

CASO PRÁCTICO

ACERINOX: Managing the change in the global market

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1. INTRODUCTION.

Thirty years after its foundation, ACERINOX felt that it needed, and not for the first time, to find new areas for growth.

The management team remembered the time ten years before when they had posed the question, “What next?” The strategic objectives the company had set itself at the start had been fulfilled and its financial situation was sufficiently sound for it to look around for new projects. Under the leadership of Chairman Victoriano Muñoz, the management decided it should search for new challenges to achieve sustained growth in ACERINOX.

During this ten-year period, ACERINOX had entered the US market by setting up a production plant there. It had consolidated its presence on both the Spanish and international markets by increasing its network of subsidiaries, and it had increased the production capacity of its Algeciras plant, almost reaching maximum levels, and continued raising its general levels of efficiency.

But the financial situation had not changed much. By maintaining its policy of internal financing, ACERINOX had achieved its investment objectives while maintaining the same level of economic solvency that it had at the start of the ten-year period.

Over these years, the international market for stainless steel had had to cope with a variety of situations with economic cycles of recession and expansion and very volatile prices for both raw materials and end products that had forced the sector to react fast. ACERINOX had dealt with all the difficulties with relative ease, strengthening its market position even during unfavourable conditions.

The company management was again looking for new challenges. The people were practically the same ones who had found alternatives for growth ten years before. And their regular weekly meetings focused on a number of questions that aimed to determine strategic plans of action for ACERINOX from then on:

- Was the time ripe for considering a merger with other companies?
- Should the sales policy be reviewed? Was it time to invest in new technology?
- Should a new production plant be built?
- What countries should they concentrate on?
- Did e-commerce represent a threat or an opportunity?



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2. STAINLESS STEEL.

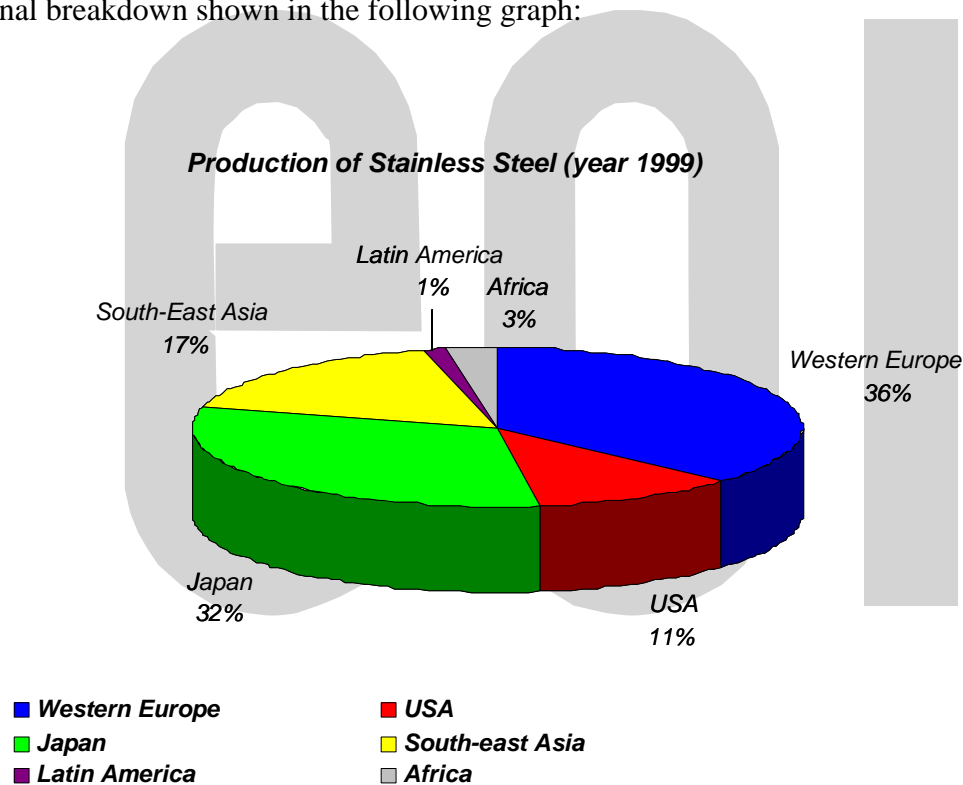
ACERINOX specialises in the production of stainless steel flat products but also produces long products and stainless steel wire through two of its main subsidiaries. Stainless steel flat products are made from alloys of common steel with chrome and nickel that are processed and polished and made to standard measurements. The main applications for these products are in the food and chemicals sector, the automobile industry, in the production of domestic utensils, in construction and in industrial products. But the range of products sold through the company's commercial network is wider than this and meets the needs of the different market segments in which the Spanish company is present.

The main characteristics of the product are the following:

- The product is highly standardised on an international level.
- Large investments are required for production.
- International regulations stipulate the necessary characteristics of each type of product, leaving a very small margin for product differentiation through quality.
- The product is a cyclical one, with producers often being subject to variations in the economic cycle although demand seems to be less sensitive to recession than to periods of growth.
- Production costs depend to a large extent on the costs of the raw materials required, namely, steel scrap, nickel, chrome, molybdenum and others.
- The prices of these raw materials are quoted on the world's main commodities markets and are therefore subject to the volatility that is characteristic of such markets. This is especially true of nickel, the most expensive raw material used in the production process.

- The main characteristic of demand is its uniformity. Stainless steel is consumed throughout the world in very similar ranges and qualities and only in the more developed countries is it required for “new applications” in the fields of hygiene, the environment or safety.
- The main sectors requiring stainless steel end products are domestic economies and the food and chemicals sectors, followed by construction and automobiles.

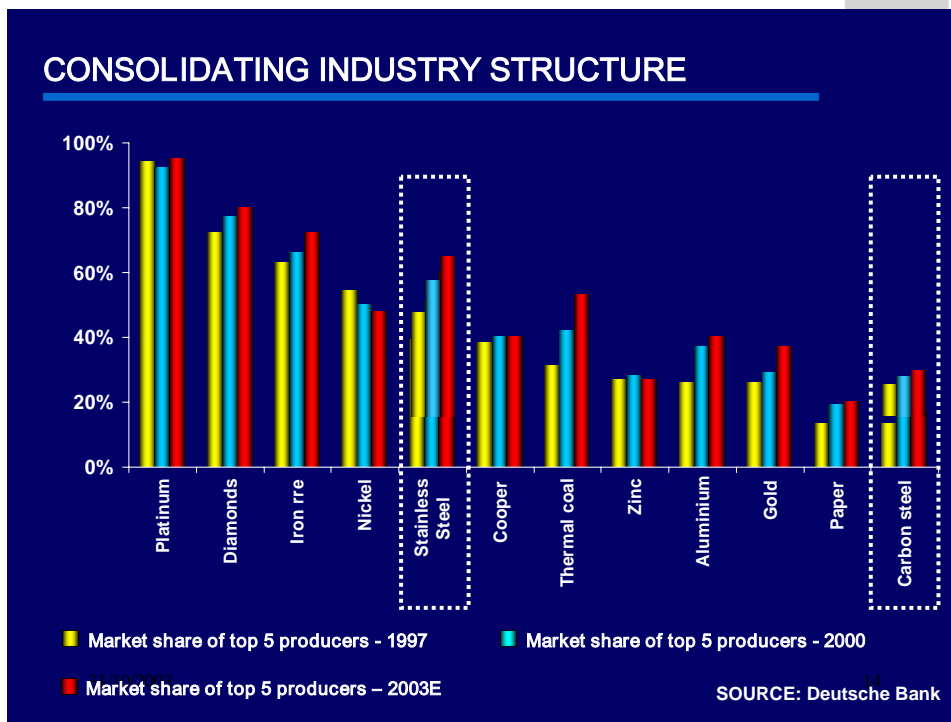
International production of stainless steel reached about 17 million tonnes in 1999, with regional breakdown shown in the following graph:



Source- Metal Bulletin Research⁹ 90 February 2001.

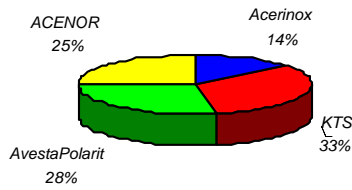
As shown in the graph, Western Europe provides about 36% of total production followed by Japan and the United States. If we also note the contribution made by the main competitors on the international scene, we can see that this sector shows a high,

and increasing, degree of concentration. The main reasons for this process of concentration are the growing need to improve productivity as well as the obligation to have international sales networks that are able to place large amounts of product in an increasingly globalised market. The process of concentration that is taking place amongst the main customers for stainless steel also leads producers to merge with a view to strengthening their positions in negotiations with clients.

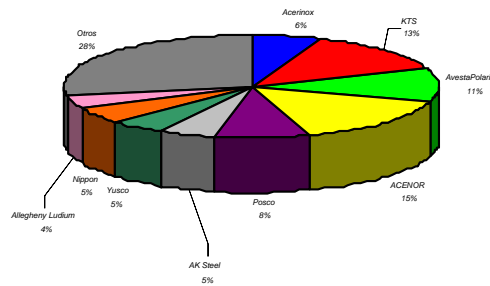


The following graphs show that, after the merger initiated in early 2000 between Usinor, Arbed and Aceralia (which appear in the graphs as ARCELOR), there are only four competitors on a European level representing 36% of worldwide production, and only nine competitors worldwide.

Main producers of stainless in Europe



Main producers of stainless steel worldwide



CRU Monitor Marzo 2001.

Of all these competitors, only a few of them (ACERINOX and AVESTA in Europe) focus exclusively on the stainless steel market. The others obtain most of their income from selling common steel. This means that the production conditions are not the same for all the participants because in many cases operations for the sale of stainless steel form part of other much larger operations for common steel and also because the negotiating power of such producers is greater as they tend to have very large volumes of trade with their customers.

From the market point of view, it must be remembered that at the beginning of the 21st century the industry is focusing on the possible recovery of the South-East Asian markets and is especially considering entry into the Chinese market by investing in new production plants.

3. ACERINOX.

3.1. The origins of ACERINOX.

“The purpose of ACERINOX is to supply the national stainless steel sheet and wire processing industry, ensuring normal and regular supply and allowing it to achieve spectacular development in coming years. As from 1976, ACERINOX will not only be able to supply the whole of the Spanish market but will be able to increasingly devote its attention to exports so that our country, hitherto mainly an importer country, can focus on exports resulting in great benefits for the balance of trade”.¹

The origin of ACERINOX goes back to the end of 1969. It was the result of a tender for the industrial development of the ‘Campo de Gibraltar’ (the area of Spain around the border with Gibraltar). While this fitted in with Spain’s economic policy at the time of replacing imports, the company’s spirit was clearly an innovative one.

ACERINOX arose out of a joint venture agreement between two Japanese companies, the Nisshin Steel Co. Ltd. (the top Japanese producer of stainless steel flat products and the leader in technological development of the sector) and the Nissho Iwai Co. Ltd. (one of the main Japanese trading companies at the time), and a Spanish investment group led by the Banesto group that was chaired by Aguirre Gonzalo and involved Banesto, Bandesco and the Banco Guipuzcoano.

The project was clearly orientated towards the international market. From the very start of the company, the export objective was always present. An obsession with competitiveness on international markets led the company to consider the need for building an integrated plant to produce stainless steel sheet products on its property in the Campo de Gibraltar.

¹ This was the objective proclaimed by ACERINOX in its first leaflet published in 1970.

Also from the start, ACERINOX showed enthusiasm for technological innovation which it has maintained ever since. The need to achieve high standards of both efficiency and quality allowing the company to be competitive and reach levels of sales that would enable it to achieve economies of scale forced the management to focus on excellence in all production processes.

ACERINOX began its commercial activities in the Spanish market during the first phases of investment in the Campo de Gibraltar plant. The formula chosen was to sell Nisshin Steel products imported by Nissho Iwai Co. Ltd, thus facilitating the creation of a national sales network through which its own products could be sold once ready.

3.2. The structure of ACERINOX at the beginning of the XXI Century.

ACERINOX was a business group comprising a total of 28 companies all over the world. Of these, 24 focus on the sale of stainless steel products, 8 in Spain and 16 in other countries. The main companies in the group were:

- ACERINOX, S.A. Production of stainless steel flat products. Based in Spain.
- North American Stainless, Inc. Production of stainless steel flat products. Based in the United States.
- Roldan, S.A. Production of stainless steel long products. Based in Spain.
- Inoxfil, S.A. Production of stainless steel wire. Based in Spain.

3.3. Company strategy and philosophy.

With regard to strategy, ACERINOX can be considered to have maintained the same principles ever since its foundation. The guidelines of its strategic approach are the following:

3.3.1. Efficiency in production processes.

Since its foundation in 1970, ACERINOX always sought to achieve efficient production processes. The types of product in which the company specialises require high degrees of standardisation which means that efficiency in production processes through economies of scale or cost minimisation becomes one of the main factors in making its products competitive.

In order to maximise efficiency levels, from the start ACERINOX decided to build an integrated plant for the production of stainless steel flat products in the Campo de Gibraltar based on an ambitious plan of investment involving the following stages:

		Year of start-up	Million pesetas (every year)
Stage 1	Cold rolling mill (SZ no.1 and no. 2, AP no.1 and no.2, SKP no.1 and Cutting Lines)	1973-1975	2,330
Stage 2	Melting shop (HE no.1, AOD no.1, CC no.1), Dock and extension of cold rolling mill (BA no.1)	1976-1977	2,980
Stage 3	Extension of cold rolling mill (SZ no.3) and melting shop (HE no.2)	1982-1983	3,821
Stage 4	Hot rolling mill, Thick plate shop and Cold rolling mill (AP no.3)	1984-1985	21,781
Stage 5	Extensions of cold rolling mill (SZ no.4, P no.4),	1989	10,821
	Several modernisation plans, Acid regeneration plant	1990-1992	8,133
Stage 6	Extension of cold rolling mill (BA no.2), and others	1995	7,350
Stage 7	Extension of cold rolling mill (SZ no.5) and melting shop (AOD no.2)	1995	6,320
Stage 8	Extension of hot rolling mill and Improvements to melting shop	1996	5,007
Stage 9	Extension of cold rolling mill (SZ no.6, BA no.3 and Cutting Lines)	1999	20,362

Source.- "ACERINOX 25 Años de Historia (1970-1995)" and Annual Reports from 1995 to 1999.

An integrated plant for stainless steel flat products carries out the three main processes required to convert raw materials into stainless steel flat products:

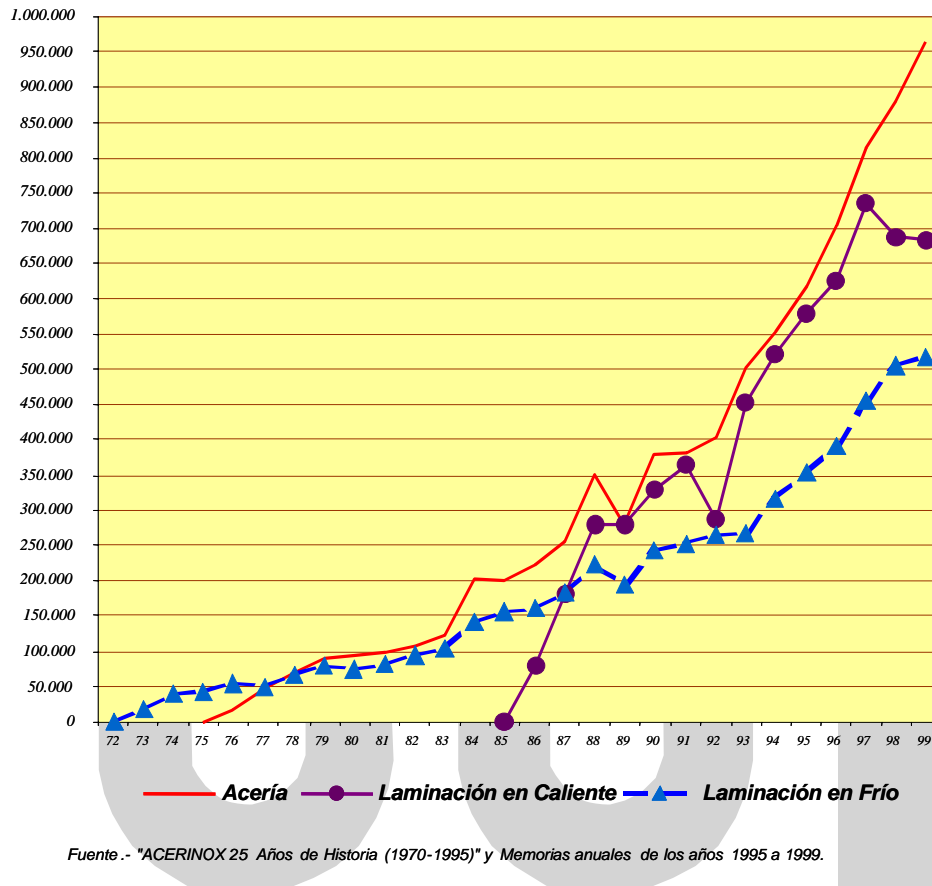
1. *Melting shop*. For melting down the scrap together with the main raw materials required to produce stainless steel (nickel, chrome, copper and molybdenum).
2. *Hot rolling*. The melted materials from the melting shop are transformed into flat products, generally with a thickness between 2 and 8 mm.
3. *Cold rolling*. This converts the hot-rolled products into more refined products, adapting them to market requirements as regards thickness, width and finish. This phase involves the largest technological component and therefore is the one that generates the highest added value. The thickness range of the cold rolled product is between 0,25 and 5,8 mm.

At the time when ACERINOX took the decision to build a plant covering all the processes, most producers in this sector specialised in just one or two of the stages and sub-contracted the rest because a large volume of investment was required to set up each one of these production processes. But, as ACERINOX saw for itself until its hot rolling mill came into operation (in 1985), this formula created serious inefficiency in both costs and quality as it did not allow the necessary standards to be reached.

ACERINOX therefore opted for an integrated plant, with a view to obtaining all the advantages of controlling the whole production process and achieving the saving in costs that was essential for international competitiveness. However, the construction of the Palmones plant began with the last stage of the production process, so it was the cold rolling plant that was the first to start functioning, followed by the melting shop and finally by the hot rolling plant.

By implementing the investment plan mentioned above, the capacity of each of the stages of production gradually increased over the years up to 1999 when the Palmones factory can be considered to have reached its maximum capacity.

Producción Fábrica de Campo de Gibraltar

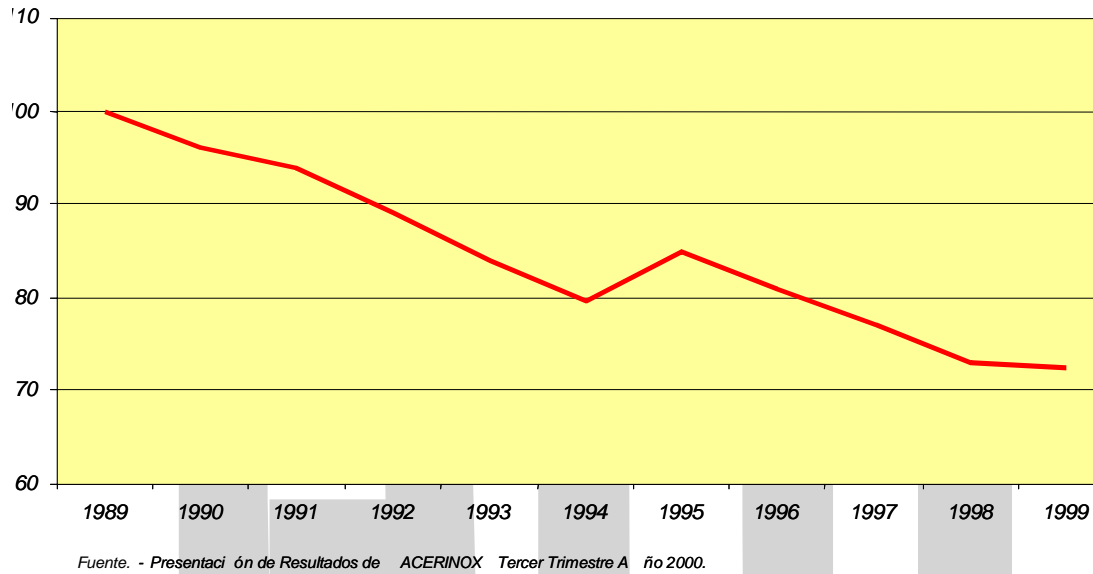


Following this same criterion, when the decision was taken to invest in production in the United States (see below), again the project was for an integrated plant with an investment plan covering several stages as with the Palmones plant which by then was giving excellent results. In this case too the project started with the cold rolling plant, moving on to hot rolling and finally the melting shop.

Its obsession with constant improvement of production processes, together with a constant policy for containing expenditure, has made ACERINOX one of the market's

most efficient companies to the extent that, even in the worst years of the stainless steel economic cycle, it has been one of the few companies in the sector that has remained in profit.

Trends in production costs in the Palmones plant



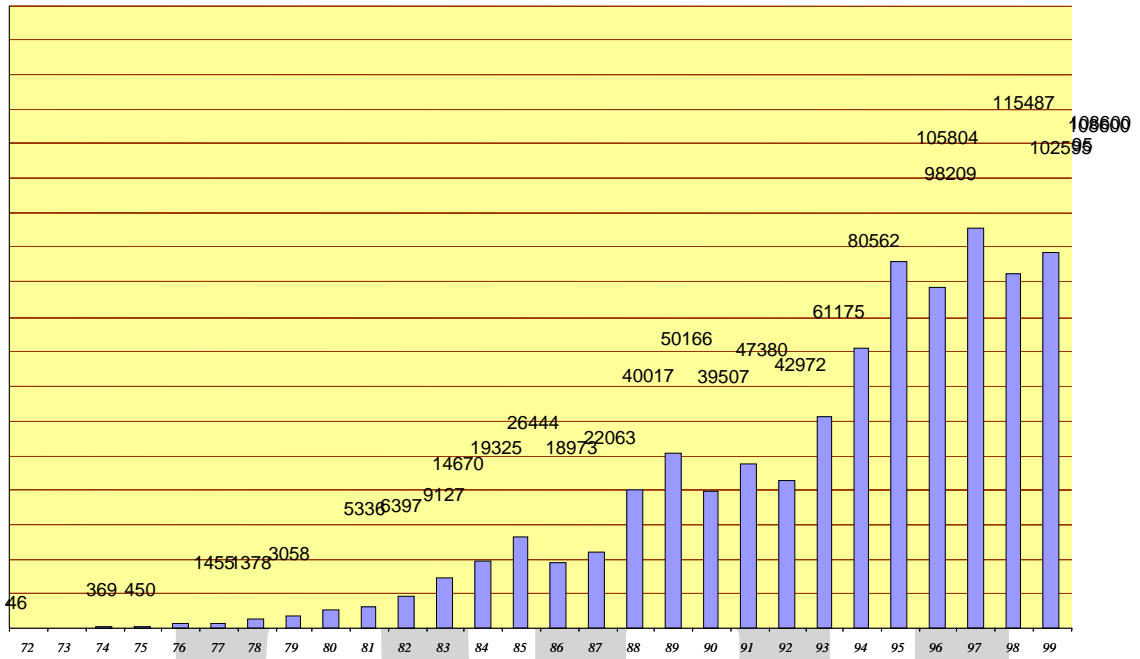
3.3.2. International Orientation.

The characteristics of stainless steel flat products make economies of scale one of the main factors for competitiveness.

However, the size of the Spanish market does not allow it to absorb the minimum production necessary for obtaining economies of scale. From the start, the ACERINOX management committee was aware of this and immediately considered expansion on international markets.

ACERINOX currently sells its products in all five continents although its main foreign market is Europe, and especially the European Union.

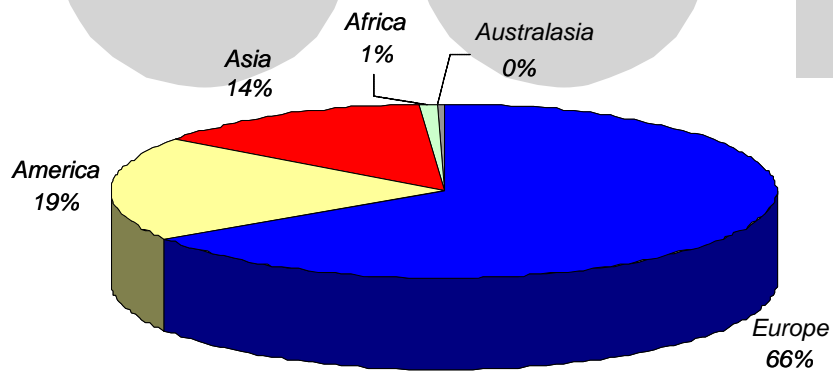
Sales in foreign markets (millions of pesetas)



■ Sales in foreign markets

Source. - "ACERINOX 25 Años de Historia (1970 -1995)" y Memorias anuales de los años 1995 a 1999.

Distribution of Foreign Sales 1999



Source: Annual Report 1999

The company has adopted a very pro-active policy in foreign markets having been through all the stages of internationalisation and having consolidated its position on most markets.

The following can be described as the main stages of internationalisation for ACERINOX:

1. *Exports to foreign markets.* During the early years, the method chosen to enter international markets was through agents as this did not require further investment at a time when a large investment effort was being made in the Palmones plant. In addition, the stake in the capital of the Japanese “trader”, Nissho Iwai, provided sufficient information and support for sales in foreign countries. However, conflicting interests between the Japanese and Spanish companies put an early end to their business relations.
2. *The use of commercial agents.* The figure of sales agents has been very important in the international development of ACERINOX throughout its history. The Spanish company still today continues to use agents in some countries, generally in those in which it is not physically present but to which it is interested in gaining access. But the use of agents is based on mutual trust so that, if ACERINOX opens a subsidiary in a country in which it already has an agent, it maintains the conditions originally agreed with the latter.
3. *Creation of subsidiaries and branch offices in foreign countries.* The need to consolidate the company’s presence in international markets and to work as closely as possible with its clients made it necessary to open up branch offices in foreign countries. This process led ACERINOX to set up 16 subsidiaries in different countries.

It should be stressed that the company’s aim was to apply the same sales policy it used on the domestic market to international markets, except for the fact that it does not sell products for third parties through its warehouses in other countries. This, however, may change in the future.

In addition to the branch offices, it created service centres in a number of countries, thus making it possible to adapt stainless steel flat products to the needs of its main clients. The policy of dealing closely with small clients was also imitated by creating warehouses in a number of countries in Europe and America to sell the products demanded by this segment of the market.

4. *Investments in foreign countries.* Ten years ago, after many of the initial objectives of ACERINOX had been achieved and its financial situation was very solvent, the management decided to set up a process of investment in production in foreign countries. This involved:

- **Participation in MEXINOX.** In 1990, the decision was taken to take a stake in this Mexican company that produced stainless steel flat products together with the German group, Thyssen. However, this investment was a short-lived one as in 1997 it was reduced from one third to one tenth of the company's share capital and in 1998 to 5% which is the level maintained today.
- **Creation of North American Stainless (NAS).** In 1990, after the detection of a market niche in the United States, ACERINOX began to build its second integrated stainless steel plant in Kentucky. All the production technology used in the American factory was developed by ACERINOX, giving rise to the most modern production plant in America from the technological point of view. The investment process concluded during 2000 and the integrated factory became operative during 2001 when the melting shop was started up. (Throughout the process, parts of the production process were in operation, namely the cold rolling plant first and then the hot rolling plant). By setting up this new factory, ACERINOX gained an unbeatable position for competition on the American market, although the structure of the latter led the management to take a number of decisions for the future. These are discussed below.

<i>Melting shop capacity</i>	800,000 tonnes/year
<i>Hot rolling capacity</i>	1,000,000 tonnes/year
<i>Cold rolling capacity</i>	300,000 tonnes/year

3.3.3. Vertical integration and Horizontal diversification.

Another of the main characteristics of ACERINOX is its product focus. This sets it apart from most of its competitors which receive the majority of their income from steel production. ACERINOX deals only in the production, processing and sale of stainless steel flat products.

This objective of concentrating on stainless steel is one of the company's constant features, having been maintained since it was first set up. It was implemented along two main guidelines – vertical integration and horizontal diversification.

From the point of view of vertical integration, the objective of ACERINOX has been to obtain the greatest possible degree of “downstream” integration, trying to reach the final client (even small clients). The results have been clear. ACERINOX covers the whole of the production process, from the melting of the raw materials in the melting shop to the production of polished, finished, stainless steel flat products through the processes carried out in the cold rolling mill. In addition, the commercial structure allows it to cover all the processes up to the final client.

The Spanish company has never decided to carry out “upstream” integration although on many occasions it has considered the possibility of purchasing a nickel mine in order to reduce the volatility of raw material costs.

With regard to horizontal diversification, the company's commercial strategy has led to the creation of service centres in which products are processed to meet the needs of

large clients and of warehouses for selling all the stainless steel products that are designed for small clients. A very important landmark was the investment in and subsequent takeover of GRUPINOX which had a commercial network of 25 warehouses and a service centre in Spain which made it possible to cover a large range of stainless steel products for sale to small consumers. So today ACERINOX uses service centres to sell products to its large clients and warehouses (within the GRUPINOX structure) to sell its own and third-party products to small clients.

In order to carry out the necessary processes for selling not only stainless steel flat products but also long products and wire, ACERINOX bought a majority stake in Roldán S.A., a company that specialises in the production of long stainless steel products. This led to the creation of Inoxfil S.A., controlled by ACERINOX, which specialises in the production of stainless steel wire. From the start, both companies have produced and sold these products together in both the domestic and international markets, and have been able to meet most of their customers' requirements for stainless steel products.

3.3.4. Innovation.

Another of the main objectives of ACERINOX has been to search for constant improvement and innovation. Since it was first set up, the Spanish company has tried to obtain maximum efficiency in its production processes and to adapt its products to market requirements.

With a view to improving “everything that can be improved to raise productivity”², in 1988 ACERINOX set up the **José M^a Aguirre Gonzalo Research and Testing Centre** to improve production processes and search for new materials to meet market requirements, in close collaboration at all times with the production area. This enabled the company to use in-house know-how when setting up one of the world's most

² ACERINOX: 25 años de historia (1975 - 1995)

competitive plants in Kentucky whose staff received training in the Campo de Gibraltar on the techniques and processes that have enabled the Spanish company to reach the position it holds today. Moreover, even the staff of some of the company's competitors receive training in the Campo de Gibraltar plant. ACERINOX also offers technical assistance to all the group companies, improving production quality and process efficiency. Not only do companies within the group benefit from this know-how but some direct competitors request technical assistance from the Spanish company although this has given rise to certain controversies concerning the transfer of know-how.

In 1985, together with the main producers of stainless steel in Spain and the main international suppliers of raw materials, ACERINOX set up **CEDINOX**, a centre for promotion, the development of new products and technical services relating to stainless steel.

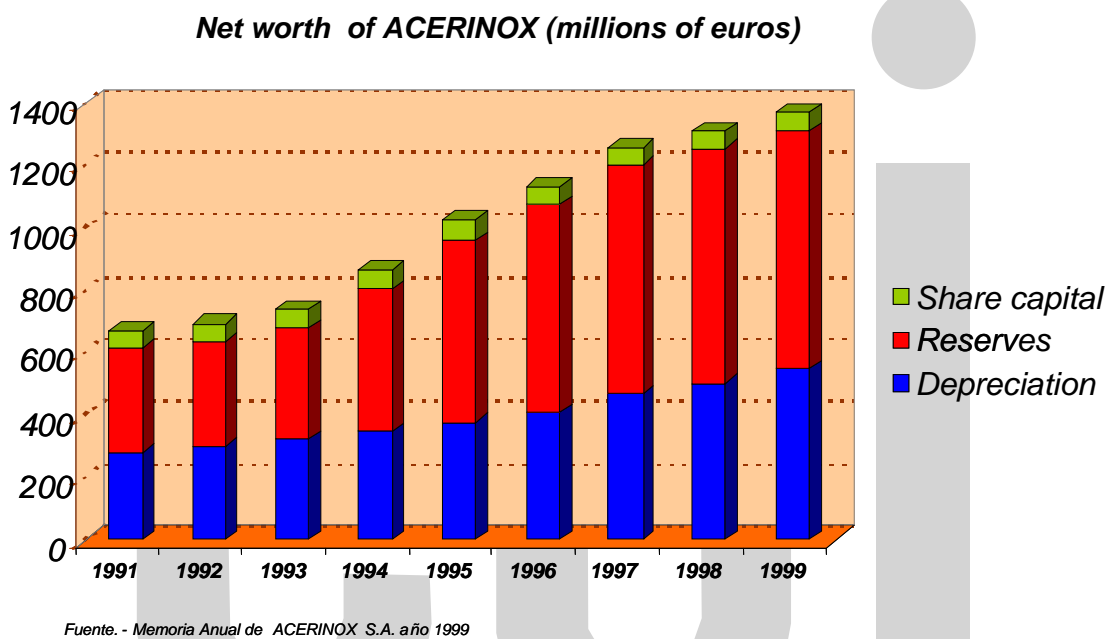
3.3.5. Financial Policy.

Undoubtedly, one of the main strategies of ACERINOX since its foundation has been to contain expenditure and to maintain a healthy financial situation. This is a key factor taking into account the investment processes in which the company has been involved.

On many occasions, the policy of growth has involved use of the company's equity and re-investment and in this respect the founding partners' support was decisive. No dividends were paid during the first nine years of the company's life even though profits had been obtained.

Another of the company's main characteristics has been its policy to control expenditure. The need to maintain high levels of efficiency in order to be competitive on international markets has made ACERINOX constantly concerned to control expenditure wherever possible thus taking full advantage of increased productivity.

This objective of controlling expenditure determined that the company’s structure should be as light as possible so that any expenditure generated by “non-productive” parts of the company would be reduced to a minimum. This can be seen in the fact that, on 31 December 1999, the staff of the Madrid office numbered just 158, in comparison with the total of 1903 staff throughout the company.



3.3.6. Commitment to the company.

The company’s human resources management is another of the factors that has been decisive over the years and has not changed. Commitment to the company is a constant feature that is exemplified in the management team which has seen practically no changes over the thirty years of its history.

The human resources policy is based on loyalty and the commitment of staff to the company and viceversa. This means that the emphasis lies on internal promotions,

constant training and open communication amongst all the levels and all the different areas. The best example is the ACERINOX management team itself which has extensive experience in the sector having been linked to the company since the start and being an essential pillar in the company's outstanding progress. It could even be claimed that, in some aspects, the company's main asset is its management team.

The human resources policy can be seen in a number of measures that have proved their effectiveness:

- Variable Remuneration Policy for all company staff. As a result of the link between remuneration and the actual hours worked and productivity, absenteeism is much lower in the Campo de Gibraltar plant than the average for the steel industry although reduction of this average is a constant objective for all members of the company and achievements in productivity have been very noteworthy³.
- The hierarchical structure of the organisation is limited in order to facilitate decision-making and improve the distribution of responsibilities.
- Internal promotion in order to keep staff turnover at low levels.

The leader of this team, Victoriano Muñoz Cava, Chairman and Chief Executive of the company, has undoubtedly been one of the key elements in the results obtained by the company. His influence has been very great not only inside ACERINOX in which he has achieved great cohesion but also outside it in that he is one of the main figures on the international scene of the stainless steel market. With his leadership of the management team, he has brought the company to what it is today, ensuring that staff at all levels are committed to the company's strategic principles.

³ Production in the Campo de Gibraltar factory more than doubled (in both melting and cold and hot rolling) between 1990 and 1999 while the number of employees remained approximately the same. Source: ACERINOX results for the third quarter of 2000.

However, and as is usual in companies with such a highly-experienced management team, when the time comes for the new generation to take over, unless this change is carefully prepared it might be of almost strategic importance for the future of the company. Will ACERINOX be prepared to carry out this transition successfully?



4. TOWARDS THE XXI CENTURY.

4.1. The company's current situation.

As stated in the introduction to this case study, after thirty years of existence, ACERINOX today forms part of the world-class elite within its sector with regard to production capacity, market presence, technological innovation and competitiveness.

Throughout this period, it has been able to cope relatively successfully with the various recessions in its sector, although these seem to be becoming shorter. In addition, the company has suffered the effects of volatile prices for both raw materials and finished products and has been able to skilfully adapt to changing market conditions. Finally, it is at the centre of the turmoil that is affecting trade amongst companies with the arrival of e-business.

Ten years ago, all the objectives the company had set at the start had been achieved, and the new, long-term objectives that were set then have now also been achieved. The company has two integrated plants for the production of stainless steel flat products – in Spain and in the United States – and its financial situation is very healthy with provisions for meeting new challenges.

From the commercial point of view, the company's presence in Europe is well consolidated. In Latin America, the company is growing, and there are many factors indicating that its presence in the United States will soon be consolidated. The latter is a very interesting market because of its size and because of the company's position now that the investment process in Kentucky is complete.

Some of the main challenges for the future lie within the company, namely in preparation of the organisation for transition to a new management team which, sooner or later, will have to take place. But the focus cannot be placed exclusively on internal changes at a time when large processes of concentration are taking place in the steel

industry (especially in recent months). Adaptations must constantly be made to international markets and new foreign policies adopted.

The Spanish company has shown it is perfectly capable of finding new areas of activity and now is the time to take decisions. The members of the management team are aware that the effects of any decisions taken now will probably only be seen once they are no longer in their positions, but their commitment to the company requires that they seek to guarantee its future, irrespective of their own personal ambitions.

4.2. Facing up to the future.

For a number of months, in their regular weekly meetings the management team has been working on the strategic alternatives for continuing to grow. They all share the idea that a company must move with the times or it will risk disappearing. So, new formulae must be found to face the challenges of the market.

4.2.1. Globalisation and International coordination.

The concept of market globalisation is not a new one in sectors such as stainless steel. It represents a step further in the processes of international commercial exchange that began several decades ago. What is new in the process of globalisation is the potential offered by technology in the field of telecommunications, and this can lead to great competitive advantages for companies competing in highly internationalised markets.

As in other areas, ACERINOX was a pioneer in the international coordination of its sales network. This allowed it, on the one hand, to offer better service to its end clients and, on the other, to achieve a high degree of stock control. But now that it has higher levels of production that need to be sold and greater presence in a larger number of countries, a more extensive and perfectly well-coordinated commercial network could in itself give it a marked competitive advantage.

Is this the right time to go a step further along the commercial chain? Perhaps the time is ripe for ACERINOX to enter the next stage of internationalisation and to create a structure that will function globally, in an integrated fashion and based on a common technological platform, achieving improvements in the integration of the supply chain processes. Is this perhaps the time to develop an integrated platform for the whole group using the new advances in telecommunications? Has the time come to convert ACERINOX into a global company, not only through physical presence but through the integration of the supply chain processes amongst the different companies of the group and with the end customer?

4.2.2. E-Commerce.

One of the favourite topics of the Board of Managers in their meetings was e-commerce which was having a great impact on all sectors of inter-company trade. The stainless steel sector was no exception.

With a view to remaining at the forefront of its sector, ACERINOX considered opening up to electronic business but not all the board members were in agreement concerning this new channel for distribution.

One group of company managers was in favour of this new project because they wanted the company to be amongst the leaders in this change on international markets. From the point of view of competition, opening up to electronic commerce could offer ACERINOX the opportunity to take greater advantage of its productivity differential with regard to its main competitors, competing in a more demanding environment from the point of view of efficiency. Bearing in mind that the Spanish company has been seen to be one of the most efficient on the market, its competitive position in this new distribution channel was unbeatable.

However, other managers were not so keen on this new channel for distribution, stating that ACERINOX had an important advantage over its competitors because it was able to

control the whole of its supply chain. Entry into e-business would force the company to increase the transparency of the whole of its supply chain and it would therefore have to relinquish some of its control. They also considered that e-commerce would open up the way to certain competitors who, while not efficient as producers, might be able to obtain a competitive advantage in the management of the supply chain and that this would go against the interests of ACERINOX. They considered that it was not a matter of rejecting the electronic “revolution” but of showing caution and waiting until it became a must on international markets.

Although a firm decision on the company’s final strategy has not yet been taken, it did decide to participate from the start on both the *Metal Spectrum Platform* and the *European 24:7 Platform*, thus gaining important experience in this area.

4.2.3. Organic Growth versus Integrated Growth.

One of the main features in the history of ACERINOX with regard to expansion has been its refusal to grow through mergers or alliances with other companies, that is, it always favoured organic growth. Only in the case of the investment in MEXINOX did it try to collaborate with its competitors in the development of a producer company but this project did not succeed, and most of the investment was withdrawn soon afterwards.

However, this policy came under review for two reasons: the process of concentration in the industry which has been speeding up in recent months, and the need to split the risk in the possible entry into new markets.

The process of concentration in the stainless steel industry has been taking place for a number of years although it has speeded up recently. Is it necessary to respond to this process through a merger on a global level? If so, who would be the best candidate?

What really convinced the board of managers to consider the possibility of changing its growth policy by accepting joint investment projects was the possibility of entering new markets. One of the clearest examples of the need to find alliances to enter new markets was south-east Asia (in which ACERINOX does not have a very significant presence from the point of view of production although it is one of the main exporters to this area).

However, it was the North American market that really led the company to review its growth policy. Once it had completed its process of investment in the integrated plant in Kentucky, ACERINOX had the opportunity to successfully enter the North American market. But the structure of the US market in which it is the distributors rather than the producers that exert control gave rise to serious doubts amongst the board of directors about the ideal approach. It was perhaps necessary to consider a vertical alliance, taking advantage of the know-how of some of the main distribution chains in the American market in order to gain a position.

Another alternative was horizontal integration, that is, the possibility of setting up an alliance with another producer making thus sharing the risk of entering this market. Or perhaps it would be best to maintain the policy of organic growth, trying to replicate in the American market the formula used in other international markets. Since the company's financial situation was sound, perhaps the time was ripe to undertake another investment project in the United States, focusing on distribution and trying to replicate what had already been done in Spain with the acquisition of GRUPINOX.

Other questions raised during the meetings of the board of directors related to the ideal formula to be adopted for the option of integrated growth. What would be most interesting for ACERINOX – to gain control of a company through purchase or to begin a takeover process starting with an exchange of shares? Should it take over a company specialising in sales and distribution or should it merge with one of the market's large companies with a view to attaining synergies?

The pros and cons of each of these alternatives mostly related to total control of the policy for penetrating the market, taking up the opportunity of the new plant in Kentucky, distributing risk and the loss or gain of know-how. But a decision in favour of setting up new alliances meant that one of the company's main strategies had to be changed. Was it worth it? Was ACERINOX ready for joint projects?

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5. WHAT NEXT?

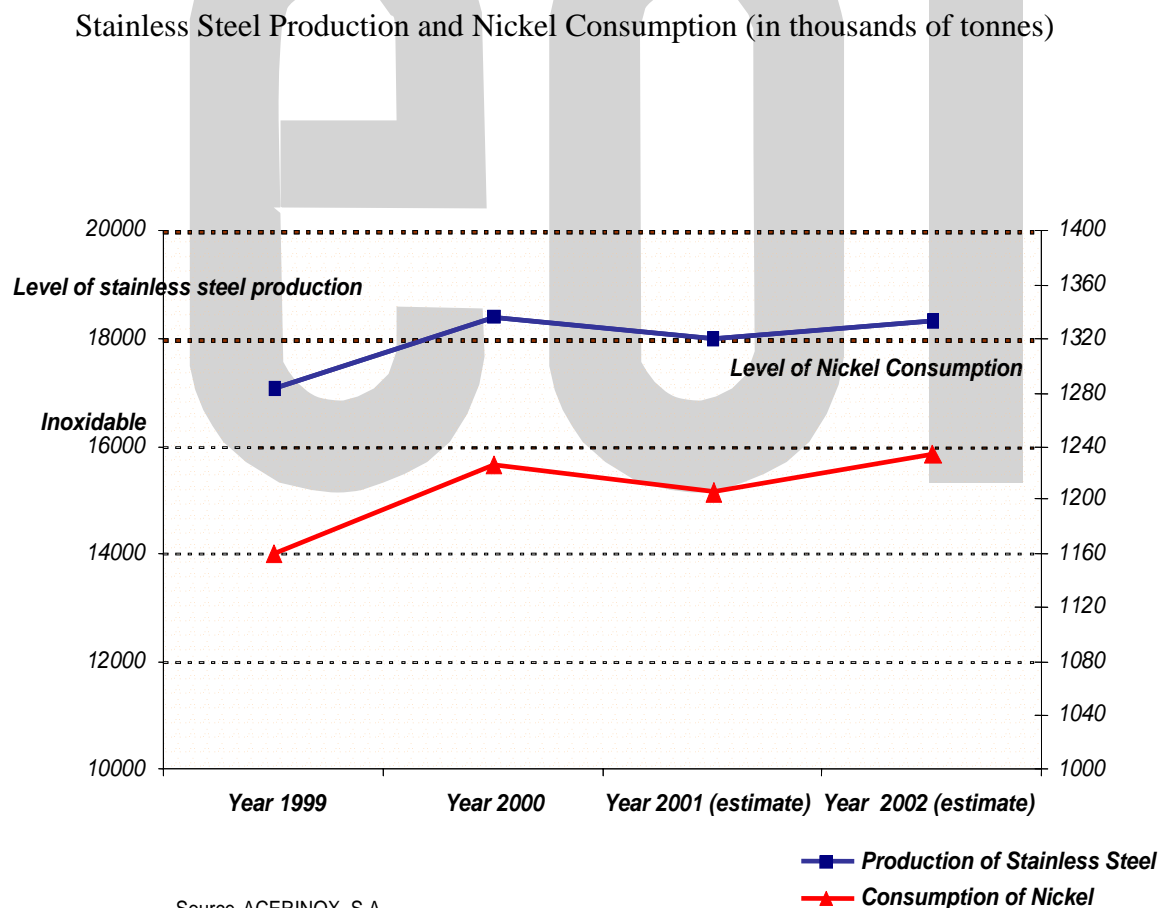
In light of the situation of ACERINOX at the start of the 21st century and the external factors influencing it, the following matters deserve consideration:

- Is this the right time to consider beginning a merger with one of the large industrial groups that compete with ACERINOX or would it be more interesting from the point of view of competition to remain independent, maintaining a light structure that will allow new challenges to be faced with flexibility?
- Should ACERINOX apply the same commercial strategy in international markets as in the domestic market? Under what conditions?
- Should the company's production capacity be increased? If so, where should this increase in production take place? Would it be in the interests of ACERINOX to buy up a company to boost production?
- Should penetration into the North American market be one of the company's strategic goals? Is the opportunity in this market really so great for ACERINOX? Would it not be more reasonable to use the production capacity in NAS to export to more dynamic markets?
- What attitude should ACERINOX adopt towards electronic commerce? Should investments be made in this field now or would it be better to wait for the change to become consolidated?
- Finally, are there likely to be problems with the entry of "new blood" into the company? Is the company becoming dangerously set in its ways?

ANNEX I (Nickel consumption and stainless steel production)

From the point of view of the production costs of stainless steel, it must be remembered that raw material prices cannot be controlled by producers and that they account for a large proportion of the final product cost.

Of all the raw materials used in the production of stainless steel, the highest cost is for nickel, for which prices are quoted on the world's main commodities market and tend to be very volatile. The amount of nickel content in stainless steel varies, determining the type of stainless steel produced (austenitic or ferritic), but average consumption of nickel with regard to total production of stainless steel can be estimated at about 9%.



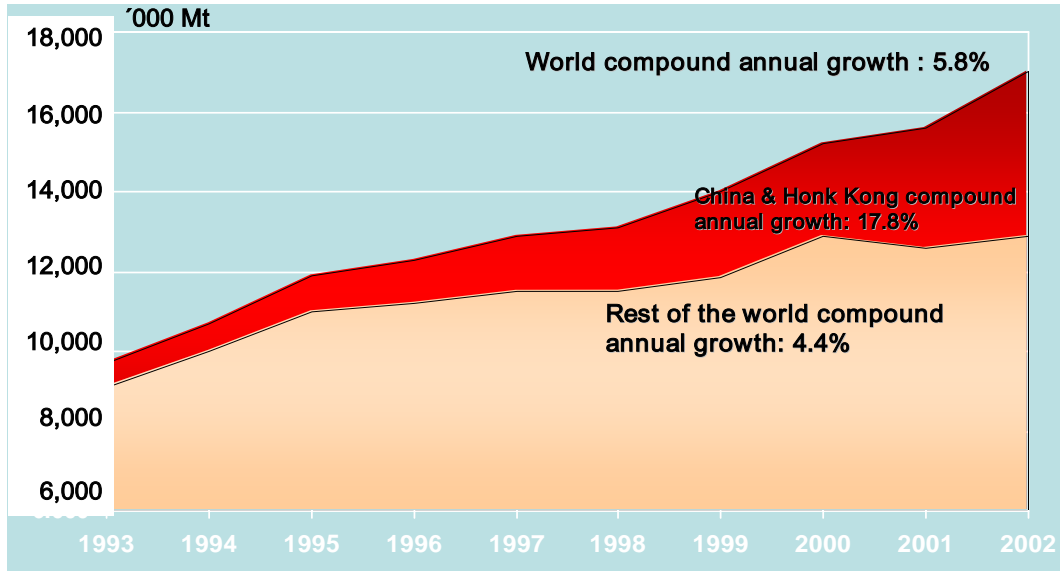
ANNEX II (Demand for stainless steel products)

World Apparent Consumption of Stainless Steel by Product Group

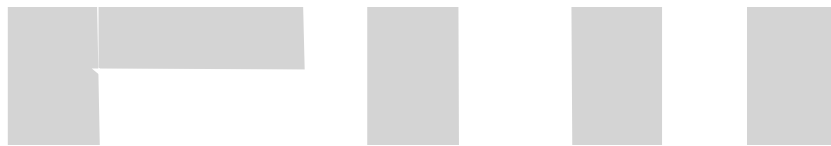
Year 1999	000 Tonnes					
	Hot Rolled Plate & Sheet	Cold Rolled Sheet & Strip	Bars Hot Rolled & Cold Finished	Wire Products	Semis	Total
France	81	275	58	64	27	505
Germany	251	800	71	47	114	1.283
Italy	256	750	101	126	134	1.367
Spain	87	232	36	43	23	421
United	76	196	17	11	13	313
Other Europe	187	543	29	89	20	868
Total Western Europe	938	2.796	312	380	331	4.757
Canada	38	149	25	10	18	240
U.S.A.	377	1.559	212	33	116	2.297
Total North America	415	1.708	237	43	134	2.537
Brazil	55	125	10	4	-	194
Mexico	26	86	10	9	-	131
Other Latin America	15	49	8	1	2	75
Total Latin America	96	260	28	14	2	400
India	80	460	25	25	20	610
Indonesia	3	48	2	3	1	57
Japan	398	918	96	185	70	1.667
Malaysia	11	46	3	11	2	73
Philippines	2	25	3	2	8	40
Singapore	5	81	16	5	-	107
South Korea	204	487	23	111	19	844
Taiwan	203	493	13	136	6	851
Thailand	19	88	6	18	1	132
Total Asia	925	2.645	186	497	126	4.379
Total Australasia	20	69	10	5	-	104
South Africa	39	60	7	6	-	112
Other Africa	7	23	4	2	-	36
Total Africa	46	83	11	8	-	148
Turkey	4	102	4	1	-	111
Other Middle East	4	54	3	1	-	62
Total Middle East	8	156	7	2	-	173
Total Western World	2.448	7.717	791	949	593	12.498
CIS	56	46	23	32	23	180
Eastern Europe	18	90	30	11	15	164
P.R. of China (including Hong Kong)	187	1.306	87	54	29	1.663
TOTAL WORLD	2.710	9.159	930	1.046	660	14.505

Source - ACERINOX,

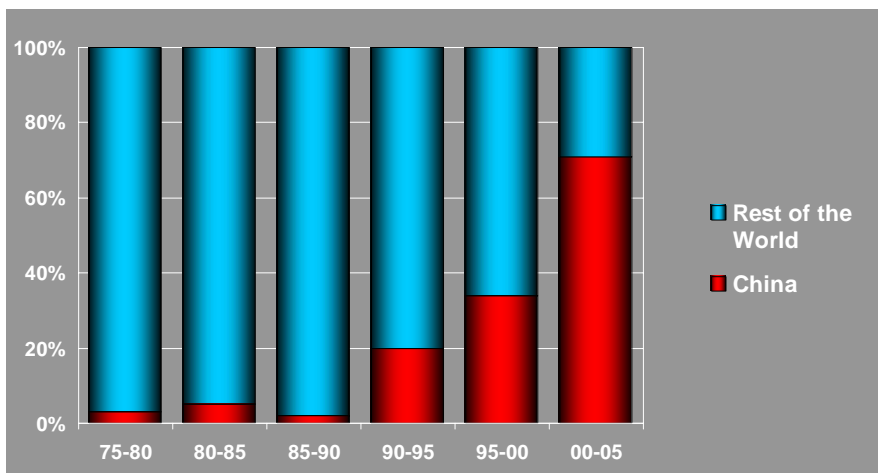
EVOLUTION OF THE STAINLESS STEEL DEMAND



Source: Heinz H. Pariser

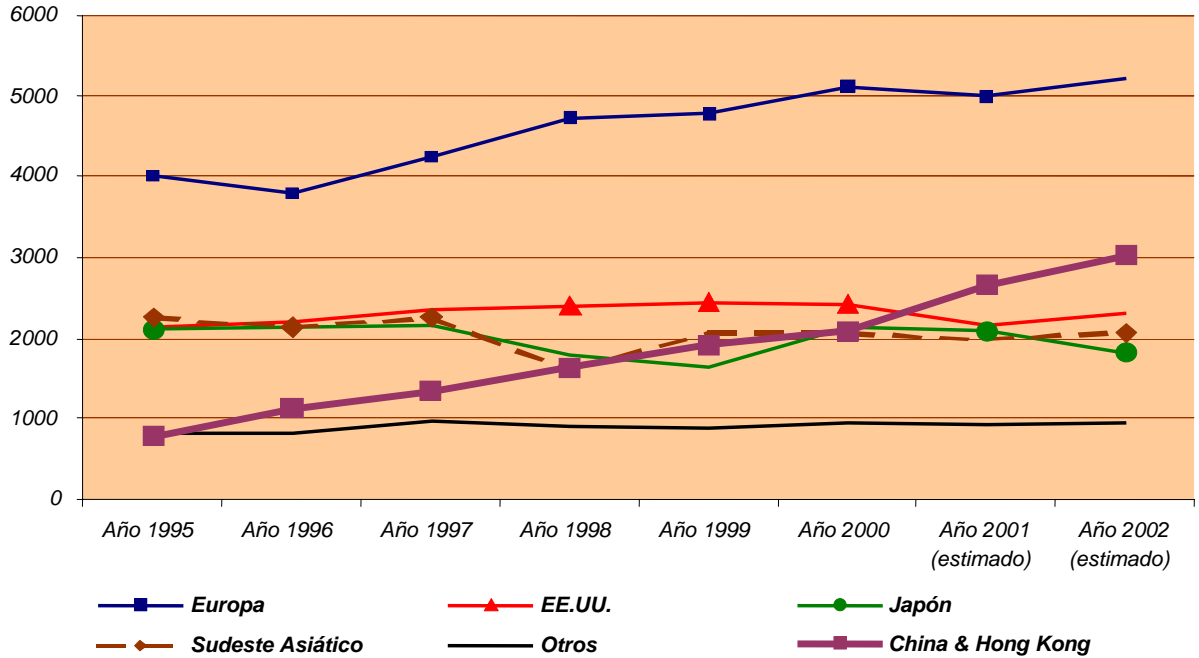


CONTRIBUTION TO GLOBAL GROWTH IN COLD ROLLED FLAT PRODUCT DEMAND



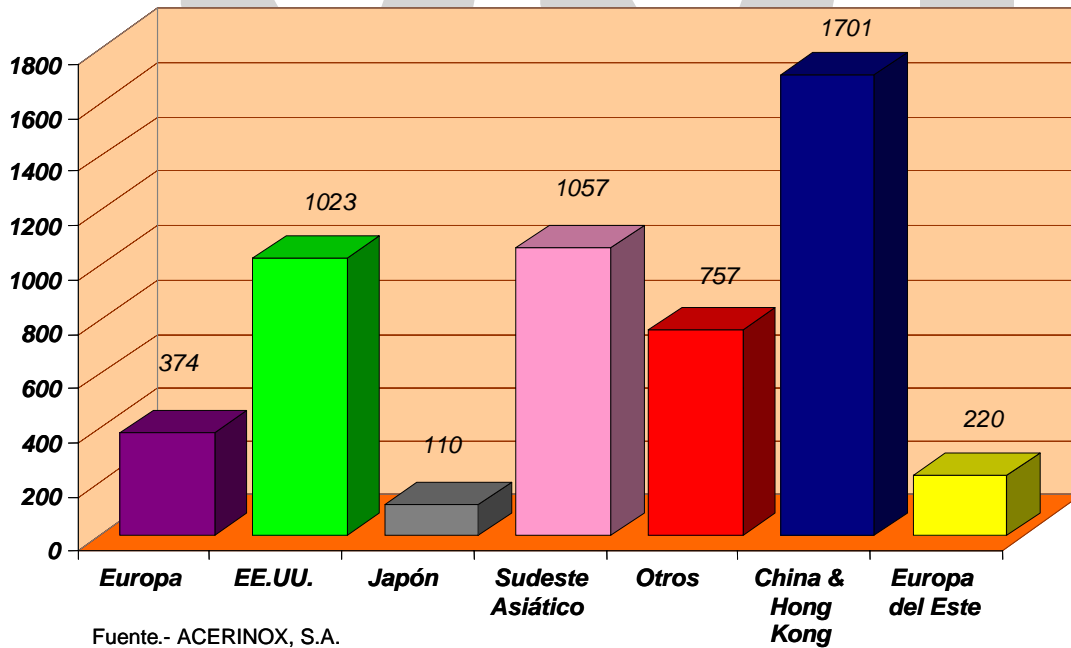
Source: CRU 6th World Stainless Steel Conference

Trends in apparent stainless steel product consumption (in thousands of tonnes)



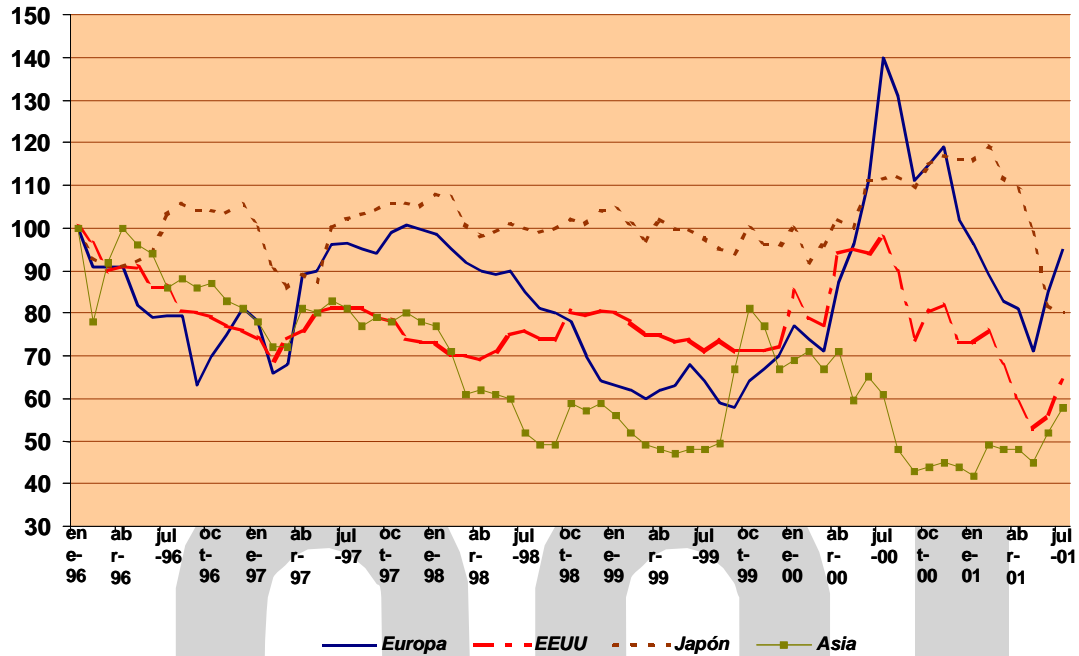
Fuente.- ACERINOX, S.A.

Imports in 1999 (in thousands of tonnes)



Fuente.- ACERINOX, S.A.

**Evolución del "margen de conversión" teórico en moneda local
(Base 100 Enero 1996)**



Fuente.- ACERINOX, S.A.

The theoretical conversion margin is a ratio calculated by the difference between the price per kg of finished stainless steel product and the cost of the nickel and ferrochrome used to produce 1 kg of stainless steel.

This graph shows that price trends in raw material and end product markets make product profitability highly volatile, and behaviour differs greatly amongst the different geographical areas.

ANNEX III (The North American market for stainless steel)

The following production companies are competitors for ACERINOX on the United States market for stainless steel flat products:

Allegheny Technologies:

This company's capacity for cold rolled stainless steel is 580,000 tonnes. It also produces special alloys with titanium, zirconium, etc. For the last 10 years it has led the stainless steel market although it seems to be concentrating less on commodity stainless and more on special products such as ultra fines, etc. although today it is the largest supplier of stainless steel in the USA.

AK Steel:

Its capacity for the production of cold rolled stainless steel is 700,000 tonnes. It mostly supplies ferritic steel for the automobile industry (providing 80% of its needs, that is 400,000 tonnes). Outside this market niche, it is trying to position itself in "commodity grade steel".

J&L:

Its capacity for cold rolled steel is 250,000 tonnes.

A member of the French Ugine group, in 1998 it invested in a bright anneal line that did not turn out as well as expected, affecting the company's possibilities in the market.

NAS:

Its capacity for cold stainless steel is 300,000 tonnes.

It has the most modern plant, the only integrated one for flat stainless steel, and is therefore considered a low-cost producer.

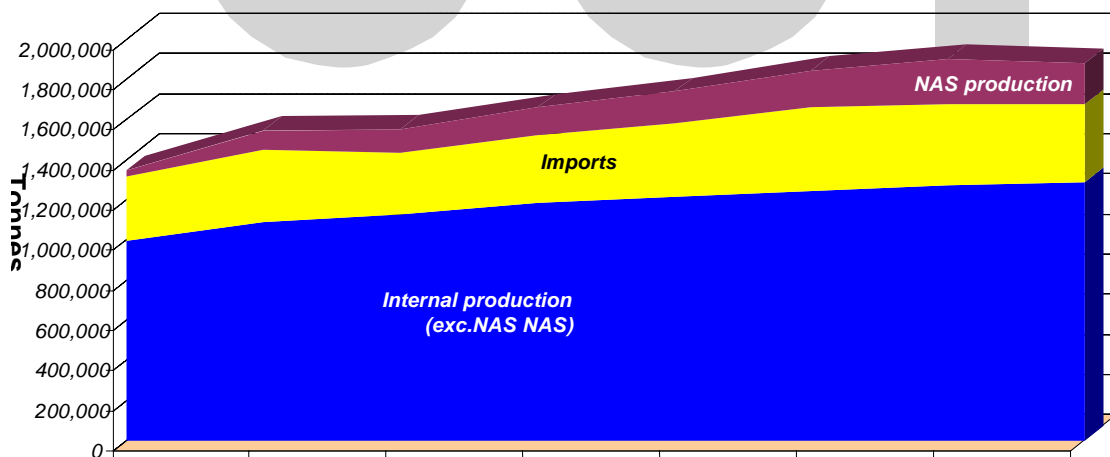
For cold steel there is another small producer, **Jindal Stainless**, with a capacity of 80,000 tonnes although it is producing no more than 25,000 tonnes and is not therefore a significant competitor on the market.

Two other non-US companies that are, however, located in NAFTA countries are **Atlas Steel** in Canada with a capacity of 125,000 tonnes and **Mexinox** in Mexico with a capacity of 200,000 tonnes.

Stainless Steel Plate Products in USA								
(tonnes)	Internal Producti	Imports	Apparent Consumpti	Growth Apparent consumption	Import Penetration	Production by Penetration by NAS NAS		
1993	186.869	35.241	222.110	14,52%	15,87%	7.869	3,54%	
1994	189.921	41.844	231.765	4,35%	18,05%	21.956	9,47%	
1995	231.545	40.640	272.185	17,44%	14,93%	27.062	9,94%	
1996	194.832	49.516	244.348	-10,23%	20,26%	30.462	12,47%	
1997	221.622	60.887	282.509	15,62%	21,55%	40.871	14,47%	
1998	209.897	56.572	266.469	-5,68%	21,23%	46.818	17,57%	
1999	189.651	60.304	249.955	-6,20%	24,13%	70.258	28,11%	
2000	186.454	65.622	252.076	0,85%	26,03%	56.712	22,50%	

Source ACERINOX, S.A.

Stainless Steel Cold Rolled products in USA



The main characteristic of the North American stainless steel market, however, is the lack of negotiating power amongst producers, this being almost totally in the hands of product distributors. This means that market conditions tend to be established by the main groups that distribute stainless steel flat products, with producers having little or no say on the market.

To date, none of the above-mentioned production companies has shown interest in participating more actively in the distribution of stainless steel flat products in the US market.



ANNEX IV (Group Balance Sheets and Income Statements)

CONSOLIDATED BALANCE SHEET FOR ACERINOX S.A. AND AFFILIATES

(in thousands of euros)

<i>ASSETS</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>
Fixed Assets	559,613	688,896	766,705	823,987
<i>Tangible fixed assets</i>	<i>527,453</i>	<i>644,537</i>	<i>737,794</i>	<i>786,225</i>
<i>Other fixed assets</i>	<i>32,161</i>	<i>44,359</i>	<i>28,911</i>	<i>37,762</i>
Long Term Receivables	230	194	174	182
Current Assets	779,111	718,662	855,430	1,905,973
<i>Inventory</i>	<i>454,288</i>	<i>442,010</i>	<i>512,794</i>	<i>716,286</i>
<i>Accounts receivable</i>	<i>312,922</i>	<i>259,282</i>	<i>323,312</i>	<i>336,390</i>
<i>Cash and banks</i>	<i>10,765</i>	<i>12,723</i>	<i>11,053</i>	<i>37,654</i>
<i>Other current assets</i>	<i>1,135</i>	<i>4,647</i>	<i>8,271</i>	<i>815,643</i>
Other assets	610	278	24	-809,735
<u>TOTAL ASSETS</u>	<u>1,339,565</u>	<u>1,408,030</u>	<u>1,622,333</u>	<u>1,920,407</u>
<i>LIABILITIES</i>				
Shareholders' equity	890,090	892,456	979,049	1,217,984
<i>Subscribed capital</i>	<i>56,235</i>	<i>56,235</i>	<i>58,479</i>	<i>59,240</i>
<i>Issue premium</i>	<i>120,215</i>	<i>102,641</i>	<i>102,641</i>	<i>114,428</i>
<i>Reserves</i>	<i>610,782</i>	<i>698,599</i>	<i>728,537</i>	<i>797,451</i>
<i>Other equity</i>	<i>102,858</i>	<i>34,981</i>	<i>89,392</i>	<i>246,865</i>
Long-term payables	94,333	111,116	132,658	169,496
<i>Bank debts</i>	<i>76,653</i>	<i>96,823</i>	<i>95,570</i>	<i>105,433</i>
<i>Other long-term debts</i>	<i>17,680</i>	<i>14,293</i>	<i>37,088</i>	<i>64,063</i>
Short-term payables	320,829	366,077	467,824	482,596
<i>Bank debts</i>	<i>87,101</i>	<i>133,503</i>	<i>140,646</i>	<i>191,111</i>
<i>Trade accounts payable</i>	<i>155,160</i>	<i>164,303</i>	<i>212,632</i>	<i>189,106</i>
<i>Other short-term payables</i>	<i>78,568</i>	<i>68,271</i>	<i>114,546</i>	<i>102,379</i>
Other liabilities	34,312	38,381	42,802	50,331
<u>TOTAL LIABILITIES</u>	<u>1,339,565</u>	<u>1,408,030</u>	<u>1,622,333</u>	<u>1,920,407</u>

CONSOLIDATED PROFIT AND LOSS ACCOUNT FOR ACERINOX S.A. AND AFFILIATES

(in thousands of euros)

	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>
<i>RECEIPTS</i>	230,941,434	1,319,480	1,447,738	2,196,532
<i>EXPENSES</i>	205,530,687	1,236,364	1,285,724	1,790,519
OPERATING PROFIT	25,410,747	83,116	162,014	406,013
<i>FINANCIAL RESULTS</i>	762,918	-6,582	-306	-9,368
<i>INVESTMENTS IN COMPANIES</i>	457,597	0	0	0
ORDINARY PROFIT	26,631,262	76,534	161,708	396,645
<i>EXTRAORDINARY RECEIPTS</i>	1,801,327	1,369	16,154	1,307
<i>EXTRAORDINARY EXPENSES</i>	68,752	10,651	892	346
CONSOLIDATED RESULTS BEFORE TAX	28,363,837	67,252	176,970	397,606
<i>CAPITAL GAINS TAX</i>	6,780,491	11,742	49,492	106,478
CONSOLIDATED PROFIT	21,583,346	55,510	127,478	291,128
<i>PROFIT ATTRIBUTED TO EXTERNAL PARTNERS</i>	-184,003	142	-2,283	-3,607
PROFITS FOR THE YEAR ATTRIBUTED TO THE PARENT COMPANY	1,399,343	55,652	125,195	287,521

ANNEX V (Simplified Process for Making Stainless Steel).

Melting, Slab Casting and Grinding

To make ferritic stainless steels, one needs iron and chromium, and to make austenitic stainless steels, nickel is added to the mixture. This raw material mixture is melted in an electric arc furnace. The molten metal is refined and decarburised in a converter vessel by blowing oxygen, argon gas and superheated steam through it. The refined molten metal is processed through a continuous casting machine to produce stainless steel slabs. The slabs go through a surface grinding process to remove scale and surface defects. This is our first saleable product.

The slabs are typically between 900 mm and 1 600 mm wide, 200mm thick, and can be cut to lengths of between 4 (four) and 12 (twelve) metres.

Hot Rolling

The hot rolling process begins at the reheat furnace where the slabs are heated to about 1 250 degrees Celsius before being rolled to the desired thickness through a twin stand reversing hot mill. Once the predetermined gauge is reached, the material can either be coiled (black coil, also known as hot band) or cut into plate (black plate). This is our second range of saleable products.

Coil mass is between 20 and 30 tons and the thickness is generally between 3,0 mm and 8,0 mm.

Plate thickness can range between 3,0 mm and 65,0 mm.

Annealing and Pickling

The hot rolled products are softened (annealed) and descaled (pickled with acids) to produce a number one (No. 1) finish product. This product has a shotblast surface with

an opaque shine to it. No. 1 finish coil and plate are also saleable products. We prefer to cold roll as many of the No. 1 coils as possible, in order to add value to our stainless steel products.

Cold Rolling and Finishing

Cold rolling of the No. 1 coils takes place on our 1 600 mm wide, heavy gauge, four-high cold mill or on one of our two 1 300 mm wide Sendzimir mills which produce smooth, shiny finished, cold rolled stainless steel.

The thickness range of the cold rolled product is between 0,25 mm and 5,8 mm.

The material is then annealed (softened) and pickled (passivated) again, before it is processed through the skinpass mill, to ensure a planished flat surface, known as a 2B finish.

Alternatively, the cold rolled material can be processed to a bright-annealed (BA) finish. This is achieved by annealing in a vertical furnace with a reducing atmosphere, to retain the bright surface imparted by the cold rolling process.

These cold rolled stainless steel coils can then be cut into smaller coils or sheets, or slit to narrower widths before being packed and shipped to customers in South Africa and countries around the world.

Polishing

Following the cold rolling, annealing and skin passing processes, a limited quantity of material can be given a uniform scratch finish by polishing with abrasive belts. This aesthetically pleasing finish can be used for decorative applications.

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THE COLUMBUS OPPORTUNITY

1. INTRODUCTION.

In view of the company's success since its creation, the ACERINOX, S.A. management committee was used to receiving offers for collaboration and bids from companies in almost all areas of the stainless steel sector, from mining to the sale of products. But all offers were rejected. An interesting opportunity was offered by Columbus in 2001, while the Board and the managing team of Acerinox were debating what to do. They needed to increase their capacity to compete internationally, yet they had to be careful not to give away the competitive advantage they had attained through years of rigorous and financially healthy management.



2. COLUMBUS.

Columbus is a South African joint venture for the production of stainless steel flat products. The company is based in Middelburg (north-east of Johannesburg) and was founded in 1991 by Samacor Ltd. (part-owned by Anglo-American PLC Group), one of the world's largest producers of ferrochrome, and Highveld Steel and Vanadium Corporation Ltd., a subsidiary of Anglo-American, that produces common steel and vanadium-related products. In addition, the South African government has a small stake in the company through a body similar to the Spanish SEPI.

At the start, the goals of Columbus were very similar to those of ACERINOX. They aimed to set up an integrated plant for the production of stainless steel flat products that would cover both the local market and foreign markets competitively. At the same time they hoped to galvanise the stainless steel industry in South Africa.

After an investment of 1 billion dollars from 1993 to 1996, Nelson Mandela finally opened up the Columbus plant in 1996, with a production capacity of 700,000 tonnes a year.

Columbus today has a technologically very advanced, and practically new, integrated plant for stainless steel flat products. It is located close to one of the world's largest ferrochrome producers, Samancor Ltd.

In the Columbus factory location the price of electric power (measured in Kw/h), a basic input for the production process, is relatively very cheap (approximately half the Spanish price), which is an important factor for competitiveness.

However, the main drawback is the geographical situation. The coast is 600 km away and although the factory has railway access, to have to use railway transport would increase overheads.

When it came to selling its products, the company found that they had more production capacity than they could sell because their sales structure was not sufficiently efficient to reach the necessary economies of scale to make them competitive.

The company's partners were not specialists in the production of stainless steel and none of them seemed interested in taking on the job of stepping up efficiency in every area of the company to make it internationally competitive. It had also accumulated a high level of debt, and this was complicating the company's viability in the short and long term.



3. LOOKING FOR A PARTNER.

The owners of the South African plant decided they needed a partner specialising in the stainless steel sector in order to turn round the company's situation.

ACERINOX seemed to be an adequate candidate, though not the only one. It had a number of characteristics that seemed very promising as a partner for the South African manufacturer:

- Extensive experience in the stainless steel sector
- A large international sales structure
- One of the most efficient production companies on the international stage
- Extensive know-how in production technology management.

The ACERINOX board also saw a valuable opportunity in the bid from Columbus. The South African plant seemed very attractive provided ACERINOX was able to negotiate an economically viable agreement, coherent with its management philosophy.

From ACERINOX point of view, the positive characteristics of a joint-venture were:

- Columbus was a modern factory incorporating the latest advances.
- The factory was very competitive from the point of view of costs, for two main reasons:
 - Its closeness to the ferrochrome plant, which kept raw material costs low.
 - The low cost of electricity, allowing a marked reduction in costs because of the intensive use of electricity in the production process.
- Its geographical location was ideal for exports to markets in South East Asia.
- The new joint-venture would climb to the third position worldwide in the production of stainless steel.

Of course, Acerinox management were perfectly conscious of the risks involved in such a joint-venture.

The Spanish managers began talks with the owners of Columbus and in early 2002, the South Africans presented the basis for an agreement. The main points of the potential agreement were as follows:

- The Columbus partners would create a new company to take over three quarters of the company's debts so that ACERINOX would only have to take on a small proportion of it.
- ACERINOX would take a 64% share in the South African factory and would take over the management as from January 2002.
- The operation was valued at about 40 billion pesetas and would take the form of a stake in the ACERINOX capital on the part of the Columbus owners.
- The Spanish company would enlarge its capital for the total value of the operation, that is, about 8% of its current share capital.
- The former partners in Columbus would therefore gain a minority share of 8% in the Spanish company's capital.

The question is whether such a proposal is reasonable and acceptable for a very successful company such as ACERINOX, and, over all, compatible with its strategy.