

NATIONAL LEAD COMPANY



NEW YORK 111 BROADWAY
BALTIMORE 214 WAREHIMELA ST.
BUFFALO 1400 OAK ST.

ST. LOUIS 722 CHESTNUT ST.

NATIONAL LEAD CO. BOSTON LEAD CO. 60 ALBANY ST.
BOSTON
GEORGIA LEAD WORKS LEAST & BISHOPS STS.
ATLANTA

CHICAGO 90 WEST 18th ST.
CINCINNATI 459 FREEMAN AVE.
CLEVELAND 1213 W. THIRD ST.

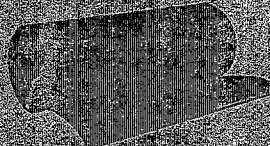
GIBSON & PRICE SWETLAND
BUILDING CLEVELAND
NATIONAL LEAD & OIL CO. OF PA. 316
FOURTH AVE. PITTSBURGH
JOHN J. LEWIS & PROS. CO. WIDENER BUILDING PHILADELPHIA

Sheet Lead and Lead Pipe

PRODUCTS

Antimonial Sheet Lead
Chemical Sheet Lead
Crawproof (Reinforced) Sheet Lead
Tellurium Sheet Lead
Antimonial Lead Pipe
Chemical Lead Pipe
Tellurium Lead Pipe

Other products of National Lead Company include: solder, babbitt metal, burning lead, traps and bends, ingots, cast blocks, tin pipe, block tin sheet, tin-lined lead pipe, lead wool, lead wire, lead washers, expansion bolts, red lead, white lead, linseed oil.



SHEET LEAD

Sheet lead of our manufacture is in use in many plants throughout the country and may be depended upon to render satisfactory service in withstanding the action of ammonia gas, phosphoric acid, sulphuric acid, electrolytic solutions, etc. We are in a position to supply four kinds of sheet lead—antimonial, chemical, crawproof or reinforced, and tellurium. Choosing the particular type to best meet requirements in a given case is a matter of determining the service conditions. In this connection, the advice of our technical staff is always available. Simply get in touch with our nearest office.

ANTIMONIAL SHEET

Antimonial sheet lead is lead alloyed with various percentages of antimony to impart hardness and other desired properties. It possesses a high degree of acid resistance. Its elastic limit is five times that of chemical lead, its tensile strength is double, and it also has a low specific gravity.

We can supply antimonial sheet in any gauge or thickness desired down to $\frac{1}{16}$ " and can furnish sheets in some weights, as large as 8' by 25'.

CHEMICAL SHEET

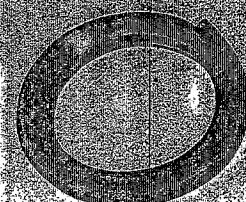
Chemical sheet lead is a pure lead alloyed with small amounts of arsenic, chemical sheet is known for its superior corrosion resistance to give maximum acid-resisting qualities. Uniform in thickness and free from irregularities it is furnished in any gauge from $\frac{1}{16}$ " up.

CRAWPROOF SHEET

This is a chemical lead sheet reinforced inside with antimonial lead supporting bars. Designed especially to prevent buckling, stretching and wrinkling. Supplied in any thickness from $\frac{1}{16}$ " up and in any size sheet not exceeding 8' in width by 25' in length.

TELLURIUM LEAD SHEET

This is a new type of lead with distinct advantages. Laboratory and plant tests indicate that it is superior to other types in resistance to sulphuric acid corrosion, tensile strength, mechanical toughness and vibration or impact resistance. Can be easily worked and burned to better than ordinary lead. Supplied in a wide variety of thicknesses and sheet sizes.



LEAD PIPE

We make antimonial, chemical and tellurium lead pipe. Only high quality materials are used and our pipe will be found to be of proper wall thickness, thus insuring correct weight per foot. Supplied in sizes up to 12" inside diameter and in various wall thicknesses. Catalog listing pipe sizes furnished on request.

GENERAL

We are always glad to advise regarding lead installations and to estimate costs of materials based on blue print or specifications.

In ordering sheet lead, please state desired thickness or weight per foot, width and length. If irregular sheets are required, please send sketch giving dimensions or provide a sketch, including dimensions, of the tank to be lined.

N 28122

0000-NLI-000014446

NATIONAL LEAD COMPANY

Atlantic Branch

111 Broadway, New York, N. Y.

Lined Products Department

PRODUCTS

Homogeneous Lead Lined Vacuum Apparatus, Evaporators, Tanks, Steam Jacketed Kettles, Digesters, Autoclaves, Agitators, Pressure Still, Treater Drums and Car Tanks. Homogeneous Lead Covered Heating or Cooling Coils.

ADVANTAGES OF PROCESS

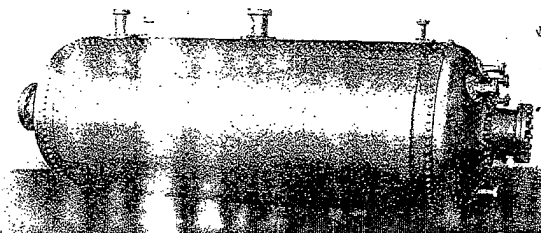
The lead lining or covering is of a uniform thickness and inseparably bonded to the steel, copper or brass, forming a flawless and impervious surface.

A strip covered with lead by our process can be mechanically twisted to destruction without the slightest

shearing action between the lead and the other metal, which effectively demonstrates why this type of equipment stands up so well under severe conditions.

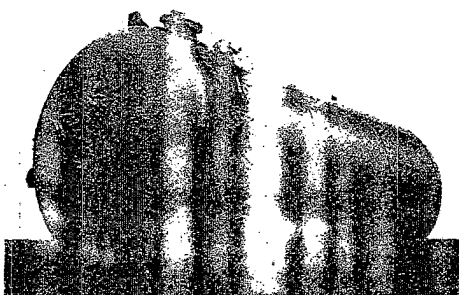
We guarantee the homogeneous lead linings or coverings to be so attached to the steel, copper or brass that the two metals are inseparable under vacuum, pressure and temperature change close up to the melting point of lead.

We solicit your specifications and in this connection the services of our Engineering Staff are at your disposal.

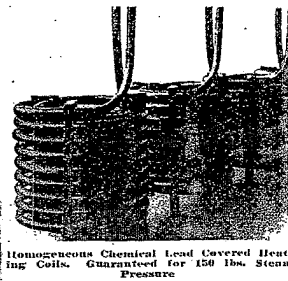
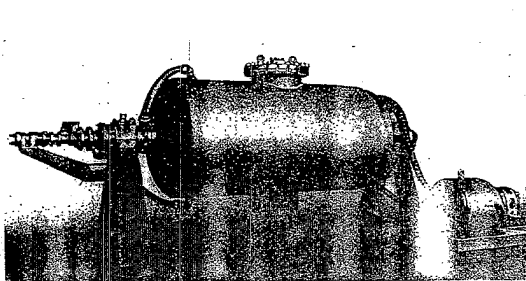


Steam Jacketed Homogeneous Lead Lined Treating Drum, 6' in diameter and 15' long. Also subjected to vacuum.

(Right)
Homogeneous Lead Lined Treating Drum for oil refining, 10' in diameter and 20' long



(Below)
Homogeneous Lead Lined Extractor



Homogeneous Chemical Lead Covered Heating Coils. Guaranteed for 150 lbs. Steam Pressure

Atlantic Branch
111 Broadway, New York, N. Y.

Lined Products Department

111

"United" Chemical and Allied
Pne. Pumps, Valves, Flange Connections
"United" Hard and Soft
Acid Pumps, Pumps, Pipes, Plug Cocks, Bibbs
"United" Tin Liner
Pne. Pumps, Flange Connections, Pumps

THE

Our Engineering Department offers its services to anyone having a difficult problem to solve. If blue prints or sketches are submitted we will be pleased to offer suggestions in detail as to the most economical and satisfactory use of "Clured" Pipe Products.

**UNITED TUBOND® CHEMICAL LEAD-LINED
STEEL PIPE AND FLANGED FITTINGS**

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"United Tubond" Chemical Lead Lined SPOTS
Flanged Pipe and Fittings Flanged pipe is made up with the bonded chemical lead lining made on to the face of the recessed flange, which gives a positive lead-to-lead joint, a real safety.

UNITED HARD LEAD OR TIN LINED ACID VALVES

United Acid Valves are heavily lined throughout with a hard lead or pure black iron and being constructed of iron offer the strength of the cast iron valve with full and resisting qualities.

Manufactured in all required sizes and styles: globe, gate, angle, check, diaphragm and free flow (MF) type plus special valves according to specifications.



When the Valve is closed, the Valve is always tight when closed, and by seating the top when opened, pressure is relieved.

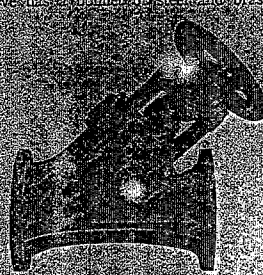
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United Chemical
and Hard Tool
Lined Wear
7900 Plumb
Acid Gate Valve

UNITED HARDWARE CHEMICAL
FLANGED AND VALVES

"United" Hand Guard Assembly on the single type Hanger Acid Valve has a bonnet of stainless brass which is covered with hard-finish. With the exception of the hand effort and bushing support.

The protected bonnet does away with the necessity of frequent costly replacement.



The body is of solid hard lead with reinforcing ribs cast integral affording maximum strength while reducing the weight to a minimum.

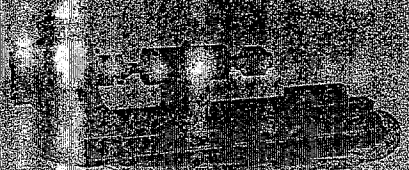
In place of the lead plug or disc a renewable rubber plug can be supplied.

"United" Hard Lead Acid Valves can be furnished in the same pattern as "United" Lined Valves, i.e., Y, Angle, Gate, etc., as well as special sizes and types according to specifications.

"UNITED" ACID PUMPS

The worthwhile feature of the vertical pump is the elimination of the packing gland. The boot serves as both suction chamber and auxiliary supply tank.

"United" Horizontal Pumps are self-lubricating, with large internal grease glands supplied by compression cups. The casing is on hard lead with the impeller in the same alloy cast around a central shaft.



"Horizontal" Hard Lead Centrifugal Acid Pump