

INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

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COUNTRY Rumania REPORT [Redacted] 25X1

SUBJECT The Lenin Steel Combine in Hunedoara DATE DISTR. 21 December 1955

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1. The Lenin Steel Combine at Hunedoara (Stahl Kombinat Lenin - Hunedoara) occupies an area of 800 by 400 meters north of the city on the west bank of the Cerna River. It is served by a railroad trunk line running south through Pestisu Mare from the main Deva-Alba Iulia railroad.
2. The Directorate of the Combine consists of the following:
 - a. Personnel Director - Mitrea Ghiugaria, [Redacted] 25X1
 - [Redacted] 25X1
 - b. Technical Director - Engineer Octav Birlic, formerly employed at Recita;
 - c. Manager of the Iron Smelter - Dimitru Gheorghescu;
 - d. Manager of the Steel Works - Ioan Danielopolu, who is not a Communist Party member. This department employs only specialists among which there are almost no Party members;
 - e. Manager of the Foundry - Mircea Constantin, a bourgeoisie;
 - f. Manager of the Rolling Mill - Ioan Petراسi;
 - g. Manager of the Forge - Gheorghe Luca;
 - h. Manager of the Power Plant - Gregor Stefanescu;
 - i. Party Secretary - Petru Crisan;
 - j. Head Dispatcher - Mihail Schuster;
 - k. Responsible for Production - Ioan Porumbac.

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(Note: Washington distribution indicated by "X"; Field distribution by "#")

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3. There is a permanent Soviet committee in the factory. Soviet members live completely apart from the Rumanians and have no contacts with them except for business purposes. The names of the Soviet members are not known.
4. The Combine has 8,000 to 10,000 employees. Of this number, about 4,000 are technically trained workers, about 1,500 are semi-skilled workers, and the remainder are laborers. The number of technically trained workers is comparatively large because of the fact that individuals enrolled in the various training and technical qualification courses are accommodated first for employment in the Combine. Women form about 25 percent of the workers. There are approximately 900 Party members and 1,500 Party candidates, most of whom are not genuine Communists but enter the Party because it is prescribed as a requisite for remaining in a job.
5. There are three work shifts in the Combine, starting at 0600, 1400, and 2200 hours. Only the two day shifts have a full complement of workers. The night shift is generally engaged in maintenance and transportation work. In spite of the lowering of norms at the end of 1954, the tempo of work is forced and workers find it difficult to fulfill the norms.
6. The entire Combine is surrounded by a wire net fence with barbed wire running along the top. The fence is mounted partly on brick, partly on wood, and partly on iron posts. The installation has five gates, two of which are always closed. Entry is permitted only after proof of identity. Each worker and employee has an identity card which bears personal information and the name of that part of the plant in which the individual is employed. Upon arrival at work the card is exchanged for a round aluminum disk bearing the worker's identity number and the number of the unit to which he is assigned. The worker must stay only in that part of the Combine to which he is assigned.
7. The Combine Guard consists of 160 men. Each work shift has 40 men on duty, while the remaining 40 men have a free day. The Fire Department of the Combine likewise consists of 160 men who, in addition, perform air raid defense duty and hold air defense courses for the workers. Each worker must be trained in a particular branch of air raid defense and the problems involved, such as removal of ruins, hygiene, etc. Those who are trained must take an annual two-weeks' refresher course and must hold 30 drills a year in their free time.
8. The uniforms of the Combine Guard and Fire Department resemble the Soviet military uniform; the Guard uniform is steel blue and the Fire Department uniform is ash gray. The Combine Guard is not armed, but is equipped with rubber truncheons. Each guard post is equipped with a pistol, some of which are automatic.
9. At the main gate, there is a porter's lodge which is equipped with an automatic time clock; a two-story, flat-roofed building, 50 by 15 meters, which contains storage space on the ground floor for fire equipment and garages and on the second floor quarters for the Combine Guard and firemen; a three-story building for the management and laboratory, 80 by 20 meters, which has a gate for employees only; and, a building 60 by 20 meters which provides separate bathing and wardrobe facilities for men and women.
10. The ore dressing plant consists of ore milling and washing units. The milling unit has two mill lines. Because of great dust accumulations,

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this milling unit is in the open air. Lump ore which is carried by the Combine railroad is piled partly by dump cars and partly by steam shovels on a conveyor belt which carries the ore to the mill line where it is crushed. The crushed ore comes out on the other side on another conveyor belt which carries it to a cylindrical ore cleaning installation. In this cylinder, the ore is cleaned by steady rotation. The ore dressing shop employs 200 workers. Either there is no night shift or it is limited to the necessary maintenance work.

11. The large smelting plant has a 500-ton and two 250-ton smelting furnaces. The 500-ton furnace was completed in 1953 and replaces one which was destroyed during the war. Of the two 250-ton smelting furnaces, one is of prewar make, the other was completed in November 1954. The cleaned and crushed ore is carried by conveyors and hoists into the so-called bell, a bell-type distributing gear, in the upper part of the smelting furnace. From this bell, the ore enters the furnace through an opening. For this purpose, coke, scrap, metal, limestone, and quartz are mixed in with the iron ore. Each shift, except the night shift, finishes one smelting. Each smelting takes about five hours. The remaining three hours are employed in charging the furnace, casting the pigs, and cleaning the furnace. The pig iron flows into asbestos-lined ingot molds. An ingot mold of 50 kilograms capacity is divided into two 25-kilogram compartments by an asbestos lining. The large smelting plant includes the special firebrick plant and asbestos manufacturing workshops of the Combine. Because of its mechanization, the large smelting plant employs 700 workers, 300 in each day shift, and 100 in the night shift.
12. The steel mill consists of 16 open-hearth furnaces, arranged in two rows, each independent of the other. In these furnaces, the pig iron is alloyed by the addition of scrap metal, aluminum, chromium, nickel, manganese, and charcoal to produce steel by means of gas firing in graphite pots.
13. Another line of open-hearth furnaces is under construction, provisionally with four furnaces, which will operate with an electric heating and steel crucible system. Two of the new open-hearth furnaces will probably be put into operation in the second half of 1955. The furnaces have a 15-ton capacity and two charges will be completed in each shift, including the night shift. This mill includes also the adjoining coking plant, consisting of 20 furnaces and a gas cleaning installation. Coke is used in the large smelting plant, and gas in the open-hearth furnaces. Coke is obtained from coking brown coal from the Jiu Valley mines. The steel mill employs 1,200 men, while the coking plant employs 200 men.
14. Casting of the pig iron, obtained from the large smelting plant and in part of the pig steel from the open-hearth furnaces, as well as of non-ferrous metal not produced in these operations, is carried on in the foundry which is organized in four sections. The smallest foundry section is the gray cast iron foundry, consisting of one room, 30 by 15 meters in dimensions. Next to it and twice its size is the iron foundry, the equally large steel foundry, and the nonferrous metal foundry which is somewhat larger than the gray metal foundry. Each foundry comprises the foundry proper and an alloy cleaning installation. In the foundries, the metals come first to the so-called cupola furnace, where they are again smelted in the desired alloy combination and then poured into wooden cases containing molds of sand and ashes.
15. The iron and steel foundries each have two cupola furnaces, the gray iron and nonferrous metal foundries each have one. The alloys, which take

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four hours to cool, are then brought to the alloy cleaning installation where they are cleansed of the sand and ashes on the surface by means of oil and compressed air. Pouring at the cupola furnace is done twice in the two day shifts, the remaining time being employed in preparing the model and for cooling off the castings. Shifts in the alloy cleaning unit begin work an hour later than the foundry unit. The foundry also has a carpentry shop for preparing models. The total number of workers in these two units is about 1,200.

16. The rolling mill is organized in the three following separate groups of buildings: a roughing mill, a secondary mill and a fine rolling mill. Each building is a 20 by 30 meter hall with a concrete framework 20 meters high. The ingots, coming from the open hearth furnaces, are brought by an automatic line of rollers to one of the two smelting furnaces at the end of the hall where they are heated by gas, to white heat, at about 1,200 degrees. The ingots are placed into and taken from the main furnaces by automatic hoists. From these furnaces, they are conveyed by rollers to the rolling mill line. The fine rolling mill consists of 18 rolling mill lines; the secondary rolling mill of 14 rolling mill lines; and the roughing mill of 10 rolling mill lines. The work is completely mechanized.
17. Before this part of the Combine was rebuilt in 1953 and 1954, and when it was still little mechanized, it employed 1,200 workers. The present employment rate is not known. Planned production for 1955 is 120,000 tons. Output includes rolled axles, rounds, flats, nail iron, I and U sections, railroad rails for sidings, as well as various types of pit props, and sheet metal, from heavy plate to fine sheets, 0.5 millimeter thick.
18. Some of the steel products from the rolling mill, as well as some of the pig steel from the open-hearth furnaces, are conveyed to the forge shop, which also consists of two units, the power press shop and the large hammer mill. The two shops are large halls with concrete framework, 80 by 30 and 100 by 30 meters in area, respectively. In both these shops the steel is put in a so-called sintering furnace heated with coal. The steel is heated red hot in these furnaces and then treated by various cooling systems. The raw material is then put under the press where it is pressed and then hammered into the desired form. The press shop has two large and two small hydraulic presses while the hammer mill has one large and three small steam hammers. This part of the Combine also has a tempering plant in which the pressed and forged steel is tempered to the desired hardness in oil-heated furnaces. In Hunedoara, only cast, rolled, forged, and pressed semi-manufactured products are turned out. There are 1,000 employees.
19. Three air raid defense bunkers have been built. These bunkers are large enough to permit the inhabitants of the settlements in the neighborhood as well as the workers to take refuge there. The bunkers are five meters underground, and have such strong concrete walls that, according to people on the spot, the bunkers can withstand atom bombs.
20. The Combine has two electric power plants. One of them, on the grounds of the Combine, has a dynamo operated by three gas turbines which are powered by the blast furnace gases of the large furnaces. This power plant can supply sufficient current to meet the needs not only of the Combine but also of the city of Hunedoara. The hydroelectric power plant, built at the dam south of Hunedoara near Telinc, is a reserve power plant for emergencies. No information is available as to the power production of the plant.

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21. Scrap metal, conveyed to the scrap metal shop by rail, is cut to pieces by motor saws and cutting torches. The scrap is then tied up in 50-kilogram bundles.
22. A two-story, 25 by 10 meter, building houses medical facilities, dispensary and emergency hospital. The first floor contains also a dentistry office, the second floor has two operating rooms and a four-room emergency hospital.
23. The planned 1955 production is 320,000 tons of crude iron and 480,000 tons of crude steel. This tonnage exceeds 1954 production by 20 percent and exceeds the planned production by 28 percent.
24. Some of the semi-finished goods produced from pig iron and steel are delivered by rail via Simeria to Orsova, from where it is shipped by way of the Danube to the USSR; and some of it is shipped to various Rumanian enterprises, chiefly in Arad, Orasul Stalin, and Bucharest, for processing. Since 1954, none of the cast, rolled, and forged semi-processed products have gone to the USSR. Instead the total production is used partly for domestic requirements and partly for export.
25. About 18 percent of the iron ore comes from the iron mines near Hunedoara, chiefly from the Baia Teluicului iron mine, while the greater part of the iron ore comes from the USSR, from Kirvoi Rog. It is in the form of lump ore and is shipped on tug boats to Turnu Severin and Orsova, from where it goes by rail via Hateg and Simeria.
26. As to alloying materials, crude aluminum and manganese ore is delivered by Hungary; manganese, nickel, chromium, and other nonferrous metals by the USSR. There is no shortage in raw materials. The Combine always has a two-weeks' reserve of raw materials, and reserves for a long period in the fall so that delays which may occur in Danube River transportation will not cause work stoppages.
27. Coal is obtained from the brown coal mines in the vicinity of Petrosani and Luteni. The Combine supplies its requirements for coke by coking the brown coal.
28. The technical equipment for the Combine consists partly of post war equipment and partly of repaired prewar equipment.
29. The reject rate in the foundry amounts to 22 to 24 percent, the higher rate being that of the iron foundry, the lower rate that of the nonferrous metal foundry. The reject rate in the rolling mill is 16 percent, in the forge shops it was brought down to less than 10 percent in 1954. The Combine competes with its counterpart shops in Resita to lower the reject rate.
30. The welfare installations at the Combine consist of a hospital, a pulmonary sanatorium, a convalescent home, a sports arena, and a culture house, all in impeccable condition.
31. The old settlement of the workers, which housed 2,000 workers, consists largely of bedroom-kitchen quarters. The new settlement of the workers, built after the war for 800 families, is composed mainly of two-room quarters. Housing built in 1953 consists of eight three-story houses with about 100 apartments. Another workers' settlement is now under construction.

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32. At present, the Combine is not being enlarged but it is rumored in Hunedoara that it is planned to build an agricultural machine factory south of Hunedoara.
33. The Combine has a standard-gauge railroad installation and a narrow-gauge railroad. The Rumanian railroads use the standard-gauge track. There are always four shunting locomotives at the Combine. The locomotives on the narrow-gauge railroad are electrically operated. The Combine has a number of trucks and motor busses.
34. A legend for the attached sketch is as follows:
- 1 - Main gate and porter's lodge
 - 2 - Guard and firemen's quarters, equipment, garages
 - 3 - Management and laboratory building
 - 4 - Bathing and wardrobe facilities
 - 5 - Ore dressing plant
 - 6 - Large smelting plant
 - 7 - Steel mill
 - 8 - Foundry
 - 9 - Rolling mill
 - 10 - Forge shop
 - 11 - Air raid defense bunkers
 - 12 - Electric power plant
 - 13 - Scrap metal shop
 - 14 - Medical facilities
 - 15 - Workers' settlement (old)
 - 16 - Workers' settlement (new)
 - 17 - Workers' apartments
 - 18 - Workers' settlement (under construction)
 - 19 - Brickyard
 - 20 - Coking plant
 - 21 - Carpentry shop (not shown on sketch)
 - 22 - Open air coal storage
 - 23 - Warehouse for raw materials
 - 24 - Semi-processed products warehouse

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1. [Redacted] Comment: Probably an error in translation.

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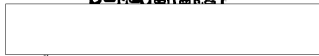
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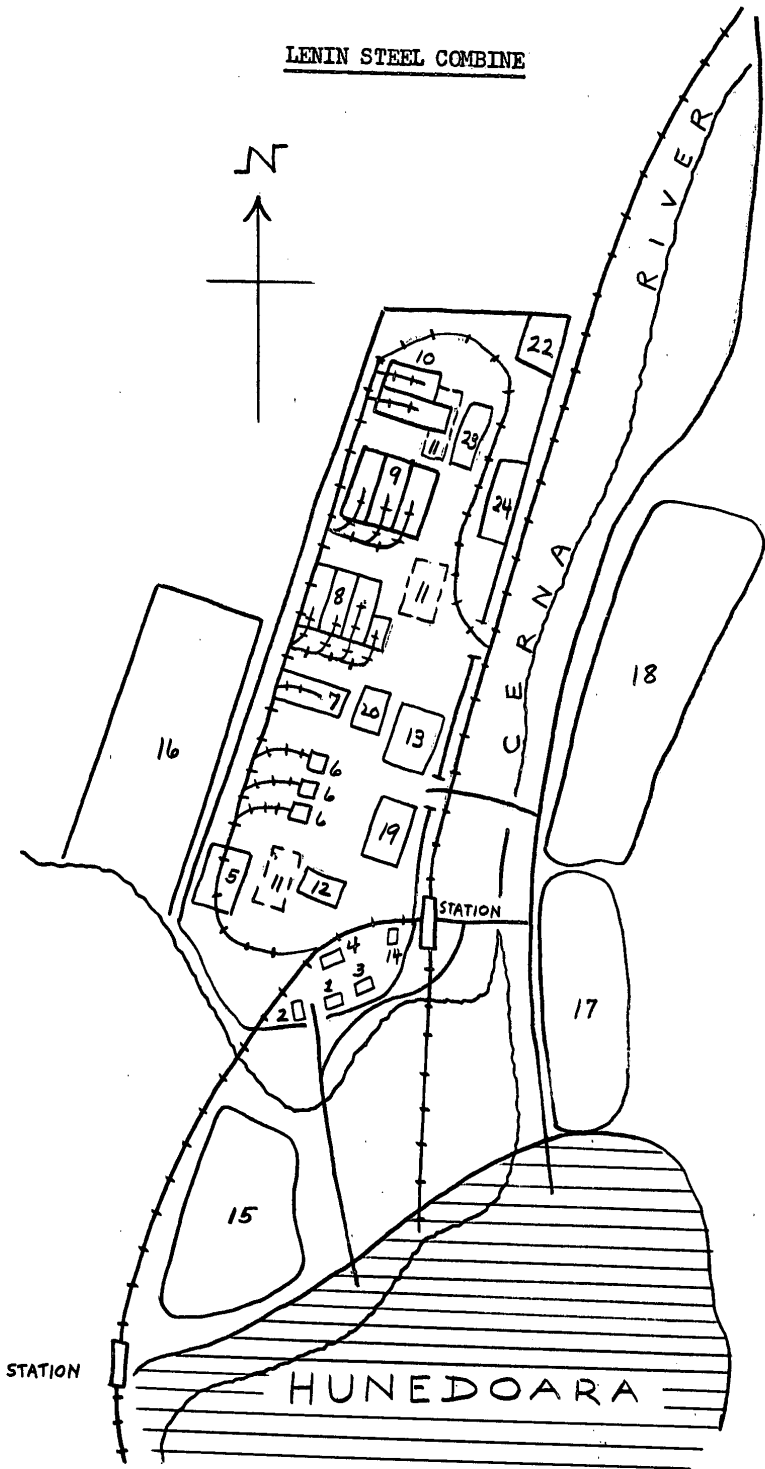
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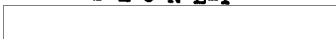
LENIN STEEL COMBINE



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