



**Request For Capital
Expenditures/Retirements**

DIVISION OR COMPANY

Organic Chemicals Division

LOCATION

J.O. CONTROL POINT

Chicago, Illinois

JOB TITLE

INSTALL SEMI-BULK HANDLING SYSTEM
FOR LEAD STABILIZERS

REPORTING CLASSIFICATION

D-1

DATE APPROVED

3/9/81

JOB ORDER NO.

OC-5300

SUMMARY OF AMOUNTS

DESCRIPTION

LOCAL CURRENCY

U.S. DOLLARS

ESTIMATED PROJECT COST

150,000

DISMANTLEMENT EXPENSE

TRANSFER EQUIPMENT

GROSS AMOUNT FOR APPROVAL

150,000

LESS TRANSFER EQUIPMENT

LESS SALVAGE OR TRADE-IN ALLOWANCE

NET CASH REQUIRED GOF-3027

150,000

RETIREMENT DATA

ECONOMICS

REVISION DETAIL - GROSS AMOUNTS

as called for in General Procedure Memo #3
Attachment C. (Attach calculations)

	AMOUNT		REV. #	DATE	AMOUNT	CUM. ACT-OR ZAT-ON
COST		ECONOMICS PERIOD	1			
DISMANTLEMENT		NET SALES	2			
LESS SALVAGE		NAT. PROFIT/SAVINGS	3			
		TOTAL INVESTMENT	4			
		% ROI (ON TOTAL INVEST.)	5			
		INTERNAL RATE OF RETURN	6			
TOTAL - CHARGE RESERVE		PAYOUT OF NEW FIXED CAPITAL	7			

DESCRIPTION AND REASONS REQUIRED

See Attachments.

Closed

MAR 16 1981

SUMMARY OF ESTIMATED COST - Details on GOF-3027		EST. MATE NO.	STARTING DATE	COMPLETION DATE	
			Upon approval	Four months after approval.	
ITEM NO.	DESCRIPTION	MATERIAL	LABOR	ENGINEERING	TOTAL
	Per estimate attached	129,500	10,500	3,000	143,000
	Tax	7,000			7,000
NET CASH REQUIRED		136,500	10,500	3,000	150,000
ACCOUNTING TREATMENT		APPROVALS			
ITEM NO.	DEPR. RATE	NAME		DATE	
		PROJECT SPONSOR			
Dr \$73,000 to PP&E Containers(2A700)	20%	<i>Dr. Rafferty</i>			
Dr \$70,000 to PP&E (2A320)	7 1/2%	<i>Dr. Rafferty</i>		3/4/81	
Dr \$ 7,000 to Expense as incurred		<i>Dr. Rafferty</i>		3/4/81	
ACCOUNTING TREATMENT / ECONOMICS APPROVED BY DIV. CONTROLLER (CHECK BOXES)					
☒	☐	DATE 3/4/81			
POST AUDIT PERIOD		POST AUDIT DUE DATE		DIVISION PRESIDENT / DIRECTOR	
DISTRIBUTION				CORPORATE OFFICER	

MAR 3 1981

N14646

DETAIL SHEET

SHEET NO. 1	JOB ORDER NO.	DATE
COMPANY		LOCATION

ITEM OR CODE NO.	DESCRIPTION	EQUIPMENT OR MATERIALS	LABOR	TOTAL	
1	Air Pallets 200 x \$320 Average load of 1,500 lbs.; capacity 1.2 M lbs.	64,000		64,000	
2	Conveyor	3,500	1,500	5,000	
3	Filling System	20,000	4,000	24,000	
4	Ventilation	1,500	1,500	3,000	
5	Unloading System	11,000	3,500	14,500	
6	Freight	1,500		1,500	
7	Semi-bulk Bag Unloading	5,000		5,000	
8	Semi-bulk Bags 40 x \$225 Average load 1,500 lbs.; capacity 24 k lbs.	9,000		9,000	
9	Engineering		3,000	3,000	
10	Contingencies	14,000		14,000	
11	Tax	7,000		7,000	
		136,500	13,500	150,000	EXPENSE

N14646.01

Proposed Work and Cost

This order requests \$150,000 for the installation of a semi-bulk filling/handling system and an initial supply of Air Pallet and semi-bulk bag containers.

Overview

Lead Stabilizers is a M\$6 business with NAT profitability of 7-10%. It is a quadrant IV business being managed for cash. The U.S. market for lead stabilizers is shared equally among Cyanamid and two major competitors -- Associated Lead and Hammond Lead. The industry and its customers are under environmental pressures to reduce lead dust exposure to comply with current OSHA regulations.

Reasons For Request

OSHA regulations and environmental concerns are forcing key customers to use semi-bulk handling systems. (20% of the lead stabilizer market has installed semi-bulk systems during the past 2 years. We estimate that another 10% will be converted by the end of 1981.) Both of our major competitors are offering semi-bulk packaging and we stand to lose significant market share if we do not offer semi-bulk shipments -- Hammond and Associated both offer Air Pallets; Hammond also offers Taicon semi-bulk bags.

Our sales volume estimates follow (k lbs.):

	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
1981-85 Business Plan	6,750	6,400	7,700	7,800	8,000	8,100
Current Estimate Without Semi-Bulk	6,750	6,200	6,000	5,800	5,600	5,500
Current Estimate With Semi-Bulk	6,750	7,000	7,900	8,100	8,200	8,300

Not offering semi-bulk packaging will reduce 1981 NBT by k\$200 and 1985 NBT by k\$700 due to sales volume declines.

Semi-bulk handling may also help reduce lead-in-air levels in our Chicago plant bag packing area as well as reduce handling and packaging costs. No consideration of these additional benefits has been included in the project economics.

Anticipated Financial Returns

This project offers less than a one-year payback (.75 years) and will generate more than M\$1 in cash through 1985 by protecting market share and volume. The 1981 forecast data in the following table of financial results assumes installation of semi-bulk packaging by June 1981:

	<u>1979</u>	<u>1980</u>	<u>1981 Budget</u>	<u>1981 Forecast</u>
Volume (k lbs.)	8,251	6,742	6,400	7,000
Net Sales (k\$)	5,937	5,619	5,207	5,600
Marginal Income (k\$)	2,241	2,451	2,870	3,080
Manufacturing Profit (k\$)	1,553	1,782	1,512	1,700
POS (%)	26	32	29	30
NAT (k\$)	454	577	392	500
NAT (%)	7.6	10.3	7.5	8.9

Details of Proposal

Manufacturing: We plan to install the semi-bulk filling and unloading system in Building 24 adjacent to the Nauta mixer, which will be tied into the semi-bulk loading system through a screw conveyor. The existing dust collector will provide sufficient ventilation.

The unloading system permits us to unload returned semi-bulk containers to drums for repackaging or rework if necessary.

We have included modifications to the Air Pallet filling/unloading systems to permit the handling of both semi-bulk bags and Air Pallets. Although most of our customers have installed or plan to install Air Pallet capability, there are a few major accounts that are using semi-bulk bags. Although we have requested funds to purchase some semi-bulk bags, they will be purchased only after obtaining a firm commitment from the customer.

Semi-bulk containers will not alter product quality or output. The semi-bulk system is expected to reduce airborne lead levels in the packaging areas; however, the magnitude of improvement cannot be estimated at this time.

We intend to color code and label the semi-bulk containers to avoid cross contamination of product types (carbonate, sulfate, phthalate). Containers will be shipped FOB Chicago and returned at Cyanamid expense.

Freight charges for return will run at most \$15 per Air Pallet (\$0.01 per pound of material shipped from California), and average under \$10 per Air Pallet (\$0.007 per pound of material shipped). These freight charges will be more than offset by reduced packaging costs (\$0.009 per pound for bags and pallets) and a one cent price premium for semi-bulk shipments.

We have provided for 2.5 semi-bulk containers for each pallet of material to be shipped per month. This should be sufficient to service the average account.

Contingent Future Commitments

By 1985 we estimate another 1.2M pounds of semi-bulk business, requiring additional expenditures averaging k\$35 per year after 1981 to increase the number of containers and to repair/replace containers. If the product mix changes, an additional k\$25 may be needed to debottleneck the filling operation. In the event that returned containers are covered with dust and become a hygiene problem, k\$25 may be needed to install an enclosed cleaning facility.

Alternatives Considered

We have attempted to meet customer requirements for reducing lead-in-air levels with other products and packaging forms including dustless grades, PVC bags, and waxed stabilizers. Although several of these offerings have had some success or interest, our large volume customers are rapidly switching to semi-bulk systems as the most practical solution readily available.

We have reviewed various semi-bulk systems over the last four years, but the Air Pallet system has appeared the most practical and this has been confirmed as customers and competitors have installed Air Pallet systems. We are providing the flexibility to handle semi-bulk bags for the few customers that require them.

Risks

Enough of our customers and competitors have successfully installed Air Pallet systems that we see little technical risk. Our Azo Pigments manufacturing facility in Bound Brook has been using an Air Pallet system successfully for about one year.