



# Hungarian Aluminium Company

*Interview by Magnus Ericsson,  
Raw Materials Report.*

Based on the results hitherto achieved the Hungarian Aluminium Company (Hungalu) expects to hold its place on a world level. István Gazda of Hungalu gives a background to the rapid development of the company.

**RMR:** How are the foreign operations of Hungalu organized?

**István Gazda:** The Hungarian Aluminium Corporation (Hungalu) is a vertically integrated corporation, including 15 companies active from bauxite mining to semi-production, and also some active in the manufacturing of finished goods and machinery. The foreign operations are partially carried out by two of its subsidiary companies: *ALUKER*, the Aluminium Trading Company of Hungalu, is active in the semi-products and special alumina fields, whilst *ALUTERV-FKI*, the Research, Engineering and Prime Contracting Centre of Hungalu, is carrying out work for other Hungalu companies, both in the home and foreign markets. Further foreign operations of Hungalu are executed indirectly by agreements, through various Hungarian foreign trade companies.

**RMR:** What is the basic business idea behind going abroad?

**István Gazda:** The business idea behind going abroad in the semis and special alumina fields is simple: our production of these goods is larger than the home consumption, although Hungary consumes more than 15 kg aluminium per capita. So the proportion non-consumed by the home market is marketed abroad.

The idea behind the foreign operations of *ALUTERV-FKI* has other reasons: there is an accumulated knowledge, technology and a small surplus capacity in engineering and research (the latter can always be easily enlarged by including the operations of non-member companies of Hungalu). This can be utilized in the best way on foreign markets, thus decreasing the costs of research and development.

**RMR:** During the 1970s Hungalu has conducted a number of projects and joint ventures, both in the "Third World" and in the capitalist countries.

Could you describe how these projects are generally carried out? What results have been achieved in terms of production, exploration, etc?

**István Gazda:** The projects carried out abroad by *ALUTERV-FKI* in the 1970s were executed via Hungarian foreign trade companies, mostly by *Chemo-komplex* and some by *Nikex*. A large variety of such operations existed in different fields:

- geology and mining
- alumina
- smelting and miscellaneous.

In the field of geology and mining several investigations were made for bauxite, mostly including survey and evaluation; and/or special examination of bauxite samples, e g in and/or for Algeria, Australia, Brazil, Greece, Guyana, India, Malagasy, Nigeria. In some cases geological prospecting and mapping as well as feasibility studies were carried out, e g in Yugoslavia and Mexico. Operations were not limited to bauxite: the fluoride industrialization was studied e g in Mozambique. Beside these projects some industrial ropeways have also been built in India.

Alumina plants have formed, however, the main activity. A number of feasibility studies for the establishment of alumina production have been made, e g in the German D R, Greece, Guyana, India, Jamaica, Malagasy, Poland and Vietnam. Some studies have also been made for an integrated aluminium industry, e g for Mali and Ghana. Some of these projects were later executed, and some alumina plants were built abroad where the feasibility studies were made by others.

The first alumina plant built abroad was that for *BALCO* at Korba, India. The project report and the design for this 200 kt/year plant, were made by *ALUTERV-FKI*, which also transferred the technology, organized the training of the specialists for the plant, and delivered some of the machinery.

*From the 1983 Annual Report  
of Hungarian Aluminium Corporation*



The project was started in 1968 and finished in 1974.

The next large alumina plant was for Tulcea, Rumania. This was a 250 kt/year plant, where the design, transfer of technology, training and the essential equipment were delivered. Two plants

were designed for Yugoslavia, the 600 kt/year "Birac" plant where the machinery was supplied by the USSR and the Obrovac plant, 300 kt/year, where the overwhelming part of the machinery and equipment were supplied by ALUTERV-FKI as the main contractor.

All these plants were commissioned in the 1970s.

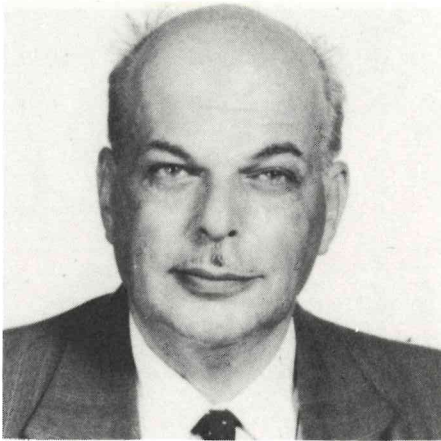
Reconstructions were made at Lauta, GDR, in the late 1970s and some other projects are still under execution there.

Two projects did not reach the execution phase, but were prepared to the



*The Székesfővár Light Metal Works produces HR and CR strips and sheets, circles for deep drawing, extrusions, tubes, rods and forgings.*

*István Gazda, Hungalu.*



stage where their execution could have started at a short notice. Both are plants of the 600 kt/year size, one for Bauxite Parnasse Mining Co in Greece for their diasporic bauxite, and another for Jamaica Bauxite Mining Ltd (the South Manchester Plant). As a smaller activity I would mention a certain technical assistance in the alumina field for Kaiser Aluminium in the 1980s.

One of the first foreign activities in the smelting field was a prefeasibility study for Carbosarda SpA for a 100 kt/year aluminium smelter in 1963 and the basic engineering for BALCO's 50 kt/year Ratnagiri smelter in 1969. Since then only technical assistance has been given in this field.

Some of the above mentioned studies were made, and some technical assistance was rendered, via UNIDO, Vienna. Some further works via UNIDO go, however, beyond the scope mentioned above:

- A soft-gamma-ray absorption model settler has been supplied to Jamaica with the aid of UNIDO.
- A study is in progress for India for the setting up of an aluminium research, development and design centre, also with the aid of UNIDO.
- Two group trainings in the bauxite and alumina field were made in 1979 and 1983, in common organization with UNIDO, for experts in the "Third World" countries.

**RMR:** What projects are Hungalu involved in today and what are your plans for the future?

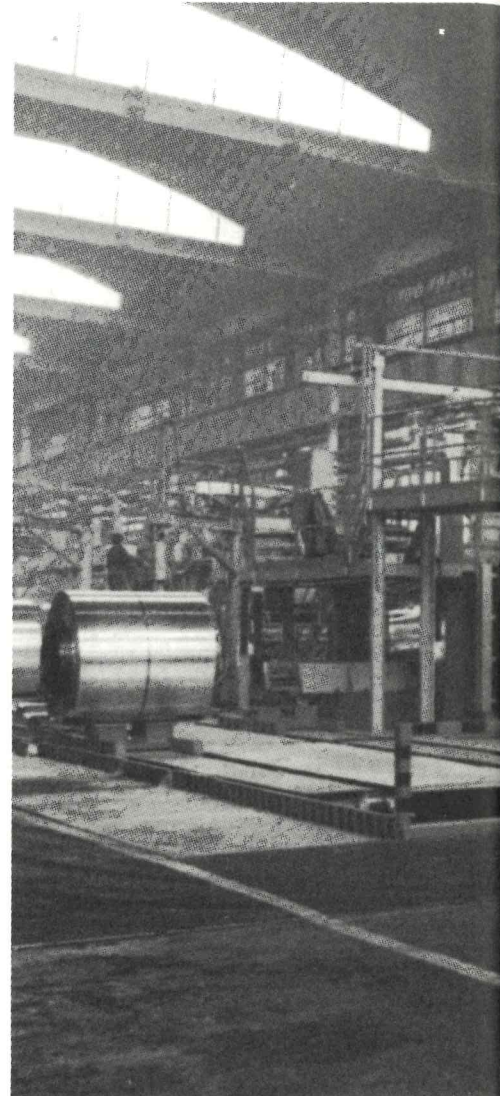
**István Gazda:** In the future ALUTERV-FKI would like to continue its activity mostly in the bauxite—alumina field. New alumina plants will probably not be built in the near future, but reconstruction of existing ones are possible due to the fact that we possess certain part-technologies, like the tube digestion, certain energy conservation methods, and other production developments like predesilication. These compose valuable and hence marketable knowledge. On the other hand, ALUTERV-FKI wishes to extend its activity into other fields too, such as semi production and the manufacture of finished aluminium products, where there is a considerable accumulated knowledge within Hungalu and also outside of Hungalu but within Hungary.

**RMR:** Which are your main competitors in the world market?

**István Gazda:** There are very few engineering companies in the world specialized in the alumina field. On the occasions of previous tenders we have confronted mostly Pechiney, Alesa—Alusuisse, VAW, Montedison and Kaiser Engineers. I would say that today Pechiney, Alesa and Kaiser Engineers are the main competitors. But we know each other very well and sometimes work together, as well. Each of us has our own speciality. Our strength is e.g digestion of any bauxite, even of diasporic.

**RMR:** How is Hungalu affected by the international recession in the minerals field?

**István Gazda:** This is a rather complex question. Hungalu, as exporter of semi-products, is affected by the lower world demand and hence lower market prices. ALUTERV-FKI, on the other hand, was more seriously affected because there is very little demand to build new alumina plants, its strongest export product,



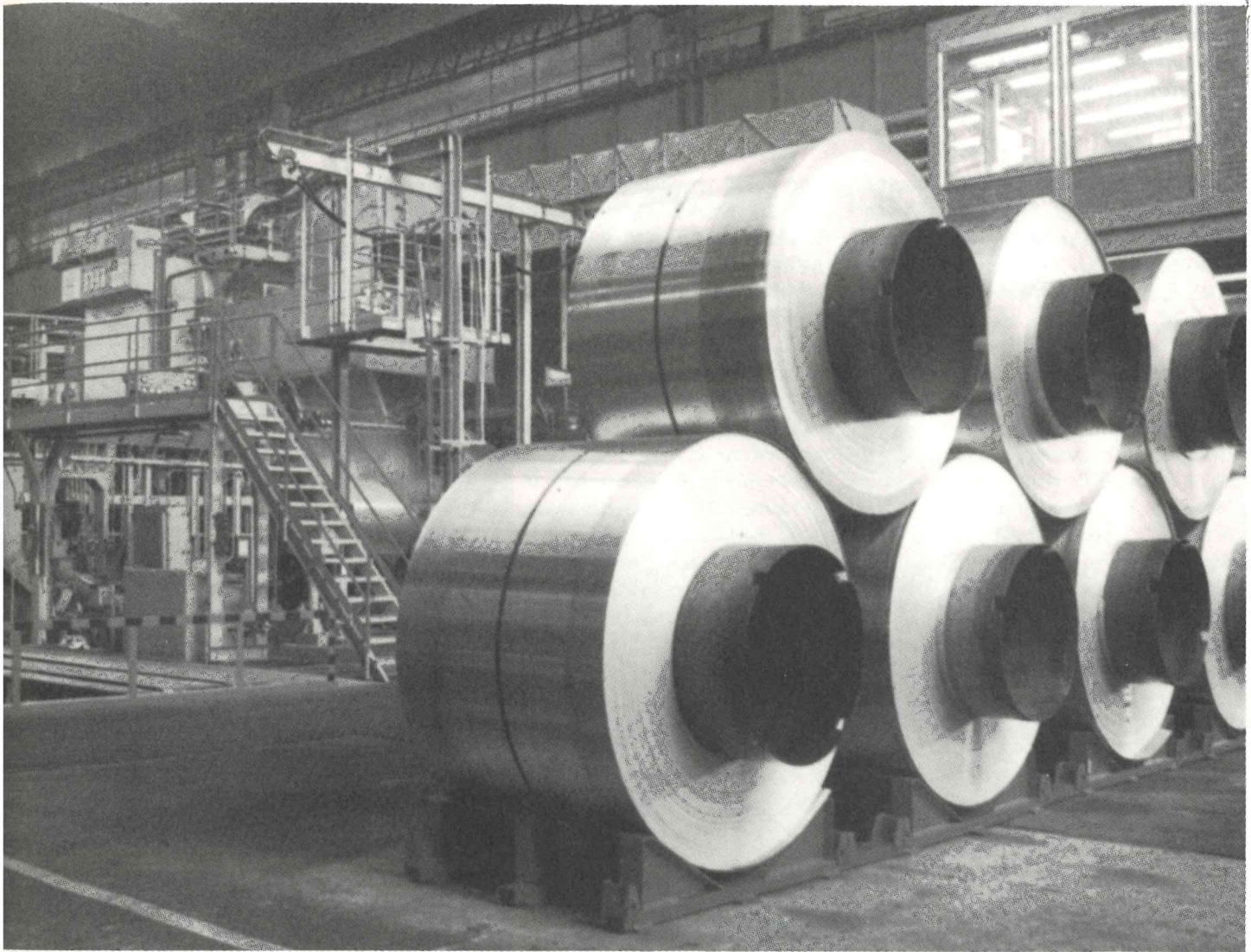
since the existing capacities are more than sufficient. This is the reason for the change in its export policy mentioned above.

**RMR:** How do you take into account the political situation in a country where you are planning to operate?

**István Gazda:** Hungary is very open in its foreign trade and is happily setting up business relations with anyone wishing to do so. Hungalu and Hungalu's companies follow the same policy. It is another question that the setting up of a new plant or even a workshop can only be done in countries having a certain stability. Hence countries where wars or steady riots are in course, or with unrealistic inflation figures, are not the real markets for investment goods.

**RMR:** Do the foreign activities of Hun-





galu have any impact on the overall supply of minerals to the Hungarian economy?

**István Gazda:** Hungary is one of the few countries mining bauxite in Europe. Its yearly production represents nearly 4 per cent of the world production of this mineral. This bauxite is sufficient for the Hungarian aluminium industry, hence the foreign activities of Hungalu do not result in bauxite supplies from abroad. Naturally from the foreign currencies earned by these foreign operations Hungary can buy anything it needs from abroad, if wanted even other minerals.

**RMR:** Could you describe in some more detail one important project that have been carried out in the "Third World"?

**István Gazda:** One typical "Third World" project was that in Korba, In-

dia. Its main importance for India was that with the aid of ALUTERV-FKI it could build its first national alumina plant. The detailed project report and detailed design were made by us, the technology was supplied and a training course was set up in Hungary for the future specialists and even some foremen of the plant. Based on this the overwhelming part of the machinery was supplied by the Indian industry and the building as well as the erection of the plant were also executed by Indian companies. We gave only the necessary technical assistance in the form of supervision and delivered some parts of the plant which could not be manufactured in India. The putting into operation and the commissioning of the plant were also executed with the assistance of Hungarian specialists.

**RMR:** Could you touch particularly on

the financing of this project?

**István Gazda:** There was no need to finance the Korba project and it could hardly be done by us, because very little hardware was delivered from Hungary. In other cases, however, where the overwhelming part of the machinery and equipment was delivered from Hungary the usual export credits were granted. In the case of some other projects — which were finally not executed — we went even a step further: the intention was to deliver the necessary machinery and equipment not only from Hungary but from three other countries in Western Europe. In this case credit packages were prepared for each country and an ad hoc partnership with several companies in these countries under the leadership of us. It is a pity that the recession interfered and hence that these plants could not yet be built.