

(2)

C 27648

Handwritten signature and number 123

CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

This Document contains information affecting the National Defense of the United States, within the meaning of Title 18, Sections 793 and 794, of the U.S. Code, as amended. Its transmission or revelation of its contents to or receipt by an unauthorized person is prohibited by law. The reproduction of this form is prohibited.

SECRET/CONTROL - U.S. OFFICIALS ONLY
SECURITY INFORMATION

50X1-HUM

COUNTRY	East Germany	REPORT	[Redacted]
SUBJECT	Situation Report on Piesteritz	DATE DISTR.	9 November 1953
DATE OF INFO.	[Redacted]	NO. OF PAGES	1
PLACE ACQUIRED	[Redacted]	REQUIREMENT NO.	RD
		REFERENCES	

50X1-HUM

THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
THE APPRAISAL OF CONTENT IS TENTATIVE.
(SEE KEY FOR COVERAGE)

50X1-HUM

The attached material is forwarded for your information.

Enclosure: Typewritten situation report on the Nitrogen Plant at Piesteritz¹.
(5 pages)

[Redacted] Comment: Reported as received. We believe this to be Stickstoffwerk, Piesteritz, which belongs to SAG Mineralduenger

50X1-HUM
50X1-HUM

SECRET/CONTROL - U.S. OFFICIALS ONLY

STATE	ARMY	NAVY	AIR	FBI	AEC	OOD	x		
-------	------	------	-----	-----	-----	-----	---	--	--

(Note: Washington Distribution Indicated By "X"; Field Distribution By "#")

Form No. 51-61, January 1953

new carbide furnace

50X1-HUM

1. The production of calcium carbide has increased sizeably after a new carbide furnace has been put into use. This is not, as previously thought, a large furnace of the same type as the one they previously used. The new mammoth furnace is on the contrary a completely new technical construction, which without doubt represents the most modern within this field. Only 10 workers per shift are needed to run this furnace. It is completely different from all other furnaces in the enterprise.

2. Technical Details

The most important technical unusualness is the electrodes for current supply to the furnace:

- a. The old method in this factory was that the electrode tacks (sic), manufactured by Siemensplania, were collected in large electrode packages with 4 to 6 tacks and then brought into the furnace from above by the aid of a huge hoisting apparatus. Each furnace is ready to work when 3 electrode packages have been inserted. Each package lasts 10 to 12 hours. After this, a change of electrodes is necessary, and this ~~lasts~~ ^{takes} about one hour.
- b. The new method is completely independent of change of electrodes. The reasons are that the electrodes no longer are produced by Siemens-Plania, but are produced in the furnace itself.

3. This Söderberg furnace functions in the following manner:

The furnace is automatically supplied with the necessary mixture of lime, coke, antracite, etc., from the turn table. The mixture is produced in the mixing bin. The raw materials are weighed and mixed here. 2 men are needed for this job. There is one man on the turn table to take care of the supply. While the electrodes in the other furnaces can be raised and lowered when necessary (through which process most of the electrode breakages are caused), it is only necessary here to regulate the electrode

Classification

SECRET
Security Information**CONTROL U. S. OFFICIALS ONLY**Page 2
50X1-HUM

production speed (which actually never is the case in practice). Most important of all, it regulates the current strength, which cannot be done on other furnaces at all. The production of electrodes takes place over the furnace in the continuously working electrode press, which automatically and without interruption stamps and pushes the electrodes out. In other words, loss because of change of electrodes is completely eliminated. The cleaning of the furnace is also much easier. This takes place by burning out the mortising opening by the aid of an extra electrode, just like in all the other furnaces.

4. As far as capacity goes, this furnace is much superior to all other furnaces. Its consumption of current is almost 50% lower. For this furnace there is also only built a transformer behind the turn table. But there is none in the "distribution building" (sic), since the furnace transformer has an entrance of 80 KW.

SECRET**Security Information CONTROL U. S. OFFICIALS ONLY**

SECRET**Security Information****CONTROL U. S. OFFICIALS ONLY**

Page 350X1-HUM

Production Amounts December 1952

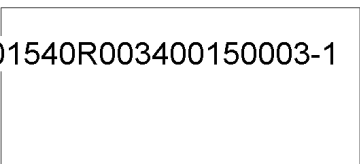
✓ Cyanide smelt (sic) (cake)	68,500 kilo
✓ Hydrocyanic acid	11,400 liter
Acetone cyanide hydrate (sic) (Acetoncyanhydrin)	9,100 liter
✓ Silicon carbide ✓	3,600 tons
✓ Calcium carbide ✓	69,000 tons
✓ Calcium cyanamide	15,200 tons
"Russ" (P 1250) (sic) ?? (Carbon black)	9,000 kilo
Piatherm (sic) ??	9,000 cm ³
✓ Phosphorus	2,200 tons
✓ Phosphoric acid I (chemically pure)	1,900 tons
✓ Phosphoric acid II (technically until 2% impure)	1,750 tons
Na ₃ P (Trinatrium (sic) phosphorus) (Sodium phosphide)	900 tons
DIDI (sic) press matter, red	170 tons
" " " " , blue	140 tons
Urin substance	12,500 tons
✓ Glue	20,500 kilo
✓ Oxygen	19,000 tons
✓ Nitrogen	42,000 tons
"Gelbkali" (sic) ??	7,200 kilo
"Gelbnatron" (sic) ??	7,200 kilo
Acetone pills (Sic - acetophentabletter)	2,700 kilo
Piacryl (sic) ?? (New dental substance)	4,000 kilo

SECRET**Security Information****CONTROL U. S. OFFICIALS ONLY**

SECRET**Security Information
CONTROL U. S. OFFICIALS ONLY**Page 4
50X1-HUMProduction Amounts January 1953

✓ Silicon carbide I	2,100 tons
✓ Silicon carbide II	1,900 tons
✓ Phosphorus	3,800 tons
✓ Phosphoric acid I	1,600 tons
✓ Phosphoric acid II	2,100 tons
✓ Calcium cyanamide	14,600 tons
✓ Calcium carbide	75,000 tons
✓ Cyanide smelt (sic)	52,300 kilo
✓ Hydrocyanic acid	11,600 liter
Acetone cyanide hydrate (sic) <i>Aceton cyanid hydrat</i>	9,200 liter
Piatherm (sic) ??	8,000 m ³
Piatherm-flok (sic) ??	1,650 kilo
DIII press matter (sic), red.	180 tons
blue	130 tons
nazur (sic)	---
black	260 tons
✓ DIDI glue	18,400 kilo
Urin substance	13,200 tons
"Gelbnatron" (sic) ??	8,350 kilo
"Gelbkali" (sic) ??	6,600 kilo
✓ Oxygen	18,500 tons
✓ Nitrogen	40,000 tons
Piacryl (sic) ??	4,600 kilo

SECRET**Security Information**



SECRET
Security Information

CONTROL U. S. OFFICIALS ONLY

50X1-HUM

- ✓ ~~Acetophen (sic) ??~~ *Acetophenone*) 2,600 kilo
- ✓ ~~Phenacetin (sic) ??~~ *(Phenacetin)*) 470 kilo
- "Russ" ~~(sic) ??~~ *(Carbon black)*) 12,300 kilo

Hexametaphosphate (sic) is no more produced here. The pro-
 duction of ~~Trinatrium phosphate (sic)~~ had also ceased.
Trisodium phosphate

SECRET
Security Information
CONTROL U. S. OFFICIALS ONLY