

PLENARY PRESENTATIONS



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TRANSFORMATION TO TACKLE THE CHALLENGES FACING THE FERRO ALLOY INDUSTRY IN THE NEXT DECADE

R.J. Linnell

FAPA

Abstract

The South African ferro Alloy industry is facing a series of major structural challenges that will require solutions that will stretch the creativity of the industries managers. This paper examines eight of these challenges and matches them with transforming solutions that can preserve the future of the industry.

These challenges include structural changes in the electricity supply industry, undercapitalisation of logistical infrastructure, black economic empowerment and a new regulatory environment, a volatile exchange rate and the rapidly evolving economies of the former Soviet Union and China.

In conclusion the author believes that the underlying competitive strength of the industry that is vested in its raw material resources will ensure a successful outcome.

ELECTRICITY SUPPLY IN SA – A 10-YEAR VIEW

T.S. Gcabashe

Eskom

Abstract

How the South African electricity industry addresses and deals with the challenges faced over the coming years will have a substantial effect on its continued competitiveness. This paper considers some of the key issues.

- *Some of the challenges facing the industry are:*
- *Future industry structure, regulation and competition;*
- *Selection and timing of new generation to meet growth requirements;*
- *Network development;*
- *Electricity as a key driver of socio-economic development;*
- *Environmental impact; and ultimately*
- *Continued provision of reliable good quality power at competitive prices.*

IDC AS THE CATALYST FOR GROWTH IN THE SOUTH AFRICAN FERROALLOYS INDUSTRY

J. Kriek

Vice President Projects Division
Industrial Development Corporation of South Africa Ltd

Abstract

Established in 1940, the Industrial Development Corporation of South Africa Ltd (IDC) is a self-financing state-owned South African development finance institution. Even though the IDC is state-owned, it functions as an ordinary business, following normal company policy and procedures in its operations, paying income tax at corporate rates and dividends to its shareholder, while reporting on a fully consolidated basis

Over the past five years IDC's investments as a percentage of private sector investment in South Africa averaged about 4.8% per annum. In addition, the IDC also facilitated the creation of more than 95 000 additional jobs and contributed R29.4 billion (or roughly USD3.8 billion) in additional export earnings.

Much of the IDC's historic success is attributed to the leading role it has played in the development of South Africa's Resources and Beneficiation sector. This sector still constitutes more than 40% (by value) of the IDC's current investment portfolio. The Resources & Beneficiation SBU is focused on resource-based mining projects and metal-based manufacturing projects. The SBU partners with global industry players to establish world-class resource based projects with a renewed emphasis on value-addition and increased export potential. The SBU aims to promote entrepreneurship and the empowerment of historically disadvantaged communities. This is achieved by encouraging participation in viable mining ventures and metal projects thereby unleashing Africa's untapped mineral wealth.

The SBU focuses on the pre-feasibility to implementation phases of a project, providing risk capital funding for feasibility studies as well as project finance and debt funding. Knowledge-based services for the development of the venture and well-trained qualified professionals are used to plan, execute and fund project studies- the SBU has a collective 122 years of industry experience and 70 years of banking experience.

DEVELOPMENT IN THE GLOBAL STAINLESS STEEL INDUSTRY

V. Muñoz

Chairman & CEO, ACERINOX

Abstract

The stainless steel industry is changing continuously, both in the short term such as supply and demand fluctuations, and in the longer term (evolutionary changes) such as fundamental changes in supply (ownership, production methods, location of production, etc.) and consumption (consumption patterns, applications, etc.). Both the short-term fluctuations and longer-term changes place severe management demands on the stainless steel industry.

GDP growth has a major impact on stainless steel demand. It is little wonder, then, that most of the growth in stainless steel demand is happening in China, which has become the largest stainless steel consumer region in the world.

Factors that influence the short term most are economic cycles, raw material prices (especially nickel), and new production capacity. These factors not only determine fundamental supply and demand, but also influence stock building and stock depletion, which contribute to highly cyclical stainless steel prices.

In the longer term, the way that stainless steel is manufactured is changing. Dramatic cost and quality changes were introduced since the 1960's by the AOD and continuous casting on the hot side and the Sendzimir mill in cold rolling. At the same time, with the new generation Steckel Mill in the mid 1980's, the drive is to obtain a fully integrated process on a single site with a minimum economic size of production.

These changes are forced by and also cause another long-term trend – the continuous reduction of stainless steel prices and margins. New processes like thin slab casting and strip casting, as well as RAP (Rolling, Annealing and Pickling) are in development with the target to achieve continuous cost reductions.

Fierce competition is guaranteed for the coming years that will encourage regional factories to optimise transport and the requirement of more specialised customer-producer relationships. This is without the present trend of increasing trade protectionism.

The close cooperation between the stainless steel and raw materials producers will be necessary.

Finally, a view of the future of the South African stainless steel industry will be addressed.

THE HEALTH OF VANADIUM

T.E. Jones

Highveld Steel and Vanadium Corporation

Abstract

Vanadium is one of the minor metals but is of significant importance both to the world steel industry amongst other users, and to South Africa, which as a country is the largest producer.

Papers are presented regularly at conferences on the pricing and the supply versus demand balance for Vanadium, very often by intermediate converters or traders, rather than by primary producers.

South Africa's position in Vanadium is significant both in terms of production capacity and actual output, and has adequate raw material reserves. Competitiveness depends on internal cost factors and efficiency, and relative exchange rates.

Volatility in the currency can decimate valuable and viable industries.

Since the last INFACON in South Africa in 1992 there have been subtle but important changes in both the production and the usage of Vanadium.

Referring to production, the output from waste materials has remained sensibly constant, while the position of the co-product (steel and Vanadium) producers has increased. The production of vanadium only on its own, from ore has declined. The competitive position of Russia and China has altered.

Relative to consumption, increasing applications in steel have occurred leading to both an increase in the consumption of Vanadium with ever increasing world steel output, as well as an increase in the relative consumption per ton of steel.

Other uses are starting to show promise. Since the early 1980's work has been taking place on a Vanadium Redox Battery and recently several large installations have been made which could be the precursor of bigger developments.

We South Africans are proud of our country and are responsible members of the world industrial community. We look forward to playing our role in a viable and healthy Vanadium industry.

STEEL RAW MATERIALS - NICKEL, CHROME, STAINLESS STEEL SCRAP AND MANGANESE

H.H. Pariser

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Abstract

Since the late 1990s, the global steel industry has been experiencing substantial changes. Carbon steel markets enjoyed after several decades of stagnation rising demand, expanding by more than 3% per year, driven by expanding usages in China and the Former Soviet Union. The Stainless Steel industry went through a remarkable metamorphosis with demand shifting to the East - China and India - which account meanwhile for 1/4 of the global market.

These developments have put unusual strains on steel making raw materials. Rising prices for iron ore, manganese alloys, chromium alloys, nickel and - last but not least - stainless steel scrap are the reflection of these market changes.

Nickel has been outstanding amongst these raw materials, where strikes in the Canadian nickel industry coupled with the perception of supply shortages resulted in sharply rising prices. While stainless steel mills temporarily benefited from these speculative activities, a counter-reaction is meanwhile under way with changes in the ferritic / austenitic ratios, the appearance of noteworthy volumes of CrMn stainless grades and a rising usage of stainless steel scrap.

Stainless steel scrap is generally the attractive alternative, with nickel units in scrap being generally available at discounts between 12 - 8 % below LME primary nickel prices. The availability of stainless steel scrap is limited. Stainless mills in Asia are competing with mills in Europe and the United States for stainless steel scrap. China in particular is causing some market distortions as the country has become the largest user of stainless steel, but recycling of scrap is not yet developed and domestic availability remains even in forthcoming years far behind demand.

While demand for High Carbon Ferro Chrome has been shrinking, Charge Chrome demand has been growing by 8% annually and South Africa is the dominant supply source. Profitability of South African ferro chrome producers has remained far behind expectations for various reasons.

Also the Manganese market has been benefiting from the above mentioned changes in the steel industry. While demand for manganese alloys had been stagnating for many years, demand growth is now exceeding 3% per year and the specific input of Mn into crude steel production is recovering.