Sanitized Copy Approved for Release 2010/06/16: CIA-RDP80T00246A046100220001-5

INFORMATION

CENTRAL INTELLIGENCE AGENCY

This material contains information affecting the National Defense of the United States within the meaning of the Espionage Laws, 18, U.S.C. Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by

		C-O-N-F-I-D-E-	N-T- I-A-L		25X1
COUNTRY	U SS R (Moscow	Oblast)	REPORT		
SUBJECT	Krasnyy Prole Building Pla	etariy Machine Tool	DATE DISTR.	18 Decembe	r 1958
	_	The American Control of	NO. PAGES	2	
•			REFERENCES		25X
DATE OF INFO.					
PLACE & DATE ACQ.	COUNCE TV	AND DEFINITION			25X1
	SOURCE EVA	LUATIONS ARE DEFINITIVE. A	PPRAISAL OF CONTEN	IT IS TENTATIVE	

A report containing a description of some of the products produced, miscellamenus information, and sketches of the Krasnyy Proletariy Machine 25X1 Tool Building Plant in Moscow

25X1

Sketch No. 1: Location of Krasnyy Proletariy Lathe Plant in Moscow

Sketch No. 2: Plant layout

Sketch No. 3: Machine shop No. 2

Sketch No. 4: Second floor of machine shop No. 2

Sketch No. 5: Crating and paint shop (two stories)

Sketch No. 6: Transformer station

Sketch No. 7: Central heating plant

Sketch No. 8: Machine, foundry, and bronze pattern shop

Sketch No. 9: Technical and experimental lathe laboratory, pattern shop, infirmary, and rest home (building No. 15)

Sketch No. 10: Electric repair and assembly shop

Sketch No. 11: Electric repair shop and storercoms (second story)

Sketch No. 12: Repair and spare parts shop for lathe shop No. 1 (two stories)



25X1

C-O-N-F-I-D-E-N-T-I-A-L

STATE X ARMY X NAVY X AIR 15 FBI AEC ORR/Ev (Note: Washington distribution indicated by "X"; Field distribution by "#".)

NFORMA FORMA

ENCLOSURE ATTACHED PLEASE ROUTE

C-O-N-F-I-D-E-N-T-T-A-T. 25X1

Sketch No. 13: Die-stamping without patterns shop

Sketch No. 14: Fitting and assembly shop for apparatus

Sketch No. 15: Saw, straightening, and die-stamping with

Sketch No. 16: Carpentry, boiler, and engraving shop

Sketch No. 17: Heating section and compressor shop buildi

Sketch No. 18: Instrument shop (first floor)

Sketch No. 19: Pattern shop for mass production

Sketch No. 20: Cutters with compressed ceramic tips

25X1

C-O-N-F-I-D-E-N-T-I-A-1

C-O-N-F-I-D-E-N-T-I-A-L

25X1

KRASNYY PROLETARIY LATHE PLANT IN MOSCOW

General

1. The Krasnyy Proletariy Lathe Plant was located south of Moscow, in the Leninskiy rayon on flat terrain in an urban area. The plant was bordered by Donskaya ulitsa, Mala Kaluzhkaya ulitsa, and Donskoy prospekt. (See sketch No. 1 on page 15, showing the plant's location.) Gorkiy Park and the Donskoy Monastery were situated near the plant which was approximately one kilometer east of the Moskva River. The nearest subway station was one kilometer away in the Oktyabrakaya ploshchad. The plant's three-kilometer perimeter was surrounded by a 2.5-meter-high wall. Ordinarily, only three of the plant's six entrances (including the railroad entrance) were used. The plant's main axis was in a northsouth direction.

25X1

Plant Layout

2. Most of the plant's brick, fire-resistant structures with sky-lights and sheet metal roofs were two stories high. Some buildings had basements. The points below, giving details of the plant layout, refer to sketch No. 2 on page 16.

25X1

Machine and special lathe assembly shop No. 3. (1)

25X1 25X1

a special machine, to be used in the construction of reinforced con-This shop employed crete sketch No. 4 on 150 workers in two shifts. (See page 18.)

25X1 25X1

Machine and assembly shop No. 1 for standard mass-produced lathes.

Two hundred workers were employed in this shop on two shifts.

Mass-produced lathe machine shop No. 2. The administration offices were also located in this four-story structure. (See legend No. 3 sketch No. 3 on page 17.) on page 7, for

25X1

Assembly shop No.2. Machine and assembly shops No. 2 employed 500 (4) workers.

Paint and crating shops. (5)

sketch No. 5 on page 19.) 25X1

Electric transformer station. (See legend No. 6 on page 8, for (6) sketch No. 6 on page 20.)

25X1

Coal-fueledsteam heating system. (See legend No. 7 on page 8, (7)sketch No. 7 of heating plant on page 21.)

25X1

Cylinder cleaning and polishing shop. (8)

Die-stamping shop. (9)

C-O-N-F-I-D-E-N-T-I-A-L

25X1

C-O-N-F-I-D-E-N-T-I-A-L

3 -

(10)	Metal-cutting saws.				
(11)	Machine, foundry, bronze pattern shops and bachelors' quarters. This was a three-story structure. (See legend No. 8 on page 8, for sketch No. 8 on page 22.)				
(12)	Collective dining room.				
(13)	Garage and vehicle repair and maintenance shop.				
(14)	Guard and fire brigade quarters.				
(15)	Laboratory and pattern shop. Infirmary and rest home were also located in this two-story structure. (See legend No. 9 on page 9, for sketch No. 9 on page 23.)	25 X			
(16)	Electrical repair and assembly shop. (See legend No. 10 on page 11, for sketches No. 10 and No. 11 on pages 24 and 25.)	25 X			
(17)	Laboratory, repair and spare parts shop for lathe shop No. 1. (See sketch No. 12 on page 26.)	25X			
(18)	Die-stamping "without pattern" shop and fitting and assembly shop. (See legend No. 13 on page 12, for sketch No. 13 on page 27.)	25X			
(19) (20)	This building contained the saw, straightening, and die-stamping "with pattern" shop, and a fitting and assembly shop. (See legends Nos. 14 and 15 on page 12-13 for sketches Nos. 14 and 15 on pages 28 and 29.) Carpentry, boiler, and engraving shops. (See legend No. 16 on	<i></i> 25X			
	page 13, for sketch No. 16 on page 30.)	25 X			
(21)	Compressor shop. (See legend No. 17 on page 14, for sketch No. 17 on page 31.)	25X			
(22)	Auxiliary heating plant. (See sketch No. 17 on page 31.)	25X			
(2 3)	Instrument shop and pattern shop. (See sketches Nos. and 19 on pages 32 and 33, for description of these shops.)	18 25X			
(24)	Base fitting shop.				
(2 5)	Club, formerly a chapel.	•			
(26)	Apprentice's school.				
(27)	Lavatories and showers.				
(28)	Clinic.				
Plant	Machinery	25 X 1			
condi.	the majority was of Soviet-make, of good quality and in good tion. There were no machines for stretching or shaping metal in				
	shop (machine shop No. 2)	25X1			
	In machine	ş			

Sanitized Copy Approved for Release 2010/06/16 : CIA-RDP80T00246A046100220001-5

25X1

shop No. 1 there was a machine called a bedframe tempering machine which had been designed and manufactured in the plant. This machine had a high-tension electrical device which tempered the lathe bedframes by heating the outer surface to a certain temperature and then spraying the bedfremes with water.

Ceramic Cutting Blades

25X1 a new type of cutter with a ceramic tip for hard metals such as wrought iron, cast iron or any smooth metal. sketch No. 20 on page 34, of ceramic cutting blade.) 25X1

Types of Lathes Produced at Plant

- 5. The plant mass-produced approximately 900 lathes per month which were marked with the plant name, year of manufacture, and serial number. Lathe model characteristics were as follows:
 - 1A62 maximum of 1200 revolutions per minute.
 - ъ. 1K62 (year 1956) - maximum of 2000 revolutions per minute. High speeds were not usually employed except in case of urgency and when the metals to be worked were suitable for that speed.
 - 1620 or 1622 maximum of 3000 revolutions per minute. Videa cutting blades were used in these lathes.

Other Plant Products

6. In addition to lathes this plant also manufactured padlocks and musical toy tops which were die-stamped from sheet metal. A wooden handle worked the spring inside the top which made it rotate. This spun the top which made musical sounds as air passed through the perforations in the sheet metal exterior.

Materials

7. Material brought from other plants was already smelted and ready to use. cast iron, wrought iron, and steel was brought in from an unidentified foundry. Lubricating oils, thick greases, linseed oils for paint, colophonite, minium, white lead, paper, nails, bronze, aluminum, coal, and other materials were brought in from unidentified centers by train and truck.

25X1

Water and Power Supply

the city water supply which served the plant was adequate. The electric current was 380 volts for machines and 36 volts for light. the electrical supply was sufficient.

25X1 25X1

Packing

9. The finished machinery was wrapped in tar paper and packed in wooden crates. A picture of a cup was stamped on the crate to indicate right the shipping address was on the machines

25X1

C-O-N-F-I-D-E-N-T-I-A-L

25X1

- 5 -

Transportation

10. The plant used both railroad and vehicle transportation which was described as follows: The plant standard Soviet-gauge railroad siding which connected with the main railroad line entered the premises on the south side of the plant and then branched in two directions; one siding led to the assembly shop No. 2 and the other ran between machine shop No. 1 and machine shop No. 2 where the bedframes were manufactured. The plant used two types of freight cars: modern metal 60-capacity cars with four wheels and outdated wooden cars. the frequency of 25X1 arrival and departure of trains nor the size of the load they carried. the cars could be loaded from either the front or side. 25X1 Loading cranes were located next to the mechanical saws. The plant owned a garage with repair and maintenance shop, and about 20 vehicles including a bus. Plant traffic used Donskaya ulitsa and Donskoy prospekt. The former was eight meters wide and asphalt paved, the latter was six meters wide and cobblestone paved; both streets had good drainage systems.

Storage

11. No separate warehouse existed but each shop had small storerooms for equipment such as spare parts, tools, instruments and work clothes. the instruments store room was the most important. Coal was 25X1 stored next to the plant's railway siding.

25X1

Working Conditions

12. Employees worked a 45-hour work week on one of three shifts. (Not all shops worked three shifts) The first shift worked eight hours with one hour for lunch, and the second and third shifts worked seven and a half hours with a half hour for lunch. The majority of personnel worked the first shift; less personnel worked the second shift and very few worked the third shift. In addition to Sundays and holidays, 15 to 24-day vacations (depending upon the job) were granted.

25X1

conditions were good. The plant had good ventilation, light, and was not humid. During winter there was adequate heat and in summer exhaust fans were available. Each shop had a first aid station for minor cases. More serious cases were taken to the policlinic, the infirmary or the rest home.

Security and Fire Prevention

13. During the day, an undetermined number of plant-employed, armed guards were stationed at all entrances including the railway entrance. These guards were quartered in a building located in the center of the plant area. Each worker was documented with a pass with photograph, first and last name, and name of shop or shop building where he was employed. This pass had to be presented to the guards at the entrances. A note of authorization was required to enter or leave the plant during working hours. Personnel had access to all parts of the plant. the plant employed a fire brigade

25X1

Each shop contained such fire-fighting equipment as fire extinguishers and boxes of sand.

25X1

Personnel and Organization

14. About 5,000 workers were employed at the plant in approximately 25 shops. The plant director's name was Surguchov. director was a kind, understanding person. The laboratory chief was Ukrainian. he was a good, competent, and sociable person although he could not remember his name. There were no strikes no complaints about working conditions.

25X1

25X1

25X1

C-O-N-F-I-D-E-N-T-I-A-L

S	Sanitized Copy Approved for Release 2010/06/16 : CIA-RDP80T00246A046100220001-5	25X1
	C-O-N-F-I-D-E-N T-I-A-L - 6 -	25X1
15.	Study Center A study center was located on Savoloskaya ulitsa and Donskoy prospekt. This state-owned school for apprentices was four stories high. A technician gave classes to students in the city in the morning and to plant workers in the afternoon.	
	War Production and Automation	25X1
16.	duction existing plant machinery could be converted to war production or military equipment being manufactured or repaired in the plant. In plans to convert to electronic subgraphs on.	25X1

to electronic automation.

C-O-N-F-I-D-E-N-T-I-A-L

C-O-N-F-I-D-E-N-T-I-A-L

25X1

-7-

Legend for

sketch No. 3 of machine shop No. 2

25X1

Machine shop No. 2 was divided into seven sections. About 150 machines plus "light" hand and automatic cranes were located here. The shop employed about 500 workers.

- 1. Chief, offices, tools, plans, sanitary services.
- 2. Repair shop.
- 3. Hall.
- 4. Work benches.
- 5. Resmer section.
- 6. Planer section.
- 7. Lathe, vertical lathe, and "large" milling machine section.
- 8. Lathe and truing machine section.
- 9. "Small" lathe section.
- 10. Grinders and drill section.
- 11. Milling machines.
- 12. Chromium plating shop.
- 13 and 14. Polishing machine shop.
- 15. Casting shop.
- 16. Hall.
- 17. Drills.
- 18. Cutting machines.
- 19. "Small" milling machines.
- 20. Entrance to assembly shop No. 2.
- 21. Machine shop No. 1 work benches, located on balcony overlooking first floor.

C-O-N-F-I-D-E-N-T-I-A-L

25X1

25X1

25**X**1

on page 20

1. Four 380-volt transformers.

- 2. Control and distribution switchboard for 380-volt distribution.
- 3. Control and distribution switchboard (not further identified).
- 4. Two 220-volt transformers.
- 5. One DC Converter.
- 6. Control office and tool department.

Legend for

sketch No. 7 of heating plant on page 21.

sketch No. 6 of electric transformer station

25X1

- Five boilers
- 2. Five coal bins.
- 3. Distribution valve section.
- 4. Four feed motors.
- 5. Control.
- 6. Open dumps.

Legend for

sketch No. 8 of machine, foundry, and bronze

25X1

pattern shop on page 22.

This was a three story building which also contained the bachelors quarters.

- 1. Storeroom.
- 2. Stairway to bachelor's quarters.
- 3. Machine shop. Twenty Soviet-make lathes were located here.
- 4. Six pattern shops.
- 5. Three blast furnaces.

C-O-N-F-I-D-E-N-T-I-A-L

C-O-N-F-I-D-E-N-T-I-A-L

Q

sketch No. 9 of technical and experimental lathe laboratory, pattern shop, infirmary and rest home on page 23.

25X1

Infirmary

- 1. Doctor.
- 2. Office.
- 3. Nurses.
- 4. Wardroom with approximately 35 beds.
- 5. Door which led to basement.
- 6. DOSAAF conference room.
- 7. Hydrotherapy room.
- 8. Kitchens which served infirmary and restheme.
- 9. Hall.
- 10. Therapy and radiotherapy room.
- 11. Stairway and vestibule.

Technical and Experimental Lathe Laboratory

The laboratory, which was divided into two sections (The Technical and Experimental), employed the following personnel: a shop chief, two qualified assistants (one for each section), from seven to ten technicians, one storeroom attendant, two cleaning women and from 30 to 40 workers.

- 12. Work benches.
- 13. Two measurement control tables.
- 14. Three testing benches.
- 15. Machine shop. This shop contained two drills, three milling machines, one special lathe, one automatic lathe, type 1A62, two US cutters (not further identified), one standard lathe type 1A62, and one GUSLOV lathe.
- 16. Office for one assistant and four experts.
- 17. Hall.
- 18. Grinder (not further identified), not located on sketch.
- 19. Storeroom.
- 20. Experimental shop. Three GUSLOV WERKER lathes, three drills of various sizes, five Soviet-make lathes type 1A62, one 1956 model automatic lathe type 1K62, one milling machine, one gear cutter, one reamer, one scales, one measuring table.

25X1

- 21. Offices.
- 22. Electrician.
- 23. Garage and shop for repairing electric platform cars.

C-O-N-F-I-D-E-N-T-I-A-L

25X1

10 -

Rest Home

- 24. Wardrobe room. Radiotherapy and electrotherapy rooms.
- 25. Dirmitories and baths which served about 80 people.
- 26. Offices.
- 27. Reception room.
- 28. Recreation room.
- 29. Dining room and kitchens.
- 30. Lavatories.
- 31. Stairway.
- 32. Dormitories.

Pattern Shop

This shop produced the patterns for the molds used in the mass production of lathe parts in machine shop No. 1. Parts for the musical tops were also produced here. Eighty workers were employed in this shop.

- 33. Tools.
- 34. Machine shop. Three lathes, three saws, three planes, three drills, and 50 work benches.
- 35. Chief and offices.
- 36. Painting section.

25X1

- 11 -

25X1 Legend for sketch No. 10 of electric repair and assembly shop on page 24. Paint section. ı. 2. Storeroom. 3• Axle bearings. 4. Axle drum device. 5. Paint storeroom. 6. Fitting section. 7. Finished parts. 8. Work bench. 9. Machine shop. One milling machine, one plane, two Soviet-make lathes type 1A62. Apparatus (not further identified). 10. 11. Fitters. 12. Switchboard assembly. 13. Padlock assembly. 14. Fithers. Hall. 15. 16. Motor storeroom. 17. Tools. 18. Work bench. milling machine, one plane, one grinder, 19. 25X1 Machine shop. One three Soviet-make lathes type 1A62. 20. Equipment shelves. 1 21. Solderers. 22. Shop which contained two hand presses, cutter, saw, drill, and a grinder. **2**3. Level table. 24. Work and inspection tables. 25. Elevator. 26. Hall. 27. Electricians.

C-O-N-F-I-D-E-N-T-I-A-L

25X1

- 12 -

- 28. Test work bench.
- 29. Cable cabinet.
- 30. Coil winders. Three work tables.
- 31. Motor testing.
- 32. Motor assembly, 500-kilogram crane, one drill.
- 33. Electricians and mechanics.
- 34. Dryer.
- 35. Motor and ventilator dryer.
- 36. Insulated work bench.
- 37. Classifying table.
- 38. Equipment for classifying and drying.
- 39. Minute parts cleaning section.
- 40. Lavatories.

See sketch No. 11 on page 25, for description of second story of this building which contained electric repair shop and storeroom.

Legend for sketch No. 13 of die-stemping without 25X1 patterns shop.

- Nine cold presses.
- Die-stamping shop. Three 1500-kilogram-capacity presses, three 2000-kilogram-capacity presses and various 500-kilogram-capacity presses were located here.
- 3. One drill.
- 4. "Large" press section.
- 5. Office and die-stamping shop storeroom.

Legend to sketch No. 14 showing fitting and assembly 25X1 shop.

- 1. Paint section.
- 2. Tool cabinet assembly section.
- 3. Manufacture of musical tops.
- 4. Twenty mechanical presses.
- 5. Electric welding section.

C-O-N-F-I-D-E-N-T-I-A-L

25X1

- 13 **-**

Legend to sketch No. 15 of saw, straightening, and die-steamping with pattern shop.

- 1. Section with seven saws.
- 2. Equipment section.
- 3. Section where eight straightening machines were located.
- 4. Four die-stamping "with pattern" machines.
- 5. Drop hammer section. Three drop hammers of 1000 kilogram capacity, one of 1500 kilogram capacity, one of 2000 kilogram capacity and five die-stamping tables were located here.

Legend to sketch No. 16 of carpentry and boiler shops. 25X1

- 1. Three wood saws.
- 2. Chief's office.
- 3. Three wood planers.
- 4. Assembly and wood framework.
- 5. Three polishing machines.
- 6. Nine work benches.
- 7. Electric casting of metal to make locks.
- 8. Shop for engraving serial numbers and other characteristics on finished machines.
- 9. Storeroom.
- 10. Office.
- 11. Carpentry shop office.
- 12. Wood drying shed.
- 13. Corredor to entrance room.
- 14. Sheet metal cutters. Two grinders.
- 15. Five electric welding machines.

C-O-N-F-I-D-E-N-T-I-A-L

C-O-N-F-I-D-E-N-T-I-A-L

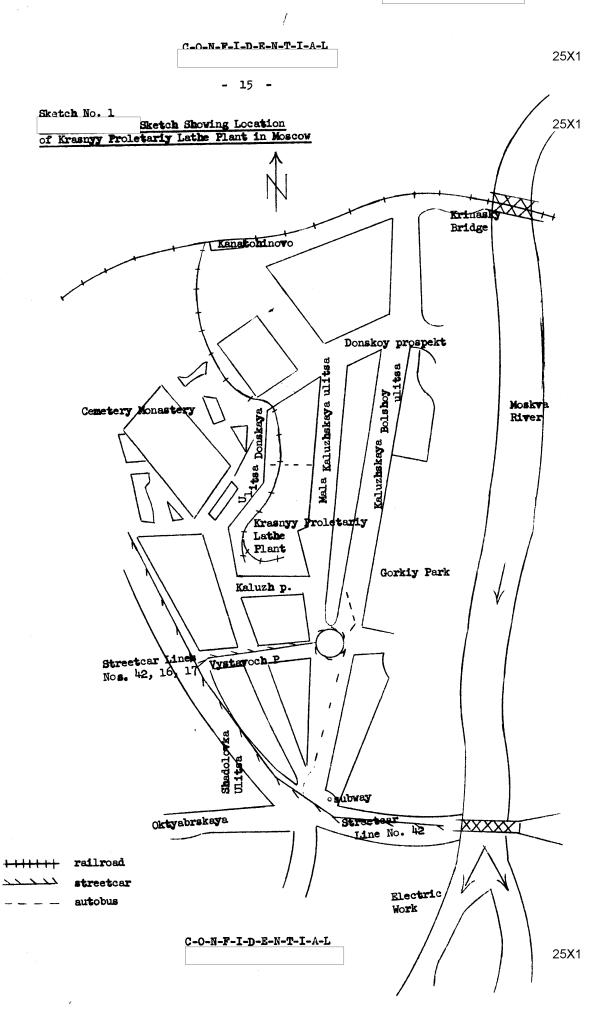
25X1

- 14 -

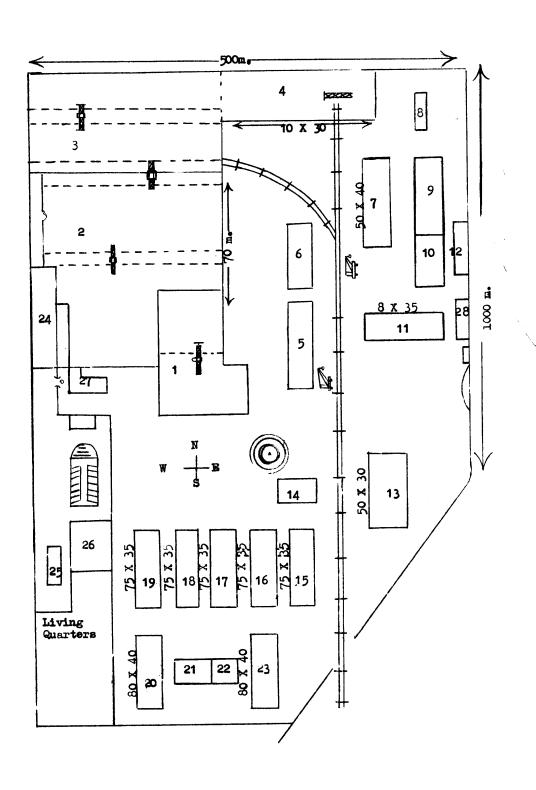
Legend No. 17 for sketch on page 31 of heating section 25X1 and compressor shop building.

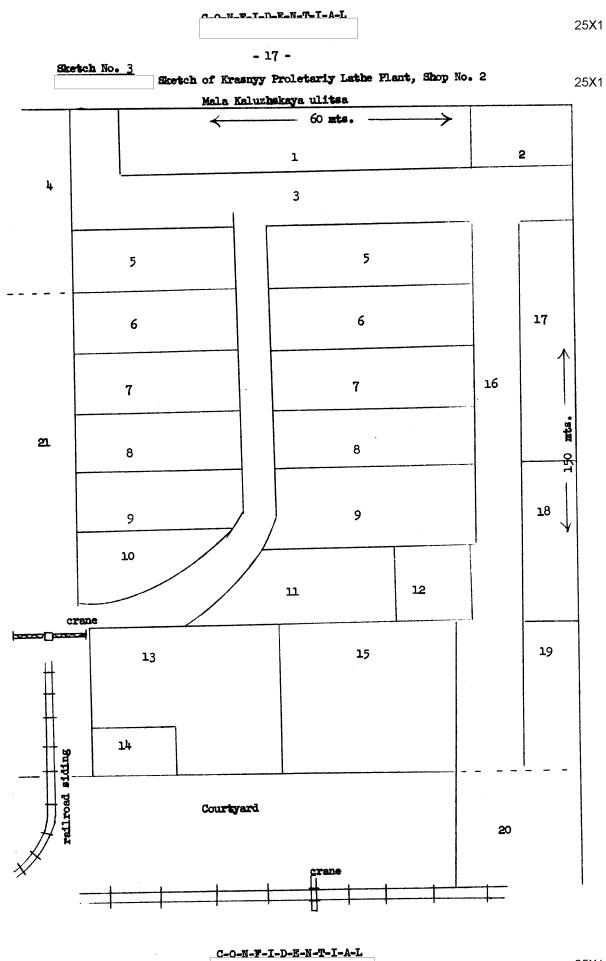
Ten workers were employed in the compressor shop and 20 in the heating sections.

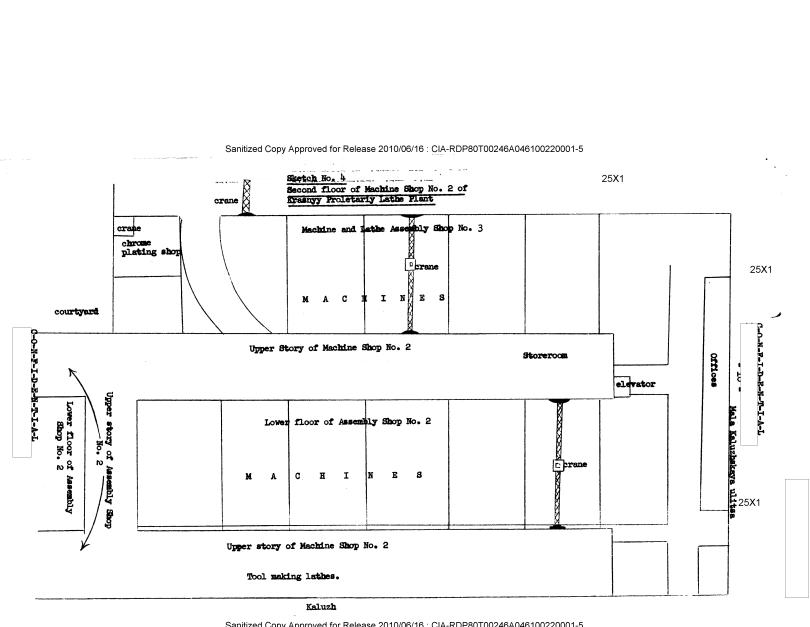
- 1. Chief's office.
- 2. "amall" compressor, 100/HP and 75 KW electric motor.
- 3. "Large" compressor, 200/HP and 230 KW electric motor.
- 4. Two compressors.
- 5. Two transformers.
- 6. Distribution control.
- 7. Feed pumps. Heating plant.
- 8. Two coal bins.
- 9. Three boilers.
- 10. Distribution valves.
- 11. Tool storeroom.



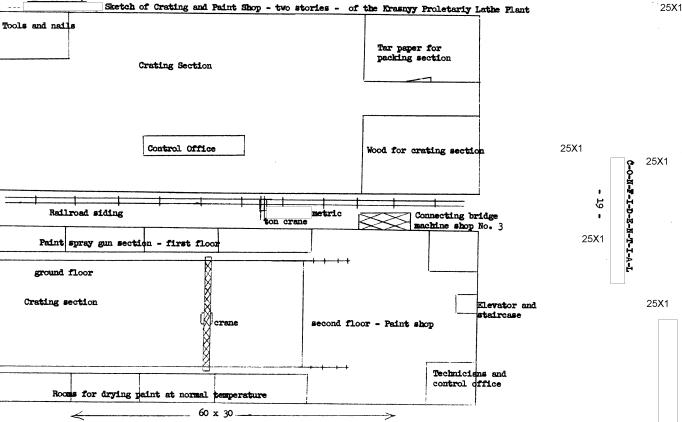








Sketch No. 5

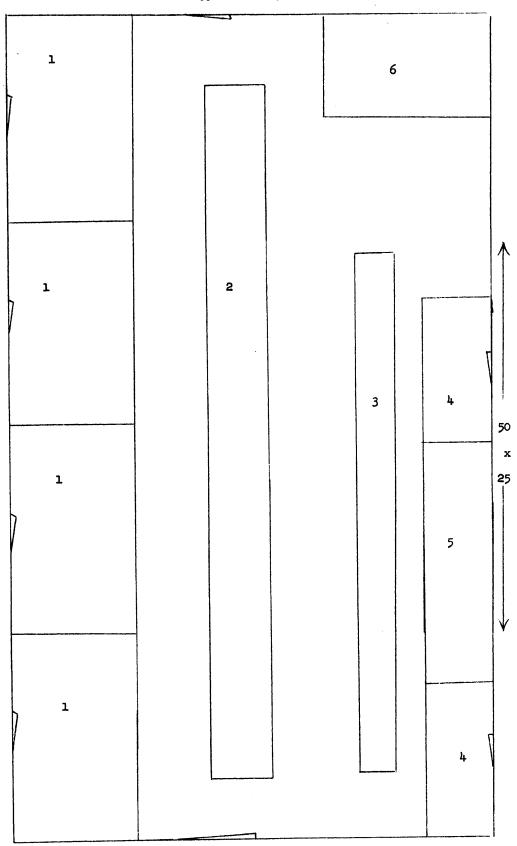


Sanitized Copy Approved for Release 2010/06/16 : CIA-RDP80T00246A046100220001-5

25X1

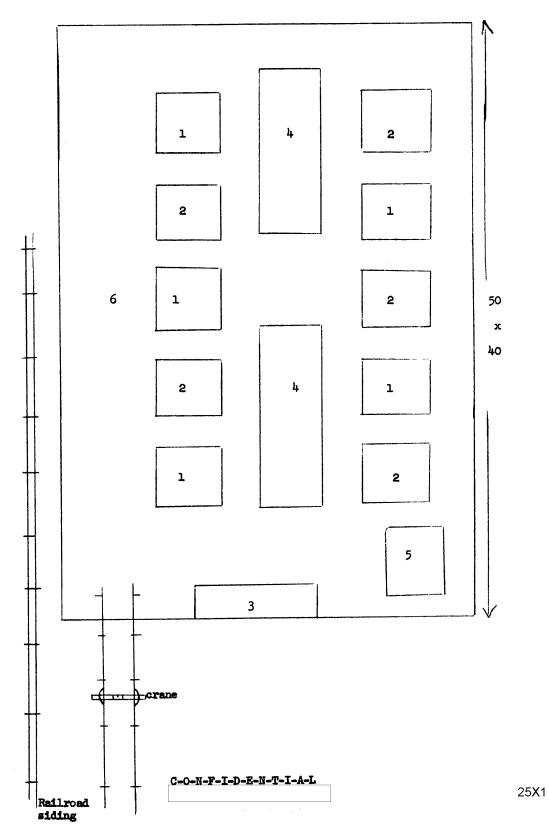
Sketch No. 6

Transformer Station of Krasnyy Proletariy Lathe Plant



- 21 -

Sketch No. 7 Central Heating Plant of Krasnyy Proletariy Lathe Plant



C-O-N-F-I-D-E-N-T-I-A-L 25X1 Sketch No. 8

Krasnyy Proletariy Lathe Plant - 22

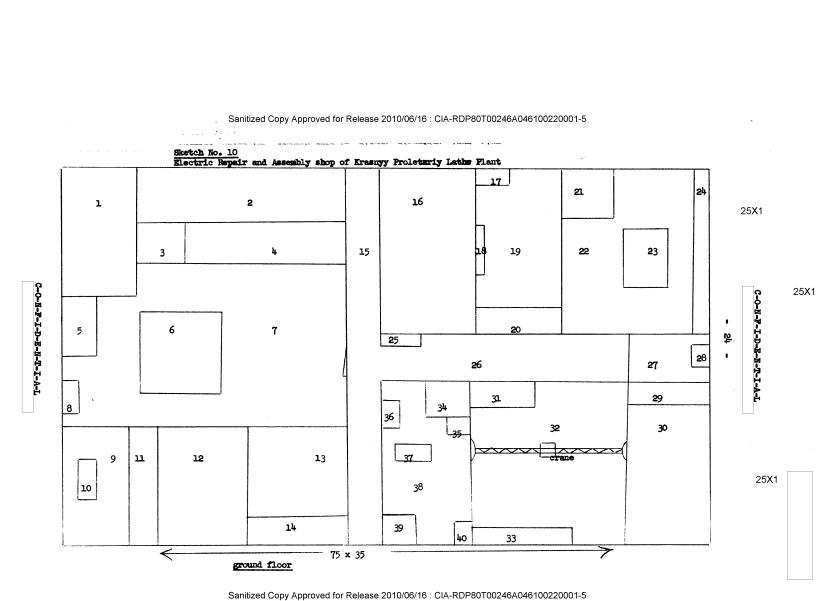
Machine, Foundry, and Bronze Pattern Shop 4 2 3 35 80 1

Sanitized Copy Approved for Release 2010/06/16 : CIA-RDP80T00246A046100220001-5

Sketch No. 9 Krasnyy Proletariy Lathe Flant Building No. 15 - two stories and basements 25X1 C-O-N-F-I-D-E-N-T-I-A-L 25X1 C-O-N-F-I-D-E-N-T-I-A-L బ్జ **5** x 35 first floor bridge 25X1 72 x 35

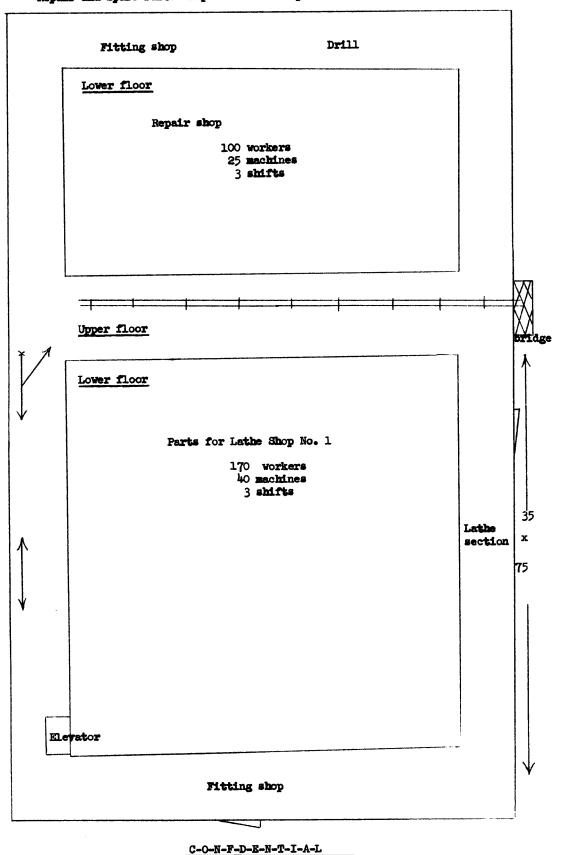
Sanitized Copy Approved for Release 2010/06/16 : CIA-RDP80T00246A046100220001-5

second floor



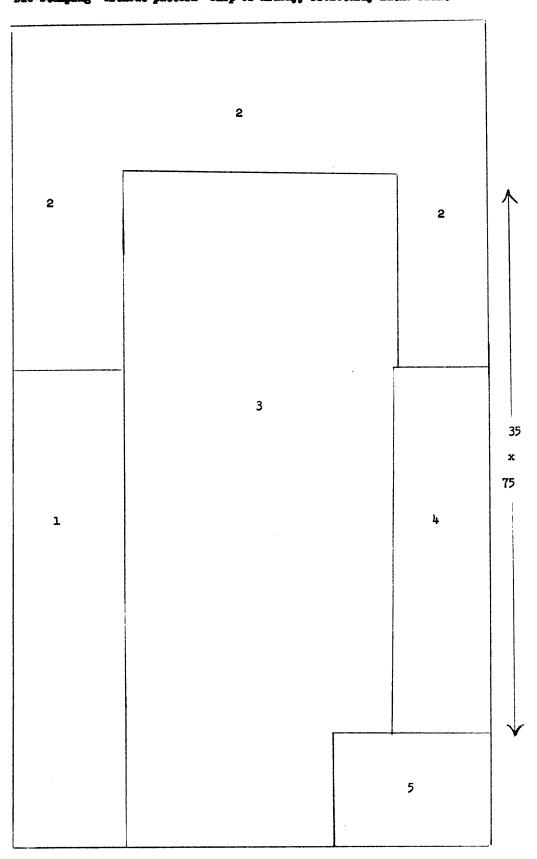


Sketch No. 12
Repair and Spare Parts Shop for Lathe Shop No. 1 -- two stories



25X1

= 27 - <u>8ketch No. 13</u> Die-stamping "without pattern" shop of Krasnyy Proletariy Lathe Plant



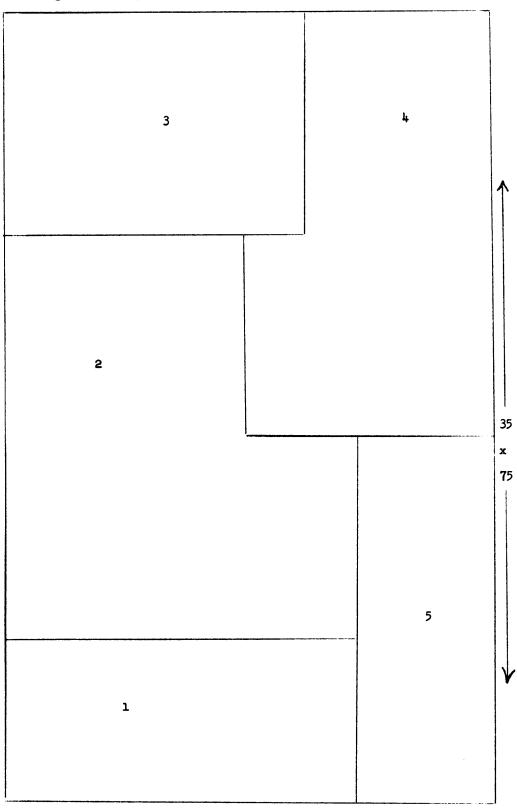
25X1

C-O-N-F-I-D-E-N-T-I-A-L

28

Sketch No. 14

Fitting and Assembly of Apparatus Cabinets

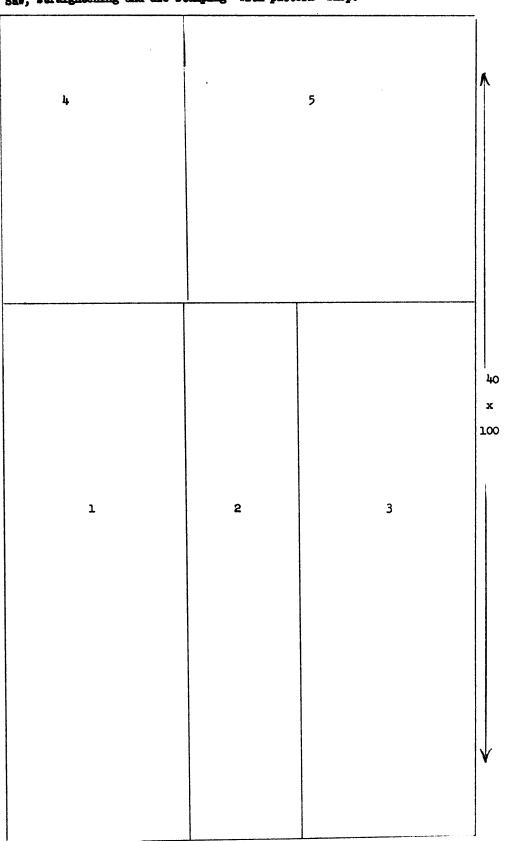


25X1

25X1

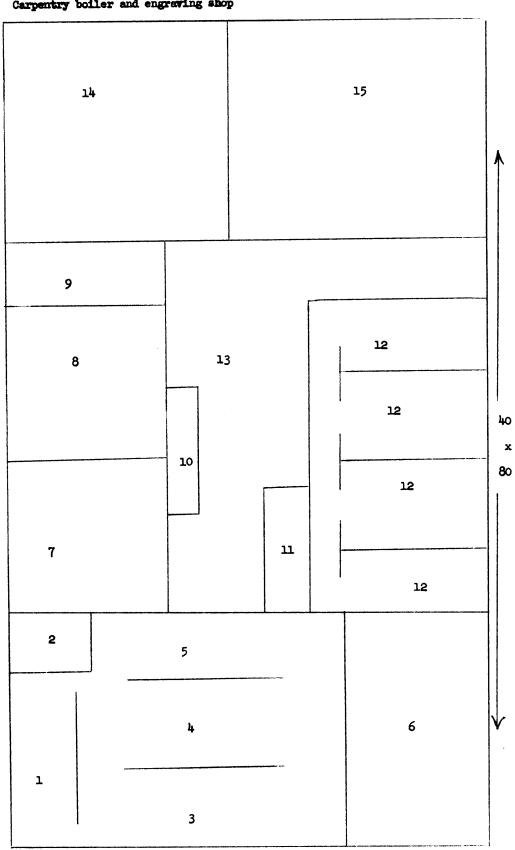
25X1

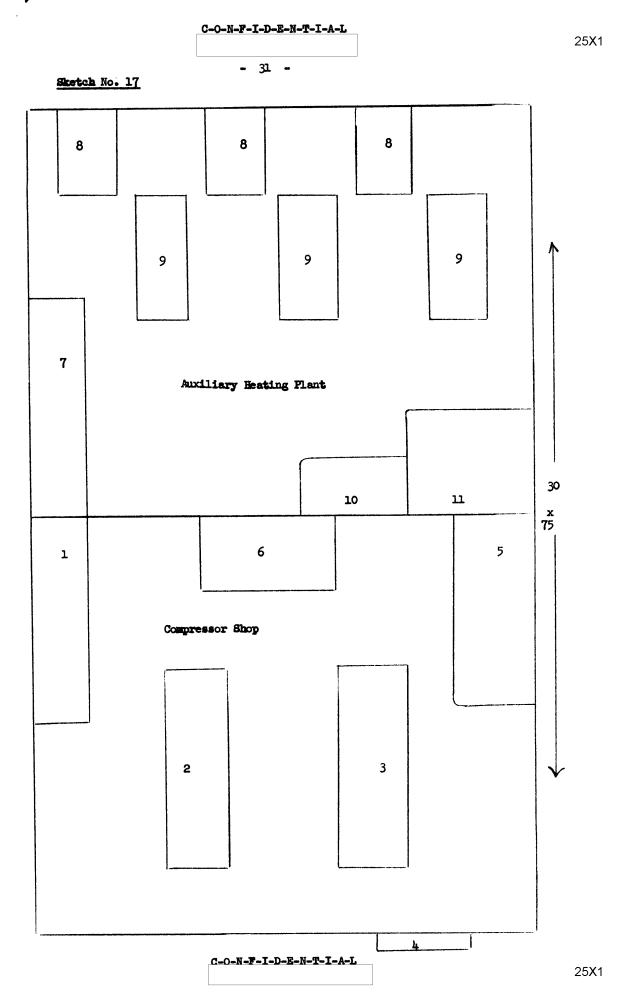


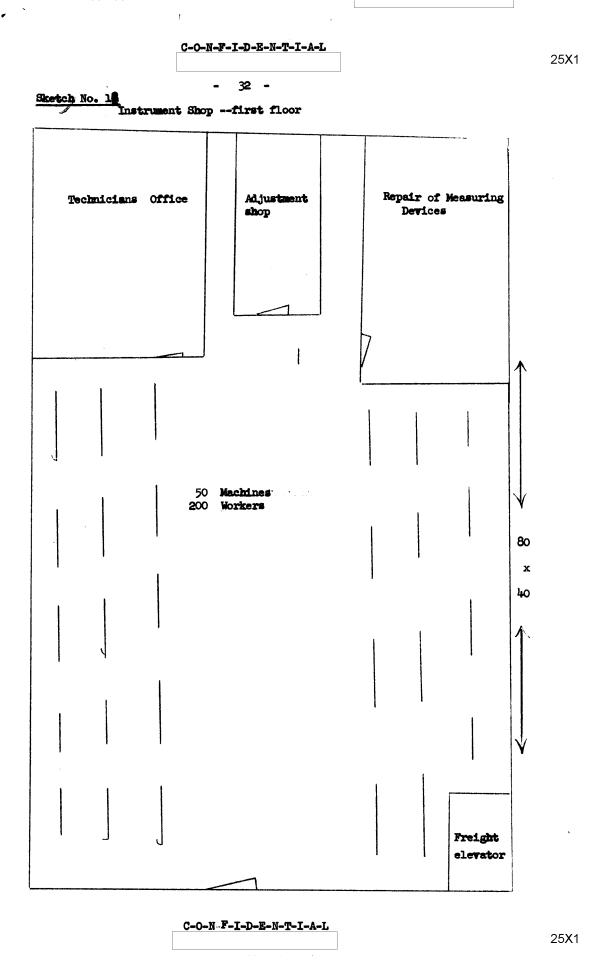


C-O-N-F-I-D-E-N-T-I-A-L

Sketch No. 16 Carpentry boiler and engraving shop







Sanitized Copy Approved for Release 2010/06/16 : CIA-RDP80T00246A046100220001-5

