UDK 669.14.018.8(497.6):658.8.012.12
Strokovni članek
ISSN 1318-0010
KZLTET 33(6)409(1999)

STAINLESS STEEL PRODUCTION IN THE ACRONI COMPANY, PRESENT SCENARIO AND FUTURE ORIENTATION

PROIZVODNJA NERJAVNEGA JEKLA V DRUŽBI ACRONI, SEDANJE STANJE IN USMERITEV ZA BODOČNOST

Vasilij Prešern

Holding Slovenian Steel Works and company Acroni Jesenice, 4270 Jesenice, Slovenia

Prejem rokopisa - received: 1999-11-19; sprejem za objavo - accepted for publication: 1999-12-01

Short presentation of the production of stainless in the Acroni company is given. Tradition of quality steel production at Jesenice since 1869. Present situation in Acroni and comparison of the years 1998 and 1999 in terms of the production of raw steel, sales of finished products, sales by product groups, and steel grades are presented.Outlook and prospects for the next few years and developments.

Key words: Steelwork Acroni, stainless steel, sales, product grups, development

Kratka predstavitev proizvodnje jekla v družbi Acroni. Tradicija proizvodnje kakovostnega jekla na Jesenicah. Sedanje stanje s stališča proizvodnje surovega jekla, prodaje proizvodov ter prodaje po proizvodnih skupinah in vrstah jekla. Možnosti in razvoj za nekaj naslednjih let.

Ključne besede: Jeklarna Acroni, nerjavna jekla, prodaja, grupe proizvodov, razvoj

1 INTRODUCTION

1.1 Position of Acroni in Slovenia and in Europe

SŽ Acroni d.o.o. Jesenice is located in Jesenice, a Slovenian town of about 60 km north west with the capital Ljubljana, and close to the border to Austria and Italy. Acroni is the largest "minimill" steel producer and the only producer of flat products in Slovenia. The company is a part of Holding Slovenske železarne (Slovenian Steelworks) with its headquarters in Ljubljana.

1.2 History of steel production at Jesenice

The production of steel in Jesenice and the surroundings has a long tradition over 600-years. The first milestone for the organised production of steel was in the founding of the "Carniolian Industrial Company" in 1869. The invention of ferromanganese production gave the company a pioneering place in the history of iron and several recognitions and diplomas were awarded to the Jesenice ferromanganese at the jubilee Vienna exposition and 100th anniversary of the United States of America in 1876 in Philadelphia.

During this century, the Steelwork Jesenice company - the forerunner of Acroni, was progressing step by step and became the country's largest steel producing company. In the former Yugoslavia the Jesenice steelworks contributed the majority of the total production of alloyed and stainless steels. In 1992 the company was reorganised and the Acroni company was established as a producer of flat products.

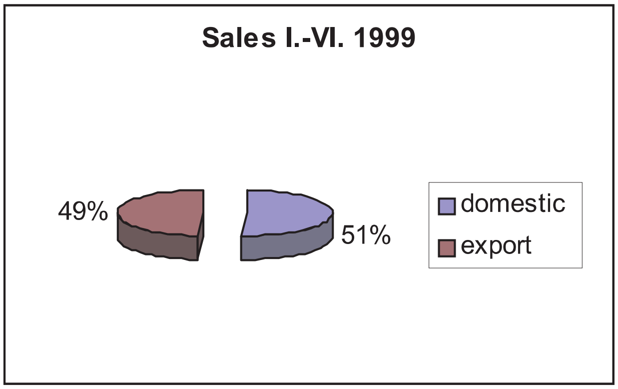
1.3 Production programme

The company's annual production amounts to approximately 200.000 t of flat rolled steel, about 60% of which is exported. The core business is based on high quality flat rolled electrical, stainless, carbon and alloyed steels. The production of non-carbon low alloyed and engineering grades is mostly destined for the domestic market, because these grades cannot be economically transported over long distances.

2 PRESENT SITUATION AT ACRONI D.O.O. AND A COMPARISON OF THE YEARS 1998 AND 1999

2.1 Production of raw steel

The production of raw steel in Slovenia declined between 1994 and 1998 by 2,3% to 405.000 t. At Acroni the production of raw steel rose in the same period by 3,4% to 231.000 t and its share of the total production of raw steel in Slovenia rose by 3,8 index points to 57% in 1998. Slovenian raw steel production reached 263.000 t in the first eight months of this year. Nearly two thirds of this quantity (171.000 t) was melted in Acroni as quality flat rolled products in the form of heavy plates, hot and cold rolled coils, strips and sheets from different steel grades. A great emphasis is given to the production of electrical sheets and stainless steel and the production of these steels will remain as the basic orientation for the future. The third types of steel produced are low alloyed ad engineering grades steels, which are sold mostly on the domestic market.



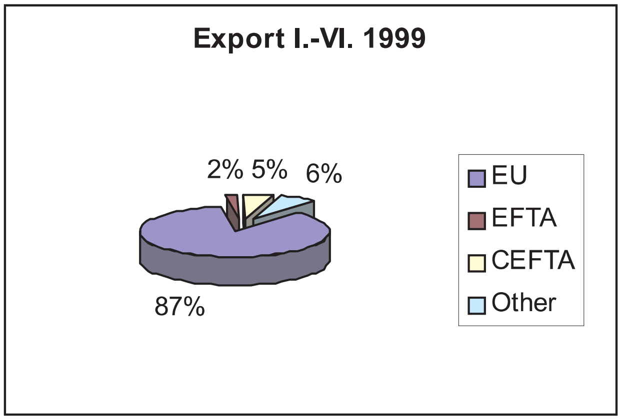


Figure 1

The production of stainless steel, for the major part austenitic grades, rose between 1994 and 1998 by 67% to 43.000 t. The share of stainless steel in the total steel production was 12% in 1994 and 19% in 1998 the production of electrical sheets (fully- and semi-finished) rose in the same period by more than 7% to 95.000 t with a share of 41% in the production in 1998.

2.2 Sales of finished products

2.2.1 Geographical

The sale of finished products amounted to 168.000 t in 1998 of which 52% was for the domestic market and 48% for export. The majority (88%) of exported steel is sold to the European Union countries. The share of export to EFTA was 3%, to CEFTA 4%, and to other countries 5%.

In the first six months of this year we sold 100.000 t of finished products, 51% was on the domestic market and 49% for export. The shares of export to the main regional groups were: European Union 87%, EFTA 2%, CEFTA 5% and other countries 6% (**Figure 1**).

2.2.2 Sales by product groups

In the first six months of this year the share of thick plates in the total sale was at the same level as last year (around one third). The share of hot rolled material rose to 14%, while the share of cold rolled declined to 54% (**Figure 2**). The increase of the sales of hot rolled products was primarily the result of better market prices for these products.

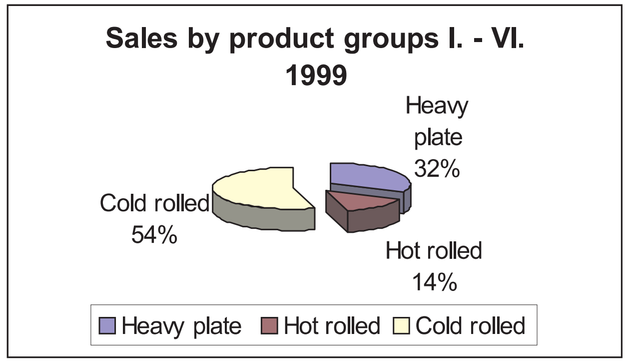


Figure 2

1.2.3 Sales by steel grades

In the first six months of this year the share of stainless steel increased to 25%, while the share of electrical steel declined to 36% (**Figure 3**). The share of other steel grades was the same as in 1998.

2.3 Stainless steel

As already mentioned, stainless steels are manufactured in three main product groups: thick plates, hot rolled coils, strips and sheets and cold rolled coils, strips and sheets.

In 1998 the sales amounted to 54.700 t of plates, to 16.800 tons of hot rolled products and to 96.500 tons of cold rolled products. The share of stainless steel in plates was 30%, in hot rolled products 32%, and in cold rolled products 13% (**Figure 4**).

The sale of thick plates in the first six months of this year amounted to 31.500 t, the sale of hot rolled products to 13.600 t and of cold rolled products 54.100 t. The share of stainless steel in plates rose to 35%, in cold rolled products to 38% and in hot rolled products to 17% (**Figure 5**).

From the total sale of plates in 1998, 95% or 15.700 t, were exported. The largest market was the European Union with more than 14.500 t. Among the EU

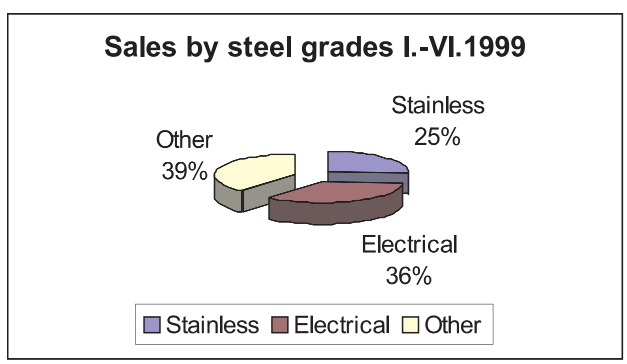


Figure 3

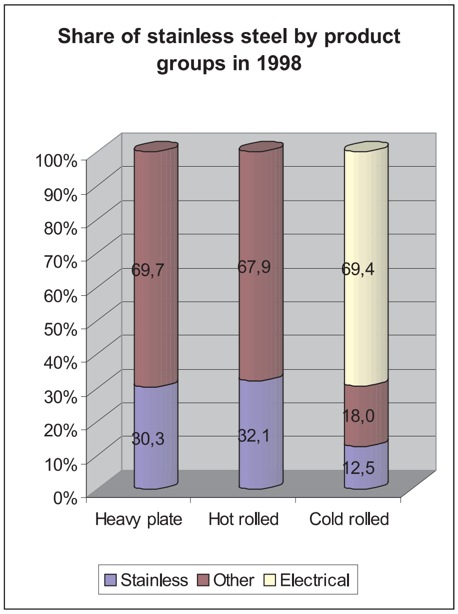


Figure 4

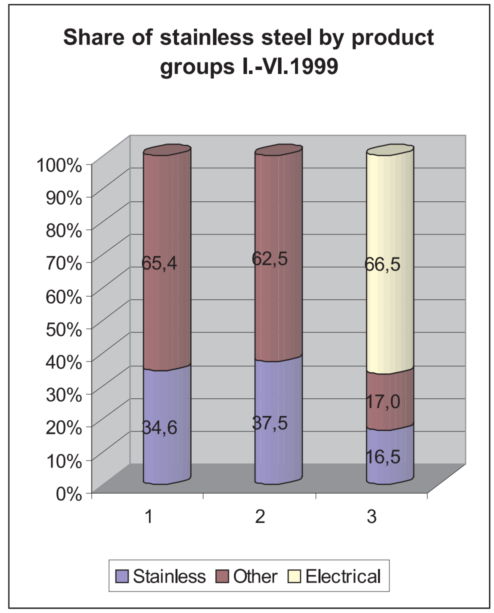


Figure 5

countries, the majority was exported to Germany (4.300 t), then Italy (3.100 t) and France (2.900 t).

In the first six months of this year, 9.900 t of stainless plates were exported, representing 91% of the total sale of heavy plates. 9.200 t were exported to the European union countries, which remain the most important market for this product. The greatest quantity was exported to France (nearly 2.500 t), followed by Germany and Italy with 2.000 t and 1.500 t, respectively.

European Union countries were also the most important export markets for hot and cold rolled coils, strips and sheets. From the total export of hot rolled stainless products (5.200 tons) last year, export to EU reached 2.300 t. Last year the USA was the second biggest market with 2.100 t.

In the first six months of this year export reached nearly 3.500 t, and export to the European Union totalled 3.000 t. Export to the USA declined to an only a symbolic quantity, necessary to maintain the long term relationships with customers.

The share of exported cold rolled products to the EU countries in the total sale of cold rolled stainless steel was around 82% in 1998 as well as in the first half year of 1999.

3 PRODUCTION OF STAINLESS STEEL IN THE FUTURE

For the next year an increase of stainless steel plates of 7% to 22.000 t is planned. Stainless steel heavy goal are also one of the core business products by the year 2005. The main difference will be the change of the output structure and not an increase in the production volume. This means an increased production of grades 316 and 316 L. Also an increased production of plates from heat resistant stainless steel is planned.

The production of hot rolled stainless steel coils, strips and sheets is planned to increase by 30% (to more than 11.000 t) in the next year. In the production of these products as well as of cold rolled products, the company can not compete with the big producers, because the maximum coils, strips and sheets width is only 1.000 mm.

The production of 15.600 t of cold rolled coils, strips and sheets is planned, down by 3% compared to this year's plan. Besides the disadvantage in terms of width, the company is faced with the absence of facilities for the production of products with BA surface for which the demand in the global stainless market is very strong.

4 CONCLUSION

The Acroni company will remain an important producer of stainless steel plates and electrical sheets. The actual references from the European consumers will help us in meeting their requirements. The company is aware that the rolling mill is small and less well equipped than the mills of our competitors, but the flexsibility and quick response to the changes in global market are our advantage.

The integration process is present in the steel industry, particularly in the production of stainless steel. The number of producers in Europe will decrease in the next decade to only five or six, and it is certain that Acroni will be among them.