the worksheet tabs in turn and input the data required for the analysis. Upon completing the data input, the Global Sourcing Financial Analysis Summary can be viewed by selecting the Summary tab. Additional information about the analysis (analyst name, date, etc.) can also be recorded on the Summary worksheet.

A brief description of each total acquisition cost component worksheets follows:

Material Cost: This worksheet calculates and compares the total annual turnover of the part based upon annual usage and the per piece prices from the two suppliers under consideration. This sheet also provides spaces to record other basic part information, including part weight (used to calculate logistics cost). The result of the calculations on this worksheet is the annual material cost savings from the proposed overseas supplier.

Working Capital: This worksheet calculates and compares the working capital requirements for the two sourcing options based upon supplier payment terms, and the amount of in-transit and safety stock inventory required under each scenario. The result of this worksheet is the net increase, or decrease, in inventory working capital required if the part were to be sourced from the overseas supplier.

Logistics Cost: This worksheet calculates the net change (assumed to be a cost increase) in total logistics cost of the part sourced from the potential overseas supplier in the quantity required during a 12-month period. For the current domestic source, transportation by ground carrier is assumed. For the potential overseas source, ocean transportation and related costs are considered.

Cash Flow: This worksheet calculates the cash flow impact and net present value (NPV) of the cost savings and working capital changes estimated to result over a five year period if the part were sourced from the overseas supplier under consideration. In addition to the on-going net cost savings/increase from materials, working capital changes, and logistics cost changes, certain one-time project implementation costs are also factored into the NPV calculation.

Summary: The summary worksheet consolidates the results from the previous four worksheets, as well as provides spaces to record information about the particular sourcing decision being analyzed. The page displays the total annual savings to be expected from the potential overseas sourcing option and ultimately assists the decision maker in determining which sourcing option is best from a total acquisition cost standpoint.