



Exporting Taiwanese Machinery to Industries in Peru

A Feasibility Study

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ABSTRACT

The present study refers to the feasibility study on exporting woodworking machines from Taiwan to Peru into the international trade framework. This study is conducted through the use of a new export model.

Villa El Salvador Industrial Park is Peru's leading industrial park for small and medium enterprises, where woodworking is one of the major manufacturing activities, and requires a wide variety of machines such as sliding table saws, which is our subject of interest. The main goal of the research is to determine the viability of exporting a Taiwanese sliding table saw into the Peruvian market. We will make use of the new export model, developed in base of three different export models, to demonstrate that exporting sliding table saw from Taiwan to Peru is highly viable, and selling sliding table saws on the Peruvian market is a profitable business opportunity. Moreover, this research will serve as a basis for future exporting plans or research to assess the viability of launching a Taiwanese product into the Peruvian market or a different market in other Latin American countries.

Keywords: international trade, export model, customs regulations, tariff, non-tariff, incoterms, woodworking machines, sliding table saw.

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I dedicate this thesis to my aunt, Victoria Ramos, who passed away,
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Chapter 1 Introduction

In the last years, there have been considerable changes in commercial relations between different countries. The international trade has been increasing, especially in the manufactured goods and service sectors, and many strategies to attract capital have been implemented.

Nowadays we have emergence of worldwide production markets and broader access to a range of foreign products for consumers and companies. Globalization, industrialization, technological changes, advanced transportation, and outsourcing are all having a major impact on the international trade system. Increasing international trade is crucial to the continuance of globalization and embraces an extending market beyond national borders in order to maintain the nation's economic growth.

The present investigation, through the use of a new exporting model, refers to the feasibility study of exporting woodworking machines from Taiwan to Peru into the international trade framework.

1.1 Problem Statement

One of the important topics of international trade is concerned with the problem of how an exporting process can be efficient, effective, and have the ability to create its competitive advantage to companies involved in exporting.

Since this investigation focuses on the feasibility of exporting woodworking machines from Taiwan to Peru, it is based on an exporting business oriented framework that is centered on a new export “model” that allows an efficient and effective exporting process.

Peru is a developing country located in South America and woodworking is one of the major manufacturing activities at Peruvian industrial parks. Villa El Salvador Industrial Park is Peru's leading industrial park for small and medium enterprises, with activities such as woodworking, metalworking, smelting, and the production of footwear, leathers and textiles. However, woodworking is one of the most important manufacturing activities at the park and requires a wide variety of machines and equipment.

Presently, no companies manufacture specialized woodworking machinery in Peru, but a Spanish manufacturer sells its products there via its distributors; also there are Italy and Belgian companies with its respective distributors.

However, the growth of the woodworking industry and thus the need for machinery such as Sliding Table Saw machine may result in additional products and brands becoming available in Peru for Taiwanese machinery.

1.2 Research Objectives

1.2.1 General objective:

The main goal of this research is to determine the viability of exporting Taiwanese Sliding Table Saw machines into the Peruvian market.

The research will serve as a basis for preparing an exportation plan to assess the viability of launching a Taiwanese-specific product into the Peruvian market.

1.2.2 Specific objectives:

This general objective can be broken down to six more specific objectives that would together achieve the overall goal of the research as follows:

1. To study different exporting models and to determine a new one for the research case.
2. To verify the niche market for Sliding Table Saw machines in Peru.
3. To identify the different companies that produce Sliding Table Saw in Taiwan, and to find the company that offers the best value for money.
4. To identify the administrative procedures involved in exporting this product to Peru.
5. To identify the existing quality standards for importing products to Peru.
6. To determine the product's retail price.

1.3 Research Questions and Scope of Research

Focusing on the feasibility study of exporting woodworking machines from Taiwan to Peru, and on the determination of a new exporting model, we are specifically interested in:

1. How big is the market demand for woodworking machines in Peru?
2. Is Peru a niche market for Taiwanese companies?
3. What are the better procedures and practices for exporting woodworking machines?
4. How viable is it to export Sliding Table Saw machines from Taiwan to Peru?
5. Is selling Sliding Table Saw machines in Peru a profitable business opportunity?

The scope of the research covers international trade, trade regulations between Taiwan and Peru, such as Tariff, Taxes, Value Added Tax, Import Requirements and Documentation, Export controls, etc.

The study deals with a survey of the Peruvian woodworking companies located at Villa El Salvador Industrial Park, which will provide us with information on their requirements.

Export models will be analyzed in order to get a new export model, and it will help to obtain the Exportation Guide of Sliding Table Saw to the Peruvian market.

Taiwanese manufacturers of Sliding Table Saw and Exporters of Sliding Table Saw to the Peruvian market will be analyzed in order to make the comparative analysis between them and determine the feasibility of the exporting study.

1.4 Foundation Hypotheses

The following hypotheses were put forward based on the research problems:

H1: The market demand for woodworking machines in Peru is increasing.

H2: The Peruvian market for Sliding Table Saw machines is a niche market for Taiwanese companies.

H3: Exporting Sliding Table Saw machines from Taiwan to Peru is highly viable and represents a profitable business opportunity.

H4: Exporting Sliding Table Saw from Taiwan to Peru is not a profitable business opportunity.

1.5 Study Contribution

The intent of this thesis is to determine the viability of exporting Sliding Table Saw from Taiwan to Peru.

By integrating the concepts of international trade, the study will see if such exporting Sliding Table Saw from Taiwan to Peru into the international trade framework, through the use of a new exporting model, will be successful in terms of feasibility of international business.

It examines commercial treaties between Taiwan and Peru, customs restrictions, the most suitable logistics and suppliers, and the advantages and disadvantages of choosing Taiwanese Sliding Table Saw with respect to European Sliding Table Saw imported into Peru.

This research hopes to introduce Taiwanese companies to the strategic benefits of exporting to Peru, showing these companies that the advantages outweigh the risks, so that they may consider a trade relationship with Peru to be a viable business opportunity.

These findings will be put together to form a document that will serve as a procedural guide for companies who are considering selling their goods on the global market. This exportation businesses plan will be a useful tool in planning and administering projects, as well as in determining project feasibility.

It is expected that this thesis will contribute in the future research on such related topics and within the domain of future studies in exporting business.

1.6 Dissertation Structure

The entire thesis is divided into eight chapters.

- Chapter 1 deals with the introduction of the paper regarding the brief introduction to the topic, the problem statement, the research objectives, the research questions and scope of the research, foundation hypothesis, and the study contribution.
- Chapter 2 describes the literature review: the theoretical framework of the paper with concepts that have been used in the different export models.
- Chapter 3 presents the research setting, method, and methodological matters used for this research.
- Chapter 4 provides a brief overview of Peru –the demand situation of woodworking machines in the Peruvian industrial sector.
- Chapter 5 presents a brief overview of Taiwan – the supply situation for woodworking machines.
- Chapter 6 provides the theoretical information of Sliding Table Saw, which is the subject of interest.
- Chapter 7 contains data presentation and analysis, and discusses both the theoretical and managerial implications of the findings.
- Chapter 8 is the conclusive part presenting our own scenarios and conclusion in light of the combined theoretical framework and empirical findings, outlines the limitations of this study, and highlights possibilities for future research.

Chapter 2 Literature Review

This chapter presents a theoretical basis for the study and provides preliminary concepts such as international trade and exporting. The export models such as performance export model, Cateora & Graham Export model, and S. James Export model, also deal with theoretical information related to Exporting.

2.1 Preliminary Concepts

2.1.1 International Trade

International trade is the exchange of capital, goods, and services across international boundaries or territories. In most countries, it represents a significant share of GDP.

International trade is in principle not different from domestic trade because, depending on whether trade is across a border or not, the motivation and the behavior of parties involved in a trade do not fundamentally change. The main difference is that international trade is typically more costly than domestic trade. The reason is that a border typically imposes additional costs such as tariffs, time costs due to border delays, and costs associated with country differences such as language, the legal system, or a different culture.

2.1.2 Exporting

The export boom is on; as never before, companies are stepping up their exporting efforts and being rewarded with surging foreign sales. Lately, the international trade scene has changed substantially.

Exporting, the basic form of international business activity, may be defined as the process of servicing foreign markets from a home country facility.

Exporting in many countries is simply a basic part of doing business to achieve economy of scale, to reach wealthier markets, and because of the proximity of so many borders. Exporting is a decision occurring as a result of three of the following motivating factors that are responsible for most sales expansion (L. Fargo Wells, 1991):

(a) Demand driven

A company has a successful domestic product and receives inquires and orders from overseas. Alternatively, it is already exporting to a limited extent, and the promise of increased sales attracts the company to other markets.

(b) Supply driven

A company makes a conscious decision to establish an export department and expand its sales by acquiring a presence and market share in specific markets abroad.

(c) Entrepreneur driven

An individual or a trading company seeks to create business by selling products overseas that are manufactured or provided by others. These are also referred to as third-party or independent exporters.

The same standards that are used in domestic marketing (process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services) cannot be applied to other countries because of the differences in social, cultural, and environmental factors. Just recognizing this is often the most difficult hurdle to overcome in establishing a successful export effort.

Also, there are other obstacles, political and economical factors, such as tariff barriers, Incoterms, different rules for arranging payments terms and extending credits: additional, or at least separate, operational details that are not normally a consideration in domestic business.

2.2 Export Models

For the study we are analyzing three Exporting models: Performance Export Model, Cateora & Graham Model, and S. James Model. Based on the analysis of these models, we will suggest a new Export Model which will be used for the current research.

2.2.1 Performance Export Model

Specifically, research attention has focused on five major groups of variables influencing export performance:

(a) Managerial Characteristics

Managerial characteristics are personal, experiential, attitudinal, behavioral, and allied traits of the exporting firm's decision-makers.

The born global internationalization process is argued to be driven by entrepreneurial owner managers with a global mindset that enables them to not only be highly innovative, proactive and risk taking, but also to direct their attention to global opportunities given, among other things, their previous experience, contacts, and often broad international education (Harveston, Kedia & Davis, 2000; McDougal, Shane & Oviatt, 1994; Madsen & Servais, 1997).

In considering the manager profile, the manager's prior experience is frequently cited as a key factor in distinguishing born global from other exporting firms (Harveston, Kedia & Davis, 2000; Madsen & Servais, 1997; Oviatt & McDougall, 1997).

Madsen and Servais (1997, p. 574) suggest, "International experience is a key necessary condition for their international expansion". Finally, in regard to the owner / manager profile, we propose the link between the status quo and developing capabilities. Building upon Dixon (1994), accumulated knowledge or intellectual capital, as captured above in the owner manager profile, "is of less significance than the processes needed to continuously revise or create knowledge".

The characteristics of a firm's main decision-maker influence the internationalization behavior of the firm. Among managerial characteristics are: Completed tertiary education, Worked overseas, Received training in export matters, previously worked for a company that exported, and Fluency in foreign language(s), among others.

International experience is important among the owner/managers. Firms that are international market oriented (currently exporting or contemplating exports) have managers that are much more skilled in export matters. This is an important finding as it indicates that export promotion agencies can aid in developing commitment to exporting by providing appropriate training and information on export matters.

(b) Organizational Factors

(Elements pertaining to the characteristics, operations, resources, and objectives of the exporting organization)

However, a recurring emphasis throughout all the literature is the core and essential role of (tacit) knowledge generation and acquisition, both within the firm and from its external environment; in this case, organizational factors refer to within the firm.

The more recent economic models of internationalization that have been reviewed focus on the importance of sunk costs and heterogeneity across firms (i.e., differences in productivity). To overcome entry costs, firms need an adequate knowledge-base and complimentary assets/resources (especially R&D and human capital assets that lead to greater absorptive capacity); and of course, productivity differences rely on firms having differing knowledge and resource bases associated with differences in rates of innovation and other aspects of total factor productivity.

However, despite this leading role for knowledge accumulation and factors such as absorptive capacity, we still have little evidence on how organizations learn (and what is most important for success in this area), and exactly how absorptive capacity can be measured (and its relative importance in determining productivity and entry into foreign markets).

(c) Environmental Forces

(Factors shaping the task and macro-environments within which exporters operate in both domestic and international markets)

Firms that enter foreign markets often find they must make significant adjustment in their marketing strategies. The environmental forces that affect foreign markets may differ dramatically from those affecting domestic markets. Thus, a successful international marketing strategy requires a careful environment analysis. Conducting research to understand the needs and desires of foreign customers is crucial to international marketing success. Some environmental forces are represented by:

- **Cultural and Social Forces** – Cultural and social differences among nations can have significant effects on marketing activities. Since marketing activities are primarily social in purpose, they are influenced by beliefs and values regarding family, religion, education, health, and recreation. By identifying major socio-cultural deviations among countries, marketers lay the groundwork for an effective adaptation of marketing strategy.
- **Economic Forces** – Global marketers need to understand the international trade system, particularly the economic stability of individual nations, as well as trade barriers that may stifle marketing efforts. Economic differences among nations—differences in standards of living, credit, buying power, income distribution, national resources, exchange rates, and the like – dictate many of the adjustments that must be made in marketing abroad.
- **Political, Legal, and Ethical Forces** – A nation's political system, laws, regulatory bodies, special-interest groups, and courts all have great impact on international marketing. A government's policies towards public and private enterprise, consumers, and foreign firms influence marketing across national boundaries. Some countries have established trade restrictions, such as tariffs.

- **Technological Forces** – Advances in technology have made international marketing much easier. Voice mail, e-mail, fax, cellular phones, and the internet make international marketing activities more affordable and convenient.

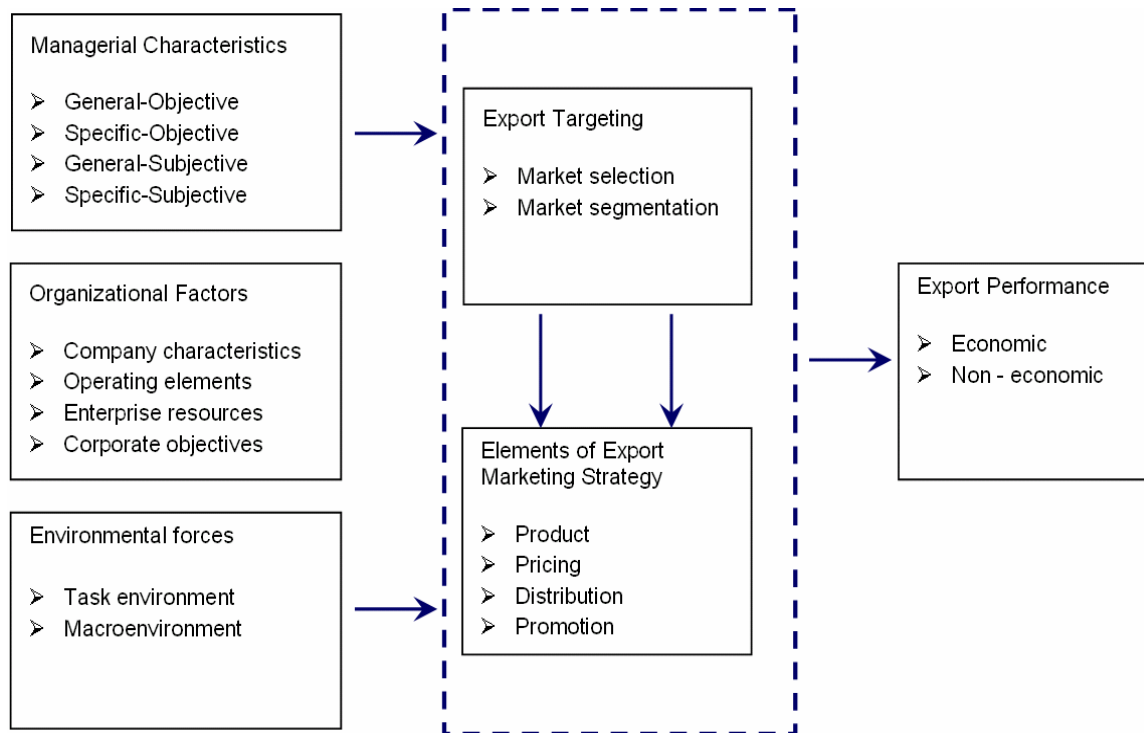


Figure 2.1 Export Performance Model – L.C. Leonidou

(Source: L.C. Leonidou, 2002)

(d) Export Targeting

(The identification, selection, and segmentation of international markets)

Export targeting involves the number and types of export markets (i.e., countries) a firm may select, as well as its segmentation activities within each export market (Albaum, Strandkov, J and Duerr, E, 1997). Segmentation is central to the firm's marketing strategy development and implementation. However, in the studies reviewed, market segmentation takes a different role than that normally employed in the domestic context. In general, two export targeting aspects were identified in the studies under review: export expansion and market segmentation. For analytical reasons, export expansion was further split into market concentration and market spreading in reference to the highly contentious issue of whether the company should concentrate its efforts on a few foreign markets or attempt to export to as many international markets as possible.

Within the exporting context, market segmentation has been described as a dual process wherein homogeneous groups of countries are first defined and identified according to

common environmental characteristics, followed by further division of these national markets into segments of customers that differ in terms of response to marketing strategies (Keegan, 1995). Studies found there show a positive relationship between segmenting international markets and export performance, particularly in terms of export sales growth, intensity, and profit level.

(e) Marketing Mixed Variables

(The company's export product, pricing, distribution, and promotion strategy).

Product- The influence on export performance of various product dimensions, including actual and augmented product factors, has been given considerable attention (e.g., Mc Guinness; Kaynak and Cavusgil). Overall, product design and style were shown to have a significant positive effect on performance. However, product design in the industrial market context showed no correlation with performance. In contrast, the relationship between product quality and export performance was widely researched and positively associated.

Branding variables were found to be positively related to overall export performance, as well as to export intensity and profit level.

Customer service (provisions for pre- and after-sales services) has been cited as a critical success factor in international markets. International customers are particularly concerned over the exporter's ability to offer the necessary services (Terpstra and Sarathy, 1997).

The provision of a warranty has been postulated to augment the value of the product exported, since this can offset foreign customers' reservations regarding product performance and reduce their risk perceptions pertaining to the purchase of such goods (Terpstra and Sarathy, 1997).

Product strategy is particularly important when a firm enters a new overseas market or exports to geographically distant markets. While available empirical findings confirmed a positive relationship of this variable with export performance, results should be interpreted cautiously as only a few studies have examined this association.

The link between product adaptation and export performance is the most widely researched issue in the extant literature. Product adaptation is defined in terms of the

degree to which the firm's actual and augmented product elements are adapted for export markets to accommodate differences in environmental forces, consumer behavior, usage patterns, and competitive situations. Three benefits can be derived from this strategy. First, it reflects a customer-orientation posture because the exporter systematically evaluates buyer behavior and host market characteristics (Douglas and Wind, 1987). Second, it can lead to greater profitability, as a better product–market match can result in greater customer satisfaction. Third, pressures to meet specific host market requirements often demand creative and innovative thinking, which may result in additional products for a firm's domestic, as well as overseas markets (McGuinness, 1981).

Pricing - Six pricing-related decision areas were examined for their potential influence on a firm's export performance: pricing method, pricing strategy, sales terms, credit policy, currency strategy, and price adaptation. Pricing method was confined to the use of a market-based pricing approach, whereby the firm sets export prices according to customer demand and competitive practices. The adoption of such an approach ensures responsiveness to changes in overseas market conditions, competitive situations, and environmental forces, increasing the likelihood of export development and success (Christensen et al., 1987).

Research on pricing strategy was also narrowly defined, in the sense that it focused largely on the effect of setting low prices. By employing such an approach, exporters aim to penetrate export markets by attracting a large number of foreign customers and winning a large market share. According to the model, the adoption of a price penetration strategy was positively associated with all aspects of performance.

The effect of price adjustment on export performance has been widely researched. Export prices may be adjusted for a number of reasons: economic, political–legal, price controls, and other environmental forces; marketing, distribution, and transportation costs; market structures and demand; tariffs, taxes, and other financial trade barriers; pricing practices of competitors; and costs and margins of distribution channels. This diversity of foreign market pricing determinants makes price adaptation necessary for firms to survive and remain competitive in host markets (Louter et al., 1991).

Distribution - According to the model, there is a low relationship between export channel intermediary type and overall export performance. The use of an export sales representative/office and direct buying were found to be related positively to export sales intensity, while the adoption of overseas distributors/agents and merchants showed weak associations with this performance measure. The appropriateness of a particular distribution channel is not static; rather, it depends largely on variable foreign market conditions, such as economic situation, distribution structure, and competitive practices.

Many studies researched distribution adaptation, which refers to the adjustment of the exporting firm's channel design in export markets. Such adjustments may occur in response to: (a) variations in business environments, such as legislation, economic situation, and physical conditions and (b) differences in distribution infrastructure in terms of number of middlemen, types of outlets, and channel functions (Keegan, 1995). The necessity for distribution adaptation was mirrored in the results of the meta-analysis, where a strong positive linkage with export performance was found, irrespective of the fieldwork characteristics of the studies reviewed. In examining performance measures individually, however, positive results were observed only for export intensity and export profit level.

Promotion - Six promotion-related variables, i.e., advertising, sales promotion, personal selling, trade fairs, personal visits, and promotion adaptation, were examined for their effects on export performance. Advertising was the most widely researched, based on the hypothesis that with sound advertising procedures the firm can inform, remind, and/or persuade foreign customers about its products and, therefore, generate more sales. Advertising's positive influence was particularly evident on export sales intensity, "other performance," and composite performance measures. Similar findings were observed for sales promotion, underscoring the role of coupons, samples, premiums, and other promotional tools, particularly in countries characterized by low incomes, keen competition, and/or advertising restrictions (S. Graham, 1999).

Many researchers have underlined the importance of personal visits to export markets as a valuable tool for (a) gaining hands-on experience in the opportunities and problems arising in specific export markets, (b) boosting communication, personalizing relationships, and cultivating a team spirit with customers abroad, and

(c) providing timely response and immediate support to the export venture's needs (Tookey; Cunningham; BETRO and Kaynak).

Finally, an issue of special concern for export managers is whether to pursue a standardized promotion strategy across all countries, or adapt it to the specific requirements of each foreign market. Proponents of the standardization approach make several justifications for this, such as similarities in buyers' consumption patterns and the existence of international market segments. In contrast, those favoring the localization strategy cite differences in government restrictions, competitive practices, communication infrastructure, and so forth, among nations (Keegan, 1995). Promotion adaptation has a strong positive association with overall export performance, irrespective of the time, place, and products focused on in the studies reviewed.

The implementation of a well-designed export marketing strategy can indeed determine export success because the overwhelming majority of the marketing strategy variables were significantly associated with overall export performance. Market segmentation, product quality, pricing strategy, dealer support, and advertising were found to influence positive performances in export markets.

All variables related to marketing strategy adaptation for export markets emerged as significant determinants of export success, especially when this was measured in terms of export proportion of sales. Moreover, variables incurring high costs for the exporting organization, such as personal visits, advertising, and sales promotion, exhibited stronger positive relationships with sales-focused measures of export performance as opposed to profit-oriented ones. Nonetheless, only a few marketing parameters, namely, product advantage, pricing strategy, and dealer support, significantly affected different measures of performance, underscoring their strategic importance in exporting.

2.2.2 Cateora & Graham Model

The Cateora & Graham Model is divided into three parts: the first deals with licenses and documentation, the second covers physical distribution, and the third involves tariff, taxes and non-tariff regulations.

Table 2.1 Exporting Process

Leaving the Exporting Country	Physical Distribution	Entering the Importing Country
Licenses: * General * Validated Documentation: Export declaration Commercial invoice Bill of lading Consular invoice Special certificates Other documents	* International shipping and logistics * Packing * Insurance	Tariffs, Taxes Non-tariff Barriers: * Standards * Inspection * Documentation * Quotas * Fees * Licenses * Special certificates * Exchange permits * Other barriers

(Source: Cateora & Graham, 2002)

Although this model appears complete, it does not address the issue of how to buy products, such as choosing the right company and identifying the right product.

2.2.3 S. James Model

The S. James Model focuses on how to conduct trade by analyzing the product and commercial contacts in the end market.

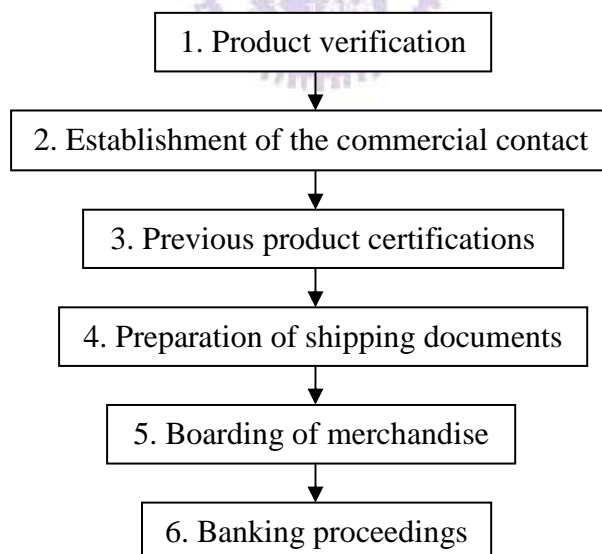


Figure 2.2 Export Model - S. James

(Source: James, n.d.)

The drawback of this model is that it does not adequately address physical distribution on an international scale.

2.3. Theoretical Framework related with the Models of Cateora and James:

2.3.1 Tariff

A Tariff is a tax designed to “protect” locally produced goods or services from competition by overseas goods or services. The tax is passed onto the consumer by the importer.

Tariffs may be of various kinds ad valorem tariff, specific tariff, etc. An ad-valorem tariff (Latin: by value) is a tax based on the value of real estate or personal property.

An ad-valorem tax is typically imposed at the time of a transaction (a sales tax or value-added tax (VAT)), but it may be imposed on an annual basis (real or personal property tax) or in connection with another significant event (inheritance tax or tariffs).

An ad valorem tariff is a fixed percentage of the value of the good that is being imported. Sometimes these are problematic as when the international price of a good falls, so does the tariff and domestic industries become more vulnerable to competition.

2.3.2 Non-tariff regulations

Non-tariff regulations influence import and export activities, the scope, and the structure of foreign trade, prices, and goods. The competitiveness provides harder conditions for the transition of foreign goods through customs compared to the conditions of the goods of national origin.

(a) Beneficiary's Certificate

The beneficiary's certificate, sometimes referred to as the certificate of assurance, is a certification issued by the beneficiary of the letter of credit (L/C) showing, unless wording is specified in the L/C, the summary of a consignment and declaring (i.e., assuring the consignee) that the shipment in question conforms to the specifications in the sales contract. The exporter can issue a beneficiary's certificate using a company letterhead.

(b) Weight Certificate

The weight certificate -weight list or weigher's certificate- is most often used in the export goods sold on weight basis. It is issued by the official weigher on the dock or the independent certified weigher.

In case of transport other than by sea and unless the letter of credit (L/C) specifically stipulates that the certification of weight must be by means of a separate document, a weight stamp or declaration of weight that is superimposed on the transport document by the carrier or his agent is acceptable.

(c) Health Certificate

Phytosanitary or Plant Health Certificate:

The prefix 'phyto' means plant. The phytosanitary certificate--plant health certificate--is issued by the government agricultural department or certified inspector for such agricultural products certifying that the goods are free from harmful pests and diseases.

(d) Sanitary Certificate

The sanitary certificate is issued by the government health department or certified inspector for processed food products, certifying that they are free from diseases or contamination.

(e) Fumigation Certificate

The fumigation certificate is issued by a specialized treatment plant or firm for agricultural and forestry products, certifying that the goods have been treated with smoke or fumes. The purpose of fumigation is to kill insects or disinfect. For example, wood may be fumigated with methyl bromide.

(f) Analysis Certificate

The analysis certificate is required by certain importing countries and/or importers for tariff or other purposes, usually issued as proof of product composition or contents. It is obtained from an independent testing laboratory. Importers may specify a testing laboratory in the letter of credit (L/C).

2.3.3 Incoterms

Incoterms (International Commercial Terms) are standard trade definitions most commonly used in international sales contracts. They are used to divide transaction costs and responsibilities between buyer and seller and reflect state-of-the-art transportation practices. They closely correspond to the United Nations Convention on Contracts for the International Sale of Goods.

Incoterms are devised and published by the International Chamber of Commerce. They either reduce or remove altogether uncertainties arising from differing interpretations of such terms in different countries (International Chamber of Commerce, 2008).

The Incoterms are divided into four groups: in the E-group the seller only makes goods available to buyer at seller's premises, in the F-group the seller is called upon to deliver goods to carrier appointed by buyer, in the C-group the seller has to contract for carriage but without assuming the risk of loss or of damage to the goods or additional costs due to events occurring after shipment and dispatch, and in the D-group the seller has to bear all costs and risks needed to bring goods to the place of destination.

(a) E-Group

EXW - Ex Works - Title and risk pass to buyer including payment of all transportation and insurance cost from the seller's door.

(b) F-Group

Title and risk pass to buyer including payment of all transportation and insurance cost once delivered: FCA, FAS, FOB

(c) C-Group

Title and risk pass to buyer when delivered to carrier: CFR, CIF, CPT, CIP

(d) D-Group

Title, risk, and responsibility for import clearance pass to buyer when delivered to named border point by seller. (See Appendix E).

2.3.4 Methods and Tools of Payment in Exporting and Importing

The process of exporting is incomplete without receipt of payment. Export income is considered earned only when payment has been received.

(a) Letter of Credit (L/C)

A Letter of Credit is a payment term generally used for international sales transactions. It is basically a mechanism that allows importers/buyers to offer secure terms of payment to exporters/sellers in which a bank (or more than one bank) gets involved. The technical term for Letter of credit is 'Documentary Credit'. At the very outset one must understand that Letters of credit deal in documents, not goods. The idea in an international trade transaction is to shift the risk from the actual buyer to a bank.

Thus a LC (as it is commonly referred to) is a payment undertaking given by a bank to the seller and is issued on behalf of the applicant i.e., the buyer. The buyer is the applicant and the seller is the beneficiary. The bank that issues the LC is referred to as the issuing bank, which is generally in the country of the buyer. The bank that advises the LC to the seller is the advising bank, which is generally in the country of the seller.

A letter of credit (L/C) can be irrevocable or revocable: when it cannot be or can be (respectively) amended or cancelled without the consent of the issuing bank, the confirming bank, and if any, the beneficiary. The payment is guaranteed by the bank if the credit terms and conditions are fully met by the beneficiary.

In exporting it could be used Check and Bank Draft, in open account and consignment trade arrangements; the telegraphic transfer -cable transfer or wire transfer- is the equivalent of a cash payment that can be credited directly to the seller's account.

2.3.5 Documentary Procedure for Importing

The documents most usual in foreign trade are as follow:

(a) Commercial invoice

The commercial invoice is a record or evidence of transaction between the exporter and the importer. It is similar to an ordinary sales invoice, except some entries specific to the export-import trade are added.

(b) An airway bill or bill of lading

i. Ocean (Marine) Bills of Lading- The bill of lading (in ocean transport), waybill or consignment note (in air, road, rail or sea transport), and receipt (in postal or courier delivery) are collectively known as the transport documents. The bill of lading (B/L) serves as a receipt for goods, an evidence of the contract of carriage, and a document of title to the goods. The carrier issues the B/L according to the information in a dock receipt, or in some cases, according to a completed working copy of the B/L supplied by the customs broker.

ii. Air Waybills- The air waybill (air consignment note or airway bill of lading) serves as a receipt for goods and an evidence of the contract of carriage, but it is not a document of title to the goods. Hence, the AWB is non-negotiable.

(c) Packing list

The packing list is an extension of the commercial invoice; as such it looks like a commercial invoice. The exporter or his/her agent -the customs broker or the freight forwarder- reserves the shipping space based on the gross weight or the measurement shown in the packing list. Customs uses the packing list as a check-list to verify the outgoing cargo (in exporting) and the incoming cargo (in importing). The importer uses the packing list to inventory the incoming consignment.

(d) Insurance letter

i. Export-Import Cargo (Marine) Insurance - The term cargo insurance, popularly known as marine insurance, applies to all modes of transportation. The need for export (or import) cargo insurance often differs from exporter to exporter (or importer to importer) and from consignment to consignment. Unless the insurance is mandatory in a trade term, the exporter or the importer may opt not to insure the goods at his/her own risks. Depending on the international commercial terms, either the seller (the exporter) or the buyer (the importer) is responsible for insuring the cargo.

ii. Insurance Premiums - The general guiding rate of the insurance premium is 1% of the amount insured (Export911, n.d.). The premium rates may vary, for example, from 0.5% to 2.5% or more depending on factors such as:

- **Type of goods:** The goods that are more susceptible to damage demand a higher premium. For example, glassware has a higher premium rate than the hammer.
- **The country and distance of destination:** Countries with a history of higher risks of loss or damage or at a war zone require a higher premium. The longer the distance of voyage, the greater the risks of loss or damage, thus a higher premium rate.
- **Value of the goods:** The higher the value of the goods, the higher the amount the insurer will compensate in the event of loss or damage, thus a higher premium rate.
- **Mode of transportation:** Generally, ocean freight has a higher premium than land freight, and land freight has a higher premium than air freight. Air freight, in general, has better cargo security than ocean and land freight and it is faster to reach the destination by air, thus there is less exposure to the risks of loss or damage.
- **Container or break-bulk shipment:** Containers provide better protection for the cargo. Therefore, container shipments have a lower premium than break-bulk shipments.

- **Type of packing:** The better the goods are protected, the lower the premium.

2.3.6 Freight Delivery

(a) Road Freight

The road freight and rail freight are commonly used in the cross-border deliveries, for example, the delivery of export goods between mainland European countries and between North American countries. About 50% to 80% of cross-border deliveries are completed using road freight. Generally, a transit distance within 1,000 kilometers using road freight is competitive compared to rail and air freight.

(b) Rail Freight

Rail freight is popular in multimodal transport and transshipment. It is widely used in land bridges.

Rail cars -rail wagons- are available in configurations to accommodate many kinds of cargo. Flat cars -flatbed rail cars- can be 40' to 89' long and can run at 120 km per hour. Some rail cars are specially designed to carry road trailers in a road-rail service or TOFC (trailer on flat car) service, which is often referred to as the piggyback (Export911, n.d.).

(c) Air Freight

Most air cargoes are carried on passenger airliner. About 80% to 90% of air cargoes are transported by IATA (International Air Transport Association) members. IATA standardizes the rules and regulations for air carriers throughout the world. Air freight is often used for high value, low volume cargo. It is generally considered expensive, although the higher transport charges associated with air freight compared to those for land and ocean freight offer various benefits which may compensate for the increased cost. Airlines or air cargo companies or their agents issue an air waybill (AWB), which is often a straight waybill, that is, the buyer is named the consignee on the waybill and he/she can claim the consignment from the carrier by simply showing proof of identity.

(d) Freight Containers and Maritime Transport

Maritime transport has a special place of its own in international trade. This is the most onerous means of transport and the delays are longer.

2.3.7 Packaging

Once considered to be a mere accessory, today's packaging plays an important part in the transport process, to the extent that it adds value to products. Packaging is designed to protect the merchandise while being transported, handled, and stored. Packaging must be sufficiently strong, as the further the distance, the more risk of damage. However, the packaging sector is faced with certain constraints pertaining to the protection of the environment.



Chapter 3 Research Methodology

The first part of the chapter begins with a general description of our view on science and our scientific approach. Next, we will describe whether our approach is qualitative or quantitative and how we have collected the empirical data. Further, we explain the methodological approach regarding the relation between the empirical data and the frame of reference; and finally we will present the new export model, which we used in the study research.

3.1 Views on Science

Science does not necessarily have to equal knowledge but there are some criteria that have to be fulfilled when it comes to determining what science is and is not. According to Filstead (1971) the collecting of data is essential to scientific research. The collecting of data has to be made in a scientific manner, with the aim to develop, verify, or falsify theories. In other words, in order to conduct a scientific investigation, one has to base its analyses, interpretations, and conclusions on empirical data and further, one has to be able to show in an explicit manner how the results have been obtained.

In the business field, the Marketing Research, the function which links the consumer, customer, and public to the marketer through information—information used to identify and define marketing opportunities and problems, generate, refine, and evaluate marketing actions, monitor marketing performance and improve understanding of marketing as a process, and entails usage of scientific research method to the study development. The scientific research method is a systematic approach towards analyzing a research issue.

The following figure shows the attributes of a scientific research methods and processes.

This flow chart entails the following characteristics (Filstead W.J., 1971): first, scientific scrutiny of some aspect of the study field; second, it creates a hypothesis that is derived from the observation of a consistent particular phenomena; then the usage of hypothesis while forecasting and explaining behavior of the phenomena; next testing these forecasted results in light of observations and experiences; then make amendment in hypothesis according to results; and finally, repeat steps 3 and 4 until you get few inconsistencies between theory and experiment.

The following figure reflects elements of a scientific research:

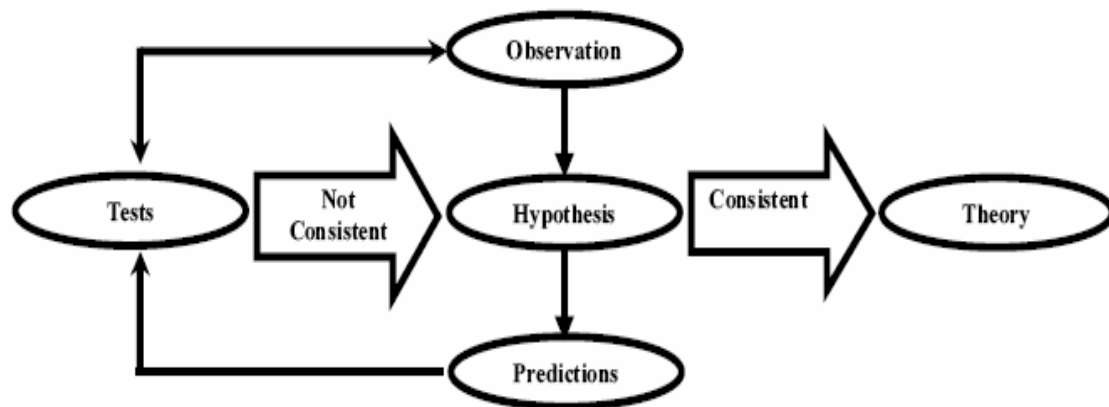


Figure 3.1 Scientific Method Flow Chart

(Source: Filstead W.J., 1971)

The Filstead method is a set of techniques including the ways of gathering, recording, verifying, and analyzing data in a social or natural setting on individual behaviors. Filstead distinguishes methodology from method as a scientific technique that helps in solving theoretical problems in the way of organizing, classifying, and interpreting particular data. After a concise view of theoretical aspects of methods and methodology, we would like to express the study as a scientific research, in which we would demonstrate an explicit presentation of both primary and secondary data.

3.2 Research Strategy

The research strategy used consists of three main steps:

3.2.1 Step 1. The Preliminary Planning Stage

The purpose of this research as mentioned earlier is to demonstrate the viability of business of Taiwanese sliding table saw in the Peruvian market.

The preliminary planning stage consisted in planning system and information system; in this stage we will set the research purpose: problem statement, the research objective, and the process of setting the research hypothesis.

3.2.2 Step 2. Research Design

The research approach is exploratory research complemented with a survey questionnaire. Exploratory research is used when one is seeking insights into the general nature of a problem, the possible decision alternatives, and relevant variables that need to be considered (Aaker Kumar, 2007). The focus on the research questions is justifiable rationale for conducting an exploratory research, which is to focus on the trends' market about woodworking machines. This research is designed to provide a preliminary investigation of the situation using secondary data sources, to provide evidence to support or refute the hypotheses.

Survey research is the most common form of cross-sectional design in which data are collected predominantly by questionnaire or by structured interview. The data from a survey are basically intended to be informative about the characteristics of a population during the observation period. Surveys provide the researcher with an image of what many people think or report doing. It is noteworthy that survey techniques are often used in descriptive or explanatory research. The use of survey methods offers many advantages. First, a survey study is replicable, testable, and allows researchers opportunities to extend the scope of the initial models. Second, the study allows researchers to test the validity of the data for different sets of sample (comparability).

The survey questionnaire (see Appendix A) was conducted in Spanish, which is the official language of Peru, and present different types of questions such as agree-disagree with scale from 1-5: from 1 = totally disagree to 5 = totally agree; and yes/no questions and questions about attitudes and opinions.

3.2.3 Step 3. Implementation

This stage consists of data collection, data analysis, and finally, based on the analysis. We will get the conclusions and recommendations for the study.

By using a survey, data is collected through the questionnaires, which are completed by respondents.

Issues addressed during the survey include the following:

- (1) Identify the preferences of buyers referred to woodworking machines.
- (2) Elicit preference information concerning the attributes of machinery from the well-informed respondent and determine the relative importance of attributes.

Which contribute to achieve the main aim of the present research: Determine the viability of exporting Taiwanese sliding table saw into Peruvian market.

The findings will provide all the necessary information to enable a decision to be made. The final measure of the value of a research project is whether or not the findings are successfully implemented. All results will be presented in the following chapters.

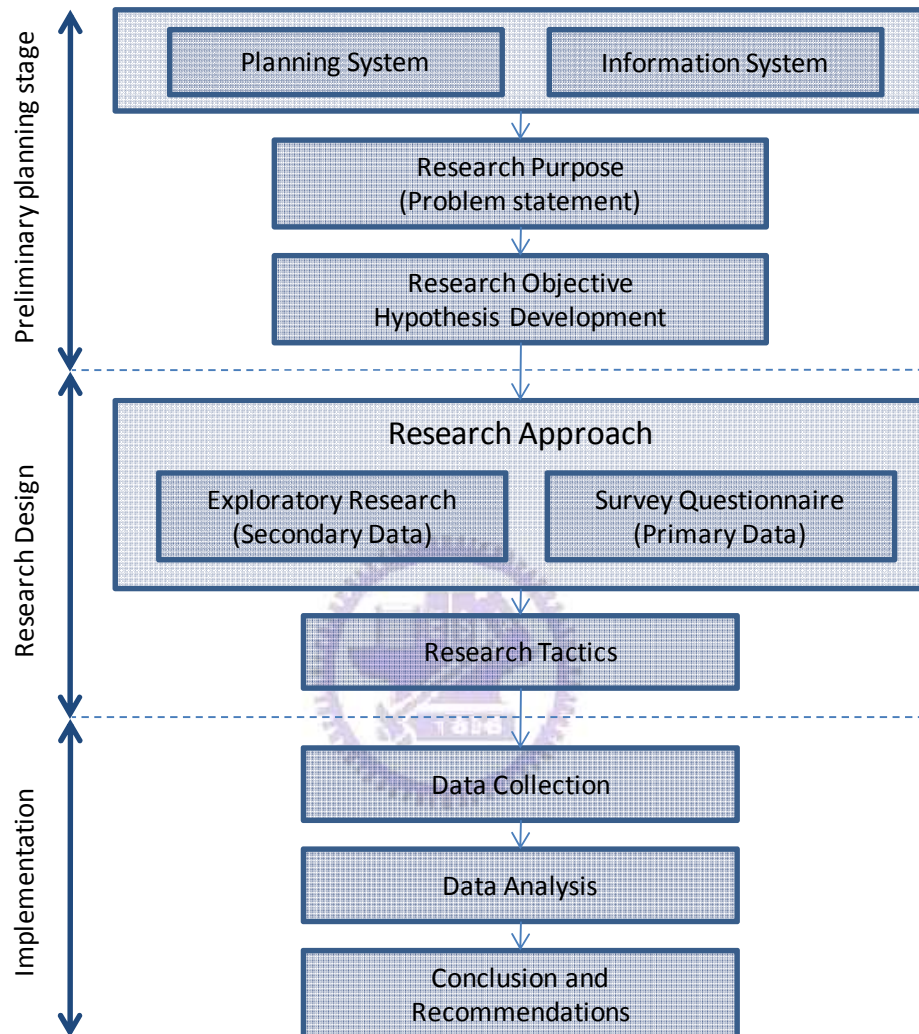


Figure 3.2 Research Design and Implementation

(Source: Aaker Kumar, 2007)

3.3 Source of Data Information

Sources of data are generally categorized as primary and secondary data. In this study, we have used data sources that are both primary and secondary.

According to Christensen et al. (2001) primary data sources are distinguished by not existing until they are collected by the researcher himself. Our primary data consists of the survey conducted with woodworking companies in Peru.

Our secondary sources, those not produced for the same purpose as that of this study, consist of printed sources as well as Internet sources used both prior to the designing of the study and is related with the area of interest for our research.

We will present in detail the sources for secondary data and primary data, respectively.

3.3.1 The Secondary Data

The secondary data came from government sources, trading institutions, statistics from previous studies, catalogues, and web page; a list of sliding table saw companies in the Taiwan Trade Directory, and information in ADEX, PROMPEX, MINCETUR, and SUNAT. Web pages with general information on Peru, and on tariffs, non-tariff regulations, and import documents were consulted, as was bibliographical material about logistic and export terms in general.

There are many variables within secondary data in international trade, including tariffs, taxes, non-tariff barriers; sliding table saw companies in Taiwan and Peru, delivery destinations, transport, labeling requirements, etc.

Internal secondary data (data originating from within the sliding table saw companies in Taiwan and Peru) and external data (published data originating outside the firm). After the internal secondary data have been examined, additional information can be obtained from published external secondary data.

The main sources of external data are:

- a) Internet. It can quickly and easily provide links to many sources of information.
- b) Government. It is by far the largest source of marketing data.
- c) Trade, business, and professional associations also have general data on the various activities and sales of their constituency.
- d) The media and trade journals also provide a wide variety of marketing and sales data on the areas they cover.
- e) Universities and foundations undertake a variety of research projects. In addition to special studies supported by government grants, universities publish general research findings of interest to the business community through their research bureaus and institutes.
- f) Corporate annual reports and commercial data services.

Information obtained from any of these sources has been examined carefully to make sure that it fits the particular needs for the research.

3.3.2 The Primary Data

The primary data was collected through survey questionnaires, with focus on woodworking industry and manufacturing companies in Peru (sample for the survey).

In second place the primary data was from machine quotations (cost data) from sliding table saw companies in Taiwan and Peru.

The research population for the survey consist of well informed respondents from woodworking companies in the Villa El Salvador Industrial Park in Lima, Peru, which has been strategically selected as the precise geographical area for data collection because it encompasses a considerable number of wood-manufacturing firms, which are suitable for the purposes of the present research, and will provide all the information necessary for answering the research questions.

As a representative sample for the survey we have a comprehensive list of members of the research population from which a (random) sample is to be drawn. The firms selected for analysis in this survey are all from the woodworking industry. The common factor between them is that they are all focused on improving their processes. The questionnaire was conducted both in person and by e-mail, and was aimed at well-informed respondents such as managers or logistic directors who know more about the area of interest for the research.

3.4 Validity of Data Information

In this section we aim to clarify the most important risks with our choice of method and mode of conduct to see what they may have implied for the results of the study.

The validity of a study is a term used to define how well it manages to capture and measure what it is meant to measure.

The literature makes a distinction between internal and external validity, where the first refers to the generalizability and transferability of the study, and the latter to the consideration given the design of the study and the way measurements are made.

In our case the validity of the study might have been compromised by the way of conducting the survey; the respondents could be afraid of the fact that the information gathered would possibly be available to their counterparties and competitors in business.

This may have made them reluctant to answer certain questions openly, or may even have supposed a reason for giving misleading answers; to minimize or avoid this situation the respondents were all informed of the purpose of the study in advance.

There is also a risk that the respondents were of different positions within their companies and may have had access to different kind of information. So they had different views on the problem.

They may also not always have had enough information to answer certain questions but in feeling uncomfortable to say so they might have invented an answer or avoided the question in order to conceal their lack of knowledge in the area. We have attempted to minimize this risk by sending the questions in advance, and select well-informed respondents such as managers or logistic directors, who know more about the area of interest for the research.

Other factors of the survey include:

- a) Questionnaire and question design in multicultural/multilingual surveys mean the survey will be conducted in Spanish because Spanish is the official language in Peru (sample selected Villa el Salvador companies, Lima- Peru).

Adaptation of survey instruments: methodological research has revealed how even small changes to the wording of questions or format may affect the way respondents answer; thus, received wisdom cautions against changing questions that have worked well. As a result, survey questions are used again and again in different surveys.

Construct validity, often used interexchangeably with external validity, refers to the validity of the theoretical ground supporting the study.

Where different theories concerning the defined problem are used, the relation between them must be specified and empirically examined.

As the theoretical background of this study was founded on several different theories and prior studies in accordance with our pre-understanding, it does not consist of one holistic theory or model that directly focuses on the problem area of the study. We have chosen to take into consideration theories that in combination cover our problem area but are aware of the fact that they were not created for the purpose of constituting parts of this by our defined broader perspective.

3.5 New Export Model

Based on the analysis of the three export models, we suggest a new Export Model which will be used for the development of the study. The suggested model is a representation based on the three export models analyzed: Export Performance Model (Figure 2.1), Cateora & Graham Model (Table 2.1), and the S. James Model (Figure 2.2). This model is more complete and covers important aspects that we need to consider when deciding whether or not to export a product to a foreign market.

This model considers the following aspects (See Figure 3.3):

- Market analysis: consists of marketing evaluation, identify the product, and choose the company.
- Planning Stage: Selecting the incoterms, tariff and non-tariff regulations, and payment procedures.
- Distribution: consists of insurance, packing and shipping; as well as import documents verification.
- Pricing: consists of the elaboration of a matrix for the cost evaluation and determining the final price of the product.

In the following chapter we will present the data processing and analysis that is based on the new export model developed.

The first part has interpreted the empirical data gathered from the survey to respondents of Woodworking Companies in Peru, along with the interpretation of results and some graphical comparisons.

From the survey will find the existing brands in Peruvian Market for sliding table saw machines and we will determine which is the preferred brand in the Peruvian market; in the second part will analyze the most representative brand for sliding table saw.

Next we will obtain the sliding table saw preferred brand's price to compare further with the Taiwanese sliding table saw price in the Peruvian market, and do the analysis, respectively.

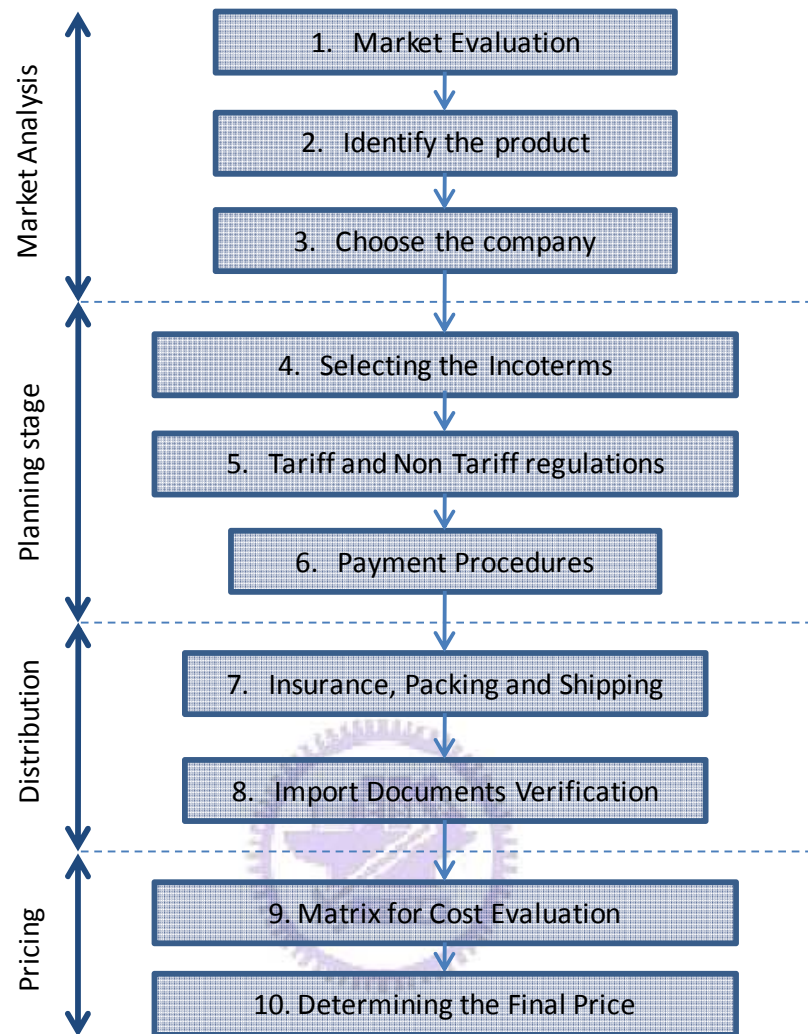


Figure 3.3 New Export Model

(Source: Own elaboration)

The following step consists of develop the planning stage of the model suggested. For that we will analyze several sliding table saw companies in Taiwan and make the comparison to get the option for the Taiwanese sliding table saw.

After that we will evaluate the insurance, packing and shipping, and the import document verification, which is inside the distribution aspect of the New Export Model.

The final step consists of pricing, elaboration of a matrix for cost evaluation and determining the final price for the Taiwanese sliding table in the Peruvian market, and will serve as a basis for preparing an exportation plan to assess the viability of launching a Taiwanese-specific product into the Peruvian market.

Chapter 4 Peru General Information – The Demand

Export to Peru means to know about the trade barriers, import documents, taxes, etc. This chapter covers it; and describes Villa El Salvador Industrial Park in Peru and the main production activities, as woodworking, metalworking, textile production, etc.

4.1 Peru – General Information

Peru, officially the Republic of Peru (Spanish: República del Perú), is located on South America's central Pacific coast. As the world's twentieth-largest nation, it borders Bolivia, Brazil, and Chile to the east and south, and Colombia and Ecuador to the north. Lima, the capital, is located on the central coast.

Area: 1,285,220 sq km, Peru is the third-largest country in South America.

Terrain: Western arid coastal plains, central rugged Andean mountains, and eastern lowlands with tropical forests that are part of the Amazon basin.

Population: 29,180,899 (July 2008). Approximately 30% of the population lives in the Lima/Callao metropolitan area.

Currency: Nuevo Sol

Religions: Roman Catholic (81%), Adventist 1.4%, other (16.6%).

Languages: Spanish 81% (Official), Quechua 16% (Official), Aymara and other 3%.

Table 4.1 Peru Main Indicators

GDP (Purchasing Power Parity)	\$219 billion (2007 est.)
GDP (official exchange rate)	\$109.1 billion (2007 est.)
GDP-real growth rate	9% (2007 est.)
GDP-per capita (PPP)	\$7,800 (2007 est.)
GDP – composition by sector:	Agriculture: 8.4% Industry: 25% Services: 66% (2007 est.)
Labor force	9.839 million (2007 est.)
Labor force- by occupation:	Agriculture: 9% Industry: 18% Services: 73% (2001)
Unemployment rate:	6.9% in metropolitan Lima; widespread underemployment (2007 est.)
Inflation rate (consumer prices)	1.8% (2007 est.)
Investment (gross fixed):	23% of GDP (2007 est.)
Exports:	\$27.96 billion f.o.b. (2007 est.)
Imports:	\$19.6 billion f.o.b. (2007 est.)

(Source: Source: the World Factbook, Central Intelligence Agency USA, 2008)

Table 4.2 Evolution GDP rate

Year	Real GDP	Taxes to Imported Products (rate %)	GDP (Index 1994=100)
2000	3,0	3,0	122,8
2001	0,2	-0,5	123,1
2002	5,0	4,0	129,2
2003	4,0	5,2	134,5
2004	5,1	6,4	141,3
2005	6,7	8,5	150,9
2006	7,6	6,3	162,3
2007	9,0	8,3	176,8

(Source: BCRP-Peruvian Reserve Central Bank, 2008)

Table 4.3 Imports Evolution CIF

(US\$ Million)

Year	Total Import. (nili. US\$)	Consumption Goods Import (mill. US\$)	Intermediate Goods Import (mill. US\$)	Capital Goods Import. (mill. US\$)	Other Goods Import. (mill. US\$)
2000	7357,6	1494,2	3610,6	2114,0	138,8
2001	7204,5	1634,9	3551,2	1921,3	97,1
2002	7392,8	1754,1	3740,4	1842,3	56,0
2003	8204,8	1841,3	4339,9	1974,2	49,4
2004	9804,8	1995,1	5363,6	2361,0	85,0
2005	12081,6	2307,8	6599,9	3063,5	110,4
2006	14866,0	2611,5	7986,7	4145,5	122,3
2007	19599,2	3191,2	10416,5	5885,5	106,0

(Source: BCRP-Peruvian Reserve Central Bank, 2008)

4.2 Trade Barriers & Custom Regulation

The Peruvian custom law has been reformed and modernized in the last 5 years with the support of the Inter-American Development Bank and the United Nation Development Program. Despite the promulgation of the “custom law” that facilitates the import process, some exporters continue to find problems with the Peruvian customs.

The pre-shipment inspection system was adopted in the 1990's to combat chronic under-invoicing and required all imports above U.S. \$5,000 FOB to be inspected before shipment. Three private international companies, Bureau Veritas, Cotecna, and SGS (PSI companies) were authorized to conduct pre-shipment inspections for Peru. (ADEX, 2007).

A license of imports is not required, or any other registration process. Every person can import products and can even clear the merchandise without the needs of customs agents. One of the most important documents required for imports and exports, is the “Customs Unique Declaration” (DUA).

The National Institute for the Defense of Competition and the Protection of Intellectual Property (INDECOPI) is the Peruvian standards development organization. A food sanitary registry is required for food processed products (issued by the Food and Environmental Health Bureau DIGESA) or a Sanitary Certificate for animal, plants or their byproducts (issued by the Ministry of Agriculture’s National Service SENASA).

4.2.1 Custom Regulations

a) Import documents:

For imports, Peruvian Customs (SUNAT) requires:

- Customs Unique Declaration (Declaración Única de Aduanas - DUA)
 - Commercial invoice
 - Letters of correction
 - Sworn declaration by the importer
 - An airway bill or bill of lading,
 - A packing list
 - Insurance letter.
- *The Customs Unique Declaration* (Declaración Única de Aduanas - DUA) is a format specially designed by Customs to brief the information that requires for the entrance or exit of merchandise in the country. It is conformed by formats A: Características generales de la mercancía (general merchandise characteristic), B: Declaración del valor de las mercancías (Declaration of merchandise value), C: Liquidación de derechos a pagar (Liquidation of rights to pay) and the Andean Declaration of Value (Declaración Andina de Valor) (ADEX, 2007).

The following documents, in Spanish, must be presented with the import declaration:

- *Commercial invoices*: Commercial invoices are obligatory for all imports, whatever their value.

The invoice must show: the name of the company, of the consignor and the importer, and their legal domiciles; order number of the invoice and the place and date of issue; number and date of the irrevocable letter of credit (if applicable); the mark, model and serial number of each article, and the unit value of the goods. It must also show the

origin of the goods and FOB and cost and freight values. It should detail separately all expenses including freight and discounts, if any, and must detail the reasons for these. It must also have a declaration of correctness and show the tariff classification.

- *Letters of correction:* These must be addressed to the Customs Administrator by the importer, up to the time of presenting the import declaration. The application should state the name of the transporting vehicle and the date of arrival, number of the bill of lading, number, quantity, class, weight (gross), and contents of the cargo(es).
- *Sworn declaration by the importer:* With the presentation of this document, the importer becomes liable for the data concerning quality, species, class, and prices of the merchandise specified in the commercial invoice.

The Peruvian Customs have been tasked with ensuring correct Customs collections. Heavy penalties are levied for under-valuations.

- *Bills of lading or airway bills:* The value of the shipment and the weights and measurements (preferably in metric units) of each case or parcel of goods, should be shown on bills of lading etc; if this information is not given, a separate signed declaration, giving the required details, must be handed to the authorities at the port of destination.
- *Certificates of origin:* Certificates of origin are not mandatory, but should be provided if requested by the importer.
- *Clean report of findings of PSI:* This certificate is issued by the company responsible for making the inspection of the goods and is compulsory for Customs clearance.

NOTE: The Peruvian Customs authorities demand that at least three copies of documents should be provided.

Additional documents must be required according to the type of product. It can be documents such as certificate of origin, quality, analysis, salubrity, weight, etc. They can be issued for a diverse range of private and public entities.

b) Health/Sanitary Certificate

For food and beverages the importer needs to submit a sworn application to DIGESA (available at www.digesa.sld.pe) accompanied with a Certificate of Free Trade and Use issued by the health authority of the country of origin, the future label, and the

registration receipt. If the certificate is not available, the importer should present a document issued by the Peruvian consulate in the country of origin.

Dirección General de Salud ambiental (DIGESA)

Website: www.digesa.sld.pe

Servicio Nacional de Sanidad Agraria (SENASA)

Website: www.senasa.gob.pe

4.2.2 Value Added Taxes

The NANDINA (Common Tariff Nomenclature of the Andean Community Member Countries) classification is used to designate, classify, and code goods uniformly. Decision 570 on the Updating of the Common Customs Classification System of the Cartagena Agreement Member Countries (NANDINA) (12.12.03) is based on the classification of the Harmonized System that will become effective on January 1, 2005, replacing Decision 507, which has been in force since January 1, 2002. These Decisions make it easier for the Andean countries to coordinate positions in negotiating Tariff Reduction Programs and Specific Rules of Origin.

The tariff structure system in Peru is as follow, according to SUNAT (2007):

Peru imposes no duties on 1.6% of the items in its tariff schedule (112 codes covering some agricultural intermediate goods, parts, capital goods not produced locally, and liquefied petroleum gas);

- 4% duties on 40% of the items (2799 codes largely covering not-locally produced capital goods, intermediate goods, new machinery, equipment and components);
- 12% duties on 42.3% of the items (2960 codes mainly consumer goods, machinery, equipment, some locally produced capital and intermediate goods);
- 17% duties on 0.7% of the items (48 codes including some pork meats, some corn, wheat, barley, and malt products, preparations for child feed, beer, and liquor);
- 20% duties on 10.8% of importable items (759 codes covering mostly textiles, footwear, household electrical products, and some other agricultural products);
- 25% duties on 4.5% of the items (316 codes mainly agricultural products).

Most imports (97% of codes) are also subject to a 19% value added tax, as are domestically produced goods. In addition, an excise tax (“Impuesto Selectivo al

Consumo”) is applied to certain products such as automobiles. There are no quantitative import restrictions.

- **IVA**

The value added tax (“El Impuesto General a las Ventas: IGV”) levies the added value of each transaction of the economic cycle. This tax applies to the domestic sale of goods and chattels, render or use of services in the country, construction agreements, the first sale of real estate made by the constructor thereof, and import of goods. The applicable rate is 19%, which includes the municipal promotion tax (2%) (ADEX, 2007).

- **Excise taxes**

Some luxury items have higher tariffs and some specific goods such as cigarettes, beer, wine, liquors and automobiles pay an excise tax according to the lists and rates included in Appendixes III and IV of Legislative Decree No. 821 (passed on April 23, 1996). In July 2000 the excise tax for new automobiles was reduced to 10%, while that applied to used ones was left at 30% (ADEX, 2007). Imports from countries with which Peru has bilateral or regional agreements are covered by different, preferential tariff schedules.

There are some exceptions: enterprises established in the industrial free zones and special treatment zones; and companies that have their operations in the jungle regions of Loreto, Ucayali, Madre de Dios, Amazonas, and San Martin, in accordance with the Peruvian-Colombian treaty.

4.2.3 Labeling Requirements

Law 28405 of November 30, 2004 requires labeling for value-added products other than foods, which could be included in the future (ADEX, 2007). In case imported products do not comply with these requirements for customs clearance, importers are allowed to properly label them in private warehouses.

According to the new regulation to facilitate trade regarding labeling and marking referred to as Law 28405 (Ley del Rotulado), this new law establishes that products exported to Peru should have a label with the following information: name of product, country of origin, address of exporter or importer or distributor, expiration date, conservation method, weight in metric system, and risks if any to use it. International quality marks should be visible and easy to identify.

4.2.4 Fines and Penalties

Heavy fines are imposed on the importer for faulty documentation, e.g., when shipments arrive without the prescribed documents, when the actual weight of the goods exceed the declared weight by more than 5%, when the value or quality of the goods is understated, or when any part of the shipment is undeclared.

The correct preparation and presentation of documentation is, therefore, a matter of great importance.

It is recommended that exporters should familiarize themselves with the Peruvian tariff classifications which refer to their products, whenever possible, requesting their Peruvian agents or importers to forward instructions as to the correct form in which the goods should be declared, thus avoiding fines which will be imposed for wrong declarations.

The Peruvian customs authorities will only consider corrections to documentation up to the time of presenting the import policy; thereafter, fines are imposed.

4.2.5 Intellectual Property

As a member of the Andean Community, Peru is enforced by decision 343, which establishes laws regarding patents and trademarks. These are simple and not complicated. Patents and trademarks are registered in INDECOPI. (Agency for the Defense of the Intellectual Property Rights).

INDECOPI (the National Institute for the defense of Competition and the Protection of Intellectual Property is the Peruvian standards development organization, among its other responsibilities. Its Commission of Technical Regulations (CTR), created in 1992, looks after standard matters. The commission has three functions:

- Approve technical standards and metrology norms.
- Qualify the public or private institutions that will provide conformity assessments.
- Defend Free Trade under World Trade Organization-TBT commitments.

The technical Peruvian standards are elaborated with the support of representatives of all the sectors: production, consumption, and technical grouped by Commissions of Technical Regulations.

4.3 Foreign – Trade Zones & Commercial Agreements

4.3.1 Foreign – Trade Zones

Current Peruvian law governs the two types of free trade zones: export, transformation, industry, trade and services zones (CETICOS), and a free trade zone (ZOFRATAACNA) in Tacna. The rules and tax benefits applying to these zones are the same for foreign and national investors.

Companies established at the CETICOS and ZOFRATAACNA are exempted from all taxes, dues, and contributions from the central government and municipalities, particularly income, sales (IGV), Municipal Promotion (IPM), and excise (ISC) taxes.

4.3.2 Commercial Agreements

The most important commercial agreements are:

- a) Multilateral Agreements: OMC, GATT
- b) Regional Scope Agreements
 - LAIA-Latin American Integration (ALADI)
- c) Customs Unions
 - Andean Community
- d) Economic Complementarity Agreement, Trade and Preferential Agreement and Partial Scope
 - Peru-Chile Economic Complementarity Agreement No 38
 - Andean Community – MERCOSUR, Partial Scope Agreement (AAP. A14TM No 11).
- e) General Agreement of Association and cooperation
 - Andean Community – European Union
 - Political and Cooperation Agreement

4.4 Villa El Salvador Industrial Park

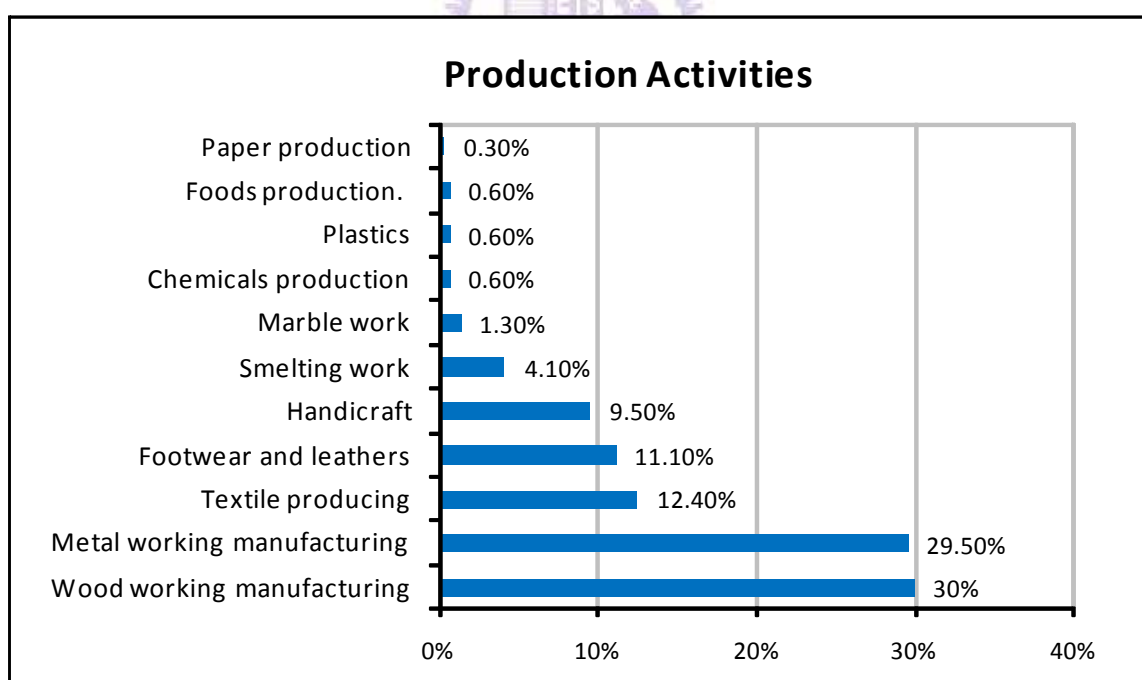
This Industrial Park is located in Villa El Salvador district, south of Lima city. Villa El Salvador Industrial Park is Peru's leading industrial park for small and medium enterprises, with activities such as woodworking, metalworking, smelting, and the production of footwear, leathers and textiles, and food production.

Table 4.4 Production Activities in Villa El Salvador Industrial Park

Production Activities	Amount of companies
Woodworking	278
Metalworking	203
Textile production	124
Footwear and leathers	75
Handicraft	70
Smelting work	97
Foods production	54
Other	144

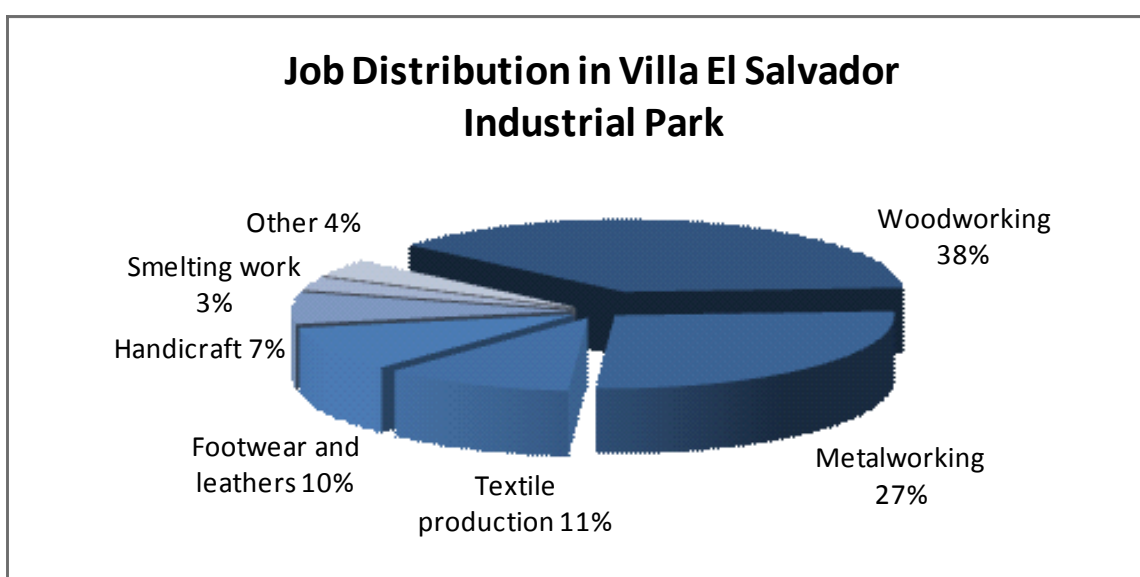
(Source: Municipality of Villa El Salvador, 2005)

Figure 4.1 Production Activities in Villa El Salvador Industrial Park



(Source: Municipality of Villa El Salvador, 2005)

Figure 4.2 Job Distribution in Villa El Salvador Industrial Park



(Source: Local Government-Municipality of Villa El Salvador, 2005)

The woodworking sector has achieved the highest impact related to the industrial activities in Villa El Salvador Industrial Park (38%).

4.5 State Trading organization / Trade Promotion Organizations

With privatization there are no state trading organizations, although the State still has assets in some sectors.

Prompex (Peruvian Export Promotion Agency)

República de Panamá 3647, San Isidro, Lima 27

Tel. +51 1 221 0880 / 221 1222, Email: sae@prompex.gob.pe , www.prompex.gob.pe

Trade Promotion Organizations

Asociacion de Exportadores - ADEX (Peruvian Exporters Association)

Av. Javier Prado Este 2875, San Borja, Lima 41,

Tel. +51 1 618 3333, Fax +51 1 618 3355, Email: mas@adexperu.org.pe,

www.adexperu.gob.pe

COMEX Peru

Bartolome Herrera 254, Miraflores, Lima 18

Tel. +51 1 422 5784, Fax +51 1 422 5942, Email: comexperu@comexperu.org.pe,

www.comexperu.gob.pe

Chapter 5 Taiwan General Information – The Supplier & Peru-Taiwan Trade Relationship

The first part of this chapter presents general information about Taiwan and the manufacturing in Taichung Industrial Park; the second part provides brief overview of Peru - Taiwan trade relationship and the evolution of exporting woodworking machines from Taiwan.

5.1 Taiwan General Information

Taiwan is an island located in the East China Sea, some 100 miles from the Chinese mainland, and is the 17th largest economy in the world. Taiwan is also known as Formosa. Taiwan's economy is highly dependent on international trade and export.

Official Name: Republic of China - Taiwan (ROC)

Capital: Taipei

Area: 36,188 Sq. Km.

Population: 22,920,946 (July 2008 est.)

Currency: New Taiwan dollar (TWD)

Official Languages: Mandarin Chinese (official), Taiwanese (Min), Hakka dialects.

Table 5.1 Taiwan Main Indicators

GDP (Purchasing Power Parity)	\$695.4 billion (2007 est.)
GDP (official exchange rate)	\$383.3 billion (2007 est.)
GDP-real growth rate	5.7% (2007 est.)
GDP-per capita (PPP)	\$30,100 (2007 est.)
GDP – composition by sector:	Agriculture: 1.4% Industry: 27.5% Services: 71.1% (2007 est.)
Labor force	10.78 million (2007 est.)
Labor force- by occupation:	Agriculture: 5.3% Industry: 36.8% Services: 57.9% (2007 est.)
Unemployment rate:	3.9% (2007 est.)
Inflation rate (consumer prices)	1.8% (2007 est.)
Investment (gross fixed):	21.2% of GDP (2007 est.)
Exports:	\$246.7 billion f.o.b. (2007 est.)
Imports:	\$219.3 billion f.o.b. (2007 est.)

(Source: the World Factbook, Central Intelligence Agency USA, 2008)

5.2 Main Commercial Partners

The Taiwanese exportation according to Commercial Office of Peru in Taipei (2002) is as follows: United State (23.47%), Hong Kong (21.13%), Japan (11.20%), Singapore (3.68%), and Holland (3.33%) between the main commercial partners.

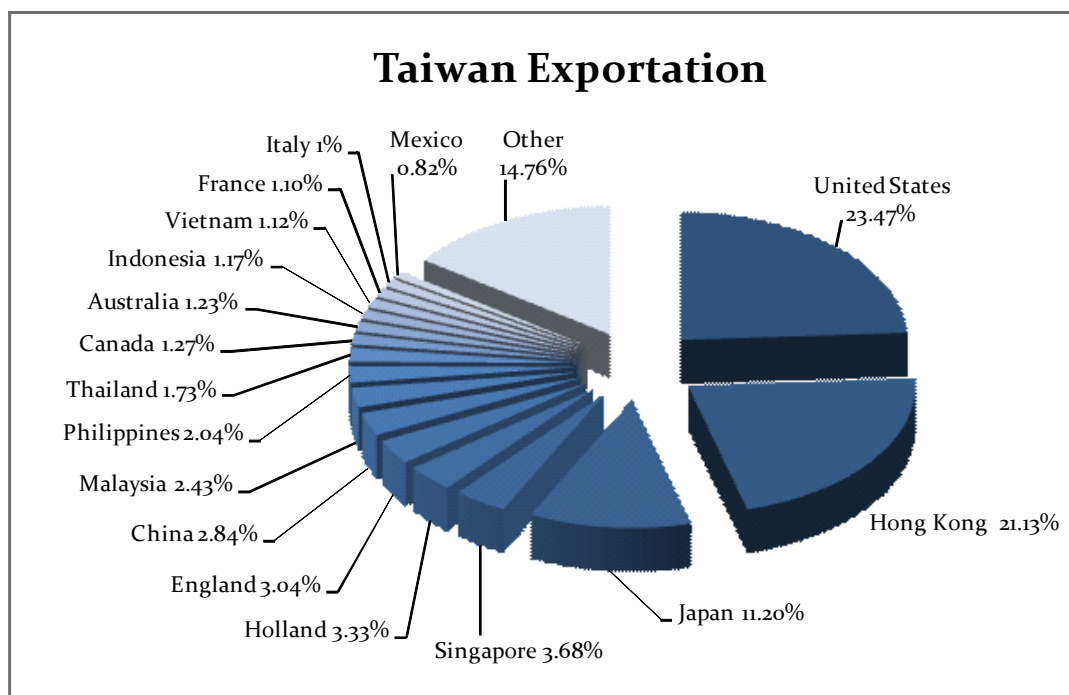


Figure 5.1 Taiwan Exportation

(Source: Commercial Office of Peru in Taipei, 2002)

Table 5.2 Exportation by Destination

Country	1999		2000	
	Amount	%	Amount	%
Asia	59,209.20	48.7	76,718.30	51.7
North America	32,652.80	26.9	36,703.80	24.7
Europe	20,320.50	16.7	23,711.70	16.0
Middle East	2,219.90	1.8	2,533.10	1.7
Oceania	2,196.70	1.8	2,296.60	1.5
Central America	1,681.20	1.4	2,198.50	1.5
South America	1,259.90	1.0	1,724.30	1.2
Africa	1,292.80	1.1	1,315.10	0.9
Other countries	758.00	0.6	1,174.50	0.8
Total	121,591	100.0	148,375.90	100.0

(Source: Commercial Office of Peru in Taipei, 2002)

According to Table 5.2: the classification by destination, the most representative are: Asia (51.7%), North America (24.7%), and Europe (16.0%).

5.3 Main Products Exported from Taiwan

According to the Commercial Office of Peru in Taipei (2002), the more important products of exportation from Taiwan are: electrical machines and electronic products (29.08%), machines and mechanical equipment (26.61%), textile production (10.25%), basic metals and plastics (9.11%), rubber and its manufactures (6.10%), transport (3.87%), furniture, toys and sport products (3.54%), and Optics and medical instruments (2.74%).

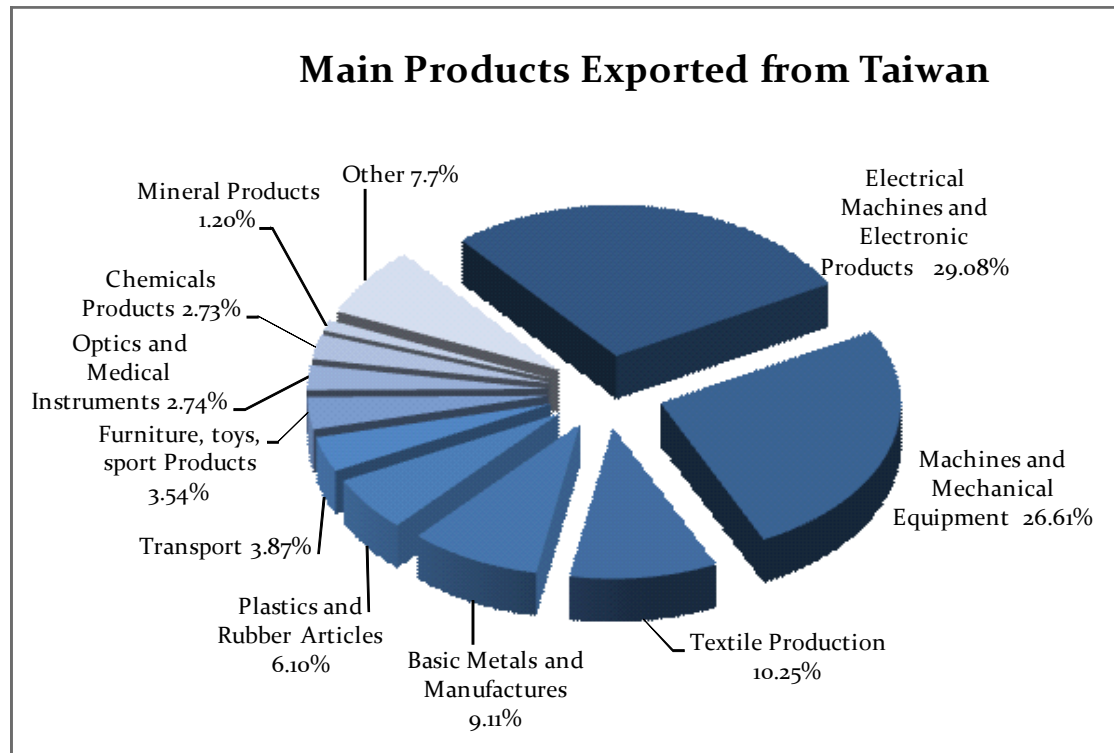


Figure 5.2 Main Products Exported from Taiwan

(Source: Commercial Office of Peru in Taipei, 2002)

5.4 Manufacturing and Taichung Industrial Park

Over the past three decades, Greater Taichung's economy has been most closely associated with the manufacturing sector, particularly for the shoe, sporting goods, machinery, and hardware industries. There are currently close to 30,000 mostly small and medium-sized enterprise manufacturers in the region, about 80 percent of which are located in Taichung city and county and Changhua country (Taichung Municipality, 2007).

In addition to the established Taichung Industrial Park, the largest city industrial park in Taiwan, about 70 percent of Taiwan's newly developed industrial zones are also located in Greater Taichung. These include the 437-hectare Central Taiwan Science-

Based Industrial Park, Changhua County's Changping Industrial Zone, and Yunlin County's Yunlin Technology Industrial Park and Offshore Industrial Zone. The Central Taiwan Science Park alone is expected to generate an annual production value of NT\$900 billion by 2011. Key manufacturing sectors include aerospace, bicycles, machinery, hardware/hand tools, footwear, textiles, sporting goods, handicrafts, rubber and plastic products, and furniture. The wood working machinery manufactured in Taiwan for global market has high quality standards and international certifications.

5.5 Peru-Taiwan Trade Relation

The table below shows the main macroeconomics indicators between Peru and Taiwan, as GDP, GDP per-capita, goods & service export and import, exchange rates for 2008.

Table 5.3 Comparative Table: Macroeconomic Indicators

Country	Population (million)	GDP (million US\$)	GDP per-capita (US\$)	Goods and services Export (% GDP)	Goods and services Import (% GDP)	Exchange rates (1US\$ /currency)
Taiwan	22.92	689 892	30 100	64.36	57.21	30.39
Peru	29.18	227 604	7 800	25,62	17,96	2.84

(Source: World Factbook CIA USA, 2008)

The Table 5.4 presents a comparative table about Peru-Taiwan trade and general information for trade of both countries with the world during 2001 to 2006.

Table 5.4 Comparative Table: Peru-Taiwan Trade

(Millions US\$)

		2001	2002	2003	2004	2005	2006 Jan-Ap
	Taiwan-World Trade						
(A)	Exports	122079	129850	143447	173153	...	...
(B)	Imports	102215	105657	118548	156685	...	...
	Peru-World Trade						
(C)	Exports	6956	7665	8995	12716	17167	6184
	(C) / (B)	6.80%	7.30%	7.60%	8.10%	...	...
(D)	Imports	6745	6944	7840	9349	11561	4324
	(D) / (A)	5.50%	5.30%	5.50%	5.40%	...	...
	Peru-Taiwan Trade						
(E)	Exports	86	110	147	242	297	107
	(E) / (C)	1.20%	1.40%	1.60%	1.90%	1.70%	1.70%
(F)	Imports	98	111	123	139	173	49
	(F) / (D)	1.40%	1.60%	1.60%	1.50%	1.50%	1.10%

(Source: Asian Development Bank, 2006)

Table 5.5 Export to Taiwan – Import from Taiwan

(Millions US\$ FOB)

	2004	2005	2005/2004	Jan-Apr 2005	Jan-Apr 2006	2006/2005
EXPORTS	242,5	297,1	22,5%	81,9	107,5	31,3%
Traditional	223,4	275,0	23,1%	75,1	96,8	29,0%
* Agriculture	0,2		...	...	0,1	...
Coffee	0,2		...	...	0,1	...
* Mining	174,0	222,2	27,7%	62,5	73,9	18,2%
Copper	166,9	215,5	29,1%	59,5	71,2	19,8%
Lead	5,7	1,9	-66,9%	0,8	0,1	-91,6%
Zinc	1,5	4,8	222,4%	2,3	2,6	12,2%
* Fishing	49,2	52,8	7,3%	12,6	22,9	82,4%
Fish oil	0,3	0,8	129,0%	0,2	0,0	-76,1%
Fish flour	48,9	52,0	6,5%	12,4	22,9	84,6%
Non-traditional	19,1	22,1	15,7%	6,8	10,6	56,8%
Farming	0,2	1,1	358,7%	0,1	2,0	2826,4%
Handicraft		0,0	...	0,0	...	...
Wood and papers	1,7	0,9	-45,3%	0,9	0,1	-84,4%
Metalworking	0,8	1,1	52,5%	0,3	0,0	-99,7%
Mining non-metallic	0,0	0,0	26,0%	0,0	0,1	1238,6%
Fishing	5,3	8,2	54,9%	1,9	1,5	-22,7%
Leathers	0,0	...	...	...	...	...
Chemical	0,9	0,7	-31,1	0,2	0,3	44,7%
Metallurgical	7,0	6,5	-8,3%	2,6	5,2	100,4%
Textile	3,1	3,6	16,1%	0,8	1,4	70,3%
Other (jewels)	0,0	0,0	-13,5%	0,0	0,0	-74,0%
IMPORTS	139,4	173,0	24,1%	45,8	49,5	8,0%
Consumer goods	27,7	25,1	-9,3%	7,9	5,4	-31,5%
Raw material and intermediate products	62,9	94,6	50,4%	21,5	26,3	21,9%
Capital goods and constructions material	48,9	53,2	8,9%	16,4	17,7	8,4%
Diverse	0,0	0,1	1570,8%	0,0	0,1	188,2%
Trade balance (X-M)	103,1	124,1	20,4%	36,1	58,0	60,8%
Trade interchange (X+M)	381,9	470,0	23,1%	127,7	156,9	22,9%

(Source: SUNAT, 2007)

The above table shows the Peru-Taiwan trade, exports to Taiwan and imports from Taiwan. Traditions products exported to Taiwan are coffee, copper, lead, fish, etc; and the non- traditional products exported are handicraft, wood, textile, etc.

Table 5.6 Main products exported to Peru

(Millions US\$ FOB)

Ranking	Description	2002	2003	2004	2005	Jan-Ap 2006
		CIF	CIF	CIF	CIF	CIF
1	Gasoil, Diesel 2				18914	
2	Magnetic tapes	2476	6622	15516	15432	2137
3	Polyethylene terephthalate without titanium oxide	3469	13954	3214	14630	4485
4	Others polyethylene terephthalate	1027	5450	11585	12253	2918
5	Polyester fibers	1808	2813	4698	4049	2094
6	Textile machines	2260	2225	3057	4042	1229
7	Polyester textured spinning	2693	2593	3479	3607	1749
8	Telecommunication instruments	3992	3297	4902	3198	214
9	Motorcycles tires	2029	2107	2644	2664	1038
10	Telephones	3394	2078	4601	2518	27
11	Adhesive lamina and tapes flat	975	1415	1794	2394	789
12	Denim	1347	1038	1611	2081	419
13	Adhesive lamina and tapes in roll	1520	1460	1496	1958	473
14	Weaves with polyester filament	1562	1862	2946	1926	757
15	Welded tubes, section to circulate, stainless steel	522	879	1670	1921	830
16	Polyethylene with density ≥ 0.94	162	333	356	1585	1882
17	Acetic acid	357	997	825	1423	40
18	Reagent chemicals	538	799	1255	1416	484
19	Screws, bolts, washers of iron smelting or steel	835	726	730	1352	467
20	Parts and accessories for motorcycles	1328	1429	1048	1303	503
	Rest	85868	81664	83749	86689	30392
	Total	118162	133746	151179	185354	52928

(Source: SUNAT, 2007)

5.6 Taiwan Woodworking Machinery Industry

5.6.1 Production and Export of Taiwan Woodworking Machinery Industry in 2004

Export of Woodworking Machinery from Taiwan has undergone a steady growth in 2004. In general, export in 2004 reached to a second record high of US\$830 million and compared with 2003 there was an increase of 18.7%.

In 2004, because of the order and shipments for this industry got strong requirement from the traditional consuming countries of Taiwan woodworking machinery: USA, China, Canada, Malaysia and a fast growing country, Vietnam made the total export value grew 18.7% to US\$830 million.

Based on the statistic of Taiwan Ministry of Finance on machine type, first rank in 2004 was sawing machines with an export of US\$256 million and enjoyed a 5.6% growth compared with previous years. Second position was machinery for finger-jointer/plate combiner and other machinery, with an export of US\$245 million, and a growth of 41.2% compared to 2003. Parts and accessories for woodworking machinery ranked third with an amount of US\$106 million; then followed by planning, milling, and molding machines with an amount of US\$78.3 million, grinders/sander with an amount of US\$76.1 million.

According to the statistic on export area, in 2004, as usual, USA still stood firmly in the first position with an export amount of US\$362.8 million and a growth of 11.7% compared with 2003, shared 43.7% of the total export. China (and Hong Kong) still showed a very strong requirement, ranked second with a record high of US\$170.8 million, a growth of 20.5%, and shared 21% of the total. Canada ranked third with an amount of US\$46.2 million and a growth of 5.6%. The new star, Vietnam, is becoming the fourth largest buyer, with a growth of 57.2%, reached up to US\$33.7 million. Malaysia with a total of US\$27.7 million and a growth of 22% ranked fifth.

In summary, major Taiwan woodworking machinery is still being exported to North America, China, and South East Asia countries in recent years. In the mean time, despite the total amount is still quite few, India and Turkey are the two countries that are starting to buy more Taiwan machinery and which makes us place more eyes on these two countries in the coming years.

Table 5.7 Exports of Taiwan Woodworking Machinery in 2000-2004
(by Destination)

2004 Rank	國家名稱 COUNTRY	2004			2003			2002	2001
		VALUE US\$	SHARE %	Change 04/03 %	VALUE US\$	SHARE %	Change 03/02 %	VALUE US\$	VALUE US\$
1	U.S.A	362,794,046	43.72%	11.7%	324,917,234	46.46%	-10.33%	362,363,264	304,420,072
2	HK+CHINA	170,831,315	20.59%	20.5%	141,754,598	20.27%	1.34%	139,873,623	98,208,329
3	CANADA	46,245,040	5.57%	14.4%	40,417,736	5.78%	-6.97%	43,444,114	38,624,812
4	VIET NAM	33,663,330	4.06%	57.2%	21,419,310	3.06%	6.76%	20,063,411	10,851,543
5	MALAYSIA	27,666,837	3.33%	22.0%	22,673,334	3.24%	-5.00%	23,867,005	19,542,391
6	INDONESIA	20,571,137	2.48%	25.3%	16,421,909	2.35%	-4.36%	17,171,048	18,881,862
7	GERMANY	16,579,136	2.00%	76.8%	9,379,553	1.34%	15.53%	8,118,416	8,420,903
8	S. KOREA	15,767,048	1.90%	82.8%	8,626,792	1.23%	24.05%	6,954,485	5,882,346
9	UNITED KINGDOM	15,617,207	1.88%	12.3%	13,903,272	1.99%	-5.94%	14,781,324	13,442,025
10	THAILAND	14,267,059	1.72%	-11.0%	16,035,907	2.29%	18.87%	13,489,952	12,632,660
11	JAPAN	13,190,997	1.59%	18.5%	11,128,350	1.59%	13.49%	9,805,843	9,702,761
12	AUSTRALIA	10,297,214	1.24%	17.9%	8,734,898	1.25%	26.49%	6,905,387	5,793,329
13	SPAIN	6,909,333	0.83%	65.5%	4,175,063	0.60%	14.10%	3,659,255	2,855,741
14	S. AFRICA	5,957,000	0.72%	23.6%	4,821,450	0.69%	36.56%	3,530,766	3,084,657
15	NETHERLANDS	4,565,678	0.55%	4.7%	4,361,648	0.62%	39.53%	3,125,941	2,804,820
16	FINLAND	4,427,039	0.53%	62.6%	2,722,466	0.39%			
17	INDIA	4,045,759	0.49%	109.9%	1,927,259	0.28%			
18	TURKEY	3,999,129	0.48%	68.3%	2,376,456	0.34%			
19	FRANCE	3,952,394	0.48%	13.4%	3,485,323	0.50%	-54.91%	7,730,232	9,225,433
20	ITALY	3,794,982	0.46%	80.5%	2,102,854	0.30%	-25.40%	2,819,000	4,525,631
	OTHERS	44,627,716	5.38%	17.62%	37,941,154	5.43%	24.96%	30,361,928	32,479,108
	TOTAL	829,769,396	100.00%	18.7%	699,326,566	100.00%	-3.48%	724,535,834	609,215,151

(Source: Ministry of Finance – TAIWAN)

5.6.2 Export of Taiwan Woodworking Machinery 2004-2007

Woodworking Machinery Exports Grew 8.31% in 2007 with respect to the last year.

Table 5.8 Taiwan Woodworking Machinery Export Statistic, 2005-2007

(Millions US\$)

Rank	Country	2005	2006	2007	% Share			% Change 07//06
					2005	2006	2007	
	World	674,544	630,508	682,885	100,00	100,00	100,00	8,31
1	United States	283,643	240,705	238,629	42,05	38,18	34,94	-0,86
2	China	86,606	85,205	101,059	12,84	13,51	14,80	18,61
3	Canada	44,035	51,272	51,193	6,53	8,13	7,64	1,80
4	Vietnam	35,073	38,947	43,107	5,20	6,18	6,31	10,68
5	Hong Kong	40,736	27,836	25,629	6,04	4,42	3,75	-7,93
6	Malaysia	23,895	22,076	23,280	3,54	3,50	3,41	5,46
7	Germany	10,406	14,593	23,165	1,54	2,31	3,39	58,74
8	Thailand	13,005	13,269	13,959	1,93	2,11	2,04	5,20
9	Indonesia	19,647	12,101	12,309	2,91	1,92	1,80	1,72
10	Finland	5,078	7,604	11,203	0,75	1,21	1,64	47,32
11	Korea, South	8,658	6,730	9,998	1,28	1,07	1,46	48,56
12	United Kingdom	8,594	7,810	9,228	1,27	1,24	1,35	18,16
13	Australia	8,582	8,925	8,632	1,26	1,42	1,26	-3,28
14	Netherlands	4,599	6,179	8,484	0,68	0,98	1,24	37,29
15	Turkey	3,868	4,290	7,726	0,57	0,68	1,13	80,07
16	Japan	11,181	7,342	7,406	1,66	1,16	1,09	0,88
17	South Africa	6,649	7,394	7,340	0,99	1,17	1,08	-0,73
18	Italy	5,034	5,427	6,954	0,75	0,86	1,02	28,14
19	India	3,857	5,860	6,903	0,57	0,93	1,01	17,81
20	Belgium	2,398	2,987	5,325	0,36	0,47	0,78	78,27
21	Spain	5,485	5,153	4,449	0,81	0,82	0,65	-13,65
22	France	3,217	2,657	3,773	0,48	0,42	0,55	41,99
23	Greece	1,380	1,618	3,510	0,21	0,26	0,51	116,95
24	Brazil	3,235	3,069	3,030	0,48	0,49	0,44	-1,27
25	Mexico	1,888	2,352	3,011	0,28	0,37	0,44	28,00
26	Russia	1,589	2,727	2,923	0,24	0,43	0,43	7,17
27	Singapore	2,365	2,544	2,421	0,35	0,40	0,35	-4,79
28	Lithuania	1,019	1,519	2,316	0,15	0,24	0,34	52,49
29	Colombia	0,844	2,585	1,930	0,13	0,41	0,28	-25,32
30	Latvia	1,071	1,546	1,864	0,16	0,25	0,27	20,53
31	New Zealand	2,046	1,751	1,643	0,30	0,28	0,24	-6,17
32	Chile	1,819	1,125	1,641	0,27	0,18	0,24	45,89
33	United Arab Emirates	2,576	1,369	1,611	0,38	0,22	0,24	17,66
34	Philippines	2,020	2,244	1,589	0,33	0,36	0,23	-29,18
35	Ukraine	0,569	1,096	1,588	0,08	0,17	0,23	44,88
36	Poland	0,638	1,264	1,494	0,10	0,20	0,22	18,21
37	Iran	1,181	0,966	1,433	0,18	0,15	0,21	48,34
38	Israel	0,873	0,536	1,406	0,13	0,09	0,21	162,29
39	Sweden	0,825	1,052	1,050	0,12	0,17	0,15	-0,20

(Source: TAITRA, 2008)

According to export statistics provided by Customs, the gross export value for Taiwanese woodworking machinery in 2007 was around US\$683 million, an 8.31%

growth on last year (2006). The Top Five countries or regions exported to are the U.S.A. (34.94% of the gross export value), Mainland China (14.80%), Canada (7.64%), Vietnam (6.31%), and Hong Kong (3.75%). (See table 5.8, TAITRA, Taiwan 2008).

Compared to 2006, exports of Taiwanese woodworking machinery to the European market showed significant growth, especially exports to Germany (+58.74%), Finland (+47.32%), the U.K. (+18.16%), Holland (+37.29%), Turkey (+80.07%), Italy (+28.14%), Belgium (+78.27%), France (+41.99), Greece (+116.95%), Poland (+18.21%), and Ukraine (+44.88%).

Exports to Vietnam and India, the most promising markets for Taiwanese woodworking in the past few years, have grown by 10.68% and 17.81%, respectively. Countries or regions that show negative export growth are China (-0.86%), Hong Kong (-7.93%), and Australia (-3.28%).



Chapter 6 Sliding Table Saw – Research Information

This chapter contains theoretical information on Sliding Table Saw which is the subject of interest to the study.

6.1 Sliding Table Saw: Subject of Interest

The Sliding Table Saw is a machine used in woodworking process industry; the job of a sliding table is to move stock past a cutter in a controlled manner. This same function can be done with other devices such as a miter gauge or a crosscut sled but a sliding table does this far better than either of those devices. Even a small sliding table will allow the user to easily crosscut a 24" wide sheet, something a miter gauge cannot do. Even the aftermarket miter-sleds cannot support a large piece of plywood like a sliding table or operate smoothly with a heavy load.

There is quite a bit of differentiation among the sliding tables available but most have the following advantages in common:

1. Increased safety. The normal stance in operating a slider is to stand more to the left of the blade when compared to a non-slider saw; this gets the operator further from the kick-back zone. Sliding tables increase the margin of safety by supporting stock much better as well.
2. Smooth sliding action is much smoother than a shop-made crosscut sled or commercial miter-sled.
3. Long crosscut fence with flip stop. Long fences are very useful in cutting up sheet goods as well as cutting door stiles (or other similar sized stock) to length, squaring door panels, as well as any small stock normally handled by miter gauges.
4. Accurate fence degree settings. The large distance between the pivot point and the degree scale make the fence angle settings very accurate. I haven't seen or conducted a test on this but I suspect a sliding table is as accurate (generally) in angle settings as any of the expensive aftermarket miter gauges.
5. Support for heavy stock. It would easily support a 24x96 piece of plywood on an end cut. All will offer far more support than any similar device.
6. Always attached and ready to use. A shop-made sled must be stored and lifted onto the saw for use and is inherently less convenient. The disadvantage of a sliding table is that it will increase the footprint of the saw and the guide rails

and structures can be in the way sometimes. To fit a sliding table the left extension wing of the saw must be removed and the rip fence rails repositioned to the right or cut. Sliding tables also take some time to align properly. However, once they are set, they should maintain their alignment.

6.2 Requirements

There are several factors to consider when looking for a sliding table; it is important to evaluate which features are most important. There are some requirements you may have that will point you towards one slider over another. The following are the major issues to consider in helping narrow the field of choices: Compatibility with mobile base, cross cut capacity (stroke), Static size of system (footprint), and Cost.

6.3 The Ideal Slider

There are some features that an ideal sliding table would have; they are:

1. Smooth and accurate travel with the ability to control the level of sliding friction.
2. Load carrying capacity that would allow it to support a 24x96 piece of $\frac{3}{4}$ " Melamine on an end cut.
3. A means of keeping the guide bars free of dust; this keeps the sliding action smooth.
4. Crosscut fence between 36" to 48".
5. Crosscut fence that can be very easily and quickly removed and replaced, preferably with no loose components with the fence off; that means the fence and/or table must capture the attachment hardware.
6. Crosscut fence with an angle scale that is reliable and with enough resolution to be able to easily set the fence in $\frac{1}{2}$ degree increments.
7. Crosscut fence with flip stop(s) that have a cursor to read a scale. An expanding fence section for stops past 48" would also be desirable.
8. Ability to very accurately and easily align the system for table height, travel parallel to blade, and slope to saw table into two axes.
9. Cutting capacity over 24".
10. Some form of stock clamp that is capable of clamping small stock and large plywood panels. This clamp must also be easily and quickly removed and replaced so to not deform the crosscut fence under normal usage.

11. A table that is flat (whether it is solid or not) that can also be locked in a stationary position even with the leading edge of the saw table and also in a position fully retracted for loading sheet goods to keep the table from sliding into the blade until desired.

6.4 Options of Sliding Table Saw

6.4.1 MODEL : STS-120S (SEMI AUTOMATIC)

The Table 6.1 shows the technical data of a Sliding Table Saw model STS-120S.

Table 6.1 Technical Data Sliding Table Saw - STS-120S

MODEL		STS-120S
SLIDING TABLE DIMENSION		1500 x 350 mm
MAX. SLIDING STROKE W/C ROSSCUT FENCE		1160 mm
TABLE SIZE (TABLE W/EXT. WING)		860 x 560 mm
MAIN SAW	MAX SAW BLADE DIAMETER	300 mm
	SAW BLADE ARBOR DIAMETER	30 mm
	CUTTING HEIGHT AT 90,45°	95/76 °
	MOTOR POWER	5 HP
	SPINDLE ROTATION	4000 RPM
SCORING SAW	SAW BLADE DIAMETER	80 mm
	SAW BLADE ARBOR DIAMETER	20 mm
	MOTOR POWER	—
	SPINDLE ROTATION	8000 RPM
CROSSCUT WIDTH		1200
BLADE TILTING ADJUSTMENT		0 - 45°
DUST COLLECTION SYSTEM		115 mm
N.W/G.W. MEASUREMENT	MACHINE SIZE	940 x 1120 x 1130 mm
	NW./GW.	354/464 kg
	SLIDING TABLE SIZE	1810 x 430 x 300 mm
	NW./GW.	49/65 kg

(Source: Technik Associates, 2008)

The Figure 6.1 shows the Sliding Table Saw model STS-120S from Technik Associates Company, a Taiwanese firm.



Figure 6.1 Model: STS-120S

(Source: Technik Associates, 2008)

6.4.2 MODEL : STS-300S (SEMI AUTOMATIC)

The Table 6.2 shows the technical data of a Sliding Table Saw model STS-300S.

Table 6.2 Technical Data Sliding Table Saw - STS-300S

MODEL		STS-300S
SLIDING TABLE DIMENSION		3000 x 350 mm
MAX. SLIDING STROKE W/C ROSSCUT FENCE		3000 mm
TABLE SIZE (TABLE W/EXT. WING)		860 x 560 mm
MAIN SAW	MAX SAW BLADE DIAMETER	300 mm
	SAW BLADE ARBOR DIAMETER	30 mm
	CUTTING HEIGHT AT 90,45°	95/76°
	MOTOR POWER	5 HP
	SPINDLE ROTATION	4000 RPM
SCORING SAW	SAW BLADE DIAMETER	80 mm
	SAW BLADE ARBOR DIAMETER	20 mm
	MOTOR POWER	—
	SPINDLE ROTATION	8000 RPM
CROSSCUT WIDTH		1200 mm
BLADE TILTING ADJUSTMENT		0 - 45°
DUST COLLECTION SYSTEM		115 mm
N.W/G.W. MEASUREMENT	MACHINE SIZE	3130 x 1090 x 1230 mm
	NW./GW.	566/620 kg
	SLIDING TABLE SIZE	3300 x 430 x 300 mm
	NW./GW.	100/140 kg

(Source: Technik Associates, 2008)

The Figure 6.2 shows the Sliding Table Saw model STS-300S from Technik Associates Company.



Figure 6.2 Model: STS-300S

(Source: Technik Associates, 2008)

6.4.3 MODEL : STS-250D/320D (SEMI AUTOMATIC)

The Tables 6.3 and 6.4 show the technical data of a Sliding Table Saw model STS-250D, and model STS-320D, respectively.

Table 6.3 Technical Data Sliding Table Saw - STS-250D

MODEL		STS-250D
SLIDING TABLE DIMENSION		2500 x 350 mm
MAX. SLIDING STROKE W/C ROSSCUT FENCE		2500 mm
TABLE SIZE (TABLE W/EXT. WING)		610 x 1000 mm
MAIN SAW	MAX SAW BLADE DIAMETER	355 mm
	SAW BLADE ARBOR DIAMETER	30 mm
	CUTTING HEIGHT AT 90,45°	114/90°
	MOTOR POWER	5 HP
	SPINDLE ROTATION	4000/5000/6000 RPM
SCORING SAW	SAW BLADE DIAMETER	120 mm
	SAW BLADE ARBOR DIAMETER	20 mm
	MOTOR POWER	0.75 KW
	SPINDLE ROTATION	8000 RPM
CROSSCUT WIDTH		835 mm
BLADE TILTING ADJUSTMENT		0 - 45°
DUST COLLECTION SYSTEM		120 mm
N.W/G.W. MEASUREMENT	MACHINE SIZE	1892 x 1164 x 1162 mm
	NW./GW.	491/596 kg
	SLIDING TABLE SIZE	2769 x 260 x 530 mm
	NW./GW.	74/104 kg

(Source: Teknik Associates, 2008)

Table 6.4 Technical Data Sliding Table Saw - STS-320D

MODEL		STS-320D
SLIDING TABLE DIMENSION		3200 x 350 mm
MAX. SLIDING STROKE W/C ROSSCUT FENCE		3200 mm
TABLE SIZE (TABLE W/EXT. WING)		610 x 1000 mm
MAIN SAW	MAX SAW BLADE DIAMETER	355 mm
	SAW BLADE ARBOR DIAMETER	30 mm
	CUTTING HEIGHT AT 90,45°	114/90°
	MOTOR POWER	5 HP
	SPINDLE ROTATION	4000/5000/6000 RPM
SCORING SAW	SAW BLADE DIAMETER	120 mm
	SAW BLADE ARBOR DIAMETER	20 mm
	MOTOR POWER	0.75 KW
	SPINDLE ROTATION	8000 RPM
CROSSCUT WIDTH		1235 mm
BLADE TILTING ADJUSTMENT		0 - 45°
DUST COLLECTION SYSTEM		120 mm
N.W/G.W. MEASUREMENT	MACHINE SIZE	2191 x 1264 x 1162 mm
	NW./GW.	620/720 kg
	SLIDING TABLE SIZE	3540 x 260 x 530 mm
	NW./GW.	100/140 kg

(Source: Teknik Associates, 2008)

The Figure 6.3 shows the Sliding Table Saw Model STS-250D/320D.



Figure 6.3 Model: STS-250D/320D

(Source: Technik Associates, 2008)

6.4.4 .MODEL : MBS 300 (SEMI AUTOMATIC)

The Table 6.5 shows the technical data of a Sliding Table Saw model MBS 300.

Table 6.5 Technical Data Sliding Table Saw - MBS-300

MODEL	MBS 300
Blade Diameter	305mm
Arbor Diameter	30mm
Max. Depth of Cut at 90 degrees	101mm
Max. Rip Right of Blade	1300mm
Max. Cut Depth at 45 degrees	70mm
Dust Port Diameter	100mm
Table Height	857mm
Cast Iron Table Size (DxW)	762mm x 1220mm
Arbor Speed	4000 RPM
Motor	3 HP 1 Ph, 5 HP 3 Ph
Net Weight	260kg

(Source: TRUPRO, 2008)

The Figure 6.4 shows the Sliding Table Saw Model MBS 300 from TRUPRO, a Taiwanese firm.



Figure 6.4 Model: MBS 300

(Source: TRUPRO, 2008)

6.4.5 MODEL : STS-250GH (MANUAL)

The Table 6.6 shows the technical data of a Sliding Table Saw model STS-250GH.

Table 6.6 Technical Data Sliding Table Saw - STS-250GH

MODEL		STS-250GH
Sliding table dimension		98-3/8"x13-3/4"
Max. sliding stroke W/Crosscut fence		98-3/8"
Max. sliding stroke W/O crosscut fence		110"
Table height		35"
Table size		24"x39-3/4" (68"x39-3/4")
Sawblade speed		6000 FPM
Main saw	Saw blade diameter	14"
	Saw blade arbor diameter	1"
	Cutting height At 90, 45°	4-1/8", 2-3/4"
	Motor power	5HP/3PH, 3HP/1PH
	Spindle RPM	4000 (Motor RPM 3450)
Scoring saw	Saw blade diameter	4-3/4"
	Saw blade arbor diameter	7/8"
	Cutting height At 90, 45°	3/8", 5/16"
	Motor power	1 HP
	Spindle RPM	8000 (Motor RPM 3450)
Ripping width		32-13/16" (48-5/8" is optional)
		68-1/2", 125"
Blade Height Adjustment		Manual
Blade Tilting Adjustment		Manual, 0-45°
Electric Control System		Magnetic switch
Dust Collection System		Main channel 5" (120mm), saw blade guard extract 2-1/2" (60mm)
N.W./G.W., Measurement		N.W./G.W : 1243/1474lbs
Ctn QTY / 20' / 40'		102-3/4'x45-3/8"x44-1/8"
Standard Accessories		20 sets
		Cast iron fence body and high/low extruded profile rip fence
		Sheet metal extension table
		Sheet metal extension table (15-3/4"x39-3/8" (400x1000mm)
		-R, 11-3/4"x28-3/4" (300x730mm)-F
		One pc type saw blade guard ; Alloy crosscut fence

(Source: HOLY TEK, 2008)

The Figure 6.5 shows the Sliding Table Saw Model STS-250GH from HOLY TEK Industrial Corp., a Taiwanese firm.



Figure 6.5 Model: STS-250GH

(Source: HOLY TEK, 2008)

6.4.6 MODEL : STS-3200M (MANUAL)

The Table 6.7 shows the technical data of a Sliding Table Saw model STS-3200M.

Table 6.7 Technical Data Sliding Table Saw - STS-3200M

ITEM	MODEL	STS-3200M
	Sliding Table Saw	3600mm
	Length of cut	3200mm
Main saw	Sawblade	Max.ø350mm
	Sawblade Bore	ø30(or ø25.4)mm
	Depth of cut of 90 °	80mm
	Depth of cut of 45 °	70mm
	Motor power	7.5HP(option 10HP)
	Spindle speed	3000/4000/5000/6000rpm
	Tilting saw blade	0-45 °
Scoring	Sawblade	ø120mm
	Sawblade Bore	ø22mm
	Motor power	1HP
	Spindle speed	8000rpm
	Tilting saw blade	0-45 °
	Cutting width	1000(option 1300,1500)mm
	Packing	2060x1180x1020 450x280x3250mm
	N.W/G.W.	870/1030kgs

(Source: HOLY TEK, 2008)

The Figure 6.6 shows the Sliding Table Saw Model STS-3200M from HOLY TEK Industrial Corp., a Taiwanese firm.



Figure 6.6 Model: STS-3200M

(Source: HOLY TEK, 2008)

6.4.7 MODEL : STS-3200 (AUTOMATIC)

The Table 6.8 shows the technical data of a Sliding Table Saw model STS-3200.

Table 6.8 Technical Data Sliding Table Saw - STS-3200

ITEM	MODEL	STS-3200
	Sliding Table Saw	3600mm
	Length of cut	3200mm
Main saw	Sawblade	Max.ø350mm
	Sawblade Bore	ø30(or ø25.4)mm
	Depth of cut of 90 °	80mm
	Depth of cut of 45 °	70mm
	Motor power	7.5HP(option 10HP)
	Spindle speed	3000/4000/5000/6000rpm
	Tilting saw blade	0-45 °
Scoring	Sawblade	ø120mm
	Sawblade Bore	ø22mm
	Motor power	1HP
	Spindle speed	8000rpm
	Tilting saw blade	0-45 °
	Cutting width	1000(option 1300,1500)mm
	Packing	2060x1180x1020 + 450x280x3250mm
	N.W/G.W.	870/1030kgs

(Source: HOLY TEK, 2008)

The Figure 6.7 shows the Sliding Table Saw Model STS-3200 from HOLY TEK Industrial Corp., a Taiwanese firm.



Figure 6.7 Model: STS-3200

(Source: HOLY TEK, 2008)

Chapter 7 Analysis and Results

This chapter aims to corroborate the arguments presented in the previous chapters in the context of empirical evidence gathered from a survey investigation in Villa el Salvador Industrial Park woodworking companies. The study is a snap shot of the situation, as it existed in the second quarter of 2008.

The survey questionnaire was conducted during the months of June and July 2008, the two last weeks of June and the first week of July; in total were 45 respondents from different woodworking companies, and all were from “Villa el Salvador” Industrial Park.

As a result of the survey, the respondents provide us with information on their requirements which is presented in the first part of this chapter.

The second part examines the price of Belgian Sliding Table Saws on the Peruvian Market, in base on the quotation requested to the distributor firm in Peru.

In the same way in base on quotation analysis we determined the most suitable Taiwanese Sliding Table Saws for export to Peru, which the analysis will be shown in the third part of the chapter.

The quotations were requested during the two first weeks of July 2008, in Lima and in Taiwan for the Belgian and the Taiwanese machines, respectively.

Using the New Export Model we determined the final selling price for the Taiwanese Sliding Table Saws to the Peruvian Market, for that we have to consider all the incoterms, tariff, and non tariff regulations, as well as the insurance and shipment cost.

Finally, after setting the Taiwanese sliding table saw's final price on the Peruvian market we made a comparative analysis between this machine and the Belgian one; the results are presented in the final part of the chapter.

7.1 Survey Descriptive Analysis

As we mentioned before the survey was conducted in Villa El Salvador Industrial Park, it has 278 woodworking companies (See Table 4.4, Production Activities in Villa El Salvador Industrial Park, Lima, Peru). The total number of respondents was 45 companies, which was random sampling.

From the survey to woodworking companies in Villa El Salvador Industrial Park, we have the following results:

Table 7.1 Sliding Table Saw in the Peruvian market

Question 1: Are there any Peruvian-made Sliding Table Saws for sale on the Peruvian market?

Answer Options	Number of Respondents	Percentage (%)
Yes	0	0.00%
No	32	71.11%
Don't know	13	28.89%
	Total	45
		100.00%

(Source: Survey result, Appendix A, 2008)

In the question 1, we found 32 respondents (71.11%) who knew that there are no Peruvian Sliding Table Saw manufacturers, while 13 respondents (28.89%) did not know whether there were or not.

Figure 7.1 Distributors on the Peruvian Market

Question 2: Do you know some distributor that sell Sliding Table Saws Machine from other country in the Peruvian Market?

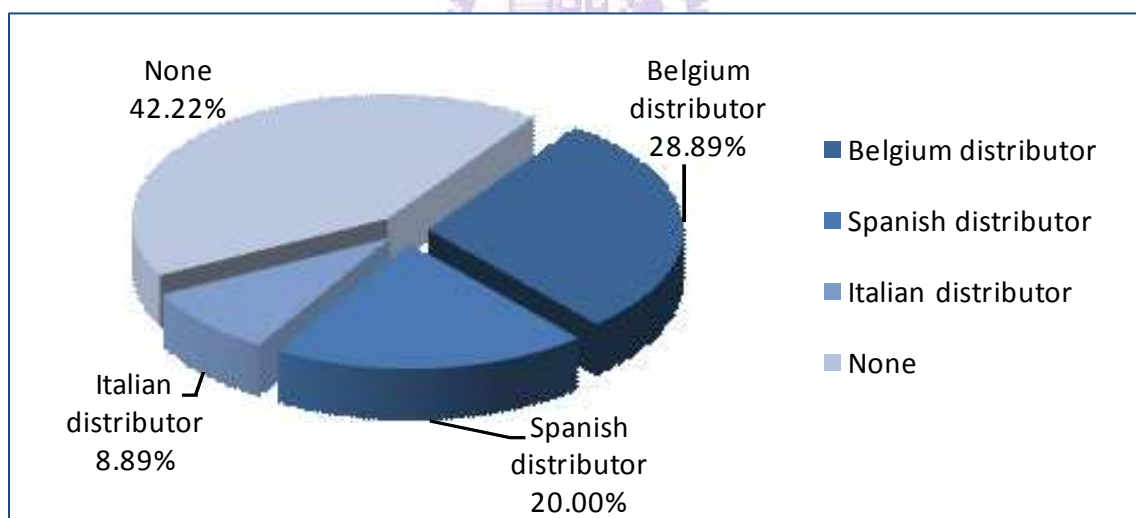


Table 7.2 Distributors in Peruvian market

Answers	Number of Respondents	Percentage (%)
Belgium distributor	13	28.89%
Spanish distributor	9	20.00%
Italian distributor	4	8.89%
None	19	42.22%
	Total	45
		100.00%

(Source: Survey result, Appendix A, 2008)

As shown in Figure 7.1 and Table 7.2, from 45 survey respondents, 13 respondents (28.89%) stated that they knew distributors that sold Belgian Sliding Table Saws on the Peruvian market, while 9 respondents (20%) knew distributors selling Spanish-made Sliding Table Saws; and 4 respondents (8.89%) knew distributors that sold Italian-made Sliding Table Saws.

Note that during the quotation request period for the research (June and July 2008), there was not available Spanish-made Sliding Table Saw in the Peruvian market; the distributors had available only Belgium-made Sliding Table Saw.

Figure 7.2 Main Features for Sliding Table Saw

Question 3: Which features do you prefer in a Sliding Table Saw Machine?

The items were: 1=very disagree, 2=disagree, 3=neutral, 4=agree, 5=very agree.

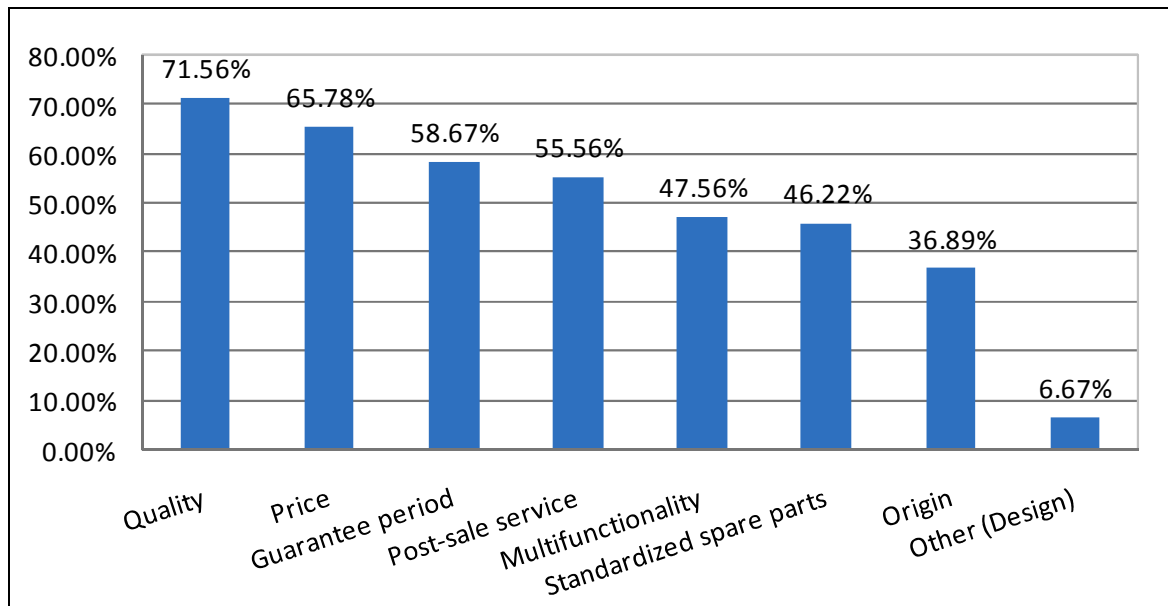


Table 7.3 Main Features for Sliding Table Saw

Feature	Percentage (%)	Quantity
Quality	71.56%	161
Price	65.78%	148
Guarantee period	58.67%	132
Post-sale service	55.56%	125
Multi-functionality	47.56%	107
Standardized spare parts	46.22%	104
Origin	36.89%	83
Other (Design)	6.67%	15
	100.00%	225

(Source: Survey result, Appendix A, 2008)

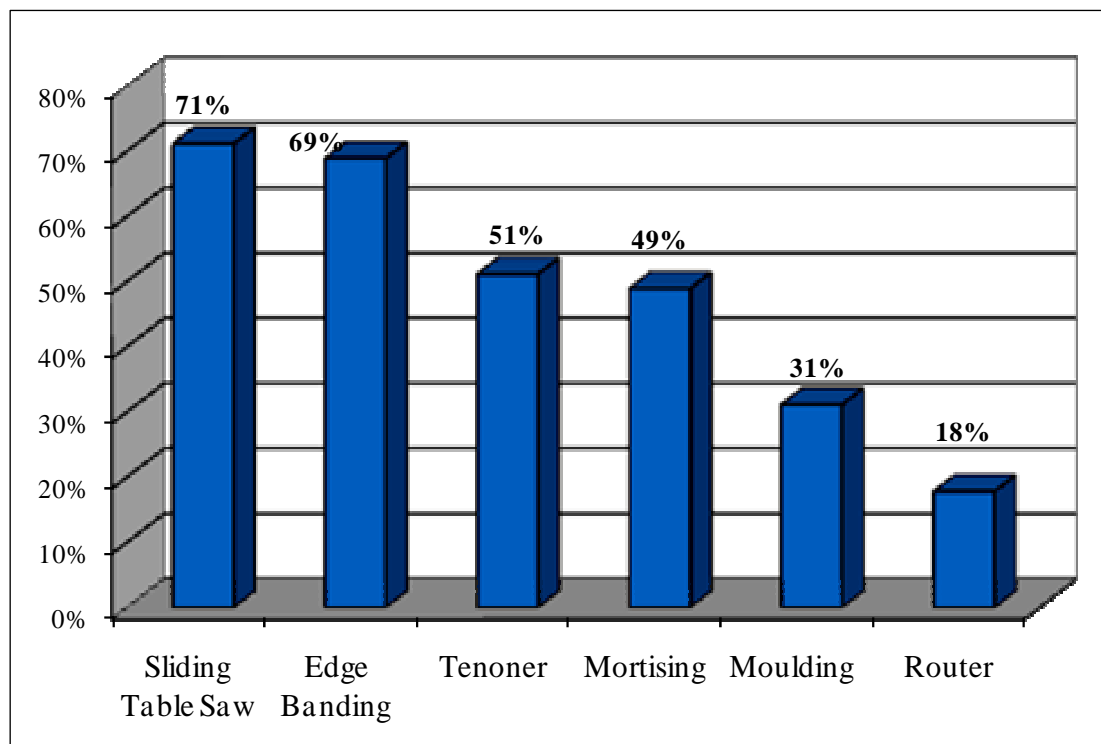
As we show in the Figure 7.2 and Table 7.3 this agree and disagree question, Quality featured accumulated a total of 161 points which represent 71.56% (considering 225 point as 100%, which is presented in case that all of the 45 respondents give 5 points to this feature); respondents chose quality as their most preferred feature in Sliding Table Saws.

Price was the second choice, with 148 points in total and 65.78%.

Guarantee period and post-sale service were the following with 58.67% and 55.56%, respectively; while the least concerned about were origin and design with 36.89% and 6.67%, respectively.

Figure 7.3 Woodworking Machines Currently Required

Question 4: Which kind of woodworking machines currently do you need?



(Source: Survey result, Appendix A, 2008)

As shown in the figure 7.3, 71% of all the respondents who required Sliding Table Saw, followed by Edge-banding with 69%, and Tenoner with 51%; this question was oriented to identify which kind of machine the companies currently require, and the following question is oriented to identify which kind of machine they are thinking of acquiring in the near future.

Figure 7.4 Woodworking Machines of Interest

Question 5: In which of these products are you interested?

(Woodworking Machines)

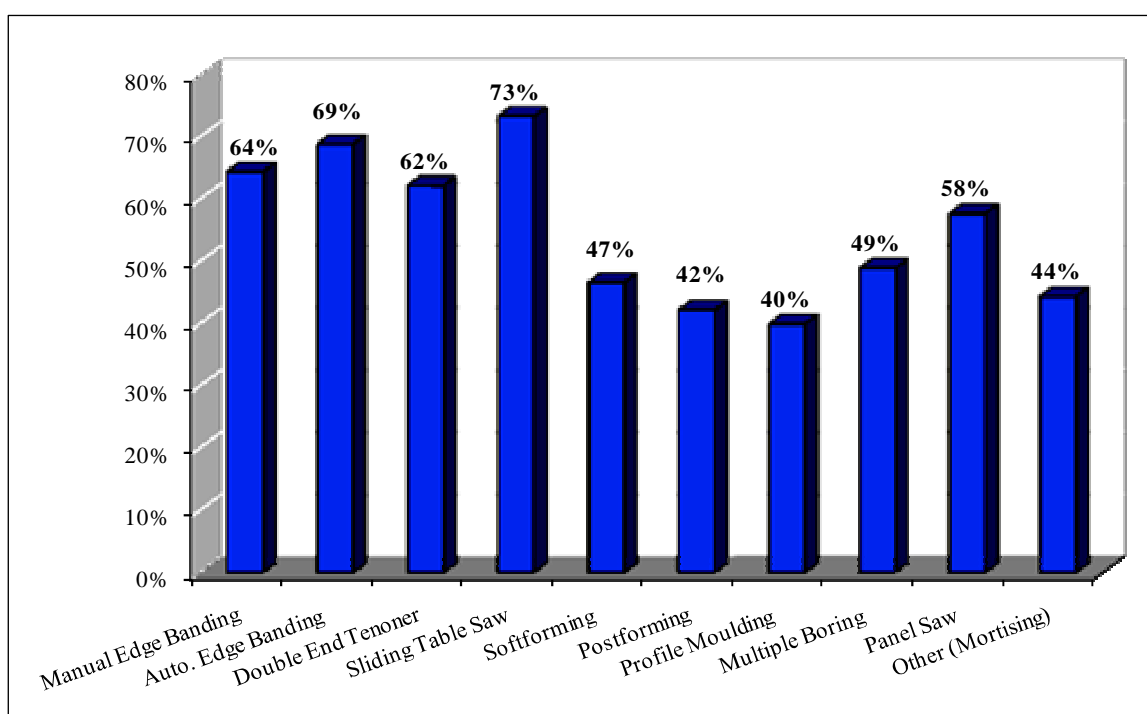


Table 7.4 Woodworking Machines of Interest

Product of Interest	Percentage (%)	Number of Respondents
Manual Edge Banding Machines	64%	29
Auto. Edge Banding Machines	69%	31
Double End Tenoner	62%	28
Sliding Table Saw	73%	33
Softforming Machines	47%	21
Postforming Machine	42%	19
Profile Moulding Machine	40%	18
Multiple Boring Machines	49%	22
Panel Saw	58%	26
Other (Mortising)	44%	20
	100.00%	45

(Source: Survey result, Appendix A, 2008)

As shown in the figure 7.4, Sliding Table Saws are in highest demand, with 73% of total of respondents and 33 companies saying that they are interested in this machine. Edge-banding, Tenoner and panel saw are next with more than 58%.

7.2 European-made Sliding Table Saws on the Peruvian Market

The survey found that there are Sliding Table Saws distributors from Belgium, Spain, and Italy on the Peruvian market; all contain similar qualities, but the Belgian brand is more popular for Sliding Table Saw, due to the more reasonable price. The Belgian brand is ROBLAND, whose Sliding Table Saws are distributed in Peru by MAHECOR.

According to MAHECOR Quotation for the Belgian brand of Sliding Table Saw, as seen in Appendix B1 and B2, we have the following prices for the Models Z 250 and Z 3200 ROBLAND Brand:

Table 7.5 Belgian Sliding Table Saw Price in Peru

Description	Model	Price
Sliding Table Saw	Z 250	US\$ 13,600.00
Sliding Table Saw	Z 3200	(*) US\$ 15,633.80

(Source: Belgium Sliding Table Saw Quotation, Appendix B, 2008)

(*) 1 US\$ = 2.84 Nuevo Sol=S/.2.84 (Peruvian currency)

S/. 44,400.00 = US\$ 15, 633.80

7.3 Taiwanese Sliding Table Saws

According to the Quotations for Sliding Table Saw from different Taiwanese companies, which are presented in Appendix C1, C2, and C3, we have the following prices for the similar model to Z 250 and Z 3200 presented in the previous point.

Table 7.6 Sliding Table Unit Price - FOB Taiwan

Type of Sliding Table Saw	OAV Equipment & Tools Inc.	Technik Associates, Inc.	HOLYTEK Industrial Corp.
2500/3200 x 350mm One Motor	US\$ 4,800 (Model: P355 3200) + US\$ 506 (Overhead)	US\$ 4,350 (Model STS 300S)	US\$ 4,846 (Model SS 320CE)
Semi Automatic 2500/3200 x 350mm Double Motor/ Independent Functions	US\$ 5,940 (Model: P402 S) + US\$ 660 (Overhead)	US\$ 6,050 (Model STS 250D)	US\$ 6,554 (Model SSA 250CE)

(Source: Taiwanese Sliding Table Saw Quotations, Appendix C, 2008)

The price varies according to the different companies, but the machines all have similar features. Technik Associates, Inc. offers the lowest-priced for the Sliding Table Saw type 2500/3200 x 350 mm of one motor of the three companies.

The second type of machine, Semi Automatic 2500/3200 x 350 mm Double Motor, has independent functions; OAV Equipment & Tools Inc. offers the lowest-priced for the Sliding Table Saw; however including the overhead costs, it will be the highest-priced for the machine.

Since the three companies have determined FOB prices in their Quotations, we will use FOB prices to make the comparative analysis of the three Taiwanese companies for the Sliding Table Saw prices.

They also have CIF Prices, but one of them depends on the minimal amount to order.

For future analysis the comparative analysis could be made in base on FOB Incoterms or CIF Incoterms.

7.3.1 Payment agreement and currency

Concerning Payment agreement and currency, it is recommended to use a confirmed irrevocable letter of credit at sight for the first transaction, as this is one of the safest methods of payment.

An exporter who pays using a confirmed irrevocable L/C is assured of payment even if the importer or the issuing bank defaults.

The trade will be conducted in American dollars, as both Peru and Taiwan use this currency in business dealings and it is one of the most commonly used currencies in international transactions.

7.3.2 Port of origin and Destination port

Most of the Taiwanese companies that produce Sliding Table Saws are located in Taichung because the manufacturers for machinery are mainly established here; Taichung is located on west-central Taiwan, so this will be the port of origin.

The merchandise will be sent to a company in Villa El Salvador Industrial Park, in Lima, Peru. So it will arrive at Callao port in Lima, which is the largest port in Peru.

7.3.3 Packing

Although the packaging of goods might seem of little importance, it is one of the fundamental aspects of international trade. Good packaging should protect the goods during transport and prevent theft. It should be economical and achieve a balance

between effectiveness and cost (both from the point of view of the material used and the time spent on packing the goods). Companies in international trade are recommended to work with an intermediary company that has experience in packaging for export. Since packing is one of the exporter's main responsibilities, as in the event of damage, the goods will have to be reimbursed or replaced free of charge.

According to the data collected from Taiwanese Sliding Table Saw quotes, as shown in Appendix C, we produced the following table examining packing sizes for the different Taiwanese companies.

Table 7.7 Sliding Table Saw Packing Size

Company	Description	Model	Net W./ Gross W.	Packing size
OAV Equipment & Tools Inc.	Manual Sliding Table Saw – One Motor	P355 3200	461+100/ 656+108 Kg	2240x1220x1130+ 3360x450x250 mm
	Semiautomatic Sliding Table Saw – Double Motor	P402 S	506+100/ 701+108 Kg	2240x1220x1130+ 3360x450x250 mm
Technik Associates, Inc.	Manual Sliding Table Saw – One Motor	STS 300S	382+136/ 480+170 Kg	2270x1030x1120+ 3310x430x300 mm
	Semiautomatic Sliding Table Saw – Double Motor	STS 250D	491+74/ 496+104 Kg	1892x1164x1162+ 2769x260x530 mm
HOLYTEK Industrial Corp.	Manual Sliding Table Saw – One Motor	SS 320 CE	382+100/ 480+140 Kg	2191x1264x1162+ 3540x260x530 mm
	Semiautomatic Sliding Table Saw – Double Motor	SSA 250 CE	491+ 74/ 596 + 104 Kg	1892x1164x1162+ 2769x260x530 mm

(Source: Taiwanese Sliding Table Saw Quotations, Appendix C, 2008)

7.4 Determination of the Sliding Table Saw Final Price in the Peruvian Market

In order to determine the Sliding Table Saw final price in the Peruvian market we will make use of the New Export Model presented in the figure 3.3.

7.4.1 Market Analysis

Step 1) Marketing Evaluation

The first part has interpreted the empirical data gathered from the survey to respondents of Woodworking Companies in Peru.

From the survey we found the existing brands in Peruvian Market for sliding table saw machines; and we determined which brand in the Peruvian market is the preferred one.

Belgium sliding table saw, brand ROBLAND, was the most representative in the Peruvian market.

Step 2) Product Identification

For the Product of Interest Sliding Table Saw, after the analysis of the table 7.6 of FOB Prices, for products of similar quality and specification:

For the Sliding Table Saw type 2500/3200 x 350 mm with one motor, the best priced is the Model STS 300S; while for Sliding table saw type Semi Automatic 2500/3200 x 350 mm with double motor, the best priced is the Model STS 250 D.

Step 3) Company Selection

Both slides table saws chosen in the previous point: Model STS 300 S and Model STS 250 D are from Technik Association Inc.; this step is undertaken to select the most suitable company for the target market in terms of competitive price and high quality. The company that best fit these criteria was Technik Associates, located in Taichung, Taiwan.

7.4.2 Planning Stage

Step 4) Selecting the Incoterms

The Incoterms or international sales terms that are widely used throughout the world are used to divide the transaction costs and responsibilities between the buyer and seller, and reflect state-of-the-art transportation practices.

For our study, we will use FOB (Free On Board) costs to do the comparative analysis, because this way, the exporter and importer would take care of the logistical arrangements in their respective countries.

With FOB, the seller must load the goods on board the ship that's nominated by the buyer, with cost and risk being divided at the ship's rail. The seller must clear the goods for export. This is only applicable when using maritime transportation.

Step 5) Determining Tariff and Non-Tariff Regulations

a) Tariff Regulations

The tariff heading for the Sliding Table Saw is P.A. = 8467.22.00.00 and according to Law 28053 – Art 1o, we must pay the respective tariffs and taxes:

Table 7.8 Tariff and Taxes Requirements

Taxes	(US\$)
AD/Valorem	(0% CIF Callao)
Municipal promotion tax	(2% CIF Callao)
Value added tax (IGV)	(17% CIF Callao)
Customs clearance rate	(2.35% UIT)

(Source: Customs Regulations, Law 28053, SUNAT, 2008)

The Price CIF Callao will be calculated later, along with the Price FOB Taiwan and the total price for sea transportation (ocean freight, insurance premium and fumigation).

The customs clearance rate is 2.35% UIT, with UIT being the tax unit in Peru (UIT: Unidad Impositiva Tributaria in Belgian).

$$1 \text{ UIT} = \text{S/. } 3,500.00 / \text{S/. } 2.81.00 = \text{US\$ } 1,250.00$$

$$\rightarrow \text{Customs clearance rate} = 2.35\% * (\text{US\$ } 1,250.00) = \text{US\$ } 29.38 \text{ (US\$ } 30)$$

The tariff heading (Partida arancelaria) for the Sliding Table Saw is: P.A. 8467.22.00.00, so AD/ Valorem = 0% (from SUNAT).

Price CIF Callao = price FOB Taiwan + insurance premium + ocean freight + fumigation costs

In the following table we show the total Tariff and Taxes Costs; we need to pay the respective taxes in base on table 7.8 Tariff and Taxes Requirements, these values are also presented in Appendix D.

Table 7.9 Tariff and Taxes Cost

Tariff and Taxes	Cost (US\$) for two machines: STS 300S and STS 250 D
AD/Valorem (0% CIF Callao)	0.00
Municipal promotion tax (2% CIF Callao)	232.00
Value added tax (IGV) (17% CIF Callao)	1,975.00
Customs clearance rate (2.35% UIT)	30.00
Total amount US\$	2,237.00

(Source: Cost of Tariff and Taxes – ADUANA Callao in Peru, Appendix D, 2008)

b) Non-tariff regulations

According to new labeling and marking regulations to facilitate trade referred to as Law 28405 (“Ley del Rotulado”), all products exported to Peru should have a label with the following information:

- Name of product
- Country of origin
- Address of exporter, importer or distributor
- Expiration date
- Conservation method
- Weight in metric system and any risks associated with the product

International quality marks should be visible and easily identifiable.

Step 6) Payment procedures

In order to build up a relationship with any trading partners, it is recommended that both companies use a confirmed irrevocable letter of credit at sight, meaning that the exporter's bank undertakes to pay the importer should the foreign bank fail to do so.

The transaction will be carried out in US\$, as it is one of the most stable currencies and is commonly used in international transactions worldwide.

7.4.3 Distribution

Step 7) Insurance, Packing and Shipping;

a) Packing:

Packing is one of the exporter's main responsibilities, as in the event of damage, the goods will have to be reimbursed or replaced free of charge, or the exporter will have to issue a credit note to the client.

The exporting company will pack the product to project and organize the transportation once the importing company has granted approval, in this case, Technik Associates.

The transporter is presumed to be legally responsible for any deterioration or products lost during transit.

b) Insurance and Shipping

The transportation can be arranged directly with air carriers or maritime shipping companies, or through freight forwarders. Air transportation is much quicker, but is more expensive. Large shipments cannot be sent by air, and if the cargo is heavy and voluminous, it is better to transport it over sea.

In our case, the international transportation will be by ship. The merchandise will be loaded on board in Keelung port, Taiwan and will arrive in Callao port, Peru.

Table 7.10 Ocean Freight Price

Ocean Freight	Amount (US\$)
CFS (Container Freight Station)	641.00

(Source: Analysis from Quotations, Appendix C, 2008)

Table 7.11 Insurance premium cost

Expense	Cost for the Total (US\$)
Insurance premium	19.00

(Source: Analysis from Quotations, Appendix C, 2008)

Table 7.12 Operating expenses in Callao port

ITEM Law	Operating expenses	Cost for 2 machines (S/.) (By CY sea transportation)
65803	Unloading, Storage and others (Enapu)	372.00
65804	Other services (CIAS. Navieras)	405.00
65805	Freight mobilization	169.00
65814	Document handling	162.00
65815	Administrative expenses	100.00
65816	Data Transmission	60.00
	Sub total amount	1,498.00
	Custom broker	331.00
	Tax	136.99
	Total amount S/.	1,735.99
	Total amount US\$ (**)	617.79

(Source: Cost of Tariff and Taxes – ADUANA Callao in Peru, Appendix D, 2008)

(**) Currency rate 1US\$=S/2.81 Nuevo sol (Peruvian currency)

In order to compete in the international market, competitive shipment pricing as well as delivery time, are important facts when choosing a transportation method.

In our study, we are going to transport heavy machinery over long distances, for that reason maritime transportation is the best choice.

The transportation from Keelung port to Callao port will be by ship, and the transportation from Callao to Villa El Salvador will be by freight truck. The shipment time will be within 45 -60 days of receipt of the confirmed irrevocable letter of credit at sight.

Step 8) Import documents verification.

Peruvian Customs requires that the following documents be displayed upon arrival of international shipments:

- Customs Unique Declaration (Declaración Única de Aduanas - DUA)
- Commercial invoice
- An airway bill or bill of lading,
- A packing list
- Insurance letter.

7.4.4 Pricing

Step 9) Cost Matrix

Transportation total cost: The total price for the sea transportation (Keelung port – Callao port) will be calculated using the following factors:

Total price for the sea transportation = Ocean freight + insurance premium + fumigation costs.

Table 7.13 Transportation total cost

Description	Cost for 2 machines (US\$)
Keelung port – Callao port	660.00
Callao - Villa El Salvador Industrial Park	81.85
Total amount	741.85

(Source: Analysis from Sliding Table Saw Quotations, Appendix C and D, 2008)

Total cost to Villa El Salvador Industrial Park, Lima, Peru.

Table 7.14 Total Cost

Description	Cost for 2 machines (US\$) (Model STS 250D & STS 300S)	Cost for 1 machine (US\$) (Model STS 250D)
Sliding Table Saw	10,400.00	6,050.00
Transportation Price	741.85	(*) 431.56
Tariff and Taxes	2,237.00	(*) 1,301.33
Operating expenses	<u>617.79</u>	(*) <u>359.39</u>
Total cost	13,996.64	8,142.28

(Source: Analysis from Sliding Table Saw Quotations, Appendix C and D, 2008)

(*) The value cost for one machine is obtained by multiplying the value “cost for 2 machines” by the factor (6,050/10,400), to give a more secure margin to the analysis.

Step 10) Determining the Final Price of the Sliding Table Saw on the Peruvian Market

The total cost for 1 Sliding Table Saw Model STS 250D is US\$ 8,142.28. To achieve a 25% net profit margin, the final selling price per unit on the Peruvian market is as follows:

Table 7.15 Final Unit Price

Description	Model	Price
Sliding Table Saw	STS 250D	US\$ 10,177.85

(Source: Analysis from Sliding Table Saw Quotations, Appendix C and D, 2008)

7.5 Evaluation results and discussion about Sliding Table Saw - Comparative Analysis

On the basis of Table 7.5, relating to the price of Belgian manual Sliding Table Saw and Table 7.15, relating to the final retail price of Taiwanese manual Sliding Table Saw on the Peruvian Market, we generated the following table:

Table 7.16 Sliding Table Saw Prices on the Peruvian market

Description	Belgian Machine	Taiwanese Machine
Sliding Table Saw	US\$ 13,600.00	US\$ 10,177.85

(Source: Analysis from Quotations - Appendix C-D, Belgian Sliding Table Saw Price - Table 7.5, and Final Unit Price - Table 7.15, 2008)

As shown in table 7.16, the Taiwanese manual Sliding Table Saw is comparable with the Belgian Machine in terms of quality and features; it is considerably cheaper than its counterpart.

Chapter 8 Conclusions and Future Work

In this chapter we aim to answer the questions of investigation and fulfill the purpose of the study. We also discuss some general aspects of the study and suggest some areas for future research.

8.1 Discussion of Findings

The whole analysis has been conducted to focus on the determination of the viability of exporting Taiwanese Sliding Table Saw machines into the Peruvian market; for that, concerning to our research questions, we have the following findings:

First, based on secondary data analysis, the market for woodworking machines in Peru is growing, as is industrial production, with woodworking being one of the main production activities in Villa El Salvador industrial park (See Table 4.4 and Figures 4.1 and 4.2).

Second, Peru is a niche market for Taiwanese companies, as the growth in Peruvian industrial production means that there is a gap in the market for woodworking machines, which Taiwanese manufacturers can fill. Survey results show that sliding table saws are currently in very high demand among woodworking companies, more so than other machineries. (See 7.1 Survey Descriptive Analysis, Figures 7.1 and 7.4).

Third, quality and price are the most important factors for products like Taiwanese sliding table saws to enter in the Peruvian market. (See 7.1 Survey Descriptive Analysis, Figure 7.2 and Table 7.3).

The Taiwanese machinery has good quality and technology. The key is to promote the machinery. Now Taiwanese organizations and Taiwanese Woodworking Association are doing well with the International TAITRA Show (It took place on Taipei on July 4-7, 2008). While the other important factor to enter in the Peruvian market is pricing; to determine the best price we have to know the Peruvian tariff and regulations because knowing the procedures and tariff barriers leads to people determining the better prices on the final market, which are explained in chapter 7; and following the new export model suggested in the study, we will understand the procedures step by step until we get the final price in the Peruvian market (See 7.4 Determination of the sliding table Saw Final Price in the Peruvian Market, Figures 7.9, 7.14 and 7.16).

Fourth, exporting sliding table saw from Taiwan to Peru is highly viable, and selling sliding table saw on the Peruvian market is a profitable business opportunity. Using the New Export Model (See figure 3.3), we were able to calculate the final selling price of the machine on the Peruvian Market, which proved to be very competitive while at the same time being profitable (See Analysis and Results 7.3, 7.4 and 7.5, and Table 7.16: Prices on the Peruvian market).

8.2 Conclusions and Implications

In conclusion, hypotheses H1, H2, and H3 have been proved satisfactory.

This research helps us to learn more about the sliding table saw's position on the Peruvian and Taiwanese markets.

In the Peruvian market, sliding table saw from Belgium are already available, but are more expensive than the Taiwanese machines. Most people, however, trust European machines more than Asian ones because some Chinese machines were found to be faulty, which resulted in people losing trust in Asian workmanship, a trust that may be hard to win back. There are several companies in Taichung Industrial Park manufacturing sliding table saws that are of good quality and are more reasonably priced than their Belgian competitors. In order to enter the Peruvian market, Taiwanese companies should gradually win people's confidence by offering good guarantees on all their machinery, and if possible, should open branches in Peru to sell spare parts, with specialized technicians on hand to carry out maintenance work.

The research results indicate that quality, price, and service after sale have important effects on the evaluation and selection of suppliers of machinery like sliding table saw. However, supplier selection is highly firm and situation-specific and the organizations probably use a set of criteria they know and feel are relevant to the situation. For example, greater attention should be given to relationship and organization profile of suppliers.

Considering the selection factor of quality strengthens the quality of incoming products/services, which in turn improves the quality of buyer's products/services or improves the product/services themselves. The selection factor also enhances the product/services innovation, adds to the ability of buying firm to react to customers' demands, and facilitates the customers' requirements and complaint analyses.

In short, quality factors (durability, flexibility of operation, simplicity of operation, and reliability) have relations to and impacts on improvement initiatives and customer focus.

Regarding the service factor it is important: the suppliers' reaction to demands of the buying firm for providing the required product or machine, the suppliers' ability to modify the products in the appropriate way based on the needed specifications of the buying firm to satisfy its needs, and the suppliers' technical support for enhancing the ability of the buying firm to find the solutions to the problems, compare alternatives and assess the shortcomings of decisions.

Good post-sales services provided by suppliers, contribute to the prevention of problems, and improvement of performance and quality standards.

Since any purchase involves some degree of service, when considering services, a firm needs to clearly define its expectations because there are few uniform established service standards to draw upon. To provide a consistently high product, promote successful development efforts, and ensure future improvements, a firm needs competent technical support from its suppliers. This is particularly important when the firm supply and technology strategy include development of a new product, technology, or access to proprietary technology into the global marketplace. Therefore, some form of global customer service may be required to support project implementation.

Project implementation should address how to improve Peruvian customer confidence in Taiwanese sliding table saw. If people believe the machine is reliable, it could be sold in high volumes; it has been suggested that to boost confidence, it is important to provide examples and videos to demonstrate the operation of the machines and offer a reliable after-sales service.

In a similar way, the organization profile is a very important factor for the selection of suppliers. The quality performance of suppliers to deliver an acceptable level of quality, the supplier's current technology to fulfill its commitments to the buying firm as a client, the production facilities and capacity of suppliers, are perceived and evaluated by buying firms when selecting a supplier.

Another important factor for the evaluation and selection of supplier is relationship. Managers who want to improve market share, competitiveness, product quality, and customer service should begin a process of internal assessment whereby their firm's immediate supplier and customer relationship capabilities are assessed and potentially modified. Following this, firms should consider identifying highly capable supply chain

partners, sharing better inter-firm cooperation and integration capabilities through information sharing and exchange, reducing response times throughout the supply chain, and sharing future strategic plans and requirements. These relationships between supplier and customer strategies may well be the key to sustained competitive advantage.

The Taiwanese exporter of sliding table saw could greatly benefit from this project, as these machines are not commonly found in the Peruvian market.

8.3 Limitations

The research will only focus on sliding table saw exports from Taiwan to Peru.

This project is only valid for the time period during which it is being carried out.

8.4 Directions for Future Research

Further progress requires extending the model of this study.

There are several possible extensions of this work. One is in the area of the research on growing markets; it would be interesting to develop a study on a different region or country and to perform a comparison with the current approach. This research can be used as a base step for extensive research in international trade between Taiwan and Peru, or other Latin American countries.

The second extension would be to include other objectives that reflect different business needs in the Peruvian market, such as other products to satisfy growing markets. To do this, the Peruvian and Taiwanese governments could find a way to jointly promote further business between the two countries, e.g., by appointing a representative for woodworking or other machinery, providing facilities, servicing, training, etc.

With the current growing industrial sector in Peru and Latin America, further research in this area could provide Taiwanese companies with new and excellent opportunities to export a wide variety of woodworking and other machinery into these growing markets in Peru or other Latin American countries.

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Appendix

Appendix A - Survey of Peruvian Woodworking Companies in Villa



El Salvador Industrial Park



MUNICIPALIDAD DE
VILLA EL SALVADOR
CIUDAD MENSAJERA
DE LA PAZ



A1. Survey - English Version

Dear respondent, please take a moment to assist us with this academic research. The purpose of this questionnaire is to explore the woodworking in Villa El Salvador Industrial Park, Peru. We highly appreciate your willingness. Please send it back, when you finish it. Thank you for your collaboration!

1. Are there any Peruvian-made Sliding Table Saw for sale on the Peruvian market?

- ☐ Yes ; Brand or Company's name:.....
☐ No
☐ Don't know

2. Do you know of any distributor that sells foreign-made Sliding Table Saw on the Peruvian Market?

- ☐ Yes ; Brand and Country:.....
☐ None

3. Which features do you prefer in a Slide Table Saw? Please, indicate with an "X" your level of agreement with the following statements from 1 (total disagreement) to 5 (total agreement):

- a) Multi-function
b) Quality
c) Price
d) Origin
e) Standardized spare parts
f) Guarantee period
g) Post-sale service
h) Other:

1	2	3	4	5

4. What type of woodworking machines do you currently require?

.....
.....

5. Products Interested (Woodworking Machines): Please tick ☐

- | | | | |
|---------------------------------|--------------------------|------------------------------------|--------------------------|
| a) Manual Edge Banding Machines | <input type="checkbox"/> | f) Postforming Machine | <input type="checkbox"/> |
| b) Auto. Edge Banding Machines | <input type="checkbox"/> | g) Profile Moulding Machine | <input type="checkbox"/> |
| c) Double End Tenoner | <input type="checkbox"/> | h) Multiple Boring Machines | <input type="checkbox"/> |
| d) Sliding Table Saw | <input type="checkbox"/> | i) Panel Saw | <input type="checkbox"/> |
| e) Softforming Machines | <input type="checkbox"/> | j) Other Machines (Please specify) | <input type="checkbox"/> |

Thank you very much for your collaboration!



Encuesta a Compañías Carpinteras Peruanas en el Parque Industrial de Villa el Salvador



MUNICIPALIDAD DE
VILLA EL SALVADOR
CIUDAD MESTIZAJERA
DE LA PAZ



A2. Survey - Spanish Version

Apreciado encuestado, por favor tome un momento para ayudarme con esta investigación académica. El propósito de este cuestionario es explorar la industria de trabajos en madera en el Parque Industrial Villa EL Salvador, Perú. Apreciamos altamente su buena voluntad. ¡Gracias por su colaboración!

1. ¿Usted conoce alguna empresa nacional que fabrica escuadradora horizontal?

☐ Si ; Marca o Nombre de la empresa:.....
☐ No
☐ No Sabe

2. ¿Usted conoce algún distribuidor que vende escuadradora de otro país en mercado peruano? Si la respuesta es Si: ¿De qué país?

☐ Si ; Marca y País de procedencia:.....
☐ Ninguno

3. ¿Qué características prefiere en una escuadradora? Por favor, indique con un "X" su nivel de preferencia: de 1 (en total desacuerdo) a 5 (completamente de acuerdo):

a) Multi-funcional

b) Calidad

c) Precio

d) Procedencia

e) Repuestos estandarizados

f) Periodo de garantía

g) Servicio Post-venta

h) Otros:

1	2	3	4	5

4. ¿Qué tipos de máquinas para trabajos en madera actualmente necesita para su empresa?:

.....
.....

5. ¿En qué productos y Máquinas está interesado?: Por favor, marque el recuadro ☐

a) Enchapadora de Cantos Manual

☐

f) Post Formadora

☐

b) Enchapadora de Cantos Automático

☐

g) Moldurera

☐

c) Doble Espigadora

☐

h) Taladro Múltiple

☐

d) Escuadradora

☐

i) Seccionadora

☐

e) Chapeadora Softforming

☐

j) Otras máquinas (Por favor especificar)

☐

¡Muchas Gracias por su colaboración!

Appendix B - Belgium Sliding Table Saw Quotation

B1. Belgium Sliding Table Saw Quotation – ROBLAND Brand, Model Z 250

(page 1)



COTIZACIÓN Nro. V255 00013

EMPRESA:
COLQUICHAGUA OSORIO GUILLERMO

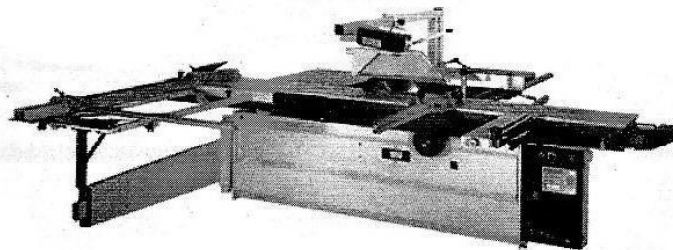
PERSONA DE CONTACTO:
Estimados Señor (es)

TELEFONO: 0
FECHA: 07-Jul-2008

Oficina Principal:
Av. Separadora Industrial
Mz. L1 Lote 10 Parcela II
Parque Industrial de Villa El Salvador
Teléfonos: 287-3070 / 287-3435
Fax: 267-6607

Oficina Lima:
Av. Paseo de la República 1076
Santa Beatriz
Teléfonos: 470-5029 / 265-8747
Fax: 471-0176

**MAQUINA SIERRA CIRCULAR ESCUADRADORA MARCA ROBLAND
MOD. Z 250 DE FABRICACIÓN BELGA**



Mahecor es:

- ◆ Líder en ventas de maquinaria y equipos para trabajar tableros.
- ◆ Más de 250 escuadradoras vendidas en el Perú.
- ◆ La experiencia de más de 50 años en el sector maderero peruano
- ◆ Servicio Técnico Calificado
- ◆ Soporte Post-Venta
- ◆ Amplio stock de herramientas y repuestos
- ◆ Su socio confiable

B1. Belgium Sliding Table Saw Quotation – ROBLAND Brand, Model Z 250 (page 2)



Descripción del Estándar:

- ✓ Modelo similar al Z3200, la diferencia está en la longitud del carro móvil, esta variación implica que c
- ✓ Motores independientes para cada Sierra (Principal e Incisor).
- ✓ Carro Móvil con sistema similar al de los rodajes, esto hace que su desplazamiento sea suave obteni
- ✓ Regulador de Incisor rápido y práctico.
- ✓ La robustez y la precisión con la que son fabricadas, no tienen comparación con una versión nacional.
- ✓ Es ideal para un empresario que haga cortes de despiece (o retazos) de tableros (x ejm, un fabricante de muebles de melamine).

Características Técnicas:

Diámetro de la sierra	: 400 mm, eje 30 mm
Altura de corte	: 125 mm, con disco de 400 mm (16")
Inclinación de la sierra	: 0 - 45°
03 Velocidades	: 3000/4000/5000 RPM
Sierra incisora	: 100 x 20 mm
Altura de corte incisor	: 0 - 4.50 mm
Velocidad del incisor	: 7000 RPM
Corte a escuadra	: 2500 x 3200 mm
Motor de Sierra	: 7.5 HP
Motor de incisor	: 0.75 HP
Boca de Aspiración	: Diámetro 120 mm
Peso Neto	: 1050 kg.

Condiciones Comerciales:

Precio \$ 13,600.00
Los precios incluyen IGV

Precio incluye 01 Jgo. Disco + Aspirador UFO 101
INSTALACION Y PUESTA EN MARCHA (*)

Forma de pago Contado o Sistema Leasing gestionado por el cliente.

Plazo de entrega

Instantánea (a confirmación)

Validez de la oferta 15 días a partir de la fecha JULIO 07 DE 2008

(*) En caso de tratarse de una instalación en provincia, el cliente asumirá los gastos de transporte y viáticos del técnico asignado a la instalación

Quedamos a la espera de sus gratas órdenes, las cuales merecerán nuestra preferente y especial atención.

Les saludamos atentamente

MAHECOR SAC

B2. Belgium Sliding Table Saw Quotation – ROBLAND Brand, Model Z 3200

(page 1)



COTIZACIÓN Nro. V256 00276

EMPRESA:

WILMER SAGUMA SEGURA

PERSONA DE CONTACTO:

Estimados Señor (es)

TELEFONO: 992682780

FECHA: 12-Jul-2008

Oficina Principal:

Av. Separadora Industrial

Mz. L1 Lote 10 Parcela II

Parque Industrial de Villa El Salvador

Teléfonos: 267-3070 / 287-3435

Fax: 267-6607

Oficina Lima:

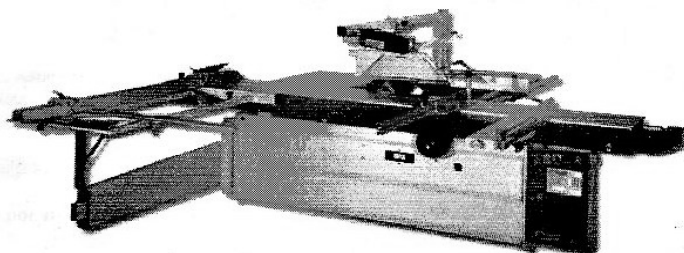
Av. Paseo de la República 1076

Santa Beatriz

Teléfonos: 470-5029 / 265-8747

Fax: 471-0176

MAQUINA SIERRA CIRCULAR ESCUADRADORA MARCA ROBLAND MOD. Z 3200 DE FABRICACIÓN BELGA



Mahecor es:

- ◆ *Líder en ventas de maquinaria y equipos para trabajar tableros.*
- ◆ *Más de 300 escuadradoras vendidas en el Perú.*
- ◆ *La experiencia de más de 50 años en el sector maderero peruano*
- ◆ *Servicio Técnico Calificado*
- ◆ *Soporte Post-Venta*
- ◆ *Amplio stock de herramientas y repuestos*
- ◆ *Su socio confiable*

Ventajas:

- ✓ Le brinda cortes de muy buen acabado.
- ✓ Posee facilidad de uso y fácil limpieza.
- ✓ Facilidad para hacer cortes de acabado como cortes intermedios de manera segura y confiable.
- ✓ Rapidez y confortabilidad.
- ✓ Confiabilidad de funcionamiento a largo plazo.
- ✓ Puede realizar distintos tipos de cortes especiales.

B2. Belgium Sliding Table Saw Quotation – ROBLAND Brand, Model Z 3200 (page 2)



Descripción de la Máquina Estándar:

- ✓ Motores independientes para cada Sierra (Principal e Incisor).
- ✓ Carro Móvil con sistema similar al de los rodajes, esto hace que su desplazamiento sea suave obteniendo un mejor corte.
- ✓ Regulador de Incisor rápido y práctico.
- ✓ El modelo más vendido en el Perú (más de 250 máquinas)
- ✓ Corta todos los formatos de tablero (hasta los más grandes).
- ✓ Mesa soporte con tope de medida especial y un carro de aluminio.

Características Técnicas:

Diámetro de la sierra	: 400 mm, eje 30 mm
Altura de corte	: 125 mm, c/ disco de 400 mm (16")
Inclinación de la sierra	: 0 - 45°
03 Velocidades	: 3000/4000/5000 RPM
Disco incisor	: Diámetro 100 x 20 mm
Altura de corte incisor	: 0 - 4.50 mm
Velocidad del incisor	: 7000 RPM
Corte a escuadra	: 3200 x 3200 mm
Motor de Sierra	: 7.5 HP Trifásico
Motor de incisor	: 0.75 HP Trifásico
Boca de Aspiración	: Diámetro 120 mm
Peso Neto	: 1150 kg.

Condiciones Comerciales:

Precio por su inversión: S/. 44,400.00
Los precios incluyen IGV

Precio incluye INSTALACION Y PUESTA EN MARCHA (*)
Un (1) Juego de Discos (Principal+Incisor) marca BOY.
Extractor de Aserrín modelo UFO 101, marca KUFO
Un pulsador tipo hongo, una abrazadera, tres metros de manguera y 8 metros de cable.

Forma de pago Contado o Sistema Leasing gestionado por el cliente.

Plazo de entrega Aprox. Acañu

Validez de la oferta 15 días a partir de la fecha JULIO 12 DE 2008

(*) En caso el destino de la máquina sea en el interior del país, el cliente cubrirá los gastos de transporte y viáticos del técnico encargado de la instalación.

Le agradecemos nos haga llegar su pedido. Ya hoy le aseguramos un servicio esmerado y satisfactorio.

Les saludamos atentamente

MAHECOR SAC

Appendix C - Taiwanese Sliding Table Saw Quotations

C1. Quotation – OAV Equipment & Tools Inc., Models P402 S and P355

(page 1)



仕興機械工業股份有限公司
OAV EQUIPMENT & TOOLS, INC.

NO. 65, TUNG-SHAN ROAD, WU-TSO SUBWARD, CHING-SHUI, TAICHUNG,
TAIWAN, R.O.C. TEL: 886-4-26201188(REP.) FAX: 886-4-26201199

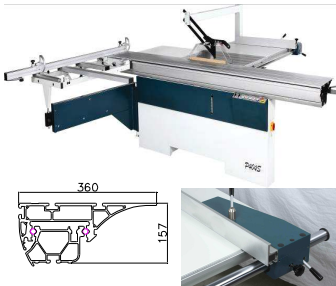

TO: ERFURT S.A.

DATE: JULY 10, 2008

ATTN: Mr. Miriam Quispe

Quote No.: Q970714002

E-mail: oav@ms6.hinet.net [Http://www.oavequipment.com](http://www.oavequipment.com)

QUOTATION						
No.	Model No.	Description	Q'ty	Unit Price/US	Freight Fee/US	Remark (Photo)
1	P402S	Sliding Table Saw P402S - 7.5HP/1HP	1	5,940	340	
		1. Sliding table : 3200x355mm				
		2. Motorized rise/fall and tilting control for main saw blade				
		3. Manual adjustment for scoring blade				
		4. Rip fence, manual with cutting width : 1300mm				
		5. Crosscut-miter fence, manual for length and angle adjustment, crosscut to 3200mm				
		6. Without main saw blade, with scoring blade				
		7. One pc type saw blade guard				
2	P355 (3200)	Sliding Table Saw P355	1	4,800	370	
		1. Main motor 7.5hp 3ph				
		2. Sliding table length 3200x355mm				
		3. Three speed				
		4. Main saw blade is not included				
		5. One pc type saw blade guard				
		6. Hold down + miter fence				
		7. Edge shoe				
		Sliding Table Saw	2 U	10,740		
		Freight Fee			710	
SUB TOTAL US\$:					11,450	




C1. Quotation – OAV Equipment & Tools Inc., Models P402 S and P355 (page 2)



仕興機械工業股份有限公司
OAV EQUIPMENT & TOOLS, INC.

NO. 65, TUNG-SHAN ROAD, WU-TSO SUBWARD, CHING-SHUI, TAICHUNG,
 TAIWAN, R.O.C. TEL: 886-4-26201188(REP.) FAX: 886-4-26201199

E-mail: oav@ms6.hinet.net Http://www.oavequipment.com

QUOTATION						
3		Overhead saw blade guard (A type)	1	506		
4		Overhead saw blade guard (B type)	1	396		
5		Overhead saw blade guard (C type)	1	264		
SUB TOTAL Overhead US\$:			1,166			
TOTAL US\$			12,616			


REMARK :

1. TERM : FOB Taichung , Taiwan
2. PAYMENT : By irrevocable L/C at sight in our favor
3. DELIVERY : 45 ~60 days after receiving the payment
4. EXPIRY DATE : 30 Days from the date hereof
5. MINI. ORDER AMOUNT : USD\$10,000

OAV EQUIPEMNT & TOOLS, INC.

 Mary / Sales Manager

C1. Quotation – OAV Equipment & Tools Inc., Models P402 S and P355 (page 3)

ITEM	MODEL	P402M/P404M/P405M	P402S/P404S/P405S
			
Rectified cast iron fixed table dimension		600 x 1,000 mm.	600 x 1,000 mm.
Sliding table dimension		3,200 x 360 mm., 3,200 x 380 mm., 3,200 x 385 mm. (2, 4, 5 t)	
Main saw blade		400 mm.	400 mm.
Main saw bore		30 / (25.4) mm.	30 / (25.4) mm.
Max. cutting height with blade at 90°		105	105
Max. cutting height with blade at 45°		70	70
Main motor power (3 PH)		7.5 HP (5.5 kw)	7.5 HP (5.5 kw)
Main blade speed		3,000 / 4,000 / 5,000	3,000 / 4,000 / 5,000
Scoring saw blade		120 mm.	120 mm.
Scoring saw blade bore		20 / (22) mm.	20 / (22) mm.
Scoring blade motor power		1 HP (0.75 kw)	1 HP (0.75 kw)
Scoring blade speed		8,000	8,000
Cutting width		1,300 mm.	1,300 mm.
Cutting width adjustment		Manual	Manual
Blade tilting adjustment		Manual	Motorized
Main saw height adjustment		Motorized	Motorized
Scoring saw height adjustment		Manual	Manual
Scoring saw +/- direction adjustment		Manual	Manual
Main blade speed show		-	-
Saw guard		Simple and overhead	
Crosscut fence		Manual and digital (optional)	Manual and digital (optional)
Dust collection system		120 / 60 mm.	120 / 60 mm.
Machine N.W./ G.W., Dimensions		661 / 856 kgs, 2,240 x 1,220 x 1,130 mm.	706/901kgs, 2,240 x 1,220 x 1,130 mm.
Sliding table N.W./ G.W., Dimensions		100 / 108 kgs, 3,360 x 450 x 250 mm.	100/108kgs, 3,360 x 450 x 250 mm.
Overhead saw blade guard (A type) optional		68 / 101 kgs, 2,110 x 1,040 x 220 mm.	68/101kgs, 2,110 x 1,040 x 220 mm.
Overhead saw blade guard (B type) optional		28.5 / 32 kg, 1,000 x 900 x 140 mm.	28.5/32kgs, 1,000 x 900 x 140 mm.
Overhead control panel N.W./ G.W., Dimensions			
Ctn QTY: (20'/40') w/o overhead guard		7/18 sets	7/18 sets

* Due to needs of continuous improvement, specifications are subject to change without prior notice.

C2. Quotation - Technik Associates, Inc., Models STS 250 D and STS 300 S
(page 1)



洪業有限公司

台灣台中縣42748潭子鄉潭富路二段288號

TECHNIK ASSOCIATES, INC.

288, SEC. 2, TANFU ROAD, TANTZU HSIANG, TAICHUNG, 42748 TAIWAN

TEL.: 886-4-2534-9000 http://www.hipoint.com.tw

FAX : 886-4-2534-9160 E-mail: technik@ms14.hinet.net

YOUR REF: 080522-MQR's

OUR REF: BNS0805221450

DATE: JUN. 26, 2008

Messrs.: **ERFURT S.A.**

RUC: 20301974966

Av. Separadora Industrial Mz. F-1 Lote

08 Parque Industrial de Villa El Salvador,

Lima 42, Peru.

TEL:+511 2880000 / 4743650 FAX: +511 4743650

ATTN.: MR. HERACLIDES QUISPE

C.C.: MS. MIRIAM QUISPE RAMOS

☒ QUOTATION

☐ SALES CONFIRMATION

☐ PROFORMA INVOICE

Gentlemen:

☒ We hereby quote you the following terms and conditions of our sales.

☐ Please counter-sign and return one of which to us as confirmation if acceptable.

Payment : By irrevocable L/C at sight in our favor or
30% T/T when ordering and 70% T/T before shipment.

Shipment : within **45** days after receipt of your L/C or T/T

Insurance : Nil.

Packing : By Wooden Case / Crate.

Validity : 31-Jul-08

Remarks : **1. Electric for 220Volt / 3Phase / 60Hz.**

2. Installation charges excluded.

DESCRIPTION	QUANTITY	UNIT PRICE	AMOUNT (US\$)
HIPOINT BRAND			FOB TAIWAN NET
SLIDING TABLE SAW			
1 MODEL: STS-300S	1 UNIT	US\$ 4,350.00	US\$ 4,350.00
SLIDING TABLE DIMENSION : 3000x350 MM			
TABLE SIZE : 860x560 MM			
MAX. CUTTING LENGTH : 3000 MM			
MAX. CROSSCUT WIDTH : 1200 MM			
MAX. CUTTING HEIGHT AT 90/45°: 95/76 MM			
MAIN SAW MOTOR : 5 HP AT 4000 RPM			
SCORING SAW : 8000 RPM			
SAWBLADE TILTING ADJUSTMENT : 0-45°			
STANDARD ATTACHMENT:			
* (1) SET OF SAW BLADE			
* (1) SET OF TOOL BOX			
* (1) SET OF OPERATION MANUAL			
PACKING SIZE (MM):			
2270×1030×1120 + 3310×430×300			
N.W. / G.W.(KGS):			
382+136 / 480+170			

C2. Quotation - Technik Associates, Inc., Models STS 250 D and STS 300 S (page 2)



洪業有限公司

台灣台中縣42748潭子鄉潭富路二段288號

TECHNIK ASSOCIATES, INC.

288, SEC. 2, TANFU ROAD, TANTZU HSIANG, TAICHUNG, 42748 TAIWAN

TEL.: 886-4-2534-9000

http://www.hipoint.com.tw

FAX : 886-4-2534-9160

E-mail: technik@ms14.hinet.net

DESCRIPTION	QUANTITY	UNIT PRICE	AMOUNT (US\$)
HIPOINT BRAND			FOB TAIWAN NET
SLIDING TABLE SAW			
2 MODEL: STS-250D	1 UNIT	US\$ 6,050.00	US\$ 6,050.00
SLIDING TABLE DIMENSION : 2500x350 MM			
TABLE SIZE : 610x1000 MM			
MAX. CUTTING LENGTH : 2500 MM			
MAX. CROSSCUT WIDTH : 835 MM			
MAX. CUTTING HEIGHT AT 90/45°: 114/90 MM			
MAIN SAW MOTOR : 5 HP AT 4/5/6000 RPM			
SCORING SAW MOTOR : 1 HP AT 8000 RPM			
SAWBLADE TILTING ADJUSTMENT : 0-45			
STANDARD ATTACHMENT:			
* (1) SET OF SAW BLADE			
* (1) SET OF TOOL BOX			
* (1) SET OF OPERATION MANUAL			
PACKING SIZE (MM):			
1892x1164x1162 + 2769x260x530			
N.W. / G.W.(KGS):			
491+74 / 596+104			
* OCEAN FREIGHT: CFS			US\$ 641.00
* INSURANCE PREMIUM			US\$ 19.00
TOTAL: CIF CALLAO, PERU	2 UNITS		US\$ 11,060.00
	VVVVVV		VVVVVVVVVVV

E. & O.E.



SLIDING TABLE SAW

MODEL : STS-300S



SLIDING TABLE SAW

MODEL : STS-250D/320D



C3. Quotation-HOLYTEK Industrial Corp. Models SSA-250CE & SS-320CE

(page 1)

HOLYTEK

HOLYTEK INDUSTRIAL CORP.

9F-1 NO. 400, SEC.1, CHANG PING RD., TAICHUNG, TAIWAN, ROC

TEL: 886-4-22452818 FAX: 886-4-22436928

P.O. BOXES 35-96, TAICHUNG, TAIWAN, R.O.C.

e-mail:holytek@ms13.hinet.net http://www.holytek.com.tw

QUOTATION

REF NO.: ERF-Q080711

MESSRS: ERFURT S.A.

DATE: JULY 11, 2008

ATTN: MR. MIRIAM QUISPE

DEAR SIRs,

We are pleased to offer you this estimate under the following terms:

1. VALIDITY : BEFORE AUGUST 11, 2008
2. DELIVERY : WITHIN 45-60 AFTER RECEIVING YOUR L/C OR DOWN PAYMENT
3. PAYMENT : **BY IRREVOCABLE L/C AT SIGHT IN OUR FAVOR OR
30% DOWN PAYMENT BY T, 70% BY T/T BEFORE SHIPMENT**
4. PRICE BASIS : **FOB TAIWAN NET PRICE**

MODEL NO.	DESCRIPTION	Q'TY	UNIT	PRICE
SSA-250CE	SLIDING TABLE SAW DIMENSION: 2,500 x 350 MM MAIN SAW: MOTOR 3KW(5 HP) 4200 MOTOR RPM 3450 SCORING SAW 0.75KW(1 HP) 8000 (Motor RPM 2850) <u>N.W./G.W. - Measurement</u> 491/596 KGS Machine, 74/104 KGS Table 1,892x1,164x1,162 Machine, 2,769x260x530 Table	1	U	US\$ 6,554
SS-320CE	SLIDING TABLE SAW DIMENSION: 3,200 x 350 MM MAIN SAW: MOTOR 3KW(5 HP) 4/5/6000 MOTOR RPM 2850 SCORING SAW 8000 RPM <u>N.W./G.W. - Measurement</u> 382/480 KGS Machine, 100/140 KGS Table 2,191x1,264x1,162 Machine, 3,540x260x530 Table	1	U	US\$ 4,846
SSA-250CE & SSA-320CE	SLIDING TABLE SAWS	2	U	US\$ 11,400

* FREIGHT FEE/US 700.- (FOR MINI. ORDER AMOUNT US\$10,000)

** HANDLING FEE US\$ 150.- WILL BE CHARGED IF THE TOTAL AMOUNT OF EACH ORDER IS UNDER US\$ 5,000.-**

Dear Mr. Miriam,

RE: EB-1M

Please kindly find the above quote for your reference.

We are looking forward to hearing from you soon.

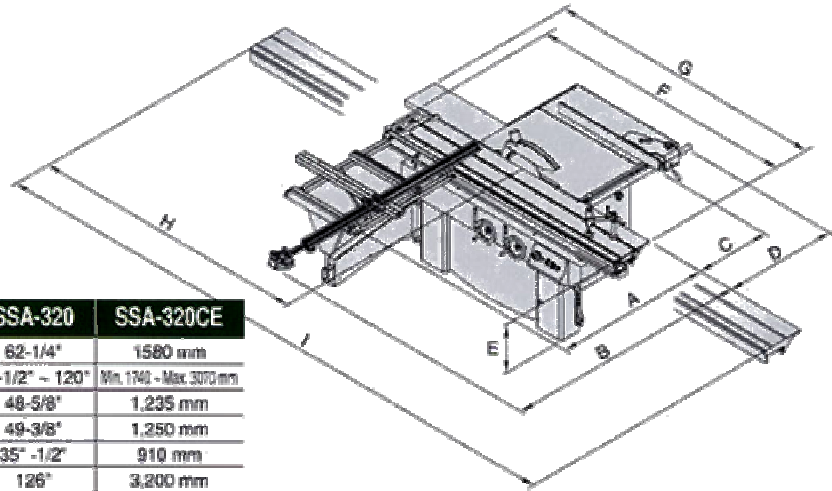
Best Regards,

HOLYTEK INDUSTRIAL CORP>

GERGE KO

GK/wl

C3. Quotation–HOLYTEK Industrial Corp. Models SSA-250CE & SSA-320CE (page 2)



DIMENSIONS:

NO.	SSA-250	SSA-250CE	SSA-320	SSA-320CE
A	57-3/16"	1455 mm	62-1/4"	1580 mm
B	68-1/2" ~ 120"	Min. 1740 - Max. 3070 mm	68-1/2" ~ 120"	Min. 1740 - Max. 3070 mm
C	32-13/16"	835 mm	48-5/8"	1,235 mm
D	39-5/16"	1,000 mm	49-3/8"	1,250 mm
E	35"	889 mm	35" -1/2"	910 mm
F	98-3/8"	2,500 mm	126"	3,200 mm
G	99-3/4"	2,530 mm	115-3/4"	2,940 mm
H	108-1/4"	2,750 mm	128"	3,250 mm
I	216-1/2"	5,500 mm	257-7/8"	6,550 mm

SPECIFICATIONS:

MODEL		SSA-250	SSA-250CE	SSA-320	SSA-320CE
Sliding table dimension		98-3/8" x 13-3/4"	2,500 x 350 mm	126" x 13-3/4" (LxD)	3,200 x 350 mm
Max. sliding stroke with crosscut fence		98-3/8"	2,500 mm	126"	3,200 mm
Max. sliding stroke without crosscut fence		110"	2,800 mm	135-3/4"	3,450 mm
Table height		35"	889 mm	35"	889 mm
Table size		table 24" x 39-3/4" (68" x 39-3/4")	610 x 1,000 mm (1,730 x 1,000 mm)	table 24" x 39-3/4" (68" x 39-3/4")	610 x 1,000 mm (1,730 x 1,000 mm)
Main saw	Saw blade diameter	14"	355 mm	14"	355 mm
	Saw blade arbor diameter	1"	30 mm	1"	30 mm
	Cutting height at 90°, 45°	4-1/2", 3-1/2"	114 mm, 90 mm	4-1/2", 3-1/2"	114 mm, 90 mm
	Motor power	5HP/3PH, 3HP/1PH	3KW/3PH, 2.25KW/1PH	7.5HP/3PH, 5HP/1PH	5.5KW/3PH, 3.75KW/1PH
	Spindle RPM	4,200 (Motor RPM 3,450)	4,200 (Motor RPM 3,450)	4000, 6000, 8000 (Motor RPM 3450)	4000, 5000, 6000 (Motor RPM 2850)
Scoring saw	Saw blade diameter	4-3/4"	120 mm	4-3/4"	120 mm
	Saw blade arbor diameter	7/8"	20 mm	7/8"	20 mm
	Cutting height at 90°, 45°	3/8", 5/16"	10 mm, 7 mm	3/8", 5/16"	10 mm, 7 mm
	Motor power	1 HP	0.75 KW	1 HP	0.75 KW
	Spindle RPM	8,000 (Motor RPM 3,450)	8,000 (Motor RPM 2,850)	8,000 (Motor RPM 3,450)	8,000 (Motor RPM 2,850)
Ripping width		32-13/16" (45-5/8" is opt.)	835 mm (1235 mm is opt.)	32-5/8" (45-5/8" is opt.)	835 mm (1,235 mm is opt.)
Crosscut width		68-1/2", 125"	1740/3175 mm	68-1/2", 125"	1,740/3,175 mm
Blade height adjustment		Manual	Manual	Manual	Manual
Blade tilting adjustment		Manual, 0° ~ 45°	Manual, 0° ~ 45°	Manual, 0° ~ 45°	Manual, 0° ~ 45°
Electric control system		Magnetic switch	CE norm braking switch	Magnetic switch	CE norm braking switch
Dust collection system		Main channel 5" (120 mm). Saw blade guard extract 2-1/2" (60 mm)			
N.W./G.W. Measurement		1,080/1,311 lbs-machine, 162/229 lbs-table	491/596 kgs-machine, 74/104 kgs-table	1364/1594 lbs-machine, 220/308 lbs-table	620/720 kgs-machine, 100/140 kgs-table
		74-1/2"x46"x45-3/4"-machine 109"x10-1/4"x20-7/8"-table	1,892x1,164x1,162-machine 2,769x260x530 mm-table	86-1/4"x49-3/4"x45-3/4"-machine 139-3/8"x10-1/4"x20-7/8"-table	2,191x1,264x1,162-machine 3,540x260x530 mm-table

* Specifications and design characteristics are subject to change without prior notice.

HOLYTEK

HOLYTEK INDUSTRIAL CORP.

9F-1, NO. 400, SEC. 1, CHANG RING RD., TAICHUNG, TAIWAN, R.O.C.

TEL: 886-4-2243-2818 (REP.) FAX: 886-4-2243-6928

E-mail: holytek@msi3.bines.net

http://www.holytek.com.tw

Appendix D – Cost of Tariff and Taxes - ADUANA Callao in Peru

PASSALACQUA S.A.

R.U.C.20100383757

Av.Argentina 405 Ap.Postal 303

Telefs.: 429-3952/465-9295/465-0273

465-7070/Fax: 4538595/429-9065

Av.Elmer Faucett Cuadra 30

Centro Aéreo Comercial Of.105-A

Telefs.: 574-0338/3349/5496

Fax: 574-6232 – CALLAO

FACTURA/PROFORMA

Fecha: 25/06/2008

ORDEN N°

SEÑOR(ES) : ERFUT S.A.

POR GASTOS DE: IMPORTACION DEFINITIVA MARITIMA

D.U.A.	Guía Aérea o Conoc.Embarque	Bultos	Peso / KB	Vapor / Línea Aérea	Fecha
		02	1,358.00		

ESCUADRADORAS

CIF US\$.11,620.00

DERECHOS E IMPUESTOS	DIFERIDO	CONTADO
AD/VALOREM		US\$.
DERECHO ESPECIFICO		
IMP.SELECT.CONSUMO		
IMP.PROMOC.MUNICIPAL		232.00
IMP.GENERAL A LAS VENTAS		1,975.00
DERECHOS ANTIDUMPING		
TASA SERVICIO DESPACHO		30.00
RECARGO NUMERACION		
SOBRE TASA ADICIONAL		
INTERES NACIONALIZACION		
LEY 28053 – Art.1°		
TOTAL ADEUDO		US\$. 2,237.00
GASTOS OPERATIVOS		
65801 – DESCGA & OTROS	Compbte.	S/. 372.00
65803 – MANIPULEO, ALMACENAJE & OTROS		
65804 – OTROS SERVICIOS CIAS. NAVIERAS / MARITIMAS	Compbte.	405.00
65805 – MOVILIZAC.DE CARGA	Compbte.	169.00
65809 – ADUANAS: TASA POR SERVICIOS		
65810 – RECONOCIMIENTO ADUANERO y/o SANITARIO		
65813 – SENASA/FUMIGACION/CERPER		
65807 – SEGURO CONTENEDOR (ES)		
77601 – FIANZA CONTENEDOR (ES)		
65807 – ESTADIAS CONTENEDOR (ES)		
65808 – MANIPULEO Y/O LIMPIEZA CONTENEDOR (ES) VACIO		
65811 – TRANSPORTE		230.00
65811 – SERVICIO MONTACARGA O GRUAS		
65812 – FLETE AEREO / MARITIMO / THC		
65814 – MANEJO DE DOCUMENTOS	Compbte.	162.00
65815 – GASTOS OPERATIVOS		100.00
65815 – GASTOS EXTRAORDINARIOS		
65816 – TRANSMISION ELECTRONICA DE DATOS		60.00
SUB-TOTAL		S/. 1,498.00
Ns. Servicios		331.00
I.G.V.		136.99
TOTAL		S/. 1,965.99

Appendix E – Incoterms Information

Incoterms or international commercial terms are a series of international sales terms widely used throughout the world. They are used to divide transaction costs and responsibilities between buyer and seller and reflect state-of-the-art transportation practices. They closely correspond to the United Nations Convention on Contracts for the International Sale of Goods.

Incoterms are standard trade definitions most commonly used in international sales contracts; Devised and published by the International Chamber of Commerce, they are at the heart of world trade; these international rules that are accepted by governments, legal authorities and practitioners worldwide for the interpretation of the most commonly used terms in international trade. They either reduce or remove altogether uncertainties arising from differing interpretations of such terms in different countries (International Chamber of Commerce, 2008).

The Incoterms are divided in four groups: in the E-group the seller only makes goods available to buyer at seller's premises, in the F-group the seller is called upon to deliver goods to carrier appointed by buyer, in the C-group the seller has to contract for carriage but without assuming the risk of loss or of damage to the goods or additional costs due to events occurring after shipment and dispatch and in the D-group the seller has to bear all costs and risks needed to bring goods to place of destination.

The Figure E.1 shows Incoterms Diagram. Among the best known Incoterms are EXW (Ex works), FOB (Free on Board), CIF (Cost, Insurance and Freight), DDU (Delivered Duty Unpaid), and CPT (Carriage Paid To), following the complete four categories with its respective subdivisions, according to ICC:

(a) E-Group

- EXW - Ex Works - Title and risk pass to buyer including payment of all transportation and insurance cost from the seller's door. Used for any mode of transportation.

(b) F-Group

- FCA - Free Carrier -- Title and risk pass to buyer including transportation and insurance cost when the seller delivers goods cleared for export to the carrier. The seller is obligated to load the goods on the buyer's collecting vehicle; it is the Buyer's obligation to receive the seller's arriving vehicle unloaded.
- FAS - Free Alongside Ship -- Title and risk pass to buyer including payment of all transportation and insurance cost once delivered alongside ship by the seller.

Used for sea or inland waterway transportation. The export clearance obligation rests with the seller.

- FOB - Free On Board and risk pass to buyer including payment of all transportation and insurance cost once delivered on board the ship by the seller. Used for sea or inland waterway transportation.

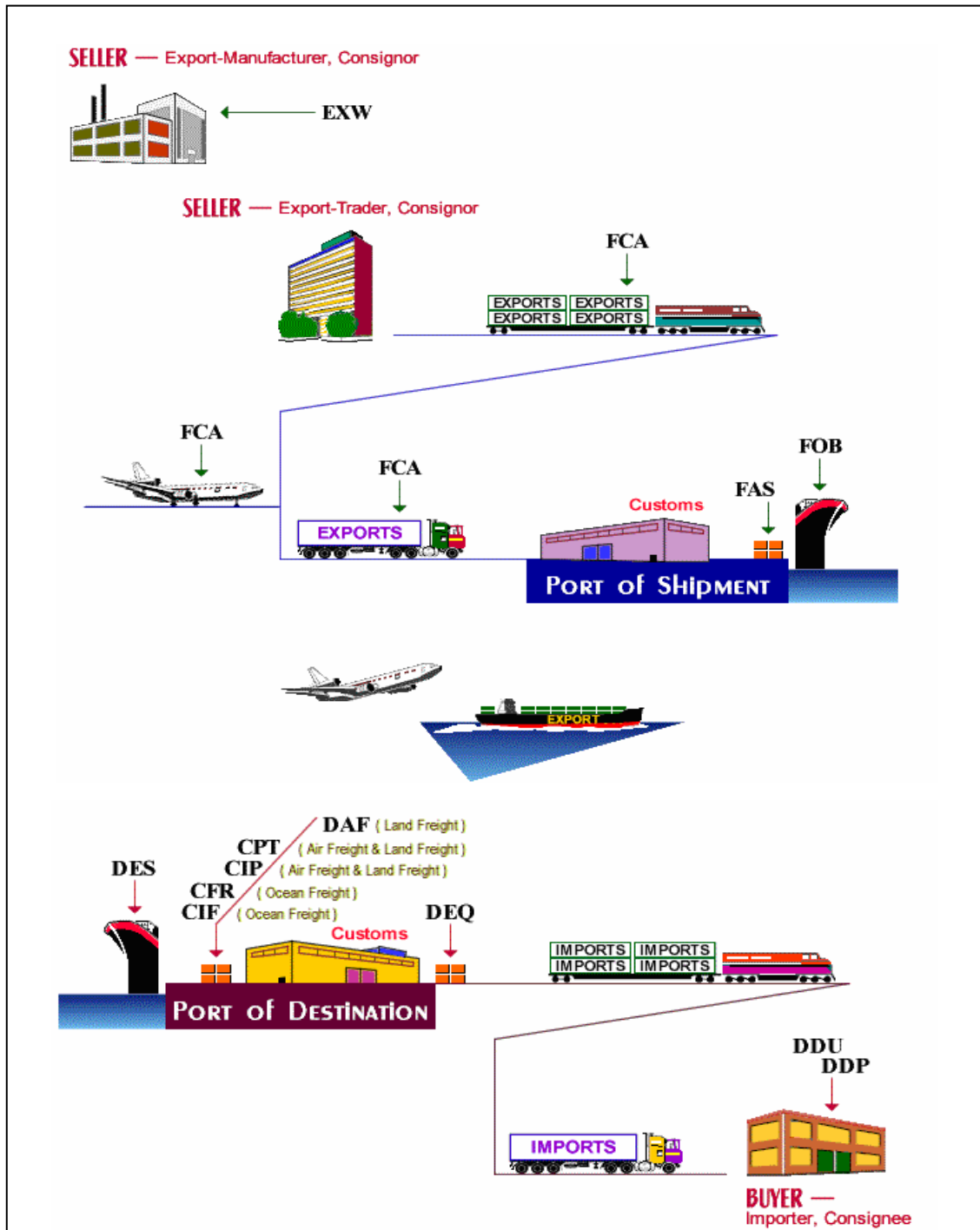


Figure E.1 Incoterms Diagram

(Source: Export911, n.d.)

(c) C-Group

- CFR - Cost and Freight -- Title, risk and insurance cost pass to buyer when delivered on board the ship by seller who pays the transportation cost to the destination port. Used for sea or inland waterway transportation.
- CIF - Cost, Insurance and Freight -- Title and risk pass to buyer when delivered on board the ship by seller who pays transportation and insurance cost to destination port. Used for sea or inland waterway transportation.
- CPT - Carriage Paid To -- Title, risk and insurance cost pass to buyer when delivered to carrier by seller who pays transportation cost to destination. Used for any mode of transportation.
- CIP - Carriage and Insurance Paid To -- Title and risk pass to buyer when delivered to carrier by seller who pays transportation and insurance cost to destination. Used for any mode of transportation.

(d) D-Group

- DAF - Delivered at Frontier -- Title, risk and responsibility for import clearance pass to buyer when delivered to named border point by seller. Used for any mode of transportation.
- DES - Delivered Ex Ship -- Title, risk, responsibility for vessel discharge and import clearance pass to buyer when seller delivers goods on board the ship to destination port. Used for sea or inland waterway transportation.
- DEQ - Delivered Ex Quay (Duty Paid) -- Title and risk pass to buyer when delivered on board the ship at the destination point by the seller who delivers goods on dock at destination point cleared for import. Used for sea or inland waterway transportation.
- DDU - Delivered Duty Unpaid -- Title, risk and responsibility of import clearance pass to buyer when seller delivers goods to named destination point. Used for any mode of transportation. Buyer is obligated for import clearance.
- DDP - Delivered Duty Paid -- Title and risk pass to buyer when seller delivers goods to named destination point cleared for import. Used for any mode of transportation.

Note: EXW, CPT, CIP, DAF, DDU and DDP are commonly used for any mode of transportation. FAS, FOB, CFR, CIF, DES, and DEQ are used for sea and inland waterway.

Appendix F – Sliding Table Saws Companies Profile

F1. Technik Associates, Inc.

TECHNIK consists of those specialists of woodworking machinery and furniture industry for the past two decades. In the corporation principles of “Honesty, Reliability, Specialization & Expertise”, we offer the systematized services as follows:

EXPORT: From Taiwan to worldwide with those of quality woodworking equipment and supplies.

IMPORT: From worldwide to Taiwan & Asian countries with those of automated equipment and devices for furniture industry.

PURCHASING AGENT: On the request of importers, furniture manufacturers or buyers, to assort the equipment & material with the appropriate specification.

MANUFACTURE: Features from sawing & sizing, laminating & edging, boring & tenorning, as well as automated peripheral equipment.

ENGINEERING & CONSULTING: Follow up the principals, to design of layout, equipment assortment, installation and technical transfer.



MAIN PRODUCT LIST:

NO	DESCRIPTION	MODEL	POWER	APPLICATION
01	PANEL SAW	PSW-130 PSW-260 PSW-320	13HP	Longitudinal cut mainly, cross cut minorly, manual feed
02	AUTO. PANEL SAW	PSW-130II PSW-260II PSW-320II	17HP 18HP	Longitudinal cut mainly, cross cut minorly, auto. feed with computer drive
	SLIDING TABLE SAW	STS-120S STS-300S STS-250D/320D		
03	DOUBLE END TENONER	DET-46HP/66HP/86HP DET-48FP/68FP/88FP	27HP 37HP	Squaring, tenoning, and moulding for double side edge.
04	EDGE BANDING M/C	COMPACT-CE/CE3 COMPACT-CM	3.4HP	contour edges, manual feed CE: 0.4–1 mm CM: 0.4–3 mm
05	EDGE TRIMMING M/C	COMPACT-CT	1.5HP	Top & bottomtrimming, manual feed
06	RADIUS TRIMMING M/C	BASIC-RT	1.2HP	Corner rounding, manual feed
07	AUTO. EDGE BANDING M/C, LINEAR SERIES	LP200A LP250A/250B LP300A/300B LP350A LP400/600	11HP 13HP 13.5HP 15.5HP 17.6HP 18.6HP/19.6HP	Edge banding & trimming with auto. Feeding system for straight edges: 0.4 –10 mm of PVC, melamine, veneer, solid lipping in strip or in coil

F2. HOLYTEK Industrial Corp.

Experience That Matters

Holytek was established in 1989 by George Ko. Previously he worked in his family's woodworking machinery manufacturing business for many years. This was an export based business and George Ko was responsible for marketing and quality control, among many other things. It seemed a natural progression to move over to more specialized woodworking machinery and start Holytek. Over the years the growth of the company has been steady and strong-going hand in hand with the continuous product improvement. In order to meet customer demands and to ensure optimum machining results, Holytek also supply a wide range of quality toolings and all kinds of wood working accessories.

The Trusted Network

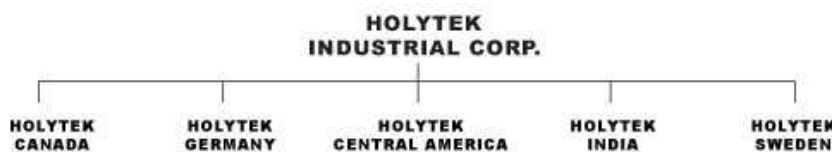
Currently, Holytek has more than 30 agents representing in excess of 60 countries around the world. But, how to handles such a vast network ? George Ko says that long-time mutual trust is the most important factor. He trusts all his agents to act on his behalf and to care about every installation. Each agent is the number one dealer in their respective regions. International sales are now divided as Europe 20% , Australia/New Zealand 20%, North and South America 30% and Asia 30%.

New and Emerging Markets

George Ko is now looking toward emerging markets in India and South America and plants to exhibit at upcoming woodworking shows in these countries. Holytek have exhibited at the past seven Ligna shows in Hannover, Germany. They also have a foothold in Russia and Eastern Europe having established sales there about three years ago.

Special Partnerships

Many may not now, but Holytek is one of the first Taiwanese woodworking machinery manufacturers to establish international joint ventures-starting in 1995. There is now Holytek Canada, Holytek Sweden, Holytek Germany and Holytek India set-up in 2006. Many of Holytek's dealers have become their joint venture partners. With these joint ventures, Holytek believe that they can improve the quality of their machinery offered and provide better services to every dealer to client.



PRODUCTS
4 Side Moulder
Sander
Rip Saw
Band Saw
Panel Saw
Cross Cut-Off Saw
Table Saw & Double End Saw
45 Degree Saw
Planer
Spindle Moulder & Auto Copy Shaper
Manual & CNC Router
Boring Machine
Wood Lathe
Finger Jointer System
Clamp Carrier & Hydraulic Composer
Tenoner Machine
Edge Banding Machine
Grinder Machine
UV Coating Line
Dust Collector
Other Machines

F3. OAV Equipment & Tools, Inc.

Established in 1980, OAV Equipment & Tools, Inc. has rapidly grown in both size and production volume from its original factory located in Ching Shui, Taichung. These new facilities, with a well planned production line, allow us to greatly increase production without sacrificing the quality and reliability on which we have built our reputation. OAV is at the forefront of power tool manufacturing in Taiwan, and has the facilities, resources and capabilities to fulfill its customers' requirements in quality, speed and service

OAV Equipment and Tools, Inc. has improved and strengthened its enterprise structure to achieve more competitive operation capability. Since its establishment, OAV has been committed to business perpetuity and has grown continuously. Today, OAV continues this process with new facilities, diversified products, and rigorous quality control systems. At OAV, our greatest strength is our persistence in offering the best possible services to meet customers' needs. We will spare no effort to reach quality perfection and meet new challenges.

OAV has proven its capability to manufacture in high volume and consistently create high quality products. These highly efficient assembly lines allow us to greatly reduce production costs, helping to ensure OAV's products' competitive prices. Assembly of all OAV's equipment and tools are performed by skilled, experienced technicians. Over the years, we, with our sub-vendors have invested considerably in high precision automatic machining equipment. The result has been production efficiency improvement, continually upgrading and enhancing OAV's ability to meet our commitment to product, quality and productivity.

Main Products:



Auto copy shapers	/	Auto dovetail tenoners	/	Band Saw Blade Sharpener
Continuous Dovetailer	/	Double end tenoners	/	Horizontal & Vertical Boring Machine
Horizontal Boring Machine	/	Multiple Spindle boring head	/	Pneu-hydr. Mortising & Tenoning Machine
Sliding Table Saw	/	Round end Tenoner	/	Salida
Thin Cutting Frame Saw	/	Vertical Boring Machine	/	Panel Saw
Beam Saw	/	4 Side Planer & Moulder	/	Radial Arm Saw
Grinder	/	Band Saw	/	Dust Collector
Boring Machine Series	/	Edge Banding Machine	/	Disc Sander

F4. JOWAY Machinery Co Ltd.

JOWAY MACHINERY CO., Ltd. was established in 1981 and is specialized in manufacturing WOODWORKING MACHINE. After hard working and devoting to the competitive market for over 20 years. JOWAY has won great reputation with outstanding quality and wide range products supplies.

As international material costs keep raising, most manufactures are seeking lower labor and material to reduce their production costs, however, JOWAY invest great efforts in upgrading production capacity and invest various machining equipments in order to offering excellent quality and satisfaction machines to meet customers' requirements. Furthermore, to import aluminum sliding table from the excellent reputation European supplier to ensure the mechanical structure. In addition, JOWAY cooperated with renowned academic organization for the development of new machinery.

To constantly improvement and growth, we will effort in providing the excellent machinery for customers. And accordingly, your continued support would be the important force for our future growth.

Main Products:

- Sliding Table Saw
- Edge Banding Machine
- Boring Machine
- Straight Line Rip Saw
- Multi Rip saw
- Horizontal & Vertical Boring Machine
- Double surface Planer
- Cutting Frame Saw



F5. ROBLAND Inc.

Robland products are built by Landuyt N.V., located at Bruges, Belgium.

The company, when founded in 1972, started building combined, good qualitative, woodworking machines for the DIY market.

Through the years the range of products has been extended with panel saws, spindles and thicknessers; always conserving the original mission, offering a good final product for a good price.

This way of thinking can not only be found back through design and production, but as well in the customer support.

Approximately 5% of the budget is invested for updating various new products and improvement of production and quality, with the goal of achieving all necessary requirements.

Robland has got a network of international dealers and exports 85% of the production worldwide, to more than 100 countries.

The company was founded by Robert Landuyt in 1972 and till today the family still owns the company.

The firm has got a surface area of 25.000 m², with 18.000m² production facility. Approximately 90 persons are employed.

Landuyt N.V. still is vertically integrated: almost all parts are completely made in-house, followed by the assembly of the different elements to the final product. This set-up can guarantee the quality of the whole production process and the final product.

In the production process use is made of CNC machining centers, lasers, CNC bending machines and welding robots. This efficient combination of production and assembly, together with a strong control on the general costs and quality, results in meeting the highest standards set by the end user: "Value for money".

Worldwide more than 150.000 operational Robland machines are active, in the most diverse sectors of the woodworking industry.

