



A/C PIPE PRODUCERS ASSOCIATION

SUITE 1113 • 1275 CONNECTICUT AVENUE, N.W., WASHINGTON, D.C. 20009 • TELEPHONE (202) 232-2100

March 27, 1975

TO: AACPP Board of Directors
FROM: J. C. Jackson, Executive Director
REF: AACPP Industry Statistics
Annual Report - A/C Pipe Production

Attached are consolidated data on domestic (i.e. United States) production of A/C pipe in 1974. The Association will publish comparable production data for North America as soon as the necessary information is received from each non-domestic member company. Compliance by your company with AACPP's November 7, 1974, request for information is as follows:

☒ Company data received.

☐ Company data not received. Additional reporting form enclosed.

JCJ:mcm
Enclosure

cc: A. Kahn w/ enc.
L. Taylor w/o enc.
Industry Promotion Committee w/o enc.

*Martha
Distribute one copy
to each statistic recipient
GB*



A/C PIPE PRODUCERS ASSOCIATION

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CONFIDENTIAL REPORT

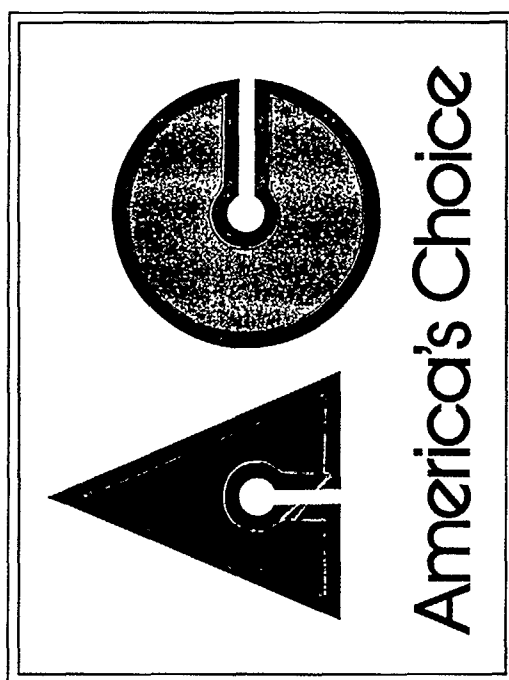
ANNUAL REPORT - A/C PIPE PRODUCTION		YEAR 1974
PRODUCTION DATA	PRODUCTION CAPACITY*	931,500 TONS
	PRODUCTION ACTUAL	994,091 TONS
	PRODUCTION RATIO - ACTUAL/CAPACITY	106.72 PERCENT
* Based on three (3) shift, five (5) day operation producing normal product mix.		

PRODUCING PLANT DATA	PLANT LOCATION	NO.	WET MACHINE DISTRIBUTION			
			TOTAL ALL SIZES	3 METER (10')	4 METER (13')	OTHER SPECIFY
	COMPANY TOTAL	14	28	9	19	0

COMMENTS: 1. Report applicable to domestic (i.e. United States)
producers only.

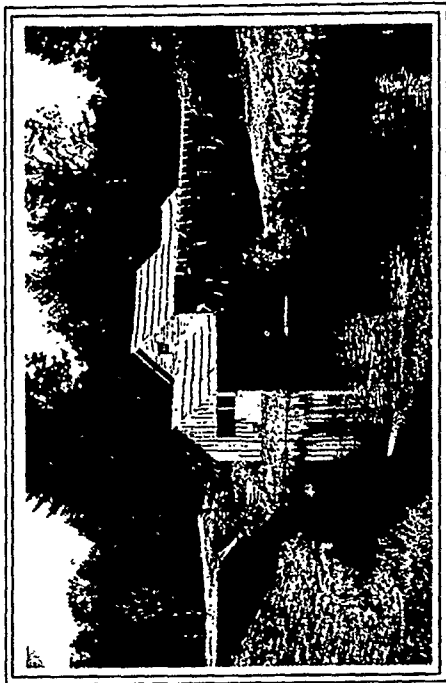
COMPANY: A/C Pipe Producers Association
NAME: J. C. Jackson
DATE: March, 1975

CAPCO JEN 0025706



"Till taught by pain
man really knows not
what good water's worth"
Don Juan (Byron)

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A land that is naturally poor in water can only survive by heroic measures.

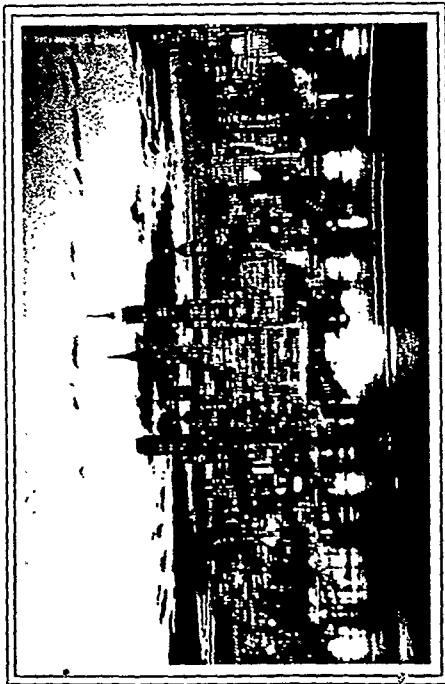
In many countries, the use of water for all purposes — domestic, agriculture, industry — is as low as 10 gallons per person per day.

The United States, blessed with an abundance of ground water and an average annual rainfall of 1500 cubic miles of water (7 trillion tons) has a per capita use of 1800 gallons per day — by far the greatest on earth.

Of the 1800 gallons per day, some 1650 gallons are required by industry and agriculture. For example, it takes about 15 tons of water to produce one pound of beef; nearly 20 tons of water to produce a bushel of corn.

About one-third of the total electrical energy in this country is generated by water power.

For personal and domestic purposes — drinking, cooking, bathing, washing, etc. — we use about 150 gallons per person per day. This is 15 times more than all of the water used for all purposes in many countries of the world.



Fortunately for all of us, water recycles itself by a process known as the hydrologic cycle and is used over and over again. . . . evaporating and then returning to earth as precipitation.

Indeed the world's water problem is not necessarily one of scarcity. The more than 9 million billion gallons of fresh water found on earth are sufficient to meet all present known and anticipated future needs.

Today's water problem is one of conservation, quality and distribution. Stewardship of our water resources must be everyone's concern. To this end we must, as a nation

- *practice conservation in use
- *maintain high standards of water quality
- *provide economic, reliable distribution

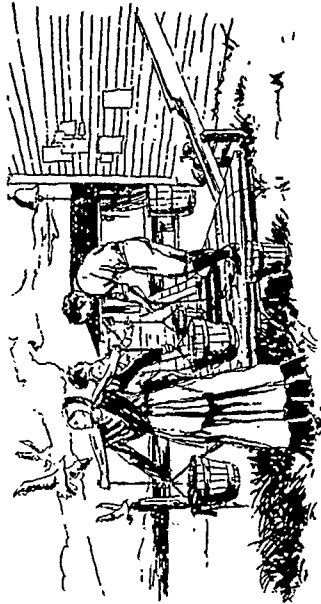
Water Supply... Progress In Perspective

The history of the United States is the history of water.

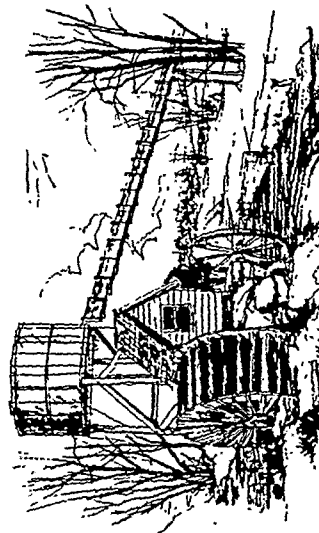
Not unlike ancient Egyptian and Roman civilizations, water supply in colonial America developed through an evolutionary process. Utilizing available materials, early systems reflected a common sense application of basic hydraulics plus a full measure of "Yankee ingenuity."



The first inhabitants settled along streams and rivers where the waters ran fresh and clear. Animal skins, dried gourds, clay pots and wood-stave buckets were primitive means to collect, transport and store water. As settlements multiplied and grew into villages and towns, captive springs and shallow wells became more convenient and protected sources of potable water.



In 1652, three decades after the landing at Plymouth Rock, the first "piped" water supply was built in Boston. Log conduits conveyed spring and well water to a crude wooden reservoir. Six years later the first public well was dug in New York City near Bowling Green. As the need for "public water" spread, wells appeared on other populous corners. Tea Water Pump in Chatham Square was said to be the most patronized well in the city.

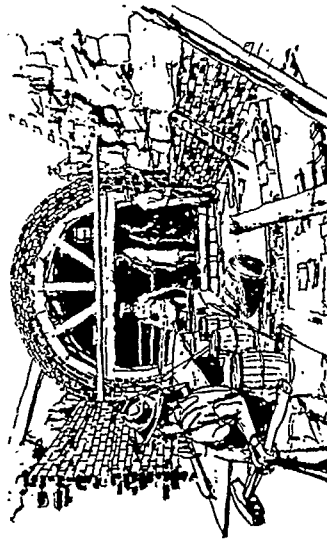


Nearly a century later in 1754, Danish millwright Hans Christiansen engineered the first coordinated water system in Bethlehem, Pennsylvania. An eighteen-foot water wheel, a wooden pump and a standpipe distributed spring water through a simple network of bored hemlock logs to the church, school and main street corners. Water service was much improved in 1764 with the installation of steam engines to pump water uphill.



By 1800, history records only nine waterworks throughout the thirteen original colonies. New York, Philadelphia, Boston . . . bustling centers of commerce . . . were plagued by waterborne epidemics of cholera and typhoid. Fires frequently leveled entire city blocks, despite the increasing availability of water. Bucket brigades and hand pumps remained the first line of defense in the absence of pressurized water systems.

As the country made the transition from the American Revolution to the Industrial Revolution, the emerging waterworks industry confronted a steadily growing demand for more and safer water. The 19th century saw major advancements in water supply treatment and distribution. Increased reliance on new technology and more efficient power sources resulted in progressively higher operating pressures. Wooden pipe was gradually replaced by metal and cement products.



The Croton Aqueduct, completed in 1890, was one of the most ambitious waterworks projects of the period. Through a cavernous eight-foot subterranean channel, hundreds of millions of gallons of water were transported forty miles to thirsty New York City.



A major improvement was made in water quality in 1892 when James P. Kirkwood successfully constructed the first sand filtration plant in Poughkeepsie, New York.

By the turn of the century, the intrinsic contribution of water quality to life quality became increasingly evident. Mechanical filtration . . . chlorination . . . water chemistry . . . step by step, over the past 75 years, water supply technology has developed into a complex science.

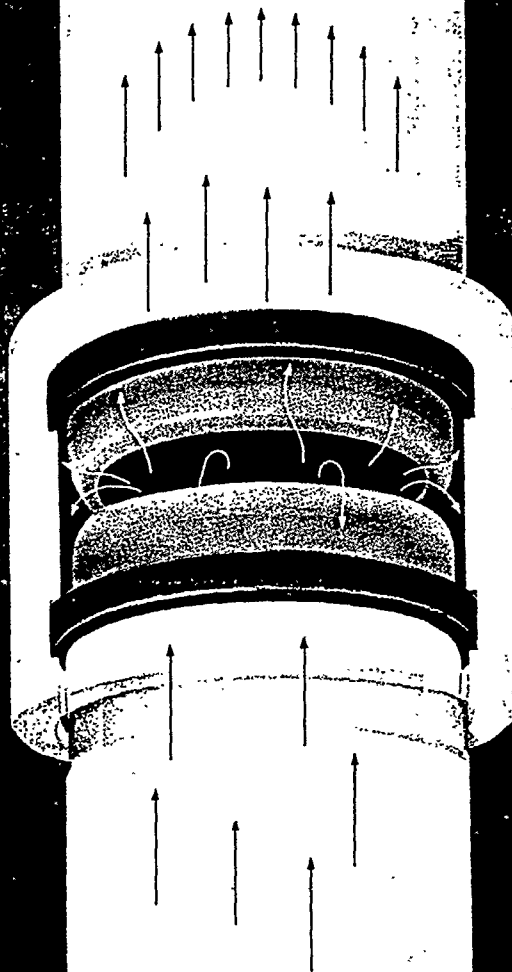


Today the 40,000 waterworks that collect, treat and distribute the prodigious quantity of water used in the United States represent an investment of more than \$50,000,000,000. This is about \$250 per person . . . a remarkably low premium for the assurance of quality water. This per capita figure will and must increase as water utilities wrestle with changing quality standards, double-digit inflation and the energy crisis. Compliance with the Safe Drinking Water Act, competing demands for investment capital and high interest rates will add to the cost of water in the future.



Value engineering *must* become a prerequisite to the selection and specification of cost effective, long life, high performance materials. Initial costs, as well as operational and maintenance cost *must* be carefully analyzed during the life of the investment. Purchasing policies *must* be non-discriminating and *must* encourage open, competitive bidding. America demands quality water . . . quality water demands no less.

Value Engineered Pipe



DURABILITY

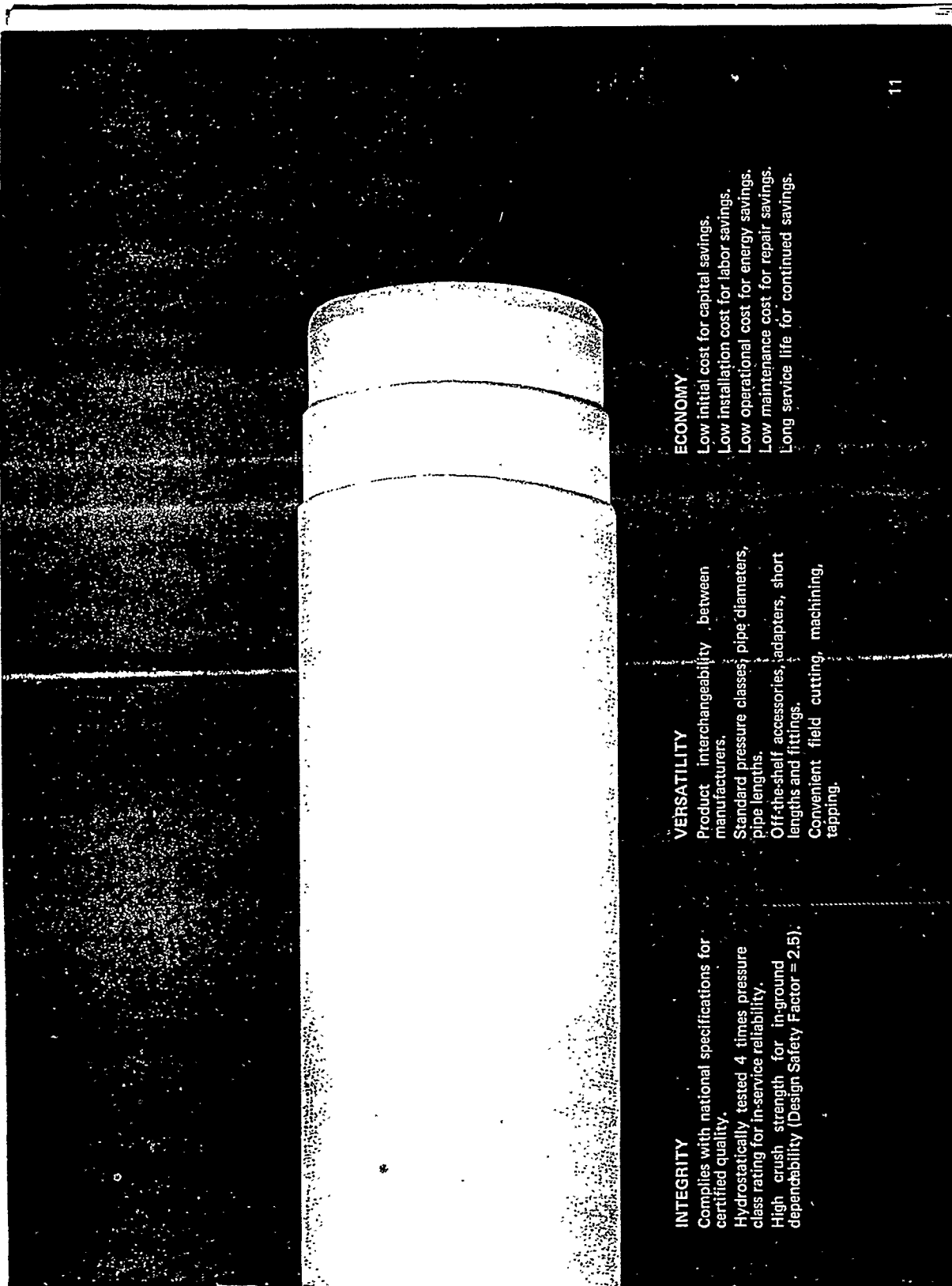
Non-metallic asbestos-cement composition for wall-to-wall corrosion resistance.
High pressure steam-cured for maximum chemical stability.
High tensile strength asbestos fibers securely locked-in for permanent reinforcement.

FLEXIBILITY

Dual rubber sealing rings for optimum joint flexibility.
Recessed seating grooves for positive, permanent watertight seals.
Self-aligning, push-on type coupling for rapid assembly.
Automatic pipe end separation for pipe expansion and deflection.
Built-in resilience to shock, vibration and line stress.

EFFICIENCY

Excellent flow coefficient ($C=140$) for maximum hydraulic capacity.
Permanently smooth bore for minimum friction loss.
Long lengths, fewer joints for lower water loss.



INTEGRITY

Complies with national specifications for certified quality.
Hydrostatically tested 4 times pressure class rating for in-service reliability.
High crush strength for in-ground dependability (Design Safety Factor = 2.5).

VERSATILITY

Product interchangeability between manufacturers.
Standard pressure classes, pipe diameters, pipe lengths.
Off-the-shelf accessories, adapters, short lengths and fittings.
Convenient field cutting, machining, tapping.

ECONOMY

Low initial cost for capital savings.
Low installation cost for labor savings.
Low operational cost for energy savings.
Low maintenance cost for repair savings.
Long service life for continued savings.

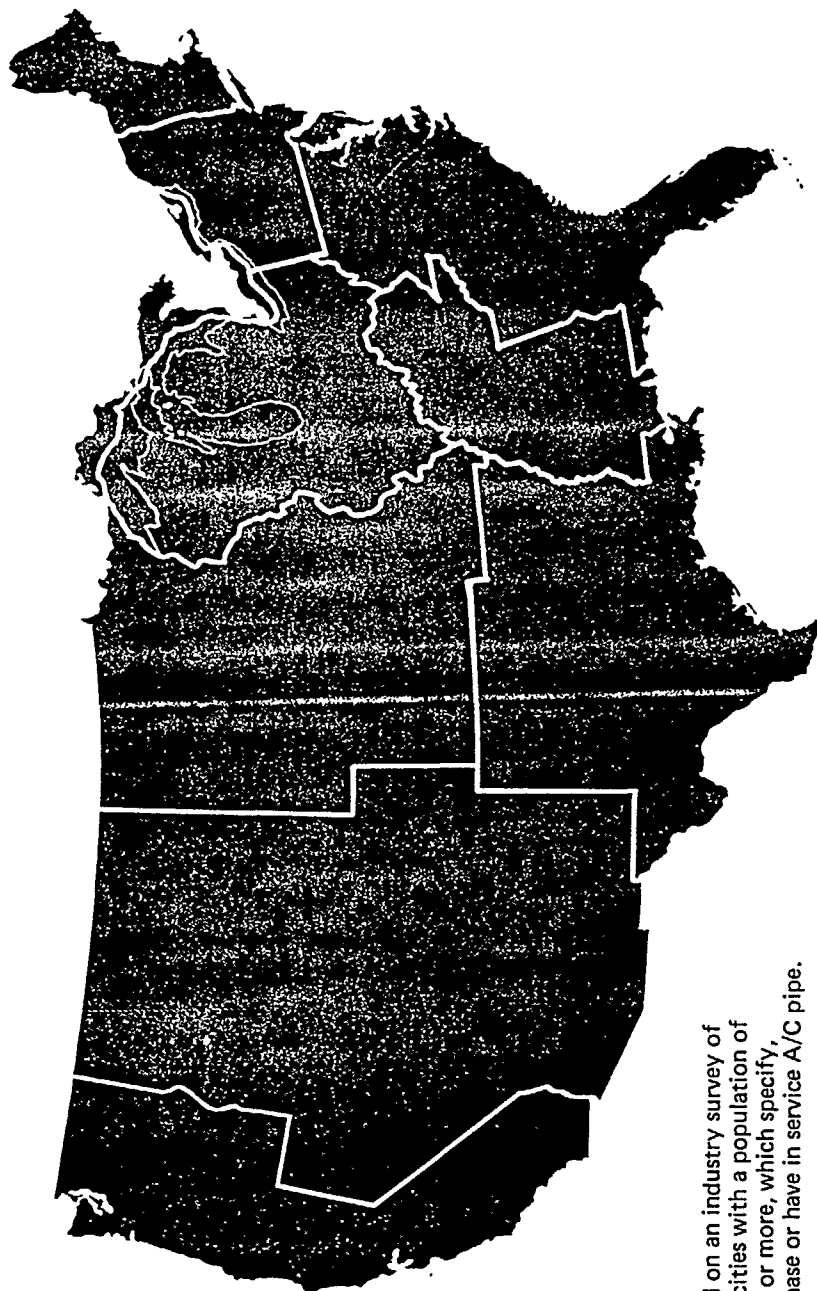
America's Choice

Of the total costs of developing a water supply system, distribution costs represent 50-75%. Water pipe is a major cost component. Thus, its selection is critical. Unlike 200 years ago, today's municipality can choose from a variety of piping materials . . . asbestos-cement (A/C), cast and ductile iron, concrete, PVC and steel. Nevertheless, the objective remains the same: *to choose that pipe which delivers the most quality water at the least cost commensurate with high system reliability.* Value engineering is the best assurance that the proper pipe will be chosen.

Providing water pipe of integrity at a cost the user can and will support is the commitment of the A/C pipe industry. How well has the industry honored this commitment? In less than half a century, A/C pipe has earned the reputation as "the value engineered pipe." A reputation built when and where it counts . . . during installation, in service and in the pocketbook. A reputation backed by national specifications . . . American Water Works Association, American Society for Testing and Materials, Underwriters Laboratories, National Fire Protection Association. A reputation confirmed whenever and wherever the right to compete has not been denied by restrictive specifications and traditional buying habits.

Year by year, installation after installation, A/C pipe has been the first choice of large and small municipalities alike. Why? *Very simply, A/C is today's best buy in water pipe.* One out of every three feet of distribution pipe currently being installed is asbestos-cement. Symbolic of its national acceptance is the increasing number of cities that specify, purchase or have in service A/C water pipe. Clearly, today's trend is towards A/C . . . America's Choice.

AC Cities*-A Survey



* Based on an industry survey of U.S. cities with a population of 1000 or more, which specify, purchase or have in service A/C pipe.

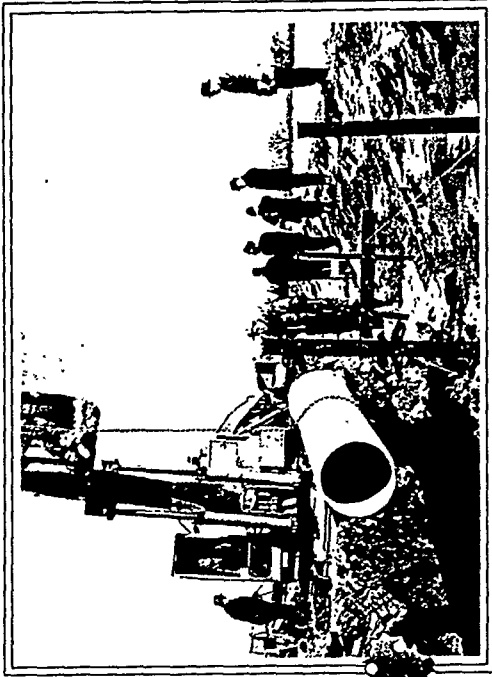
Northeast

States: Connecticut, Rhode Island,
Maine, Massachusetts,
New Hampshire, Vermont

A/C Cities: 322

Population: 3,488,000

Percent of Total Cities: 45



Low Initial Cost

Designed for value. Engineered for performance.

A/C costs less than cast and ductile iron for practically all distribution pipe sizes. Invest dollars in pipe, not corrosion allowances and costly cathodic protection. Lower first costs. Lower bonded indebtedness. Lower long term interest charges.

Buy A/C . . . America's Choice.

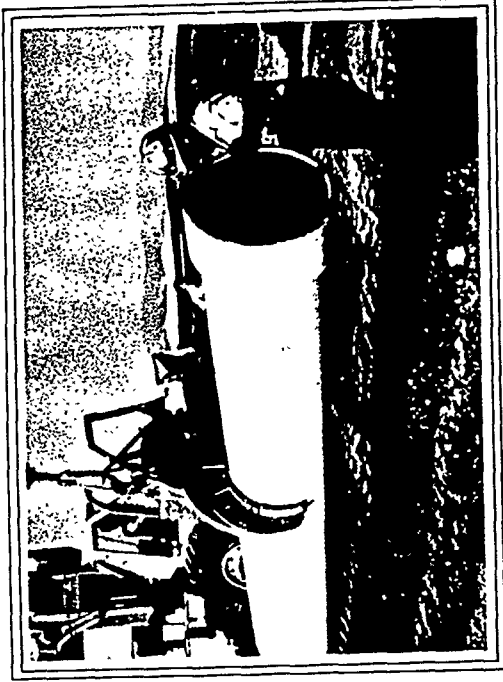
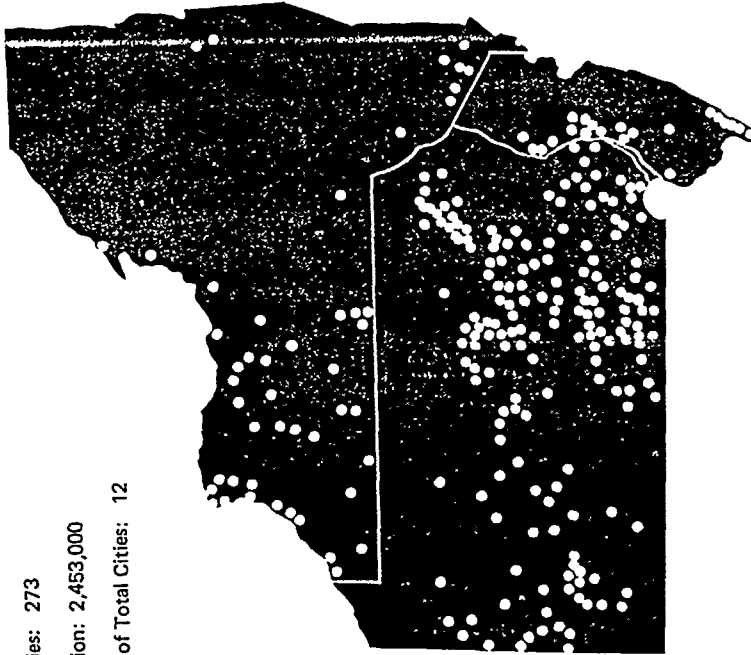
Middle Atlantic

States: New Jersey, New York,
Pennsylvania

A/C Cities: 273

Population: 2,453,000

Percent of Total Cities: 12



Low Installation Cost

Light in weight. Long in length.

A/C costs less to install. Quick connecting couplings installed at the factory or on the job site. From truck to trench, assembly is swift, sure, simple. No special requirements for trenching, bedding or testing. Pay less freight per foot. Lay more pipe per day. Cut construction time and costs.

Install A/C . . . America's Choice.

South Atlantic

States: Delaware, Florida, Georgia,
Maryland, North Carolina, South
Carolina, Virginia, West Virginia

A/C Cities: 542

Population: 4,870,000

Percent of Total Cities: 28



Low Operating Cost

Smooth bore today. Smooth bore tomorrow.

A/C moves more water for less dollars. No tuberculation to decrease effective pipe size. Permanent high flow characteristics maintain hydraulic efficiency, guarantee fire flow availability. Eliminate low pressure complaints. Reduce pumping loads. Minimize energy costs.

Specify A/C . . . America's Choice.

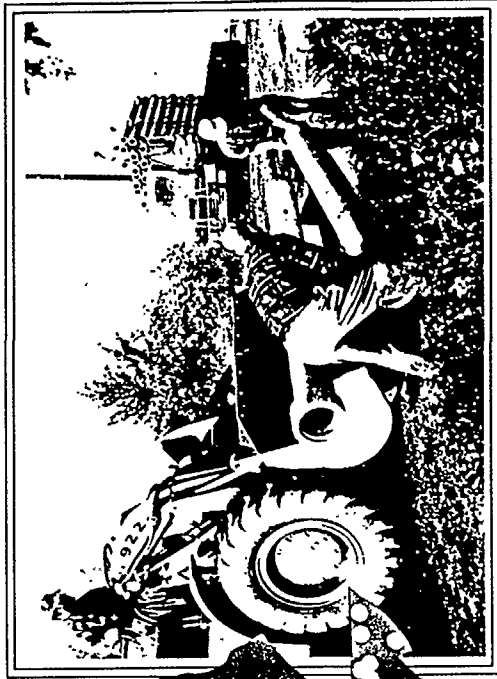
E.S. Central

States: Alabama, Kentucky,
Mississippi, Tennessee

A/C Cities: 157

Population: 1,702,000

Percent of Total Cities: 19



Low Maintenance Cost

Durability without cost. Lines without loss.

A/C is practically maintenance free. Built-in protection, inside, outside, all the way through to rust, electrolysis, galvanic and electrochemical types of corrosion. Put a stop to periodic cleaning. Decrease down time. Roll back repair costs.

Depend on A/C . . . America's Choice.

E.N. Central

States: Illinois, Indiana, Michigan,
Ohio, Wisconsin

A/C Cities: 614

Population: 13,922,000

Percent of Total Cities: 31



Structural Integrity

Factory-tested. Field-proven.

A/C is the optimum balance between high performance, long life and cost effectiveness. Quality control second to none in the pipe industry assures high pressure reliability with sensible factors of safety . . . consistently, inexpensively. Examine the alternatives. Analyze the costs. Pay only for performance.

Design for A/C . . . America's Choice.

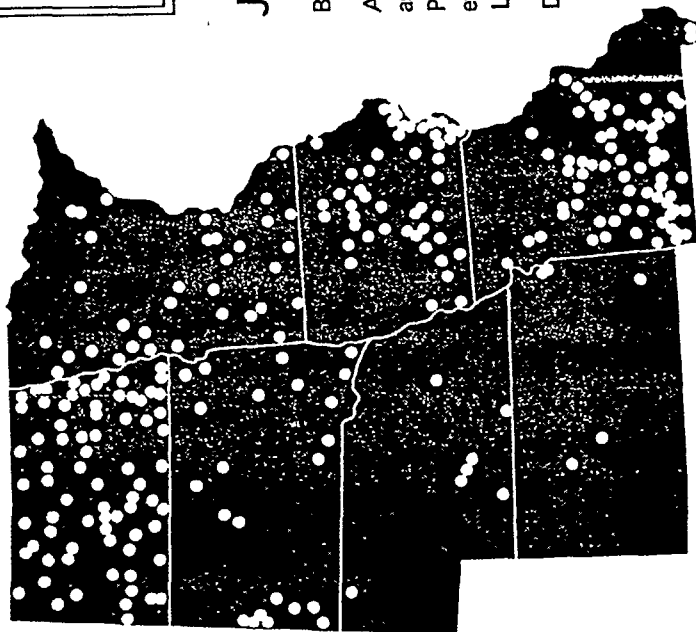
W.N. Central

States: Iowa, Kansas, Minnesota,
Missouri, Nebraska, North
Dakota, South Dakota

A/C Cities: 278

Population: 2,318,000

Percent of Total Cities: 20



Joint Reliability

Built-in flexibility. Permanent bottle-tight seal.

A/C minimizes water loss, maximizes water revenue. Two easy assembly steps: Lubricate . . . Slide pipe in . . . That's all! Positive joint closure, immediately, automatically, permanently, even under adverse weather and ground conditions. Meter more. Lose less. Protect your treatment dollar.

Distribute with A/C . . . America's Choice.

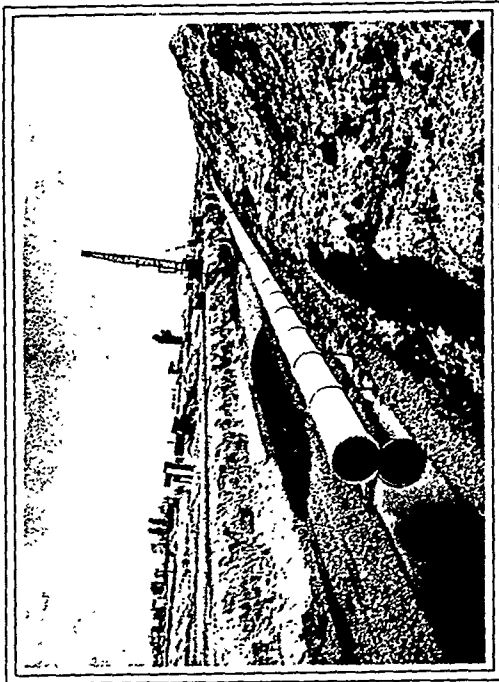
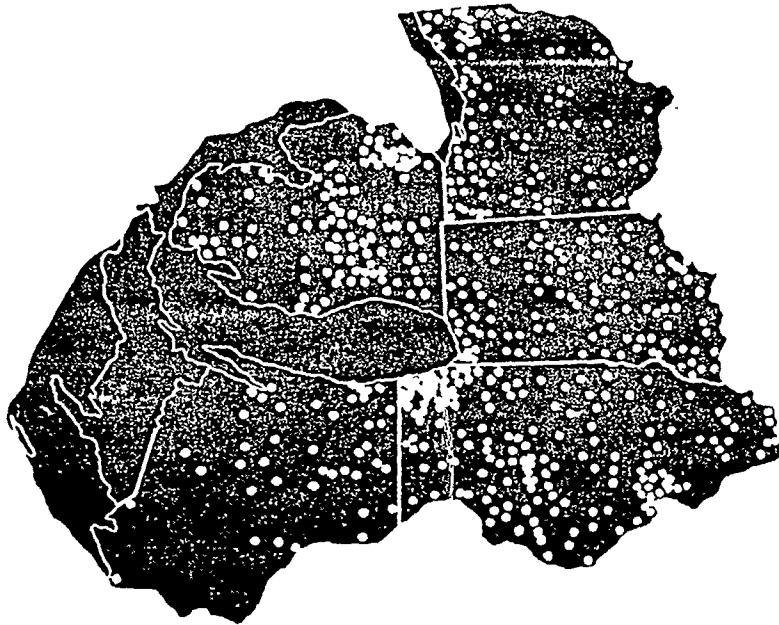
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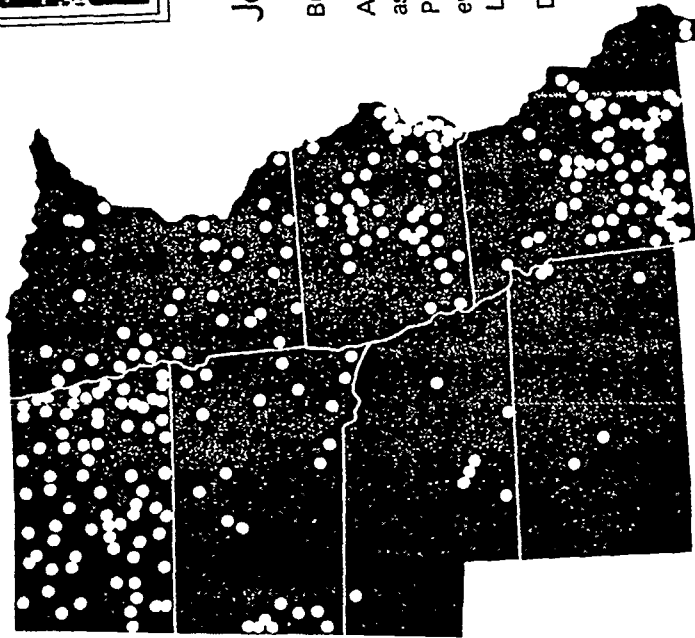
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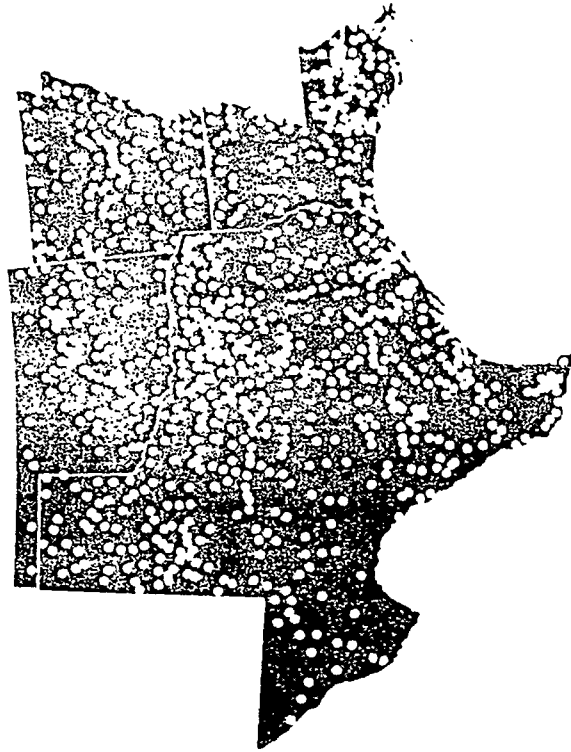
W.S. Central

States: Arkansas, Louisiana,
Oklahoma, Texas

A/C Cities: 1,033

Population: 14,914,000

Percent of Total Cities: 81



Versatility

Fits the first time. Every time.

A/C connects with ease to hydrants, valves, bends and tees. Interchangeable pipe design and standard accessories make short work of add-ons, tie-ins, closures. Simplify service connections. Avoid adaptability problems. Make ends meet.

Standardize with A/C . . . America's Choice.

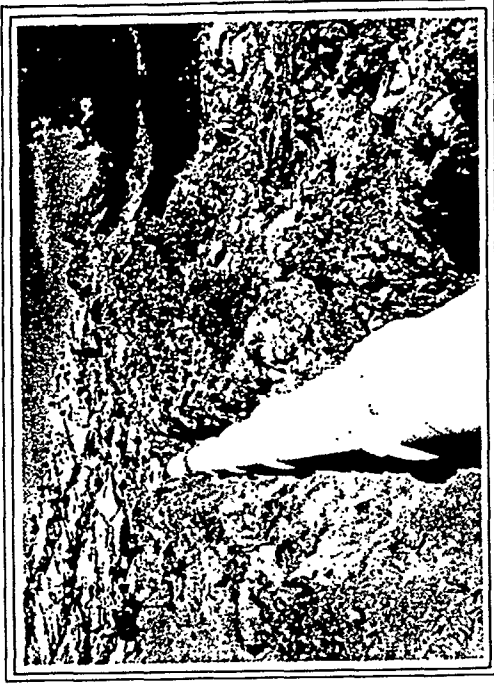
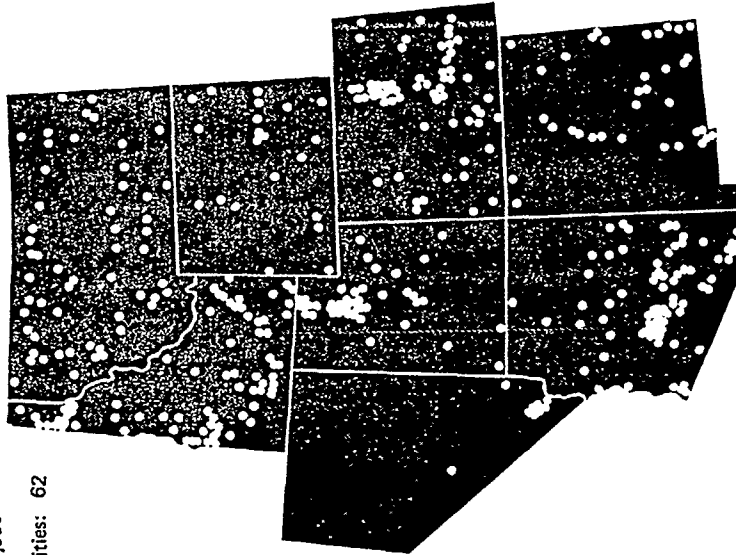
Mountain

States: Arizona, Colorado, Idaho,
Montana, Nevada, Utah,
New Mexico, Wyoming

A/C Cities: 396

Population: 4,860,000

Percent of Total Cities: 62



Long Service Life

Top of the line durability. Bottom line savings.

A/C costs less over the long run. No other water pipe gives you so much built-in corrosion resistance for so little . . . wall to wall, water to water, soil to soil, year to year. Combat corrosion. Put an end to pipe replacement. Show better return on investment.

Protect with A/C . . . America's Choice.

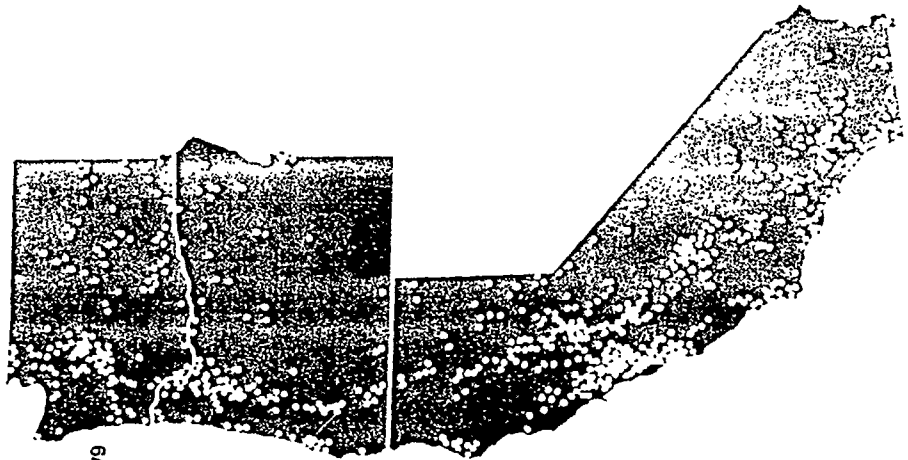
Pacific

States: Alaska, California, Hawaii,
Oregon, Washington

A/C Cities: 973

Population: 16,409,000

Percent of Total Cities: 79



Water Quality

Committed to safe water. Pledged to public health.

A/C safeguards water quality from treatment to tap. "No firm evidence shows that the proper use of asbestos-cement pipe poses a hazard to health by reason of ingestion of asbestos fibers."** No focal point for bacterial growth. No odor. No discoloration.

No problem with A/C . . . America's Choice.

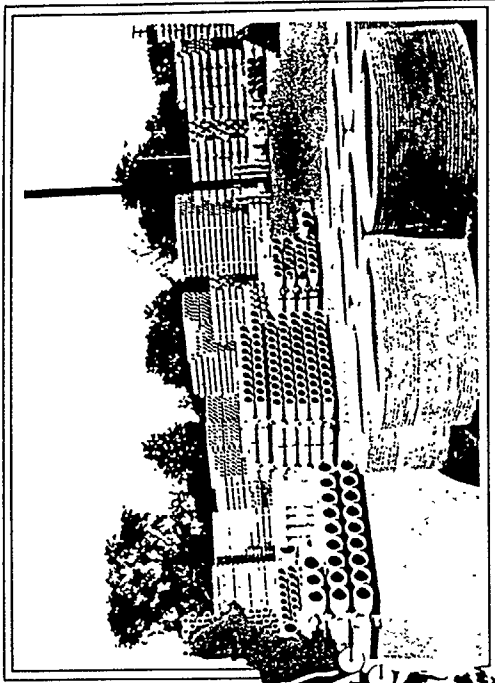
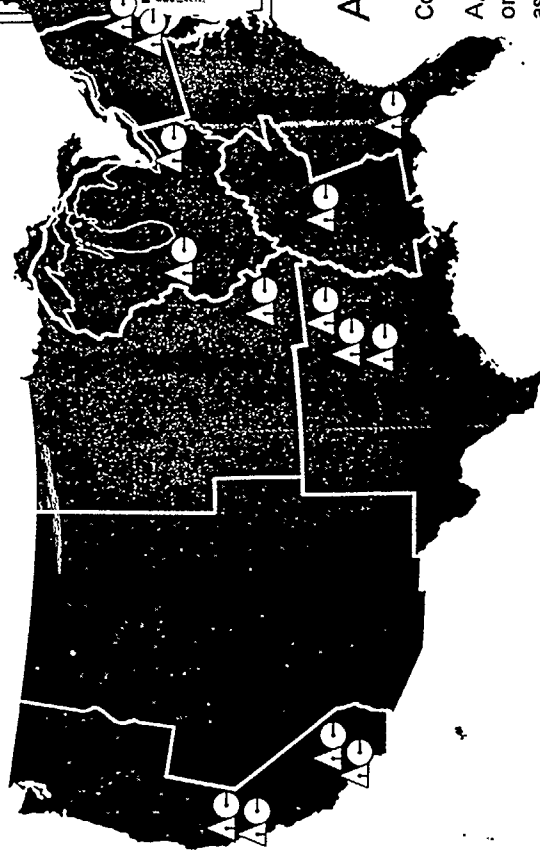
** A Study of the Problem of Asbestos in Water by the American Water Works Association Research Foundation.

United States

A/C Cities: 4,587*

Population: 64,936,000

Percent of Total Cities: 38



Availability

Coast to coast. Four manufacturers, fourteen plants.

A/C delivers . . . when you want it, where you want it. New order, repeat order. Customer service on the phone or technical assistance in the field. The people behind A/C put you ahead. Expect service, not excuses. Plan on delivery, not delays. Count savings, not costs.

* Based on an industry survey of U.S. cities with a population of 1000 or more, which specify, purchase or have in service A/C pipe.

Order A/C . . . America's Choice.

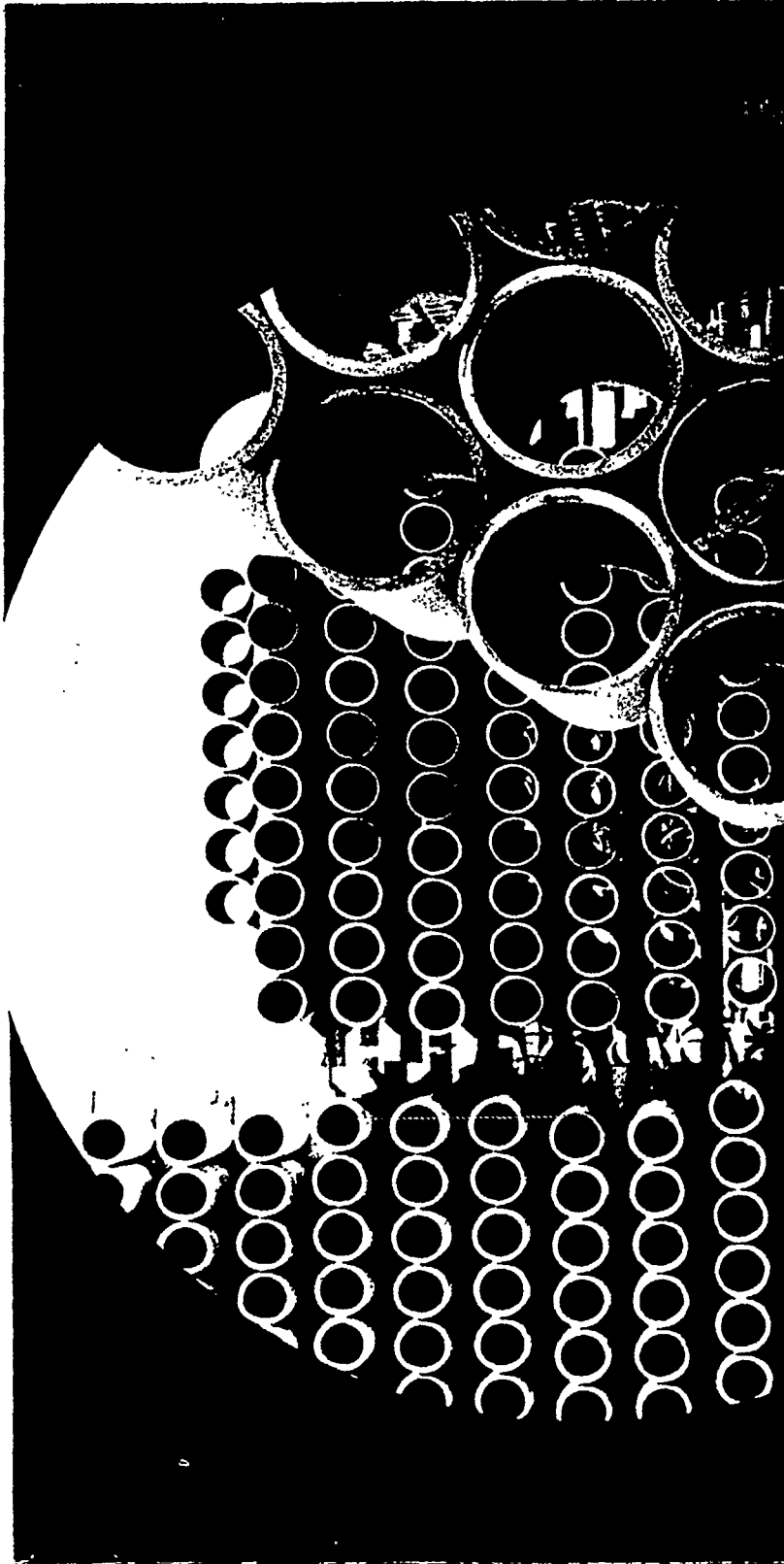
A/C Pipe Producers Association

The A/C Pipe Producers Association functions as a non-profit, non-partisan world-wide trade association on behalf of the A/C Pipe industry. Inquiries for information on specific products, their individual attributes and differences, should be directed to member companies.

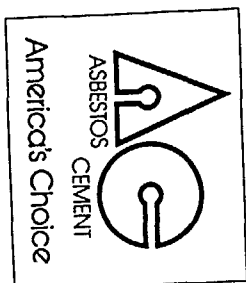
The Statements contained in this document are those of the Association of Asbestos-Cement Pipe Producers and are not intended as a warranty.



- Regular Members**
- Asbestos de Mexico, S.A.
Tlalnepantla, Mexico
 - Atlas Asbestos Company
Montreal, Canada
 - Canadian Johns-Manville Co., Ltd.
Ontario, Canada
 - Cement Asbestos Products Company
Birmingham, Alabama
 - Certain-teed Products Corporation
Valley Forge, Pennsylvania
 - The Flintkote Company
Akron, Ohio
 - Johns-Manville Sales Corporation
Denver, Colorado
 - Mexalit del Norte, S.A.
Mexico City, Mexico
- Associate Members**
- Association de l'Industrie l'Asbeste-Ciment
Nyon, Switzerland
 - Amiantus Centre Export
Hamburg, Germany
 - Asbestos Monterrey, S.A.
Mexico City, Mexico
 - Eternit, S.A.
Kapelle-op-den-Bos, Belgium
 - James Hardie & Company Pty. Ltd.
Sydney, Australia
 - Hellenic Industry for Building Materials
Hellenit, S.A.
Athens, Greece
 - Paraisten Kalkki Oy
Pargas, Finland
 - TAC Construction Materials, Ltd.
Manchester, England

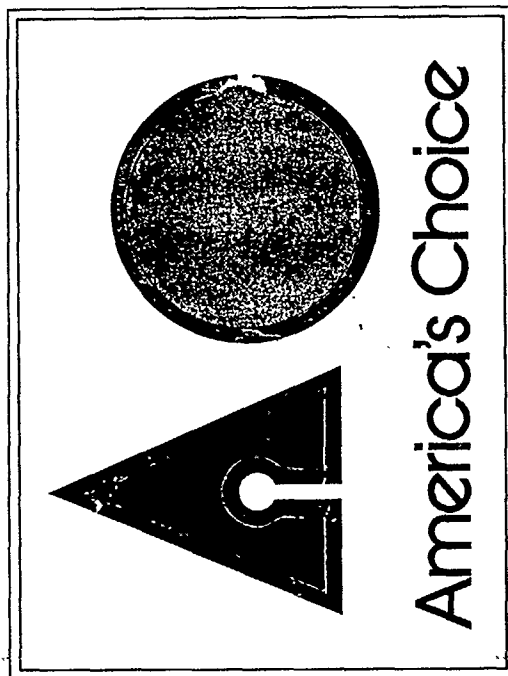


Prepared by the Association of Asbestos-Cement Pipe
Producers as a salute to the American waterworks
industry whose ingenuity, resourcefulness and hard
labor has contributed so much to the health and
prosperity of our nation.



A/C Pipe Producers Association Suite 1113, 1875 Connecticut Avenue, N.W., Washington, D.C. 20009, Phone (202) 232-2100.

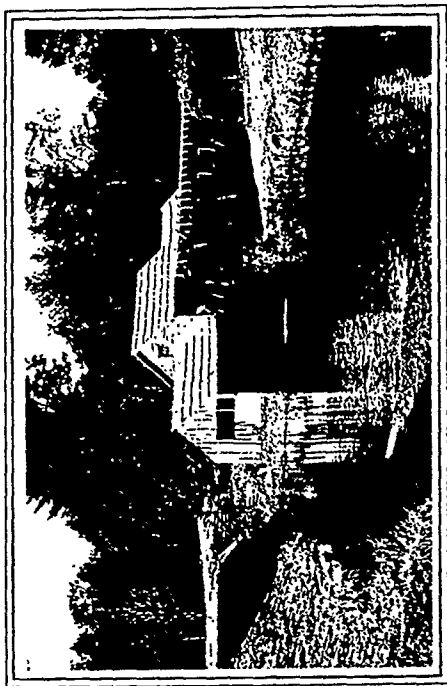
Double-sided



W.B. Farrell

"Till taught by pain
man really knows not
what good water's worth"
Don Juan (Byron)

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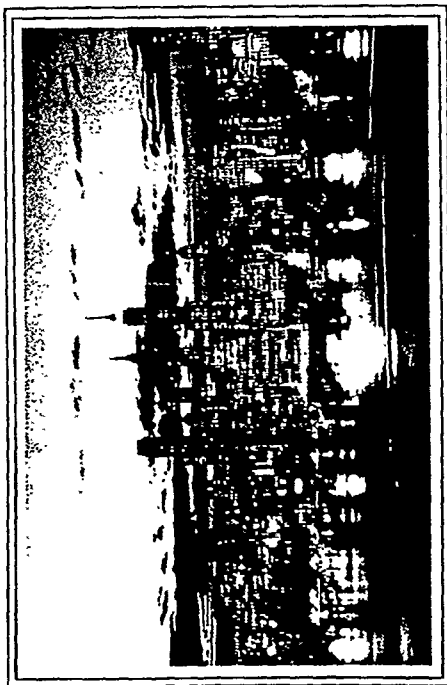
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Water Supply...Progress In Perspective

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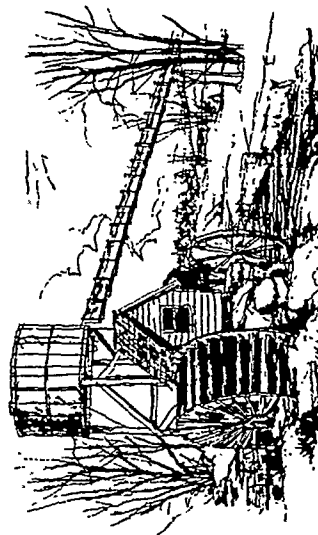
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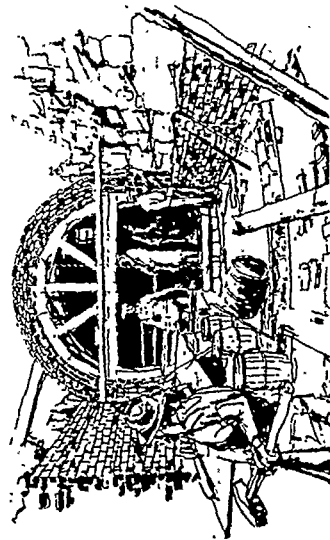


Nearly a century later in 1754, Danish millwright Hans Christiansen engineered the first coordinated water system in Bethlehem, Pennsylvania. An eighteen-foot water wheel, a wooden pump and a standpipe distributed spring water through a simple network of bored hemlock logs to the church, school and main street corners. Water service was much improved in 1764 with the installation of steam engines to pump water uphill.



By 1800, history records only nine waterworks throughout the thirteen original colonies. New York, Philadelphia, Boston . . . bustling centers of commerce . . . were plagued by waterborne epidemics of cholera and typhoid. Fires frequently leveled entire city blocks, despite the increasing availability of water. Bucket brigades and hand pumps remained the first line of defense in the absence of pressurized water systems.

As the country made the transition from the American Revolution to the Industrial Revolution, the emerging waterworks industry confronted a steadily growing demand for more and safer water. The 19th century saw major advancements in water supply treatment and distribution. Increased reliance on new technology and more efficient power sources resulted in progressively higher operating pressures. Wooden pipe was gradually replaced by metal and cement products.



The Croton Aqueduct, completed in 1890, was one of the most ambitious waterworks projects of the period. Through a cavernous eight-foot subterranean channel, hundreds of millions of gallons of water were transported forty miles to thirsty New York City.



A major improvement was made in water quality in 1892 when James P. Kirkwood successfully constructed the first sand filtration plant in Poughkeepsie, New York.

By the turn of the century, the intrinsic contribution of water quality to life quality became increasingly evident. Mechanical filtration . . . chlorination . . . water chemistry . . . step by step, over the past 75 years, water supply technology has developed into a complex science.

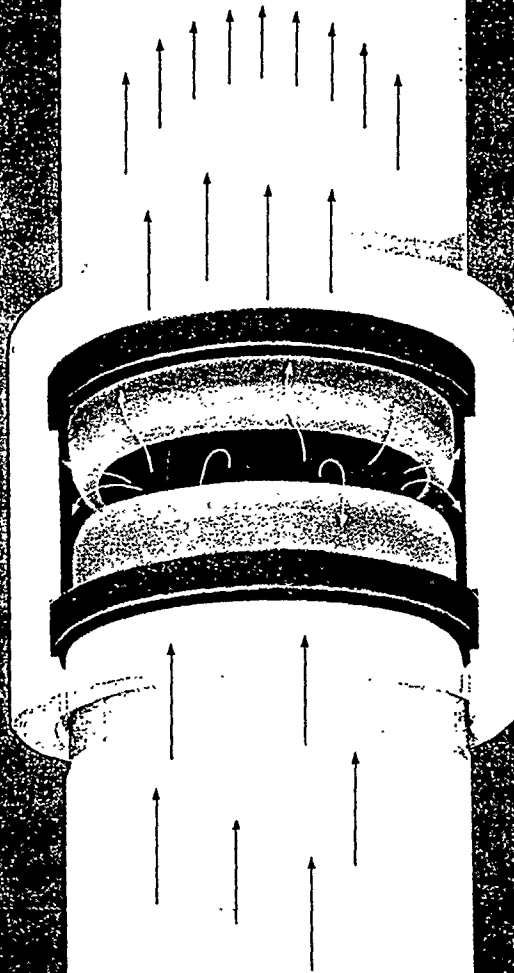


Today the 40,000 waterworks that collect, treat and distribute the prodigious quantity of water used in the United States represent an investment of more than \$50,000,000,000. This is about \$250 per person . . . a remarkably low premium for the assurance of quality water. This per capita figure will and must increase as water utilities wrestle with changing quality standards, double-digit inflation and the energy crisis. Compliance with the Safe Drinking Water Act, competing demands for investment capital and high interest rates will add to the cost of water in the future.



Value engineering *must* become a prerequisite to the selection and specification of cost effective, long life, high performance materials. Initial costs, as well as operational and maintenance cost *must* be carefully analyzed during the life of the investment. Purchasing policies *must* be non-discriminating and *must* encourage open, competitive bidding. America demands quality water . . . quality water demands no less.

Value Engineered Pipe



DURABILITY

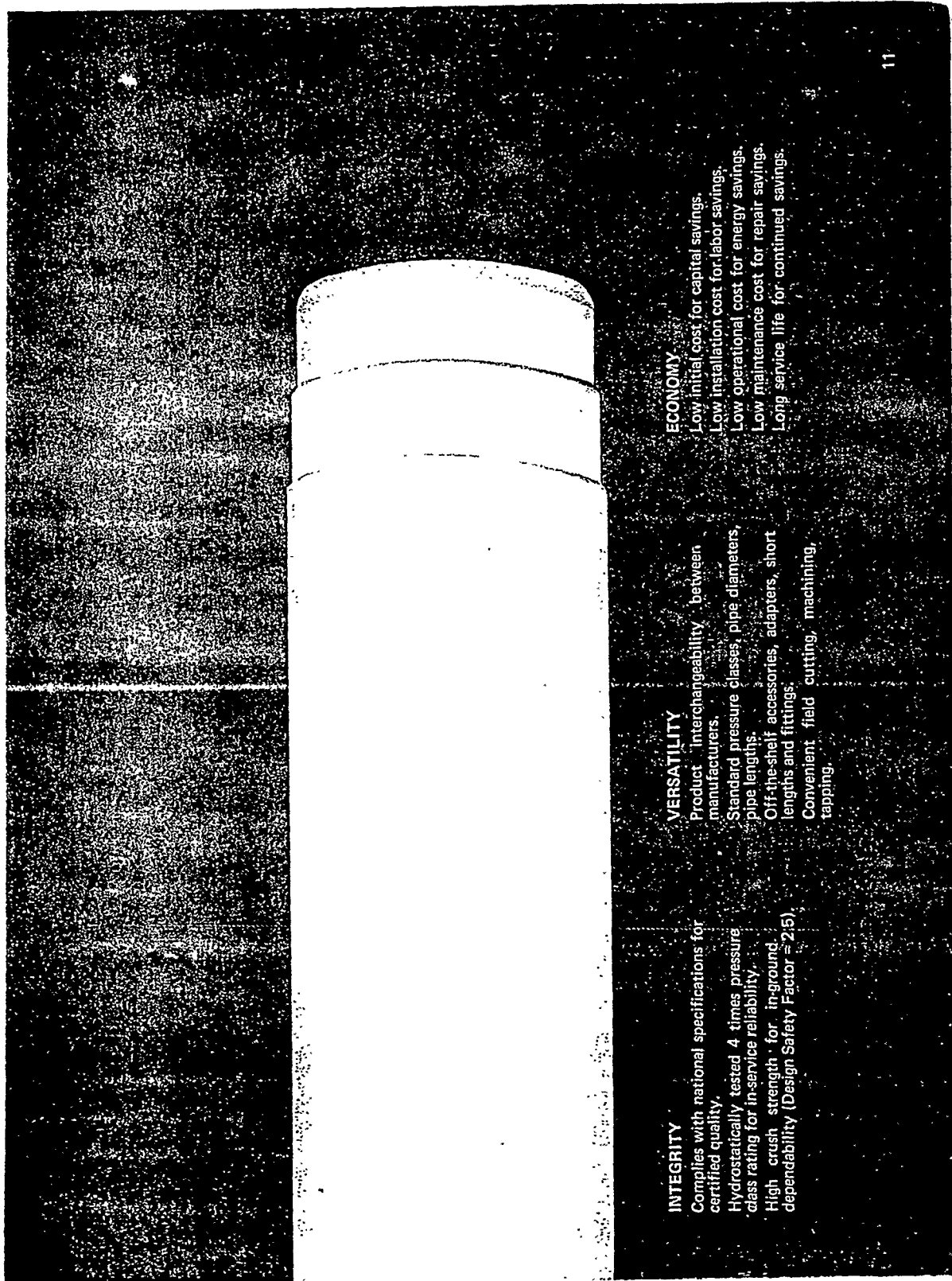
Non-metallic asbestos-cement composition for wall-to-wall corrosion resistance.
High pressure, steam-cured for maximum chemical stability.
High tensile strength asbestos fibers securely locked in for permanent reinforcement.

FLEXIBILITY

Dual rubber sealing rings for optimum joint flexibility.
Recessed seating grooves for positive, permanent watertight seals.
Self-aligning, push-on type coupling for rapid assembly.
Automatic pipe end separation for pipe expansion and deflection.
Built-in resilience to shock, vibration and line stress.

EFFICIENCY

Excellent flow coefficient ($C=140$) for maximum hydraulic capacity.
Permanently smooth bore for minimum friction loss.
Long lengths, fewer joints for lower water loss.



INTEGRITY

Complies with national specifications for certified quality.
Hydrostatically tested 4 times pressure class rating for in-service reliability.
High crush strength for in-ground dependability (Design Safety Factor = 2.5).

VERSATILITY

Product interchangeability between manufacturers.
Standard pressure classes, pipe diameters, pipe lengths.
Off-the-shelf accessories, adapters, short lengths and fittings.
Convenient field cutting, machining, tapping.

ECONOMY

Low initial cost for capital savings.
Low installation cost for labor savings.
Low operational cost for energy savings.
Low maintenance cost for repair savings.
Long service life for continued savings.

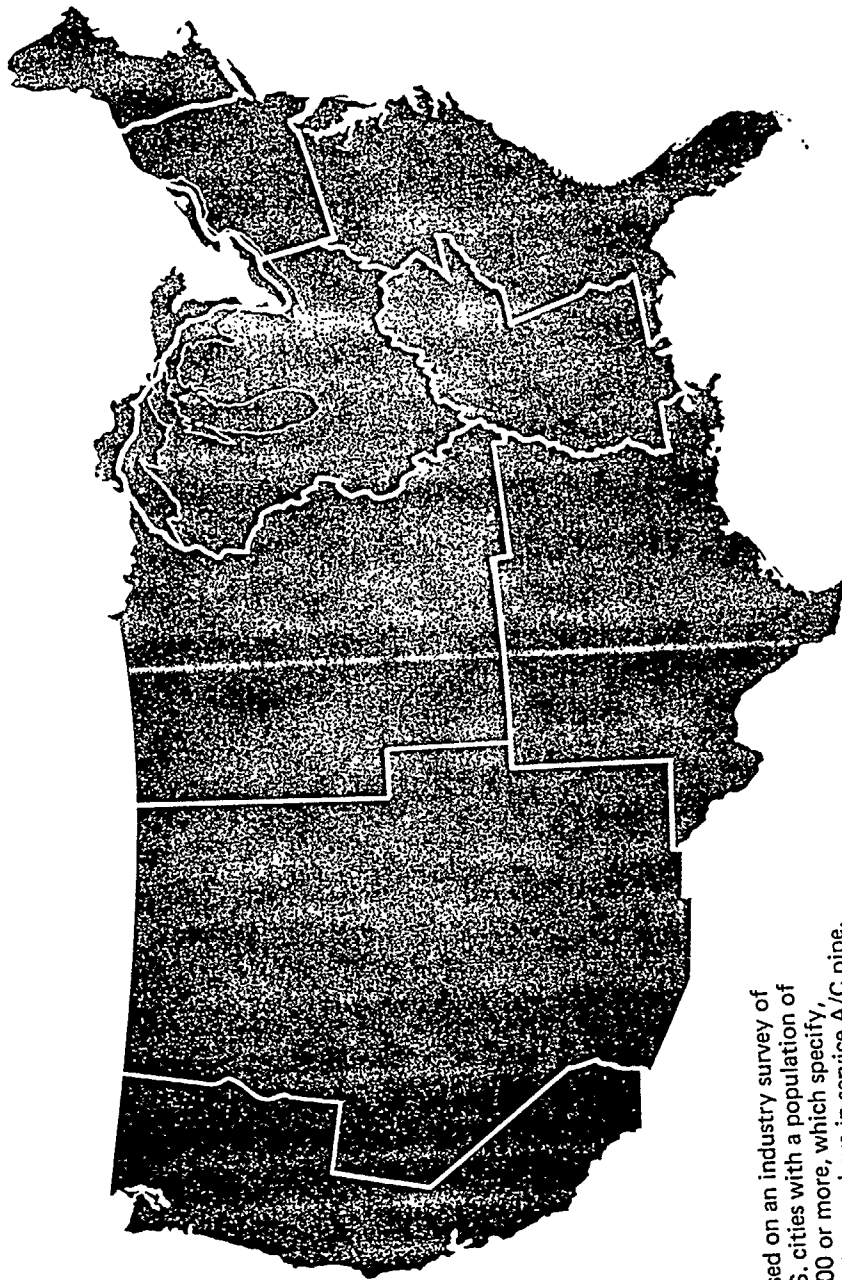
America's Choice

Of the total costs of developing a water supply system, distribution costs represent 50-75%. Water pipe is a major cost component. Thus, its selection is critical. Unlike 200 years ago, today's municipality can choose from a variety of piping materials . . . asbestos-cement (A/C), cast and ductile iron, concrete, PVC and steel. Nevertheless, the objective remains the same: *to choose that pipe which delivers the most quality water at the least cost commensurate with high system reliability*. Value engineering is the best assurance that the proper pipe will be chosen.

Providing water pipe of integrity at a cost the user can and will support is the commitment of the A/C pipe industry. How well has the industry honored this commitment? In less than half a century, A/C pipe has earned the reputation as "the value engineered pipe." A reputation built when and where it counts . . . during installation, in service and in the pocketbook. A reputation backed by national specifications . . . American Water Works Association, American Society for Testing and Materials, Underwriters Laboratories, National Fire Protection Association. A reputation confirmed whenever and wherever the right to compete has not been denied by restrictive specifications and traditional buying habits.

Year by year, installation after installation, A/C pipe has been the first choice of large and small municipalities alike. Why? *Very simply, A/C is today's best buy in water pipe*. One out of every three feet of distribution pipe currently being installed is asbestos-cement. Symbolic of its national acceptance is the increasing number of cities that specify, purchase or have in service A/C water pipe. Clearly, today's trend is towards A/C . . . America's Choice.

AC Cities*-A Survey



* Based on an industry survey of U.S. cities with a population of 1000 or more, which specify, purchase or have in service A/C pipe.

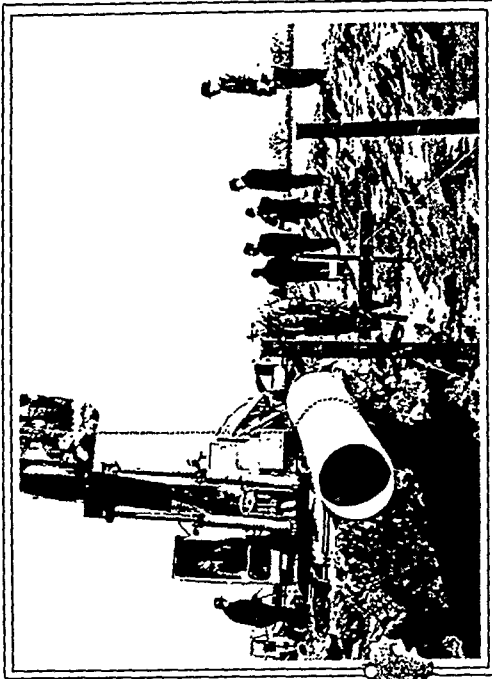
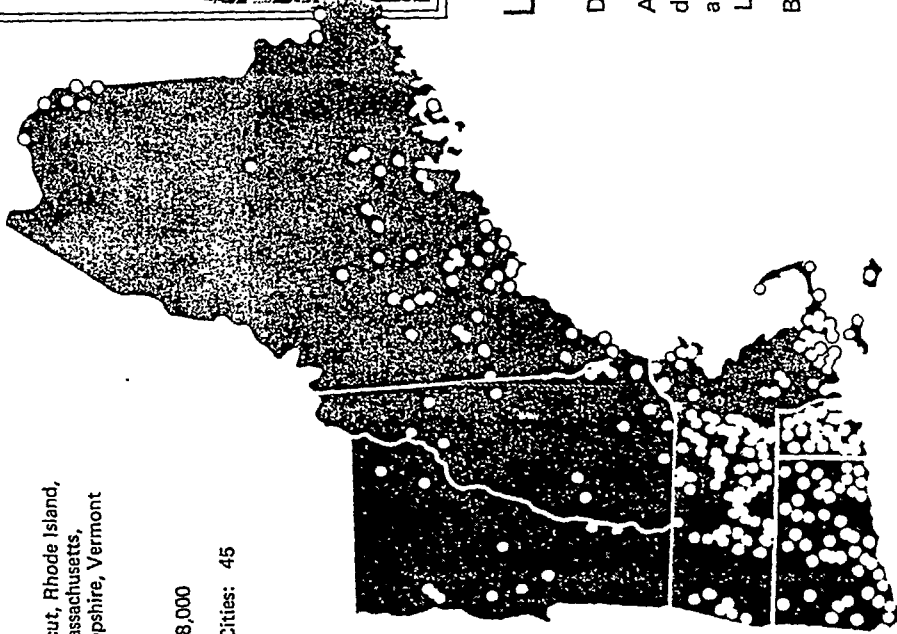
Northeast

States: Connecticut, Rhode Island,
Maine, Massachusetts,
New Hampshire, Vermont

A/C Cities: 322

Population: 3,488,000

Percent of Total Cities: 45



Low Initial Cost

Designed for value. Engineered for performance.

A/C costs less than cast and ductile iron for practically all distribution pipe sizes. Invest dollars in pipe, not corrosion allowances and costly cathodic protection. Lower first costs. Lower bonded indebtedness. Lower long term interest charges.

Buy A/C . . . America's Choice.

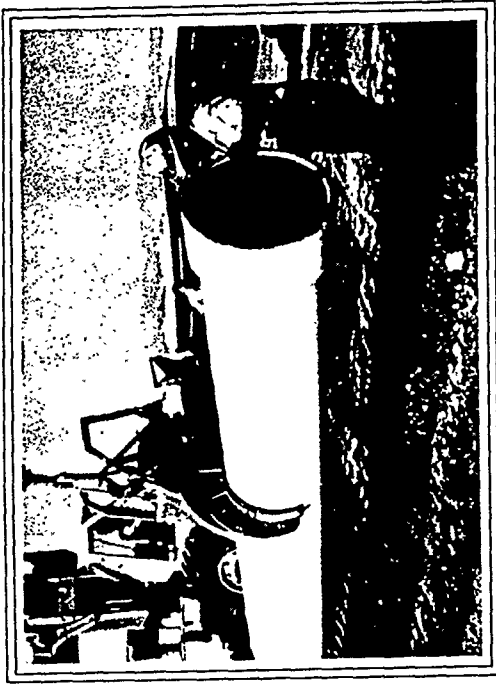
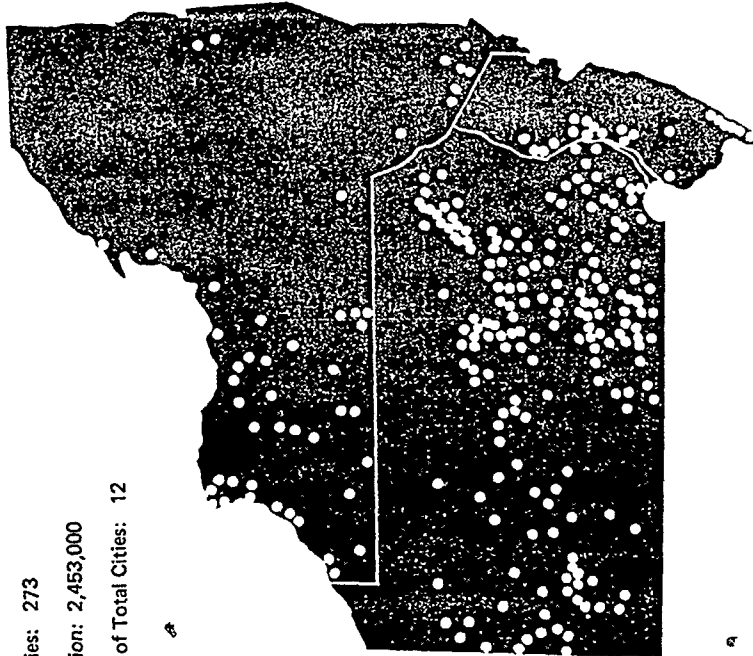
Middle Atlantic

States: New Jersey, New York,
Pennsylvania

A/C Cities: 273

Population: 2,453,000

Percent of Total Cities: 12



Low Installation Cost

Light in weight. Long in length.

A/C costs less to install. Quick connecting couplings installed at the factory or on the job site. From truck to trench, assembly is swift, sure, simple. No special requirements for trenching, bedding or testing. Pay less freight per foot. Lay more pipe per day. Cut construction time and costs.

Install A/C . . . America's Choice.

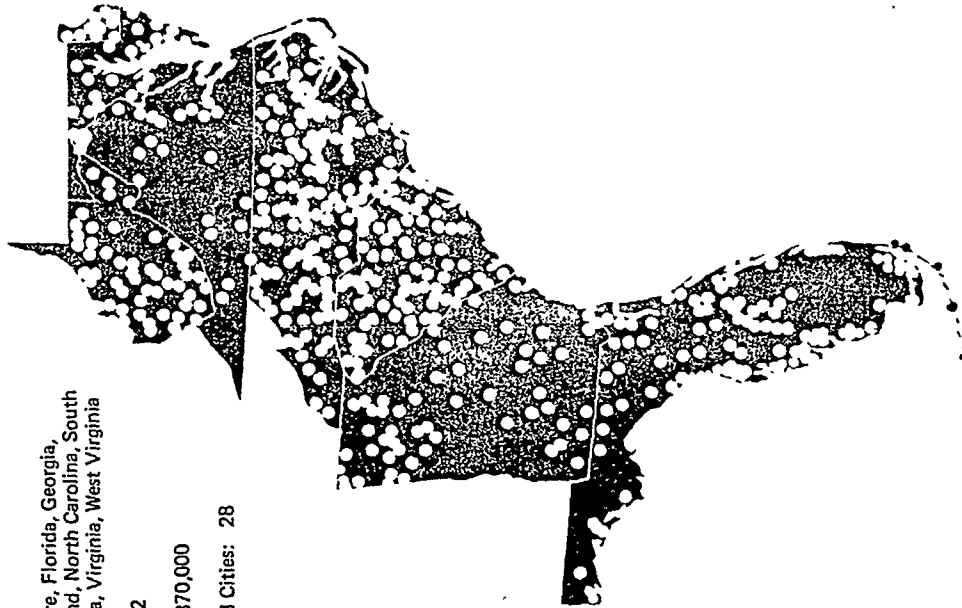
South Atlantic

States: Delaware, Florida, Georgia,
Maryland, North Carolina, South
Carolina, Virginia, West Virginia

A/C Cities: 542

Population: 4,870,000

Percent of Total Cities: 28



Low Operating Cost

Smooth bore today. Smooth bore tomorrow.

A/C moves more water for less dollars. No tuberculation to decrease effective pipe size. Permanent high flow characteristics maintain hydraulic efficiency, guarantee fire flow availability. Eliminate low pressure complaints. Reduce pumping loads. Minimize energy costs.

Specify A/C . . . America's Choice.

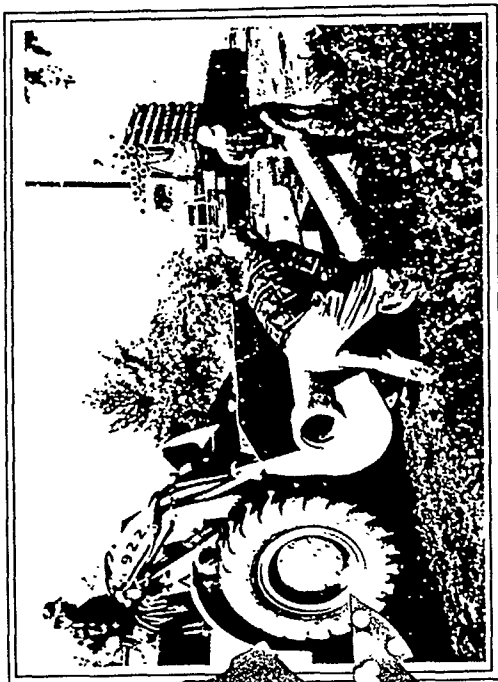
E.S. Central

States: Alabama, Kentucky,
Mississippi, Tennessee

A/C Cities: 157

Population: 1,702,000

Percent of Total Cities: 19



Low Maintenance Cost

Durability without cost. Lines without loss.

A/C is practically maintenance free. Built-in protection, inside, outside, all the way through to rust, electrolysis, galvanic and electrochemical types of corrosion. Put a stop to periodic cleaning. Decrease down time. Roll back repair costs.

Depend on A/C . . . America's Choice.

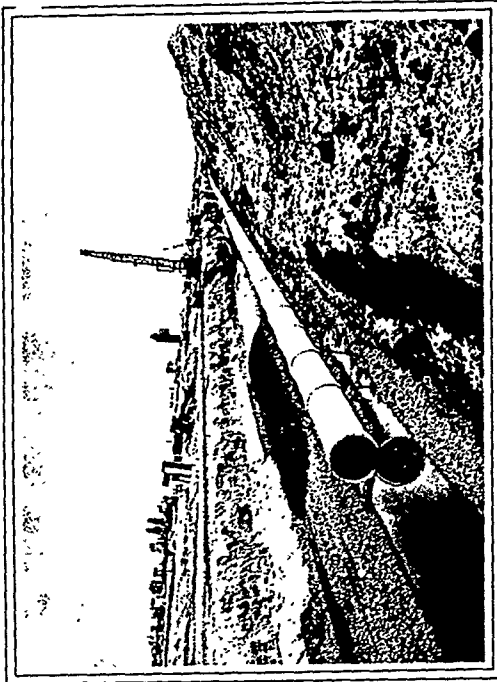
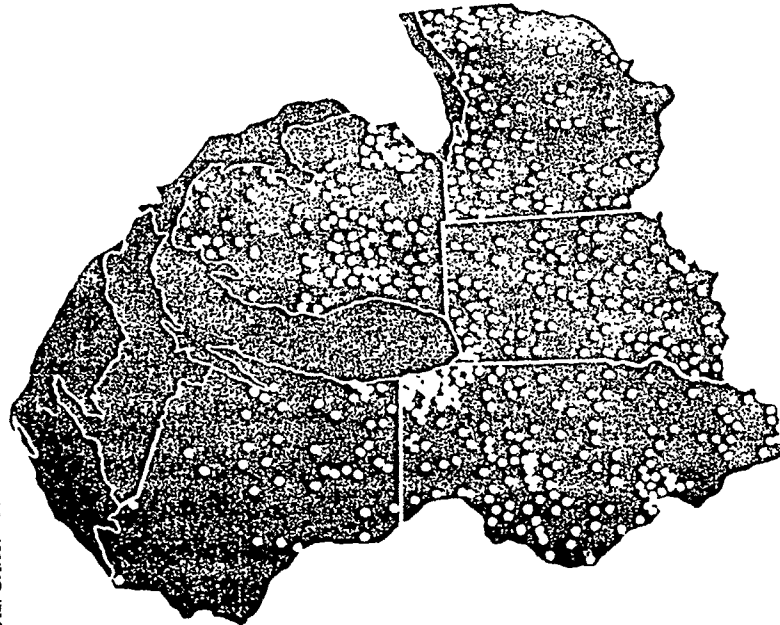
E.N. Central

States: Illinois, Indiana, Michigan,
Ohio, Wisconsin

A/C Cities: 614

Population: 13,922,000

Percent of Total Cities: 31



Structural Integrity

Factory-tested. Field-proven.

A/C is the optimum balance between high performance, long life and cost effectiveness. Quality control second to none in the pipe industry assures high pressure reliability with sensible factors of safety . . . consistently, inexpensively. Examine the alternatives. Analyze the costs. Pay only for performance.

Design for A/C . . . America's Choice.

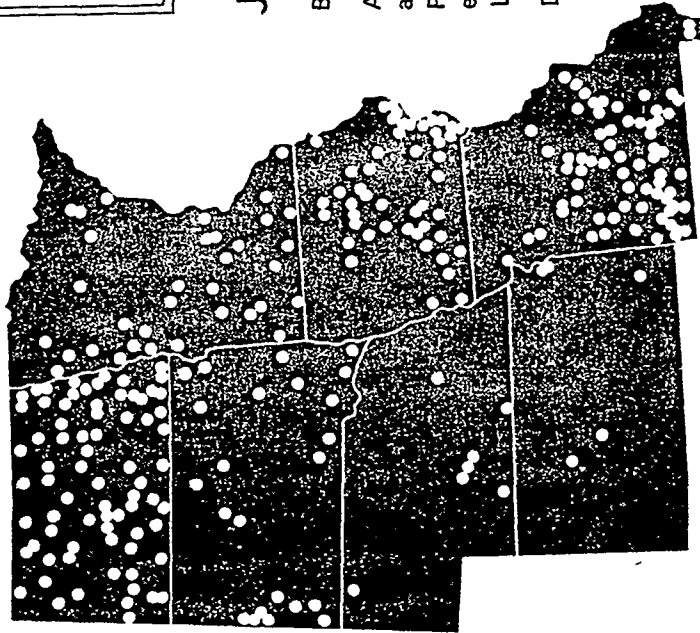
W.N. Central

States: Iowa, Kansas, Minnesota,
Missouri, Nebraska, North
Dakota, South Dakota

A/C Cities: 278

Population: 2,318,000

Percent of Total Cities: 20



Joint Reliability

Built-in flexibility. Permanent bottle-tight seal.

A/C minimizes water loss, maximizes water revenue. Two easy assembly steps: Lubricate . . . Slide pipe in . . . That's all! Positive joint closure, immediately, automatically, permanently, even under adverse weather and ground conditions. Meter more. Lose less. Protect your treatment dollar.

Distribute with A/C . . . America's Choice.

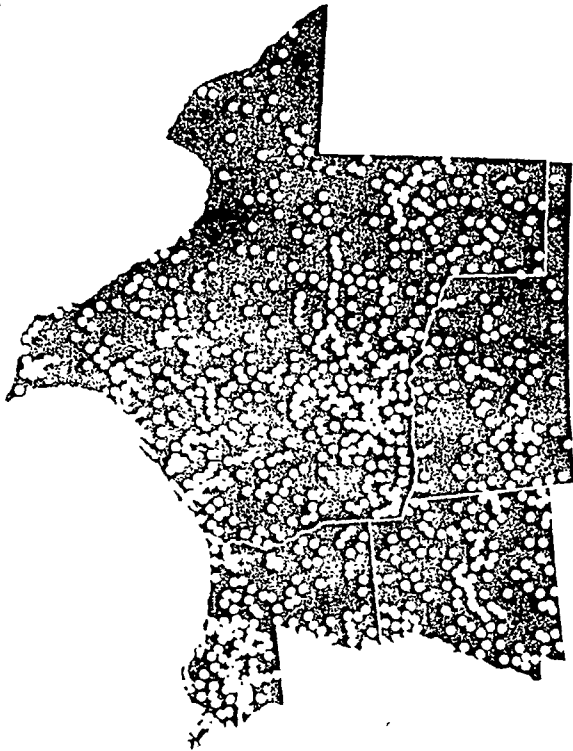
W.S. Central

States: Arkansas, Louisiana,
Oklahoma, Texas

A/C Cities: 1,033

Population: 14,914,000

Percent of Total Cities: 81



Versatility

Fits the first time. Every time.

A/C connects with ease to hydrants, valves, bends and tees. Interchangeable pipe design and standard accessories make short work of add-ons, tie-ins, closures. Simplify service connections. Avoid adaptability problems. Make ends meet.

Standardize with A/C... America's Choice.

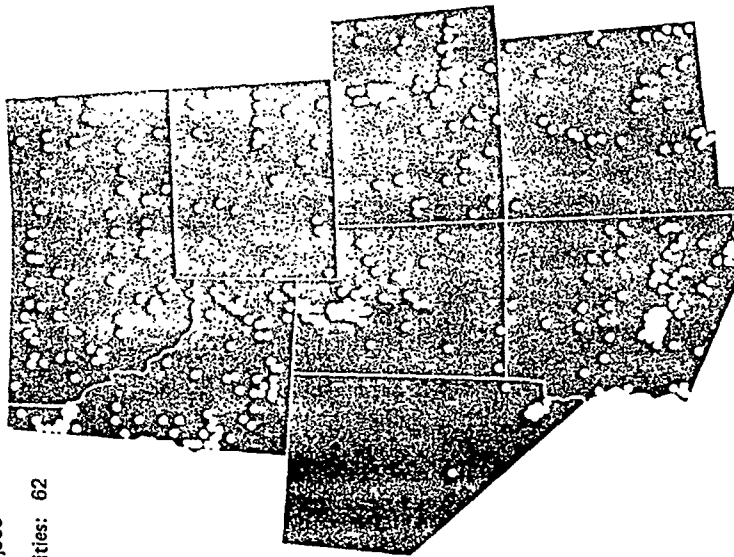
Mountain

States: Arizona, Colorado, Idaho,
Montana, Nevada, Utah,
New Mexico, Wyoming

A/C Cities: 396

Population: 4,860,000

Percent of Total Cities: 62



Long Service Life

Top of the line durability. Bottom line savings.

A/C costs less over the long run. No other water pipe gives you so much built-in corrosion resistance for so little . . . wall to wall, water to water, soil to soil, year to year. Combat corrosion. Put an end to pipe replacement. Show better return on investment.

Protect with A/C . . . America's Choice.

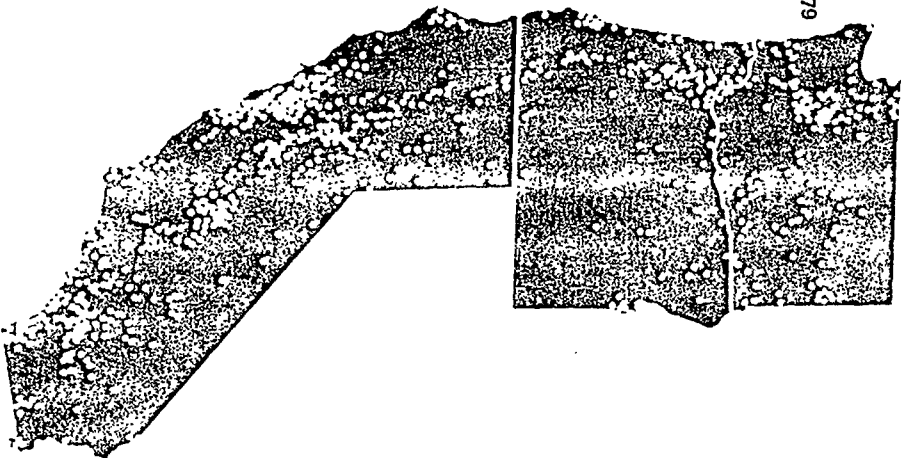
Pacific

States: Alaska, California, Hawaii,
Oregon, Washington

A/C Cities: 973

Population: 16,409,000

Percent of Total Cities: 79



Water Quality

Committed to safe water. Pledged to public health.

A/C safeguards water quality from treatment to tap. *"No firm evidence shows that the proper use of asbestos-cement pipe poses a hazard to health by reason of ingestion of asbestos fibers."* ** No focal point for bacterial growth. No odor. No discoloration.

No problem with A/C . . . America's Choice.

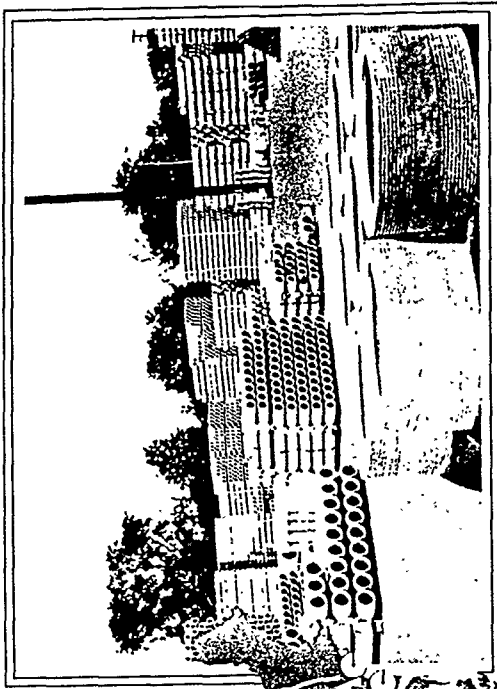
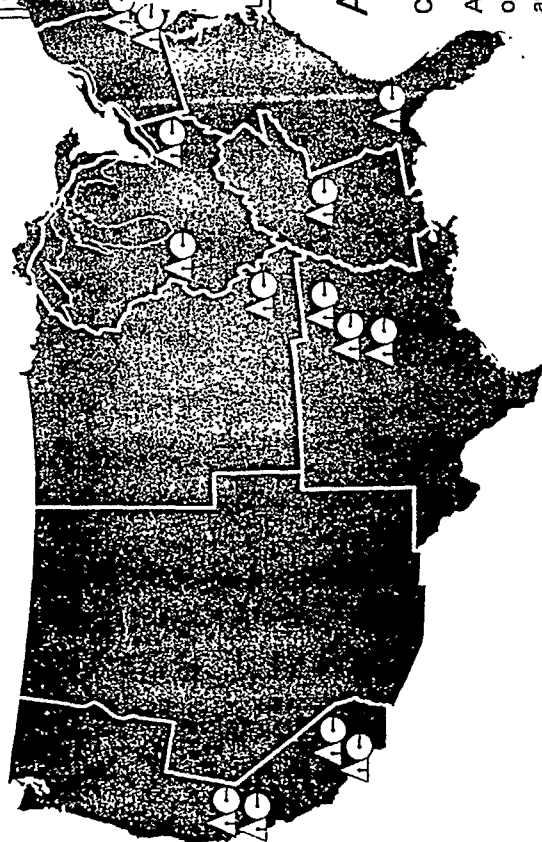
** A Study of the Problem of Asbestos in Water by the American Water Works Association Research Foundation.

United States

A/C Cities: 4,587*

Population: 64,936,000

Percent of Total Cities: 38



Availability

Coast to coast. Four manufacturers, fourteen plants.

A/C delivers . . . when you want it, where you want it. New order, repeat order. Customer service on the phone or technical assistance in the field. The people behind A/C put you ahead. Expect service, not excuses. Plan on delivery, not delays. Count savings, not costs.

Order A/C . . . America's Choice.

* Based on an industry survey of U.S. cities with a population of 1000 or more, which specify, purchase or have in service A/C pipe.

A/C Pipe Producers Association

The A/C Pipe Producers Association functions as a non-profit, non-partisan world-wide trade association on behalf of the A/C Pipe industry. Inquiries for information on specific products, their individual attributes and differences, should be directed to member companies.

The Statements contained in this document are those of the Association of Asbestos-Cement Pipe Producers and are not intended as a warranty.



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Canadian Johns-Manville Co., Ltd.
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Birmingham, Alabama

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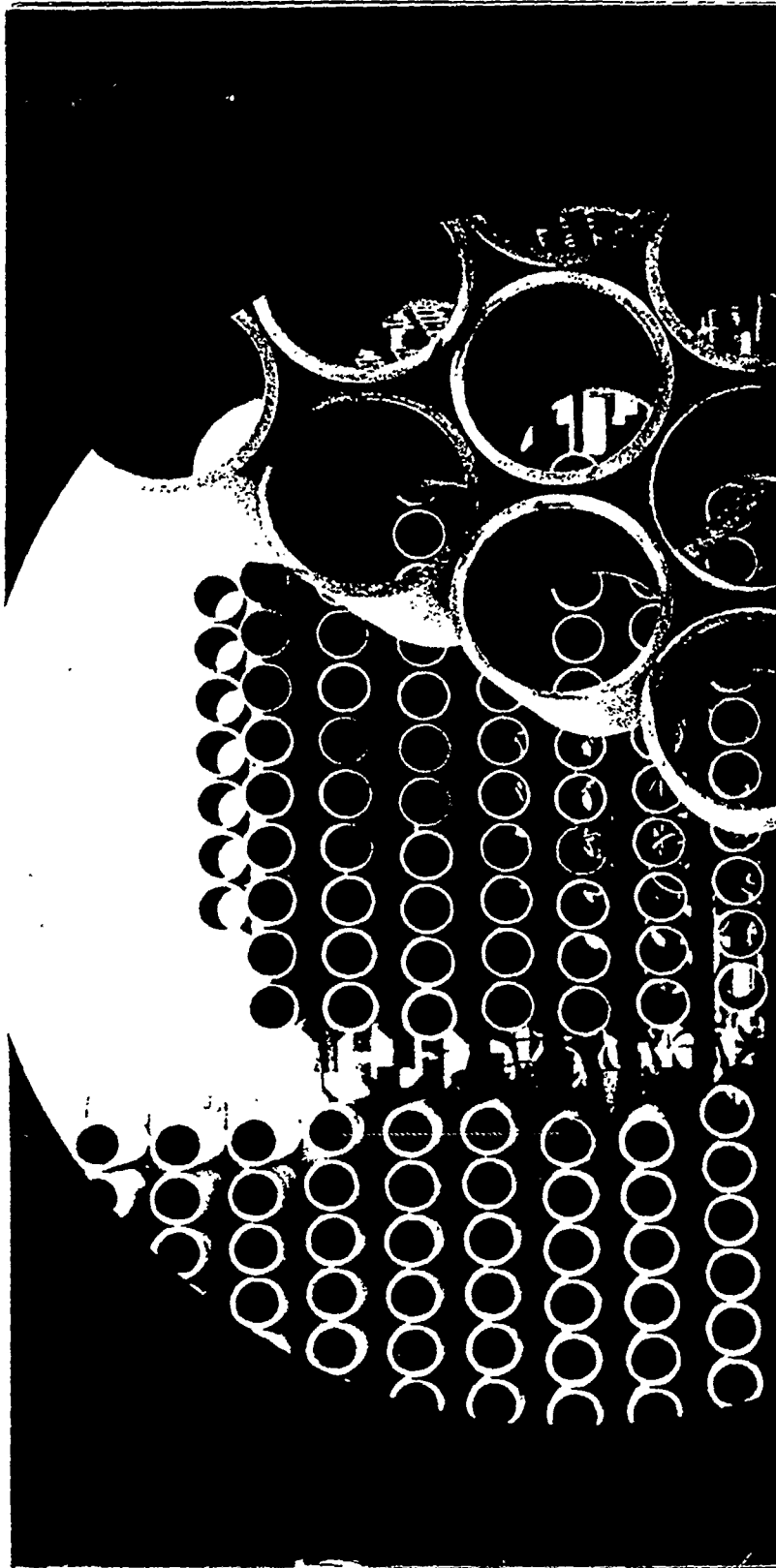
James Hardie & Company Pty., Ltd.
Sydney, Australia

Hellenic Industry for Building Materials
Hellenit, S.A.

Athens, Greece

Paraisten Kalkki Oy
Pargas, Finland

TAC Construction Materials, Ltd.
Manchester, England



Prepared by the Association of Asbestos-Cement Pipe
Producers as a salute to the American waterworks
industry whose ingenuity, resourcefulness and hard
labor has contributed so much to the health and
prosperity of our nation.

WILLIAM R. PERRELL
GENERAL SALES MANAGER

capco

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