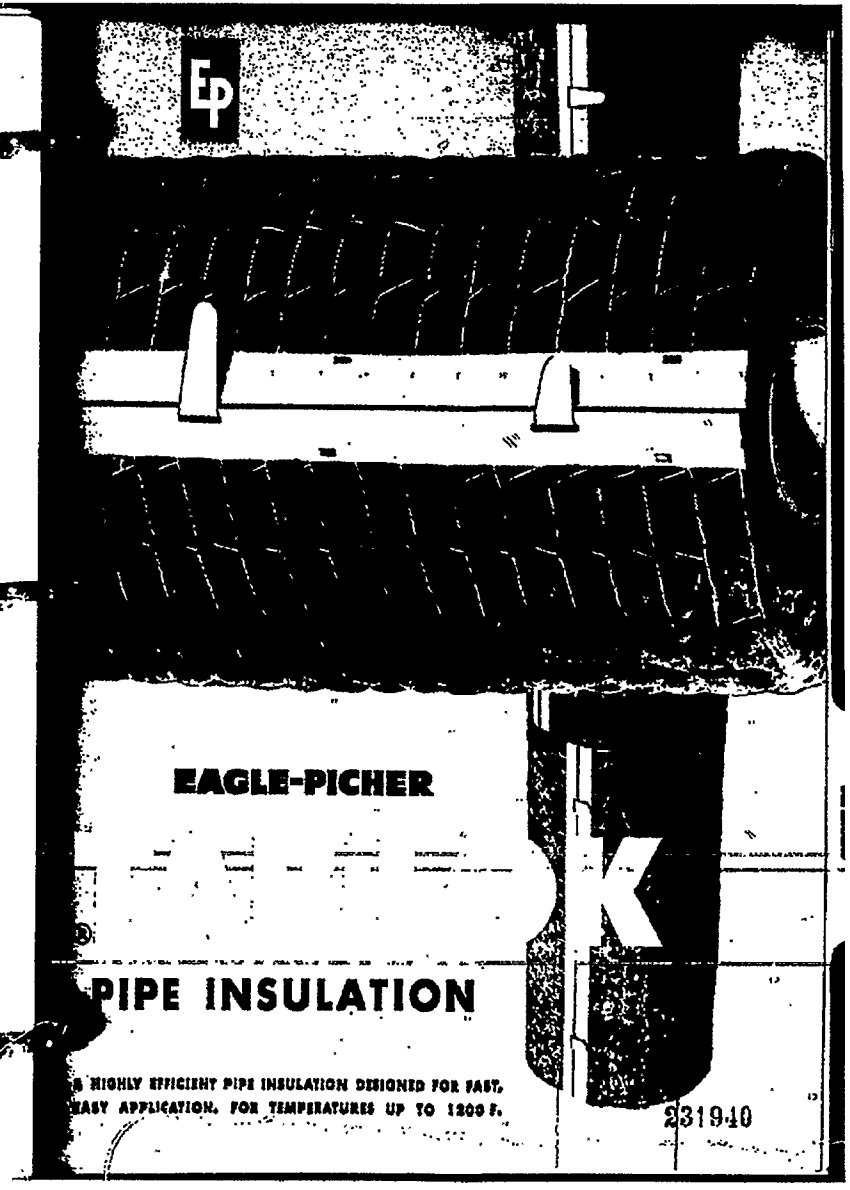
PLAINTIFF'S
EXHIBIT
Y-145

PIPE COVERINGS

PIPE COVERINGS



EAGLE-PICHER

K

PIPE INSULATION

A HIGHLY EFFICIENT PIPE INSULATION DESIGNED FOR FAST, EASY APPLICATION. FOR TEMPERATURES UP TO 1200 F.

231940

EAGLE-PICHER TAB-LOK

PIPE INSULATION



For temperatures to 1200 F

Meets A.S.T.M. Spec. C-280 and Fed. Spec. HH-I-552, Type II

Eagle-Picher TAB-LOK Pipe Insulation is a formed pipe covering made by felting and securing high temperature mineral wool between metal fabrics of special copper bearing metal lath and galvanized wire netting held in place by soft galvanized tie wires. The inside metal fabric is cut- and spaced for easier application—to fit exactly the outside circumference of the insulation. Running along the edges, for the full length of each TAB-LOK section, are two galvanized strips, one having three strong, flexible tabs, the other, matching slots.* In application, the tabs are passed through the slots, providing a close, secure fit as they are pulled taut and bent over.

PHYSICAL DATA

Corrosion Resistance—Eagle-Picher TAB-LOK Pipe Insulation contains nothing to cause or accelerate corrosion.

Fire Resistance—Eagle-Picher TAB-LOK Pipe Insulation is non-combustible.

Moisture Absorption—Practically nil. In an Underwriters' Laboratories Test, Eagle-Picher Mineral Wool gained less than ½ of 1% on weight after being subjected to a relative humidity of 100% for over 200 hours.

Temperature Range—Up to 1200 F.

USES

Eagle-Picher TAB-LOK Pipe Insulation is designed to provide maximum heat saving efficiency on steam piping and hot lines. It may be finished with protective coatings if desired. Also for use on outside cold water lines.

SIZES

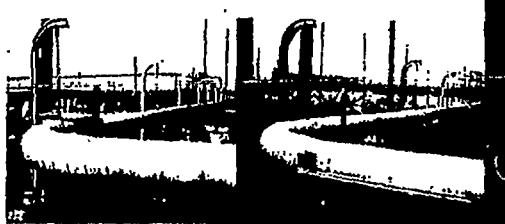
Eagle-Picher TAB-LOK Pipe Insulation is manufactured in sections of 2 linear ft. for nominal pipe sizes from 4 in. up to and including 30 in. in diameter. Available in thicknesses of 1½ in. to 4 in. (Over 30 in. in diameter and over 4 in. in thickness available on special order.)

ADVANTAGES

Saves Time and Labor—Eagle-Picher TAB-LOK Pipe Insulation can be applied in about half the time required in the application of ordinary pipe coverings. It goes on in a single layer regardless of thickness. It is easy to handle, cut and fit. No special fitting problems involved, no costly tools needed . . . simply draw tabs through slots, pull taut, and bend tabs over.

Highly Resilient—TAB-LOK Pipe Insulation has excellent resiliency due to its fibrous structure, allowing a minimum of slots in expansion and contraction of heated equipment. Such action is frequently responsible for cracking the exterior lauds in non-resilient insulations.

*On TAB-LOK pipes weighing 30 lbs or more, the closure device is supplied with 4 tabs and slots instead of the customary 3.



Here is positive proof of the permanency of mineral wool pipe covering made by Eagle-Picher. After 20 years of continuous, rugged service at the St. Joseph Power and Light Company, St. Joseph, Missouri, the insulating material showed absolutely no wear and was still providing outstanding thermal efficiency!

231911

INSTALLED IN 1927 — BARE VIEW—20 YEARS LATER

You Have Never Seen a Pipe Covering Easier to Apply!



First Steps: Since the center tab is longer than the two end tabs, it is slipped through the slot on the closure side first and then bent over.



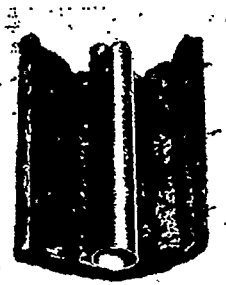
Second Steps: With the center tab holding the TAB-LOK Pipe Covering in place, the two end tabs are pulled through the slots and secured.



Third Steps: The center tab which had been serving a "holding action" is now pulled up tightly and bent over for maximum tightness.



A section of pipe TAB-LOK insulated with the staggered way closure strips are arranged to give a close moisture seal to prevent voids



Opened-up view of Eagle-Picher TAB-LOK Pipe Insulation. Note the unique, flexible tabs which provide a tight, secure seal.

ADDED ADVANTAGES

Close Butted Joints—TAB-LOK Pipe Insulation eliminates the openings or voids, caused by expansion and contraction of heated equipment, that are normal to preformed pipe covering.

Water Repellent—The inherent non-absorbancy of Eagle-Picher TAB-LOK Pipe Insulation assures permanent insulating performance under most conditions of humidity.

High Insulating Values—TAB-LOK Pipe Insulation is capable of withstanding continuous high temperatures to 1200 F.

Durable—Under normal operating conditions, the chemical and physical stability of Eagle-Picher TAB-LOK Pipe Insulation, plus the protection offered by the metal fabric, means virtually permanent protection against heat loss.

Straight, Uniform Alignment on Pipe—The galvanized strips act as a "straight edge" guide in keeping the sections of TAB-LOK Pipe Insulation in uniform alignment.

Uniform Tightness—The tab-and-slot feature of TAB-LOK Pipe Insulation provides a means for securing uniform tightness throughout the entire length of the pipe being insulated . . . so necessary for top efficiency.

Easily Removed for Line Inspection—Simply straighten the tabs and slip them from the slots and the section of TAB-LOK Pipe Insulation can be removed and replaced. Quick! Easy!

Economical—Its much greater efficiency than the average type of pipe covering provides worthwhile economy. This, coupled with the ease and speed of application, adds up to immediate, important dollar savings that continue indefinitely.

Requires Less Storage Space—Packaged flat in cartons that are easy to handle and stack in a minimum of space in warehouse; makes TAB-LOK easier to handle on job scaffolding.

231942

STEAM PRESSURE OR CONDITION	TEMPERATURE	THICKNESS OF INSULATION* IN INCHES	
		PIPES 3 IN. AND LARGER	PIPES 4 IN. AND 4½ IN.
Hot Water		1	1
0 to 25 lb	212 to 267 F	1	1
25 to 100 lb	267 to 338 F	1	1
100 to 200 lb	338 to 388 F	1½	1
Low Superheat	388 to 500 F	1½	1½
Superheat	500 to 600 F	2	1½
High Superheat and Hot Oil Lines	600 to 700 F	2	2
	700 to 800 F	2½	2
	800 to 1000 F	3	2½
	1000 to 1200 F	4	3½

*8 in. thickness is the maximum practical thickness for TAB-LOK Pipe Insulation from a manufacturing standpoint.

PIPE COVERINGS

REPRESENTATIVE HEAT LOSSES & EFFICIENCIES

PIPE TEMP. F.	TEMP. DIFF. °	PIPE SIZE:	3 IN.	4 IN.	6 IN.	8 IN.	10 IN.
300	300	Recommended Thickness	1½	1½	1½	1½	1½
		Btu Loss*	71	86	118	147	178
		Surface Temp.	133	119	123	122	114
		% Efficiency	92.08	92.53	93.04	93.34	93.54
500	500	Recommended Thickness	1½	1½	2	2	2
		Btu Loss*	133	158	217	220	265
		Surface Temp	129	131	125	125	129
		% Efficiency	94.19	94.55	94.91	96.04	96.18
700	700	Recommended Thickness	2	2	2	2	2
		Btu Loss*	145	198	266	330	397
		Surface Temp	135	137	132	137	132
		% Efficiency	96.68	96.47	96.78	96.93	96.9
800	800	Recommended Thickness	2½	2½	3	3	3
		Btu Loss*	171	200	239	292	347
		Surface Temp	135	137	137	137	132
		% Efficiency	97.0	97.2	97.78	97.91	98.01
1000	1000	Recommended Thickness	3	3	3	3	3
		Btu Loss*	212	245	322	393	468
		Surface Temp.	150	145	148	143	141
		% Efficiency	97.6	97.85	98.08	98.[illegible]	98.28

80° Ambient Still Air

*Btu losses are per hour per linear foot

231943

Form No. [illegible] Printed in U.S.A. PB 103

RECOMMENDED APPLYING THICKNESSES

Eagle-Picher TAB-LOK normally should be applied in the thicknesses indicated in this table. However for outdoor piping all thicknesses should be increased by ½ in. and for underground applications these thicknesses may be decreased by ½ in. where practical to do so.

SHIPPING DATA

Eagle-Picher TAB-LOK Pipe Insulation is shipped in cartons "open" (flat) and weighs 1.3 lb per sq ft of outside surface area for 1 in. thick. For each additional inch of thickness, add .8 lb per sq ft outside area. These are approximate weights.

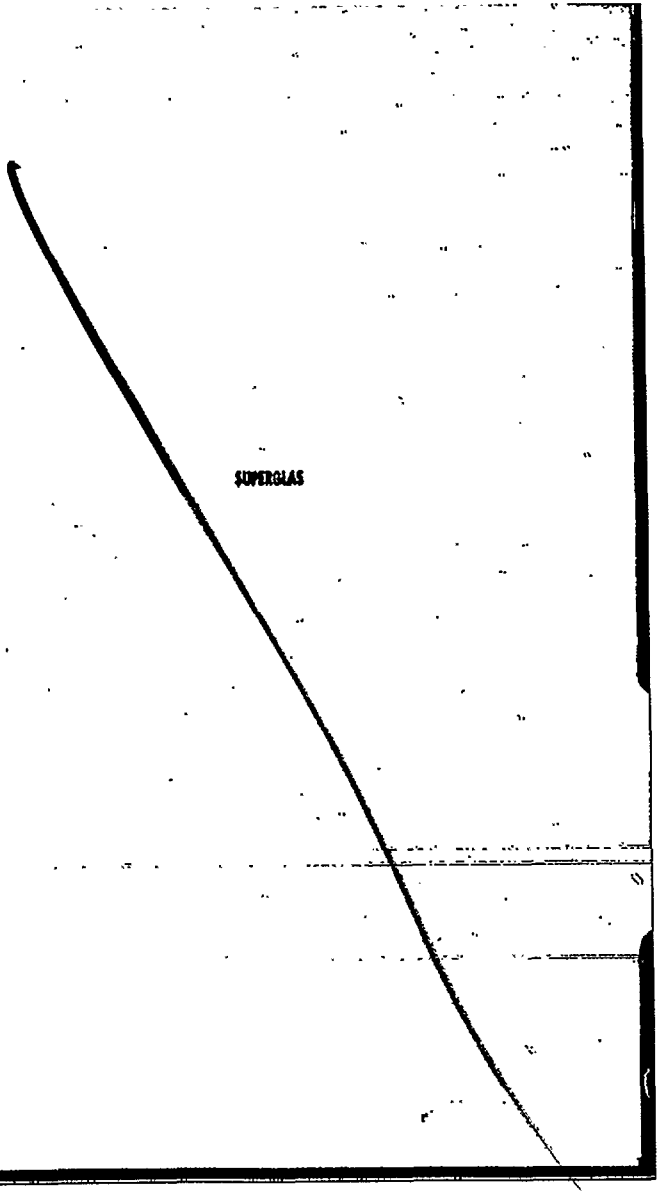
SHIPPING POINT

Joplin, Missouri
Cartons
Less cartons
Minimum cartons:
$5,000 list value
(TAB-LOK may be combined with other Eagle-Picher insulations in shipment.)

EAGLE EP PICHER

THE EAGLE-PICHER COMPANY
General Offices, Insulation Division
American Building, Cincinnati 1, Ohio

Member
National Insulation Manufacturers Association



SUPERGLAS

Alpha Systems
Microfilming Specialists
458 Pike Road
Huntingdon Valley, PA 19006
(215) 322-8100

MICROFILM CERTIFICATE

Dechert, Price & Rhoads
COMPANY

Spec. 7065 DR

The microfilming of official records, designated below, in the offices of the identified herein, is true and correct and same is performed as prescribed by the custodian of records.

The following records are hereinafter microfilmed for preservation, relating to substitution of microfilm for the original record in the interest of economy and conservation of space, in accordance with the Uniform Photographic Copies of Business and Public Records As Evidence Act.

RECORD DESCRIPTION	BEGINNING	ENDING
Brochures	Keene Baldwin Ehret Hill Estimating Dept	Eagle Pitter (2)

dawn

ROLL 2

DATE 9/4/81

CART. COLOR

END

ALPHA SYSTEMS