, abo	sified in Part - Sanitized Copy Approved for Release 2012/09/11 : CIA-RDF கம்கள் CENTRAL, INTELLIGENCE AGENCY	-
	INFORMATION REPORT	<b>7</b> %
	COUNTRY: Germany (Sov Zone)	DATE DISTR. 18 JUN52
1	SUBJECT : Rail Equipment Repair and Manufacturing Plant at Niesky	50X1-HUM
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	DATE OF	
		50X1-HUM
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## 2. LOWA Niesky had three operational divisions:

## (a) Structural Steel

This division built bridges, frames for buildings, cranes, turntables, and also did repair work.

## (b) Structural Wood

The structural wood division built prefabricated houses and barracks. (Consumer goods were sold in these barracks.)

## (c) Railway Car Division

This division constructed railway cars (freight and mail), wheel and axle sets (European and Soviet gauge), and three-axled wheel-trucks for railway crane cars. It also repaired freight and passenger trains and streetcars.

defense work done at LOWA	50X1-HUM
Niesky during World War II the construction of	
wings for Junkers JU-352 aircraft, which were built in the	
Structural Wood Division in the last months of the war.	1.0
During World War II, 50% of the plant was destroyed, and 25%	50X1-HUM
was dismantled after the war.	
from 1945-1950 sporadic reconstruction efforts were	
made and production had been slight. After July 1950 the plant was almost completely rebuilt to prewar status and	
was further expanded and modernized.	50X1-HUM
a new administration building was to be built	30, (1, 1, 1, 0, 1)
There were rumors of	
a reorganization of the plant so that it would conform to the	16
new regulations prescribed by the German Democratic Republic	i.i.s.
Ministry for Machine Construction	

#### Plant Operation

### 3. Structural Steel Division

This division required about 970 tons of steel per month. The steel was brought from the Stahl and Walzwerk Hettstedt Plant (51° 39' N - 11° 30' E), the Stahl and Walzwerk Thale Plant (51° 45' N - 11° 03' E), and the Stahl and Walzwerk Hennigsdorf Plant (52° 38' N - 13° 12' E). The plant also recieved steel through the Deutsche Handels Zentrale Stahl and Eisen, Berlin. The amount of steel recieved from each plant varied monthly. Bridge construction required about 400 tons per month, structural steel for buildings about 265 tons, and bridge and building repairs about 305 tons. Two-thirds of the bridge sections were sent to Berlin; the other third was allocated to the rebuilding of railroad bridge sites, eg, the railroad-autobahn bridge near Chemnitz and the river bridge near Frankfurt/Oder. The latter project was to require about 2,850 tons of steel and Niesky was to be the sole supplier. Structual steel was sent to the Sportwettkampfhalle, Stalin Allee, Berlin.

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Four overhead traveling cranes were built for the LOWA Missky plant itself. Two overhead traveling cranes were built for the LOWA Bautsen Railway Equipment Plant. Distribution of all products was effected by the Ministry for Machine Construction, Vehicle Construction Division, Berlin.

## 4. Structural Wood Division

Prefabricated houses and sales barracks were built in this division. The houses were two-storied, 12 x 8 x 8 m, had a gabled roof, tar-paper covered. The barracks were 125 x 16 x 4.5 m, had a low pitched roof, constructed of wood, covered with tar-paper. Thirty-four houses were manufactured monthly and were shipped to the USSR as reparation payments. Four barracks were constructed each month and transported to the steel plants which were being built at Fuerstenberg/Gder (52° 09' N - 14° 41° E) and Calbe/Saale (51° 54' N - 11° 46' E).

## 5, Railway Car Division

this division con- 50X1-HUM structed the following equipment monthly, and thereby real-ized their established quota:

- 33 three-axled wheel-trucks for railway orane under-carriages
- 332 railway box cars, having 20 tons capacity and two axles
- 840 European gauge wheel and axle sets
- 350 Soviet gauge wheel and axle sets which were sent to LOWA Querlitz and LOWA Bautzen.

Each month the Railway Car Division repaired:

- 32 street cars
- 13 railway box cars
- 1 four-axled mail car
  - 3 two-axled cars
- 6 two-axled passenger cars

Five-six thousand tons of steel were used in the construction of railway box cars every month. (The steel was received from the same plants mentioned in the Structural Steel Division.) Axle forgings were procured from Krupp-Gruson, Magdeburg (52° 10° N - 11° 40° E). Seventy-five per cent of 50X1-HUM the wheels and tires were sent from Nettstedt and Poland;

Other parts came from the places indicated:

springs: from the Federawerk (Spring factory) at Zittau (50° 54' N - 14° 50 E); screw type couplers: from LOWA Goerlits; buffers: from LOWA Bautzen; brass for journals (Rotguss-Lagerschalen): from Leipzig;

brake parts: from the Berliner Bremsenbau A0

(formerly Kunze-Knorr AG);

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paint: from the factory in Niesky,

, and Chemnitz;

wood: primarily from Thuringia, by way of the DHZ

Holz, (Deutsche Handels Zentrale, a stateoperated organization of the lumber trade),

Berlin and Dresden. Most of the wood was
quite green.

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From December 1950 - January 1951 362 railway box cars standing in the plant area, waiting for springs. During this time, at least 25% of the cars had to have one, two or three additional planks put on the superstructure because the wood had shrunk so much. Wood was always in short supply, and LOWA Niesky frequently had to borrow some from other plants. jigs for buckets 50X1-HUM were being built. The buckets were to be sent to LOWA Goerlitz which was building bucket cars (Kuebelwagen), to transport tar-like material.

6. All kinds of material were in short supply and new bottle-necks arose almost daily. A "bottleneck list" of articles which were lacking was compiled about three times a week. There was no appreciable increase in overall production There were sporadic increases in productivity resulting from time/motion studies, but these increases were always accompanied by increased work quotas -- this phenomema is characteristic of the USSR and its satellites.

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- 7. The plant used three steam locomotives for shifting railway cars. Two of them were coal-fired steam locomotives, three-axled, and the other, a "round-house goat", was filled with compressed steam, had no fire box, and was two-axled. Most of the machine tools were quite new, having been purchased to replace those which had been dismantled. Some of the machine tools had been purchased at the Leipzig Fair in 1950; delivery of any machine shown at the Fair was promised within a year. The great majority of the machines were well-built, meeting recognized standards of material in frame and bed. The machine tools were smooth-operating, with hand-finished tracks.
- 8. Electric current. except that produced in the plant, was conducted from Weisswasser by means of a high tension overhead line. It was 10,000 V but was transformed to 220 V 50X1-HUM in the plant Water was numbed from wells located in the boiler houses inside the plant area. Water pressure was consistently high enough to meet all operational requirements.

## Site Layout

50X1-HUM

9.

## Road

10 m wide, cobblestone, with 4 m wide concrete plate sidewalks on each side. This road ran south to Goerlitz and north to Klitten (510 21' M -140 36' E).

## Dwellings

Brick buildings, 24 x 12 x 11 m, two-storied, gable roofs, covered with red tiles,

#### Pence

Wooden, 2.5 m high, topped with two strands of

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barbed wire, inclining from the plant. This fence was in very good condition - it was impossible to get through it, other than at the entrance gates.

#### Main Entrance

Iron gate, 12 m wide, 3 m high, two wings opening toward the plant area. It was used only during shift changes and for the entry of vehicles. Four members of the German Democratic Republic (DDR) People's Police (Volkspolizei--Vopo) were always on guard, armed with pistols.

#### Entrance

Iron gate, 1.5 m wide. Identification was checked here when employees or visitors entered the plant area. Employees leaving the plant area were never checked for identification, although spot-checks were made to prevent state-owned property leaving the plant. Plant identification cards had the employee's photograph, name, birthdate, section in which he worked, type of job, and his signature. They were enclosed in a laminated plastic case, were always carried, and were to be in the owner's possession only.

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## Police Building

Brick, 24 x 12 x 11 m, two-storied, gable roof covered with red tiles. Member of the People's Police had their day room in this building. All visitors to the plant were required to sign a request, in triplicate, for admission. After surrendering their personal identification, visitors were escorted by one of three girls employed for that purpose.

#### Plant Roads

12 m wide, cobblestone, in good condition,

## Bicycle Stand

Wood building, 20 x 10 x 4 m, flat roof covered with tar-paper. It was locked during working hours.

#### Shop Building

Brick, 220 x 45 m. Part of 1t was dismantled after World War II, including the roof over Section C. It was divided into the following sections:

## Section A - Day Room

Wood truss roof covered with tar-paper. Political meetings and discussions were held here; it was also used as a lunch-room.

#### Section B - Offices

Flat wood roof, covered with tar-paper. This section was divided into offices by wooden partitions and was used by the Structural Steel Division.

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## Section C - Work Shop

No roof. Steel trusses for the roofs of newly constructed buildings, were riveted in this shop.

## Section D - Garage

Two plant-owned automobiles were parked here.

## Main Administration Building

Brick, 34 x 30 x 13 m, two-storied, pitch roof covered with red tiles. This building contained the offices of the plant director, technical director, personnel section, SED plant director, plant union chief, cultural director, and the design section of the Structural Steel Division.

## Apprentice Work-shop and Bookkeeping Building

Brick, 160 x 50 m. This building was divided by brick walls into the following sections:

## Section A - Apprentice School Building

Two-storied, pitch roof covered with red tiles. Contained class-rooms for apprentices.

## Section B - Apprentice Work-shop

Brick, 12 m high, load-bearing walls and steel truss roof. The roof was covered with glass and had a triangular steel frame skylight. This shop contained all types of steel and wood-working machinery for apprentice instruction.

#### Section C - Apprentice Work-shop

Sloping wood roof covered with tar-paper. This section contained steel and wood-working machinery.

## Section D - Bookkeeping Section

Two-storied building, sloping wooden roof, covered with tar-paper; contained offices only.

#### Section R - Transformer House

Brick, 5 x 4 x 4 m, flat wood roof covered with tar-paper. Two German oil-filled transformers, which reduced current from 10,000 V to 220 V, were located in this section.

## Plant Union School and Plant Public Address System House

Brick building, 24 x 12 x 12 m, two-storied, pitch roof covered with red tiles. The class rooms were used by the plant union (Betrieb Gewerkschaft) for information and education courses. Plant employees

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were given the privilege of attending these courses for two weeks, free of charge. During the two-week courses, the employees learned of the history of the Communist Party of the USSR, the lives of Engels, Marx, Lenin and Stalin, the trend from capitalism through socialism to communism, collective agreements, world events, etc. Those attending received full pay, calculated at an average rate. Plant production norms were not allowed to interfere with the workers' education. After completion of such a course, an entry to that effect was made on the employee's record. The public address system was used to summon employees to the administration building. It was also used to transmit German or Russian (never "Western") music or political speeches during the breakfast and lunch periods, 0900 to 0915 and 1200 to 1230 respectively. For every five minutes of music there was ten minutes of political indoctrination.

### Administration Building

Wood, low pitch roof, wood covered with tar-paper. This building was produced in the plant's Structural Wood Division and contained the offices of the administrative director and his assistants.

## Railroad Turntable

25 m in diameter, hand-driven (by two men) by means of a gear mechanism.

#### Quard House

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Wooden shed, 4 x 4 x 3 m, flat roof, wood covered with tar-paper. A plant employee was stationed here to direct visitors to another entrance,

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#### Warehouse

Brick building, 25 x 12 x 4.5 m, wood truss covered with tar-paper. Small items used in structural steel construction, eg, rivets, bolts, welding electrodes, etc, were stored here.

#### Storage Area

160 x 20 m, covered with structural steel shapes. This area was equipped with a gantry crane, 20 m wide, 5 m high, 7.5 ton capacity.

#### Storage Area

100 x 100 m, covered with structural steel shapes.

## Transformer House

Brick building, 5 x 4 x 4 m, flat roof, wood covered with tar-paper. Contained two German, oil-filled transformers, which reduced current from 10,000 V to 220 V.

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## Structural Steel Preparation and Assembly Building

Brick, steel frame, "L"-shaped, each side 160 m long, 15 m high, steel truss girder roof with triangular steel frame skylights. It was divided into two sections by four steel girder columns:

## Section A - Structural Steel Preparation Section

100 x 60 m, skylight running east-west. This section contained the following:

- 2 universal power shears (Universal scheren), which could cut sheet and steel shapes up to 12 mm thick.
- 4 drill presses, with power feed, (Sauelenbohrmaschinen), which could drill holes up to 50 mm in diameter.
- to 50 mm in diameter.

  2 radial drill presses (Auslegerbohrmaschinen),
  which could drill holes up to 60 mm in
  diameter.
- 2 planers (Hobelmaschinen); 8 m bed length.
- 2 circular Baws (Kaltkreissaegen),
- 4 profile flame cutting machines (Autogenschablonen-brennschneidmaschinen), similar to "Oxygraph" device which cuts steel sheets by means of an oxy-acetylene flame.
- 1 hand-operated sheet metal roll (Blechrichtwalze).
- 2 metal-straightening tables (Richtplatten).
- 1 overhead traveling crane, 5-ton capacity. several portable electric welding machines.

## Section B - Assembly Section

160 x 60 m, skylight running N-S. This section contained the following:

- 2 overhead traveling cranes, one of 7.5-ton and the other of 5-ton capacity.
- 25 portable electric welding machines.

A three inch steel nine brought compressed air from the boiler house, to this section. One-inch pipe, laid in channels in the concrete floor, 50X1-HUM distributed this air to outlets spaced at ten meter intervals along the walls. Electric lines were also laid in these channels. This section was the assembly shop for the Structural Steel Division of LOWA Niesky. Parts of bridges, turntables, cranes, and steel frames for buildings were assembled here for subsequent transport to the construction site.

## Boiler House

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50X1-HUM

Brick building, 60 x 40 x 15 m, steel frame construction, with a steel truss girder roof and a triangular steel skylight. The wooden roof was covered with tar-paper. It contained two vertical boilers, which supplied steam for heating buildings in the Structural Steel Division area, and two air-compressors, which supplied air of about 5-7 atmospheres for use in the assembly section,

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The boilers were lignite-fired, but

their capacity and fuel consumption is unknown

Fuel shortages were mover experienced.

## Smokestack

Brick, 45 m high, and 5 m in diameter at the base.

## Coal Dwmp

Goal was hand-loaded into the boilers which were 60 x 20 m.

## Dwellings

Brick buildings, 24 x 12 x 11 m, two-storied, gable roofs covered with red tiles.

## Gas Works

Brick building, 50 x 20 x 5 m, pitch reof, wood covered with tar-paper. This was the municipal gas works plant and had no affiliation with the LOWA Miesky Plant.

### Gasometer

Steel construction, 20 m in diamter; the gasometer was 10 m high when not full and about 17 m high when full.

#### Fence

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1.2 m high picket fence.

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#### Paint Factory

Brick building, 40 x 20 x 5 m, pitch reef, wood covered with tar-paper. This factory produced paints and lacquers and had no affiliation with the LOWA Niesky Plant, although the plant did buy some paint from this factory.

production or other distribution.

#### Road

10 m wide. and cobblestoned up to the guard house from there on it was a dirt road.

## **Railroad**

Four tracks, normal European gauge. About 100 m
west of the area shown it became a single track
railroad. They ran in a 4 m deep cut. All of the
tracks with the exception of the
small gauge system and a Russian gauge
track were European gauge.

## Overpass

Wood construction, 27 m long, 2 m wide, for the use

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of plant employees only. A member of the Peopl Police, was always posted at the bottom of the stairs on the north side of the overpass. During shift changes, there were two A member of the People's 50X1-HUM guards, armed with pistols, posted at this point.

## Office Building

Wooden, 28 x 16 x 10 m, two-storied, which had a pitch roof covered with slate. This building was divided into two sections:

## Section A

Section A contained the offices of the plant doctor, plant dentist, first aid section, and the medical storeroom.

## Section B

The production planning office for the three divisions of the plant were located in this section as were the offices engaged in scheduling, time studies, work fulfillment, norms, etc. The entire second floor was also occupied by the production planning office.

#### Weighing House

Wooden building, 5 x 3.5 x 2.5 m, flat mooden roof, tar-paper covered. Newly built railway cars were weighed here. They were then moved to the paint shop to have the tare weight and other information painted on them.

#### Assembly Building

Brick, 120 x 50 x 15 m, one story, round crescent-grehed wood roof covered with tar-paper. Window frames, doors, prefabricated walls, etc, were assembled here prior to shipment.

## Shipping Building

Brick, 80 x 50 x 15 m, one story, low pitch roof, wooden truss, wood covered with tar-paper. The

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articles completed in the assembly building
were crated in this building, ready for shipment. Paper work on these articles was also done here.

## Loading Ramp

80 x 8 x 1.5 m, wooden construction.

## Design and Police Offices

Brick building,  $40 \times 35 \times 12 \text{ m}$ , two-storied, pitch roof covered with red tiles. Contained the design offices of the Structural Wood and the Railroad Car Divisions. The offices of the security and criminal investigation police were also located here.

## Telephone Exchange

Brick building, 80 x 14 x 6 m, one story, pitch roof covered with red tiles. Contained the telephone exchange for the entire plant, as well as offices of the Structural Wood Division. Two telephone operators worked 8 hours per shift. The exchange was open 24 hours a day; telephone service was satisfactory.

#### Plant Maintenance

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Wooden building,  $40 \times 14 \times 4.5 \text{ m}$ , one story, low pitch roof, wood covered with tar-paper. This building contained the offices of the plant maintenance group.

## Quard House

Wooden building,  $8 \times 6 \times 3.5$  m, flat wooden roof covered with tar-paper. A plant guard controlled the vehicles which entered and left the plant area. Four People's Police members, armed with pistols, were always on guard.

## Plant Entrance

Wooden gate, double wings,

#### Plant Gasoline Pump

An underground tank, (capacity unknown), held the gasoline (source unknown). Gasoline was dispersed only upon presentation of a chit from the garage.

## Vehicle Lift

Hydraulic, used to raise passenger cars for greasing.

## Garage and Repair Shop

Brick building, 45 x 12 x 10 m, one story, pitch roof, steel truss girder construction, covered with wood and tar-paper. The plant had four German 12-ton trucks, three Z18 3-ton trucks, and two German

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7-ton trucks, all in poor condition. The plant also owned eight passenger cars which were in very poor condition.

## Drying Chambers

Brick building, 70 x 40 x 3.5 m, pitch roof, wood covered with tar-paper. The 8 chambers were divided by brick walls. Wood brought here on dollies, was dried by hot air piped to the building from the boiler house 50X1-HUM

#### Day Room

Wooden building, 100 x 40 x 6 m, one story, low pitch wood truss roof, wood covered with tar-paper. Used by the Structural Wood Division workers for washing and changing their clothes.

## Assembly Building

wooden, 100 x 40 x 6 m, one story, low pitch wood truss roof, wood covered with tar-paper. Windows and doors were assembled here.

## Wood Shaping Building

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Wooden, 100 x 40 x 6 m, one story, low pitch wood truss roof, wood covered with tar-paper. Fourteen different wood shaping machines were located in this building.

## Wood Cutting Building

wooden, 100 x 40 x 6 m, one story, low pitch wood truss roof, wood covered with tar-paper. Contained 12 different wood-working machines.

## Lumber Cutting Building

Brick, 50 x 40 x 6 m, one story, low pitch roof, wood truss covered with wood and tar-paper. Contained four gang-saws.

## Small Gauge Railroad

Transportation facility for bringing lumber and finished products from one building to another on hand-driven dellies. Turntables were also hand-operated.

## Lumber Yard

Lumber and wood used in railway car construction and repair were stored.

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there were always hundreds of cubic meters of wood on hand. Most of it came from Thuringia by way of the DHZ Holz, Berlin.

#### Storage Shed

An area 150 x 30 m, covered by a flat wooden roof 6 m above the ground. Open on all sides. Hard and rare woods were stored.

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## Pre-fabricated Wall Construction Building

Brick, 160 x 50 x 6 m, one story, low pitch roof, wood truss, covered with wood and tar-paper. Divided into three sections:

## Section A - Offices

Section B - Day Room

19.50

## Section C - Pre-fabricated Wall Construction

Contained two wood-shaving machines, a machine which mixed the wood-shavings and cement mixture, a press to compress the mixture, and about 150 form boxes, each of which held 10 forms. Each fabricated wall section was about 0.5 x 1.5 m, and about 5 cm thick. These sections were used in the construction of prefabricated houses; 750 of the wall sections were produced in one 8-hour shift. Drying time in the form boxes was 12 hours. After being taken out of the forms the wall sections were allowed to dry for another 36 hours inside the building.

Distribution was affected by the DHZ Stein und Brde (Stone and Earth) local office. The major—try of these wall sections were sent to Fuerstenberg and Calbe (Sov Zone), Germany.

## Propane Gas Storage

Located in a brick building,  $18 \times 12 \times 8$  m, pitch roof covered with red tiles. The propane gas was contained in a tank taken from a railway tank car. The gas was brought by railway tank car from Schlauroth ( $51^{\circ}$  06' N -  $15^{\circ}$  02' E) near Goerlitz. Propane gas, stored here, was piped to the forge

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propane gas had been brought to the forge in portable tanks by truck.

"Land" fire department in Dresden to have the tank filled from a railway tank car, by proving that it was more economical. The plant fire department and the plant security detail were opposed to filling the tank, as they feared sabetage to such a centrally located danger point, and exerted much pressure to have the tank moved to a point in the open area,

Such a move, however, was impossible

plant budget did not allow funds for it. In order

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to have the tank filled, therefore supervisors and officials of the plant, had to mount guard on the tank on Sundays, since there were insufficient Volkspolizei to maintain a 24-hour watch and still allow them one day off each week. The officials were all expected to volunteer

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## Thermal Electric Fower-plant

for this detail.

Brick building,  $80 \times 35 \times 12 \text{ m}$ , one story, low pitch roof, steel girder truss, covered with wood and tar-paper. This plant contained two vertical

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coal-fired boilers and two Siemens-Halske generators, which produced an average of 12,000 kwh per month.

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The alternating current produced was 220 V. The thermal electric power plant also contained two air compressors which produced air of 5-7 atmospheres. The steam was also used to heat the buildings of the Structural Wood and Railway Car Divisions. The steam pipes were partly underground; the electric cables were all under-

#### Smokestack

Brick, 45 m high, 5 m in diameter at the base.

## Coal Dump

100 x 35 m, usually about 2 m high. (Loaded by hand:)

## Spare Parts Shed

Wooden construction, 40 x 15 x 6 m, no sides, flat wooden truss roof, covered with wood and tar-paper. This shed contained railroad brake shees, brake rods, air cylinders, couplings, buffers, etc.

## Steel Stamping and Cutting Building

Brick, 50 x 20 x 8 m, low pitched roof, steel truss, covered with wood and tar-paper. This building contained the following:

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- 1 power shear (Tafelschere), which could out steel up to 18 mm thick. The knife width was 2.5 m. It was Czech-made, bought at the Leipzig Fair in 1950.
- 2 circular saws.
- 4 power hacksaws (Buegelsaegen). 6 punch presses (Ausklinkmaschinen or Stanzmaschinen).

## Steel Yard

Various sizes and shapes of steel beams, plates and rods were stored here. The yard was equipped with a gantry crane, 18 m wide, 6 m above the ground, 150 m rail length, and had a 7.5-ton capacity. It could be equipped with a magnet to move steel shapes.

#### Railway Car Building (and Fire Department)

Brick building, 248 x 50 x 8 m, one story, low pitch roof, steel truss, covered with wood and tar-paper. This building was divided into five sections:

Section A - Offices of the Railway Car Building Division

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## Section B - Plant Fire Department

The equipment included one hose truck, one pumper, and an ambulance. The fire trucks were acquired from the Horch Company at Zwickau (50° 44° N - 12° 30° E) in 1950, and the ambulance was procured from the same company in 1951. The permanent fire detail was composed of 18 men; a volunteer corps composed of 52 men could be raised among the plant workers in an emergency. The permanent fire detail drilled every day and was quite efficient. There was a 24-hour fire watch through-out the plant. The alarm signal was a siren which formerly had been 50X1-HUM

"Surprise" fire drills were sometimes
held at night and the department heads had to report 50X1-HUM
to this section. There were four of these
surprise night drills during my employment there,
("Surprise" drills were announced to the department
heads in advance.) time of arrival at the drills
was noted and reported to the "Land" Fire Depart— 50X1-HUM
ment Section (Landes Feuerwehrleitung) in Dresden.
Fire departments from the nearest towns, Niesky
and Weisswasser, were included in plant 50X1-HUM
gency detail.

## Section C - Steel Cutting Section and Apprentice Welding Shop

This section contained:

4 profile flame cutting machines, similar to "Oxygraphs".
12 stationary electric welding sets

## Section D - Forge

Forging work for the entire railway car construction shops was done here. The equipment included the following:

- 1 150-ton crank press (Kurbelpresse) with one crank.
- 2 forging presses, horizontal ram (Schmiede-maschinen).
- 3 eccentric presses (Exzenterpressen).
- l drop hammer (Schmiedehammer) fifty-ton, steam-driven.
- 4 forging ovens (Schmiedecefen) propane gas heated.
- 1 electrical flash welder (Stumpfschweissmaschinen-Anlage).

## Section E - Tool and Jig Construction

This section contained the following:

- 1 drill press, with power feed which could drill holes up to 45 cm in diameter.
- 1 radial drill press which could drill holes up to 40 cm in diameter.
- 2 surface plates (Anreissplatten).
- 5 portable electro-welding sets.
- 2 portable oxy-acetylene welding sets.

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1 overhead traveling crane, 2.5-ton capacity, electrically driven, and operated from the floor.

Various tools and jigs used in the construction of railway cars and wheel and axle sets were built here.

Brick building, 25 x 12 x 6 m, pitch roof covered with red tiles. Food, clothing, tobacco, soap, beer, mineral water, etc were sold here. 50X1-HUM

## Workshop

Brick building, 160 x 150 x 14 m, lew pitch roof, steel truss, covered with wood and tar-paper. The workshop was divided into the following sections:

## Section A - Large Part Preparation

This section had two square monitors, running lengthwise. The lengthwise and crosswise steel beams of the railway car undercarriages were drilled here. Stiffening beams and axle bearing cradles were also drilled. All holes were drilled according to patterns. The equipment at the Workshop included:

- 1 universal power shear, which could cut sheet steel up to 12 mm thick. This shear was Hungarian and had been bought at the Leipzig Fair in 1950.
- 8 drill presses, with power feed. These presses could drill holes up to 60 mm in diameter.
- 4 radial drill presses which could drill holes up to 55 mm in diameter.
- 1 overhead traveling crane, 5-ton capacity.

#### Section B - Undercarriage Construction

The undercarriages of the railway cars were built here in timed-interval serial production. The shapes prepared in Section 64 A were assembled here. Train couplings, brakes and brake equipment, axle bearing housings, wheel and axle sets, and buffers were attached to the undercarriage. Section B contained:

- 2 rivet squeezers, air-operated (Nietbuegelmaschinen).
- 4 electrical rivet heaters (Nietwaermer).
  2 locating jigs (Einlegeheftschablonen); jigs for locating and tack-welding undercarriage in one operation.
- 2 welding jigs (Schwenkbare-Ausschweissschablonen); rotating jigs used for welding undercarriages.
- 25 portable electrical welding sets.
- 1 overhead traveling crane, 5-ton capacity.

## Section C - Spraying Shop and Railway Car Roof Covering Shop

Various parts of railway cars were sprayed here in

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four booths, equipped with exhausters. The roof coverings of the railway box cars, consisted of a canvas-like blanket impregnated with a tarry material, water- and temperature-change-resistant. They were referred to as "Bitumen-Decken." The material was warmed before it was applied; upon cooling it shrank, giving a tight fit.

## Section D - Paint Shop

Repaired streetcars were sprayed in two booths.

## Section E - Machine Shop

All machine tool operations needed in railway car construction were performed here. The machine shop contained the following equipment:

- 8 engine lathes (Spitzendrehbaenke); 500-2500 mm spindle length, 150-500 mm spindle height.
- 2 five mm capacity planers.
- 4 shapers (Shapings); 250-500 mm capacity. 2 vertical shapers (Stossmaschinen).
- 3 milling machines, one vertical, two horizontal (Fraesmaschinen).
- 2 circular grinders (Rundschleifmaschinen). 4 threading machines, single spindle. (Gewindeautomaten) which cut external threads only, by means of thread dies.
- 2 bench grinders (Schmirgelscheiben).

## Railway Car Repair Shop

Brick building, 150 x 80 x 14 m, low pitch roof with a square monitor, steel truss covered with wood and tar-paper.

## Section A - Preight, Passenger and Mail Car Repair

Wood needed for repairs was cut in the Structural Wood Division. Steel sections or parts were made in the workshop, 13 freight cars, one 4-axled mail car, three 2-axled mail cars, and six 2-axled passenger cars were repaired here every month on the average.

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## Section B - Battery Recharging Section

50X1-HUM

36 batteries for electric hand-trucks and passenger cars and trucks could be recharged at one time. There were 48 German hand-trucks in the plant.

## Sliding Platform Installation (Schiebebuehnenanlage)

Electrically driven.

#### Maintenance Repair Shop

Brick building, 50 x 20 x 8 m, low pitch roof, wood truss covered with wood and tar-paper, All plant equipment which needed repair was brought to this

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## shop. The shop contained:

- 1 engine lathe 1500 mm spindle length, 250 mm spindle height.
- l drill press, with power feed which could
- drill holes up to 35 mm in diameter.

  1 sheet metal shear (Blechschere). This shear was hand-operated and could cut sheet metal up to 5 mm thick, 500 mm wide.
- 1 hand-operated sheet metal roll (Blechbiegewalze).
- 2 portable electric welding sets.
- portable oxy-acetylene welding sets. 4 bench drill presses (Tischbohrmaschinen) which could drill holes up to 10 mm in diameter,

## Railway Car Building, Repair, and Paint Shop

50X1-HUM

A brick building, structural steel frame, 300 x 160 x 15 m, low pitch, steel truss roof, covered with wood and tar-paper. Two square monitors were on the roof. This building was divided into the following sections:

## Section A - Paint Shop

Two spraying booths, each of which could hold two freight cars. This section was equipped with exhaust fans.

## Section B - Three-axled Wheel-trucks Construction

The wheel-trucks were built of steel plate 20, 25, 50X1-HUM and 30 mm thick. 33 wheel-trucks were built per month

Upon completion, the wheel-trucks were sent to a railway car factory in Dessau, (Waggonfabrik SAG Dessau), which built undercarriages for railway cranes. The Dessau plant received Soviet gauge wheel and axle sets for these undercarriages from a plant (name and location unknown), in Czechoslovakia. The undercarriages were sent to the MIAG Company, Leipzig, where the cranes were built on them. The shop contained the following equipment:

- 2 profile flame cutting machines, similar to "Oxygraphs".
- 4 cutting torches
- 1 drill press, with power feed

- 2 locating jigs l welding jig l inspection jig (Messpräfstand) which was a device for proving measurements of these wheel-trucks.
- 1 overhead traveling crane, 5-ton capacity.

These three-axled wheel-trucks had been made at LOWA Gotha (51° 25' N - 12° 36' E) and LOWA Babelsberg, but were unsatisfactory and therefore LOWA Niesky was given the assignment to construct them

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(on 1 Jan 51). Production was to begin on 1 Mar 51, but we were already producing them during the last half of February.

## Section C - Box Car Superstructure Construction

The box cars that were constructed were of steel ribs, wooden sides and flooring. It contained the following:

2 jigs, for box-car door welding. 2 jigs, for box-car roof construction.

25 portable electric welding machines.

1 overhead traveling crane, 5-ton capacity.

the plant was producing 332 new box-cars per month.

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## Section D - Freight, Passenger and Mail Car Repair Shop

This section had no permanent machines, other than an overhead traveling crane, 5-ton capacity. Tools were brought in as required.

## Machine Shop

50X1-HUM

A brick building, structural steel frame, low pitch roof, steel truss, covered with wood and tar-paper. One square monitor located on the roof. This building was divided into the following sections:

## Section A - Air Brake Assembly Shop

Brake parts came from the Berliner Bremsenbau AQ-formerly Kunze-Knorr Bremse AG. The brake parts were assembled here, and mounted and tested on the cars in building 65 A, 68 C, and 68 D. The shop contained neither machines nor a crane.

#### Section B - Plumbing Shop

Pipes for the air brake equipment were out, threaded by hand, and assembled in this shop; it contained only work benches and hand tools. was no crane.

#### Section C - Sheet-metal Shop

Parts needed in the railway car construction and repair shops were made here. It contained:

- 2 sheet metal rolls (Blechrichtwalsen). hand-operated and one power-operated.)
- 2 sheet metal folding presses (Blechbiegemaschinen). (One hand-operated and onepower-operated.

2 hand-operated sheet metal brakes (Block-

abkantmaschinen).

- 2 sheet metal shears (Blechscheren).
- 4 portable oxy-acetylene welding machines.
  1 overhead traveling crane, 22-ton capacity, floor-operated.

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## Section D - Street Car Repair Shop

powered) street cars of the Berliner Verkehrsgesellschaft were repaired per month, both undercarriage and superstructure. During this time, only nine street cars with motors were repaired.

## Section E - Wheel and Axle-set Shop (Radsatz-fertigung)

This shop was engaged in the construction of new railroad wheel and axle sets (except for locomotives), for the German railroad system and also for the Soviet Union. Those sets built for the latter were sent to Goerlitz and Bautzen, where reparation passenger cars were being built. Axle spindles were turned and burnished. Wheel tires were also turned. This shop contained:

10 vertical boring mills (Karrusseldrehbaenke), which had been made by the Niles Company, Chemnitz. Wheels and wheel tires were turned on these.

6 cranes, rotating arm. Powered by compressed air, they could lift 750 kg and were used for lowering and lifting wheels and tires.

1 drill press, with nower feed. This press could drill holes up to 65 mm in diameter.

2 circular saws.

l center locating machine (Zentriermaschine). This machine was used to center axles, which were received as rough forgings.

4 rough turning axle lathes (Achsendrehbaenke zum Schruppen). 2.5 m bed length, 300 mm spindle height.

l lathe (Ablaengebank), which was used to determine the exact length of axles. No turning was done on it.

4 fine turning axle lathes (Achsendrehbaenke zum Schlichten). 2.5 m bed length, 300 mm spindle height.

1 magna-flux device (Durchflutungsgeraet).

Wet process.

1 retaining ring rolling machine (Sprengring-Einwalsmaschine). This machine was used to insert retaining ring holding tire to wheel.

4 electrical overhead traveling oranes, 2,5-ton capacity,

wheel mounting and dismounting presses (Radsatzpressen). The axles were pressed into the standing wheels by this machine. They were hydraulic-powered and could exert 250 tons pressure. When a wheel was pressed onto an axle, a graph was made of the procedure, and was sent along with the wheel and axle set. These graphs had to show a pressure of 45-65 tons on sets for the German railway system, and 55-75 tons for those destined for the USSR.

# SECRET SECURITY IMPORMATION - 21 -

2 wheel tire heating ovens (Bandagewaermeeefen). Propane-gas heated--the tires were heated to 300°C. before being put on the wheels. They were allowed to cool naturally inside the building.

4 wheel lathes (Radsatzdrehbaenke). Complete wheel and axle sets were turned here in order to give the required profile to the tire.

to give the required profile to the tire.

2 burnishers (Praegepolierbaenke). Axle spindles were burnished in these by means of steel rollers.

Rough axles, tires and wheels were tested by the firm delivering them and were accompanied by inspection papers. Miesky did not subject them to a drop test. The finished axles were subjected to a magna-flux test. The complete sets were inspected by the German rail-road inspector or the Soviet inspector. These men inspected the sets, checked the papers, and stamped the wheels and axles with steel dies. This was the only shop section which had no pits under its railroad tracks.

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## Material Dump

Wheels and forgings for wheel and axle sets were stored here. An overhead traveling crane, 5-ton capacity, was used.

## Tool Making Shop

Brick building,  $25 \times 15 \times 6 \text{ m}$ , flat wooden roof, covered with tar-paper. Tools used in the wheel and axle construction shop were made here. This shop contained:

- 2 brazing and forging furnaces (Schmiedecefen). Propane-gas heated. Used in forging cutting tools and for brazing tungsten carbide tips on cutting tools.
- 1 shaper.
- 4 precision tool grinders (Werkzeug-Spezial-Nasschleifmaschinen).

## Locker and Toilet Room

Brick building,  $25 \times 15 \times 6 \text{ m}$ , flat wooden roof, covered with tar-paper.

#### Warehouse and Offices

Brick building, 150 x 40 x 8 m, pitch roof, wooden truss, covered with wood and tar-paper. This building was divided into two sections:

## Section A - Warehouse

All kinds of material used in railway car building were stored here.

#### Section B - Warehouse Office

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Open Area
Dirt Road

Leading to Moholz (51° 20' N - 14° 47' E). This road was about 8 m wide.

Iron and Steel Yards

Material used in railway car building. It was 50X1-HUM hand-loaded onto dollies.

Woods

Coniferous trees.

## Personnel

10. There were 4368 workers at LOWA Niesky in June 1951 employed 50X1-HUM as follows:

Structural Steel Division	Number of Employees
Design department Main office Storage area Steel preparation Plant assembly Site assembly	36 8 75 198 303 <u>240</u>
total	860
Structural Wood Division	
Main office Storage area Wood preparation Plant assembly Site assembly Prefabricated walls	10 132 324 523 100 <u>135</u>
total	1224
Railway Car Division	• .
Design department Main office Storage area Steel stamping & cutting Machine shop Forge Tool and jig construction Undercarriage construction Superstructure construction Upholstery Paint shop Wheel and axle construction Repair shops	24 72
total	1332

SECURITY INFORMATION

LOWA Niesky Employees -- (Continued).7

	eneral Employees	Number of Employees
	those not connected with	TWDIO1669
any		-0
	Plant administration	28
	Bookkeeping	84
	Personnel	8
	Administrative director	123
	Plant maintenance	. <b>8</b>
	Plant maintenance shop	71
	Apprentice training	48
	Apprentices	500
	Quality control	82

Total Personnel 4368

total

952

About 65 per cent of the 4368 employees were skilled workers. (This high percentage is slightly misleading—the greater percentage of the plant's skilled personnel were employed in the Structural Wood Division.) Regular apprentice training periods were of three years'duration, but apprentices could shorten this time by over-fulfilling their work quotas. There was no shortage of personnel at the plant. Employees from 82 communities in the vicinity of Niesky (and up to a distance of 65 km away), worked at LOWA Niesky.

11. The plant normally operated six days a week, 24 hours a day. Sometimes, when some particular work was urgently needed, Sunday work was scheduled. Most office employees worked from 0700-1630 hours; other shifts were: from 0500-1400, 1400-2200, and 2200-0600 hours.

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## Security Measures

The LOWA Niesky plant was guarded by a detail of 32 members of the German Democratic Republic People's Police (Volks-polizei). They were blue uniforms, were armed with pistols, and were commanded by a lieutenant, who was responsible to a colonel of the Vopo, stationed in Niesky. The guards were stationed at the entrances,

The plant also had representatives of the Security Detachment (Sicherheitsdienst; the SD) and the Criminal Police (Kriminal-polizei). The representatives were not responsible to the plant administration but to the services to which they were attached. They had access to everything in the plant, and without previous announcement, visited the Plant or Technical Directors.

13. The Cultural Director (Kulturdirektor), whose primary duties were information and education, was also responsible for fire prevention in the plant.

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Fire hydrants were located throughout the plant, both inside and outside of buildings. Carbon tetrachloride extinguishers (Minimax system) were placed in all the buildings. Plant employees never engaged in military, air raid, chemical, or biological warfare drills.

50X1-HUM

	SECURITY	SECURITY INFORMATION		
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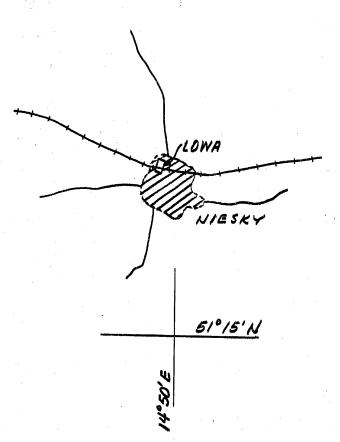
14. A continual effort to inculcate all employees with a fear of sabotage was made by the security sections. They harped on the destructive intentions of the Americans, who were said to be particularly interested in damaging state-owned 50X1-HUM precautions taken to guard the propane plants. was an example of this exaggerated fear. gas tank Another example is funished in the case of the failure of some newly-purchased vertical boring mills. Ten of these machines were received from the Niles Company, Chemnitz, between 15 Aug 50-15 Mar 51. In April 51, five of the boring mills were out of commission because of shaft failure, For fourteen days, two men from the Sicherheitsdienst, eight men from the Kriminalpolizei, and two men from the Ministry for Machine Construction in Berlin, investigated the ostensible case of sabotage. They interrogated the machine operators, the oilers, the shop foremen, the shop director and the technical director. The suspects were all exonerated because it was found that the shafts had seized because of material failure or poor workmanship by the Niles Company. Three of the shafts were found to have cracks in them. The oiling system had been at fault in the other two--the copper tubes were bent too sharply, reducing the flow of lubricating oil to the shaft. The Niles Company repaired the latter at their expense, and the other three at the plant's expense. Morale and plant operation was greatly influenced by these security groups and their system of plant supervision and spying.

- end -

ENCLOSURE: (A)	Overlay of GSGS 4416 Map-Spremberg, Germany Showing Location of LOWA Niesky	
	50	X1-HUM

SECRET SECURITY INFORMATION

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51°20'N = 1,00°5

OVERLAY OF G.S.G.S.4416 MAP - SPREMBERG, GERMANY SHOWING LOGATION OF LOWA NIBERY

ENCLOSURE (A)

50X1-HUM

