

INTERNATIONAL SMELTING AND REFINING COMPANY

WHITE LEAD DEPARTMENT

EAST CHICAGO, INDIANA

ANNUAL REPORT

YEAR 1943

PNYC00001609

1

INTERNATIONAL SMELTING AND REFINING COMPANY

WHITE LEAD DEPARTMENT

EAST CHICAGO, INDIANA

SUMMARY OF WHITE LEAD PLANT OPERATIONS

YEAR 1943

PRODUCTION:

Total production of White Lead for year 4,995 tons

The plant operated during the year at the following rates:

January 1st to March 31st	Shut-down, operating as Betts plant
April 1st to April 30th	23 tons daily rate
May 1st to July 31st	29 " " "
August 1st to October 31st	Shut-down, operating as Betts plant
November 1st to November 30th	23 tons daily rate
December 1st to December 31st	29 " " "

Average operating data for the year was as follows:-

Average daily production rate	27.4 tons
Average amperes	4,973
Average current density, amperes/sq. ft.	34.03
Average pounds of White Lead/D.C. Kilowatt hour	3.11

NEW EQUIPMENT INSTALLED DURING YEAR:

1. The Raritan Motor generator set was repaired and improvements were added.
2. A basement locker room was added to the White Lead change house to accommodate the women employees.

LABOR:

Under date of September 6, 1943, the National War Labor Board ordered an increase in pay for the hourly workers on the following basis:

Rate of 72¢ to be increased 5¢ per hour.
Rates of 73¢ to 79¢ to be increased 4¢ per hour.
Rates of 80¢ or over to be increased 3¢ per hour.

This increase was made retroactive to December 15, 1942.

Minimum number of direct and indirect hourly employees	July 31st	55
Maximum number of direct and indirect hourly employees	June 30th	60
Average number of direct and indirect hourly employees	58.5 avg. hrs. worked/week	43.8
Average number of direct and indirect salary employees	17.3 avg. hrs. worked/week	40.0

PNYC00001610

Labor Shortage

Due to the critical labor shortage in the area it was necessary to start hiring women late in 1942. By December, 1942 approximately 50% of the operating force was composed of women, but it had not been necessary to resort to the employment of colored women in this department. The employment of women was accompanied by some reduction in operating efficiency.

ELECTRIC POWER

All power was purchased from the Northern Indiana Public Service Co.
 Total Kilowatt hours for year 5,081,661
 Average cost for year per A.C.K.W. Hour 0.008141
 " " " " " D.C.K.W. Hour, delivered to cells 0.009695

FUEL:

Total amount of coal used during year at boiler house 4,545* tons
 Average cost per ton \$ 3.950

* 65.30% of steam generated was used by other departments for heating.

OPERATING COST:

Average production cost per ton 40.459
 Average pounds of metallic lead charged per pound of White Lead produced .8261

		<u>Per Pound</u>		<u>Per Ton</u>
Average net sales price				
less cash discounts		7.835¢		\$ 156.70
Average cost of goods sold	7.168¢		\$ 143.34	
Less Depreciation	.215	6.955	4.30	139.06
Average operating margin		.888¢		\$ 17.64 ✓

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MAJOR EXPENDITURES:

A summary of the major items of cost for the year is given below:

<u>Item</u>	<u>Cost</u>	<u>% of Total Cost</u>
Pay Roll Labor	\$ 72,594.98	35.163
Salaries	25,381.06	12.294
Coal	6,832.78	3.019
Acetic Acid	5,005.46	2.425
Soda Ash	510.26	.247
Barrels	1,026.76	.497
Drums	26.32	.013
Bags	8,637.00	4.184
Electricity	41,002.37	19.860
Linen	3,597.14	1.742
Taxes (property)	1,084.64	.526
Unemployment Insurance Tax	987.93	.479
Old Age Annuity Tax	970.59	.470
Insurance	1,687.15	.817
Group Insurance	470.08	.228
Depreciation	21,282.63	10.309
Other Items	<u>15,953.51</u>	<u>7.727</u>
	\$ 206,452.57	100.000
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INTERNATIONAL SMELTING AND REFINING COMPANYWHITE LEAD DEPARTMENTSUMMARY OF WHITE LEAD PLANT OPERATIONSYEAR 1943METALLURGICAL BALANCE

		<u>Metallic Lead Pounds</u>	<u>White Lead Pounds</u>
Anode Lead			
Receipts (new)		14,958,621	
Less Returns: Scrap Anodes	6,341,160		
Rejects	24,704		
Dirty White Lead	32,437		
Olive Filter Cake	54,634		
Dirty Lead-in-Oil	2,070		
Scrap Lead	4,950		
Batts Lead	1,733		
		<u>6,461,688</u>	
Net Receipts		8,496,933	
Anodes on Hand, January 1st, 1943		<u>1,733</u>	
		8,498,666	
Anodes on Hand, December 31st, 1943		<u>246,017</u>	
Lead Charged		8,252,649	10,330,692
In Process, January 1st, 1943		<u>51,906</u>	<u>64,882</u>
		8,304,555	10,395,574
<u>In Process December 31st, 1943</u>			
Settling System, etc.	273,570	341,962	
In Bismuth Slimes	12,731	15,914	
Losses Manufacturing	22,753	28,312	
Losses in Bismuth Slimes	<u>15,867</u>	<u>324,921</u>	<u>406,055</u>
Production		<u>7,979,634</u>	<u>9,989,519</u>

$9,989,519 \div 8,252,649 = 1.21$ pounds of White Lead produced per pound of metallic lead charged.

Percent of Losses Per Pound
Metallic Lead Treated

Manufacturing	0.2740
In Bismuth Slimes	0.1911

INTERNATIONAL SMELTING AND REFINING COMPANY

WHITE LEAD DEPARTMENT

EAST CHICAGO, INDIANA

WHITE LEAD PLANT

<u>YEAR</u>	<u>CAPITAL INVESTMENT</u>	<u>PROFIT</u>	<u>LOSS</u>	<u>NET</u>	<u>PER CENT RETURN</u>
1920	439,570.09		71,871.25		16.22
1921	530,312.22		238,001.74		44.82
1922	545,512.25	7,460.27			1.37
1923	546,772.02		25,991.35		4.75
1924	547,002.71	57,495.25			10.51
1925	552,999.59	57,772.45			10.34
1926	655,722.19	11,799.71			1.80
1927	675,532.05		70,643.34		10.46
1928	682,761.24	57,412.77			8.34
1929	710,929.90	51,421.26			7.22
1930	720,220.00		6,329.05		.86
1931	720,220.00	24,924.29			3.15
1932	720,220.00	24,219.25			3.40
1933	729,612.69	24,872.42			7.20
1934	731,211.74	55,004.37			7.52
1935	745,352.22	24,905.66			11.42
1936	772,021.27	24,922.02			7.22
1937	810,222.27		52,475.25		6.42
1938	815,442.22		12,909.72		2.32
1939	850,004.22	41,004.22			4.82
1940	852,541.21	20,745.22			3.61
1941	847,202.23	72,712.24			8.22
1942	894,722.21		9,272.72		1.07
1943	899,322.10		15,204.22		1.42

Total

Investment
and Return

to Date \$899,322.10 \$705,054.22 \$306,240.74 \$194,214.24 21.22

* No allowance made for depreciation for the period 1920 to 1943, inclusive
depreciation charges totalled \$245,222.29.

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INTERNATIONAL SMELTING AND REFINING COMPANYWHITE LEAD DEPARTMENTEAST CHICAGO, INDIANALEAD-IN-OIL PLANT

<u>YEAR</u>	<u>CAPITAL INVESTMENT</u>	<u>PROFIT</u>	<u>LOSS</u>	<u>NET</u>	<u>PER CENT RETURN</u>
1931	1,544.86	578.51			36.97
1932	1,544.86	7,800.18			498.44
1933	4,026.83	24,015.45			596.39
1934	4,026.83	20,328.31			504.82
1935	17,089.54	8,089.85			47.34
1936	17,089.54	17,520.77			102.52
1937	17,089.54	12,301.03			71.98
1938	17,089.54		42,696.56		254.95
1939	17,089.54		4,555.74		26.66
1940	17,930.30		5,024.52		28.02
1941	24,580.77	1,450.48			5.90
1942	24,580.85		1,794.67		6.81
1943	24,580.85		2,989.44		11.34
Total Investment and Return to Date	24,550.85	92,084.68	63,040.95	29,023.73	110.14

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INTERNATIONAL SMELTING AND REFINING COMPANY

EAST CHICAGO, INDIANA

SUMMARY OF BETTS PLANT OPERATIONS

YEAR 1945

PRODUCTION:

Total production of cathode lead for year 2,824 tons

The plant was operated at the following rates:

January	9.0 tons daily rate.
February	18.7 tons daily rate.
March	18.2 " " "
August	14.8 " " "
September	17.3 " " "
October	18.9 " " "

Average operating data for the year was as follows:

Average daily production rate	15.6 tons
Average amperes	4,146
Average current density, amperes/sq. ft.	30.7
Average pounds of cathode lead/D.C. Kilowatt hour	10.576
Average pounds of H_2SO_4 consumed per ton of cathode lead	12.08
Average pounds of gasses consumed per ton of cathode lead	0.91

LABOR:

The number of men employed on an hourly basis varied from a minimum of 46 in August to a maximum of 55 in March. A summary of the average number employed and the average hours of employment per week follows:

<u>Type of Employment</u>	<u>Avg. No. Employed</u>	<u>Avg. Hrs. per Week</u>
Pay Roll Labor	50	46.08
Salaried Employees	18	40.00

ELECTRIC POWER:

All power was purchased from the Northern Indiana Public Service Company.

Total Kilowatt hours for year	888,586
Average cost for year per A.C.K.W. Hour	\$ 0.010570
" " " " " D.C.K.W. Hour delivered to cells	\$ 0.017376

OPERATING COST:

Average cost per ton of cathode lead produced	\$23.06
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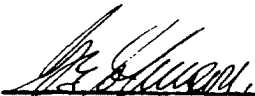
A summary of the major items of cost for the year is shown in the following tabulation:

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Sheet #2 - Summary of Betts Plant Operations - Year 1943

MAJOR EXPENDITURES:

<u>Item</u>	<u>Cost</u>	<u>% of Total Cost</u>
Pay Roll Labor	\$ 38,958.34	41.739
Salaries	15,938.83	17.076
Coal	696.92	.747
Hydrofluosilic Acid	3,912.84	4.192
White Lead	1,314.96	1.409
Glue	734.70	.787
Oil	111.76	.120
Electricity	9,392.41	10.063
Taxes (property)	296.82	.312
Unemployment Insurance Tax	550.90	.590
Old Age Annuity Tax	550.90	.590
Insurance	347.18	.372
Group Insurance	345.99	.362
Depreciation	5,379.67	5.654
Other Items	<u>14,886.65</u>	<u>15.949</u>
	\$ 93,338.87	100.000


Plant Manager

njh 2/11/44

cc: Mr. J.R. Hobbins
Mr. R.E. Dwyer
Mr. F. Laist ✓

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