

c. A railroad line entered the plant from the northwest and several branches led to various shops. The southeastern plant area was being surveyed for the construction of an additional railroad track.

d. Because of surveying work in the vacant plant area northeast of the plant buildings it was concluded that extensions are planned in this direction.

For plant layout see Annex 1.

For sketch and cross section of the "annesmann department see Annex 2.

For sketch and cross section of the open hearth department and Kolosni department see Annex 3.

For sketch and cross section of the forge see Annex 4, and for cross section of the mechanical department see Annex 4.

3. Work force:

The number of Soviet laborers in the production work totaled about 2,000 working in three shifts. No details were available on the number of PWs and convicts doing construction work.

4. Production:

Seamless tubes varying in length and diameter. The other plant departments so far produced plant requirements only. The production of the rolling mill had not started.

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Comment:

a. Showing the type of construction of the most important plant departments, this report and attached sketches furnish a very illustrative picture of the Karl Liebknecht Steel Plant in Dnepropetrovsk. Confirmation is required.

b. The plant existed before the war. It is believed that the Soviet statements, according to which construction work started in 1945, referred only to reconstruction work after the war. The plant is on the German Military Geographical town plan of Dnepropetrovsk, issue 1941. The exact plant location can be seen from this plan.

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4 Annexes:

4. blueprints (sketches and cross sections of the Karl Liebknecht Steel Plant and Rolling Mill in Dnepropetrovsk)



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Legend:

- 1 Mannesmann department, also see Annex 2
- 2 Open hearth department, also see Annex 3
- 3 Kolosni department, also see Annex 3
- 4 Forge, also see Annex 4
- 5 Mechanical repairshop, equipped with 40 to 50 machine tools of various kinds, mostly of German or American origin. Brick building with steel frame, 225 x 90 x 165 meters. For cross section see Annex 4.
- 6 Rolling mill under construction, steel structure, 450 x 180 meters height presumably 16.5 meters, partially completed. Soviets stated that there previously was another rolling mill on this site which was destroyed during the war.
- 7 and 8 Mitissni Nail Factory under construction. Two workshops 360 x 120, 27 meters clearance, and 180 x 90 x 13.5 meters clearance. Without equipment. [redacted] the nail factory was part of the plant, being separated from it by a wooden fence.
- 9 Two brick buildings, main offices, plant management and administration.
- 10 Pumping station, for the plant water supply
- 11 Dwelling houses with gardens
- 12 Old open hearth plant with one furnace, operating for plant requirements
- 13 Guard detail and scale for vehicles
- 14 Garage, fenced in
- 15 Plant gate
- 16 Five cooling towers of the open hearth plant, on concrete bases of 6 x 6 x 4.4 meters
- 17 Transformer station, off limits to PWs
- 18 Mess hall for Soviet personnel
- 19 Offices of the Mannesmann and Kolosni departments
- 20 Skrawo store, 300 x 27 x 16.5 meters with concrete floor, still vacant but, according to Soviet statements, earmarked for storage of plant products.
- 21 High tension line with branch leading to the plant
- 22 Guard posts
- 23 Sandy area, still vacant
- 24 Dwelling with gardens

Legend to Annex:2:

The Mannesmann department is comprised of a longitudinal workshop, about 150 meters wide, and a traverse workshop, about 225 meters wide. The total length of both workshops is about 1,000 meters, the height about 15 meters, and clearance, including skylight, 19.5 meters. The building is a steel structure with brick walls. Pillars are constructed in the walls at 5.4 meters intervals to support the roof rafters. The roof of the longitudinal workshop consists of several concrete slabs, a 1.8-meter layer of peat slag, a 1.5 cm ferro-concrete floor of paper on top. The traverse workshop is covered with corrugated metal. The floor of the righthand workshop section (right of the dotted line) consists of the following three layers: Concrete at bottom, covered by a layer of slag concrete and foundations of the building measuring up to 4.5 x 4.5 meters on top.

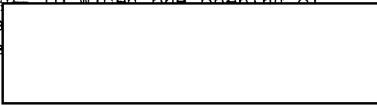
Three lines of pillars divide the traverse workshop into four long sections; the longitudinal workshop is divided into three long sections by two rows of pillars. All pipe lines for compressed air and cooling water and the power lines are buried in canals covered by steel plates.

Installations:

- 1 Concrete foundation, where slug samples are taken
- 2 Two magnetic cranes, each with a capacity of 5 tons
- 3 Two cranes, each with a capacity of 3 tons
- 4 Six cranes, each with a capacity of 2.5 tons
- 5 Twelve cranes, each with a capacity of 3.5 tons
- 6 Two small cranes
- 7 Two annealing furnaces, each 18 x 4.5 x 2.7 meters, naphtha fueled
- 8 Abutment into which slugs are chucked
- 9 Rotatable and movable machine tool with mandrel to pierce the slugs
- 10 Two saws for cutting completed tubes
- 11 Foundation with conveyer transporting the tubes
- 12 Annealing furnace like No 7 above, for final annealing of rifled tubes
- 13 Straightening machine
- 14 Installation with unknown purpose, 45 x 18 meters 5.4 meters deep, covered with a 1.5 meter thick concrete ceiling in level of the floor of the building. A staircase leads down. The room is equipped with 20 foundations for medium size machines.
- 15 Foundation with test stand
- 16 Two thread cutting machines
- 17 Tube storage



- 18 Eight special devices, each 2.7 meters high to widen one opening of the tube pieces, 0.45 to 0.9 meters long a funnel-like mouth, similar to a muzzle brake (the ends are milled).
- 19 Power station with one turbine, 9 x 2.4 x 1.8 meters, in a horizontal position, and some electric motors.
- 20 Switching station; all installations are made AEG and Siemens Schuckert
- 21 Office
- 22 Machinshop with many lathes and a railroad connection.



Legend to sketchA Open-Hearth Department:

The open-hearth department is on a hill, about 13.5 meters above the other plant parts. It is a steel structure, lined with brick work, about 360 x 225 meters. The clearance varies. (See sketch of the cross section).

Five smokestacks of different heights stand at the north side of this building.

Installations:

- 1 through 5: Five open-hearth furnaces, each almost 12 x 4.5 x 7.5 meters. They were constructed in the Soviet Union after German models. Capacity of each furnace 100 tons. Replacing of fire clay bricks every three to four months within three days. Put into operation as follows:
 - Furnace No 1, in 1946
 - Furnace No 2, in October 1947
 - Furnace No 3, in June 1948
 - Furnace No 4, in October 1948
 - Furnace No 5, in December 1948
- 6 Brick smokestack, 50.4 meters high
- 7 Smokestack, 77.4 meters high, with steel coating on concrete foundation.
- 8 Three brick smokestacks, each 75 meters high
- 9 Five storage basins 18 x 4.5 x 3 meters deep, containing materials to charge the furnaces
- 10 Annex with office
- 11 Three foundry (casting) cranes, each with a capacity of 110 tons
- 12 Three cranes charging the furnaces, each with a capacity of 10.5 tons
- 13 Charging platform
- 14 Platform where the cast is controlled
- 15 Four cranes, each 5 tons capacity, conveying the scrap to the charging platform
- 16 Four cranes, each 2½ tons capacity, to unload the molds from the cars and to reload the freed castings
- 17 Three cranes, each 2½ tons capacity, to load the cast slugs for shipment to the Mannesmann- or Kolosni department. .-.-.-. tracks of the traveling crane.
Work force of the open-hearth department, three shifts with a total of about 250 laborers and 50 employees.

B Kolosni Department:

The Kolosni department measures 720 x 135 meters and is a steel structure lined with brick. As seen from the cross section, the department has the same type of construction as the Mannesmann department. It is also

divided in three long sections with traveling cranes by two lines of pillars. A railroad track enters the workshop from the southeast and extends as far as the last third of the building.

Installations:

- 1 Annealing furnace
- 2 Various kinds of machine tools, including forge hammers
- 3 Storage dump with many manufactured railroad car wheels with fitted rims
- 4 About 50 cooling basins in three parallel lines, somewhat larger than the railroad wheels (to cool railroad wheels). Some of them with several railroad wheels, in superposed position
- 5 concrete foundations, 18 x 5.4 meters and 7.5 meters deep. The corner was later screened by a temporary wooden wall,
 According to Soviet statements, lathes were previously installed here but were too weak and new foundations for special lathes had to be constructed. Work force of the department, about 150 laborers, working in three shifts.

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Legend to sketch:A Forge

Steel structure with brick lining, 180 x 60 x 18 meters, with plain roof without skylights. Production of plant requirements only. Work force 100 laborers working in three shifts.

Installations:

- 1 Machine shop equipped with a compressor and some electric motors
- 2 Concrete cooling basin, 7.5 x 7.5 meters, 4.5 meters deep, projecting 90 cm above the floor
- 3 Two cranes with 3 tons capacity each
- 4 Five heavy pneumatic hammers, each 2.7 meters high
- 5 Five stacks with smoke discharging device, leaving the building above the office annex
- 6 Offices
- 7 Kitchen and mess hall

B. Mechanical Repairshop:

Steel structure with brick work, 22.5 x 90 x 16.5 meters equipped with 40 to 50 machine tools of German and US origin.