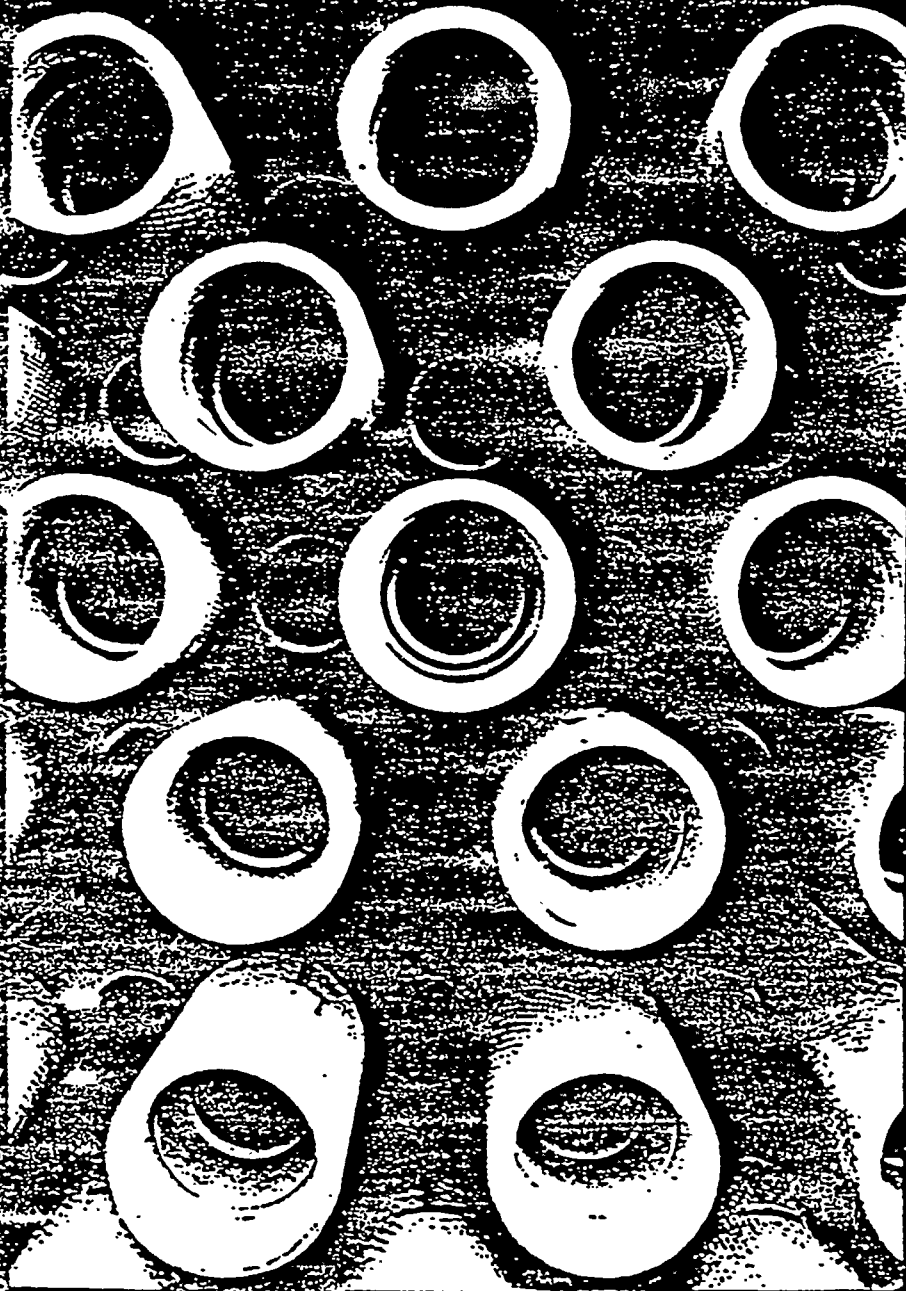


capco

**Cement Asbestos Products Company,
a subsidiary of ASARCO Incorporated.**

ASA-543



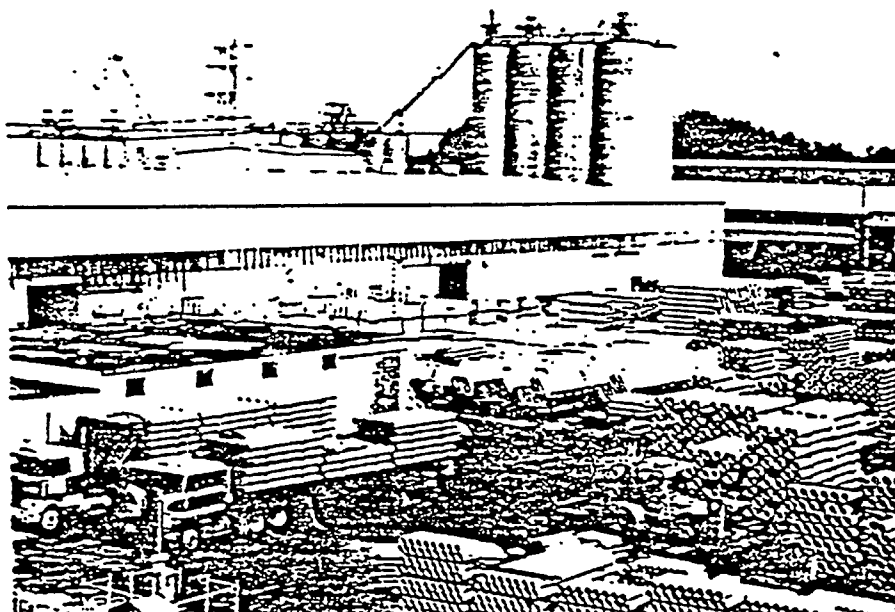
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Production

Asbestos fiber, silica, and portland cement are the three essential ingredients of asbestos-cement (A-C) pipe. From storage silos, these three materials are fed into a weighing and blending system where they are mixed with water. The resulting asbestos-cement slurry is pumped into vats which feed the giant, pipe-forming machines.

Next, a continuous belt of felt webbing that runs through the pipe-forming machine picks up this slurry of raw materials from a revolving cylinder and transfers it to a steel mandrel around which it is formed to required specifications. At the right moment, the newly formed pipe, intact with the mandrel, is transferred to a moist atmosphere in a primary curing oven. The carefully controlled environment in the oven brings the pipe up to sufficient strength to be separated from the mandrel.

After the mandrel is removed, the A-C pipe is conveyed through a secondary curing oven for further conditioning. Once it emerges from this oven the pipe is stacked on trays ready to be autoclaved.

The autoclave, a high-pressure, steam curing vessel, brings the asbestos-cement pipe up to full strength. From here, the pipe is taken to a machining station where the ends are cut to the required dimensions.

Now begins the most important phase of the A-C pipe production cycle: testing. Every single piece of pipe must pass two mechanical "tor-ture" tests and final inspection by a quality control inspector.

The first test is for beam strength. Each piece of four-, six-, and eight-inch pipe is mechanically flexed to be certain it meets stringent specifications.

Following the flex test is the hydrostatic test. Here, each piece of pipe is tested at $3\frac{1}{2}$ times its rated pressure.

After these two tests, a quality control inspector checks every piece of pipe for conformity to specified dimensions and tolerances. The pipe is coded for future reference then either assigned to inventory or shipped immediately to the customer.

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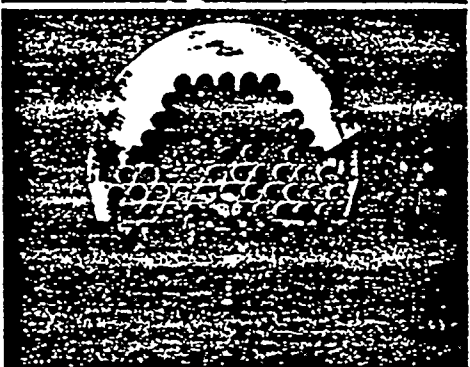
A conveyor system handles materials handling at the Van Buren plant. Bags of asbestos fiber are opened in a controlled environment, then mixed with silica and cement and water to form the slurry from which A-C pipe is made.



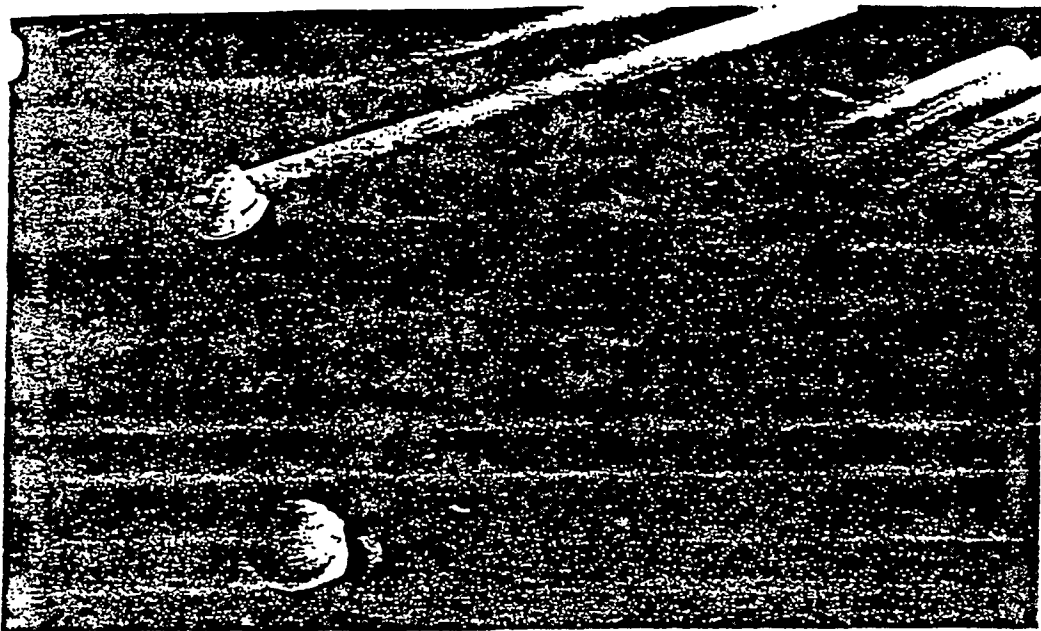
A continuous belt of felt webbing picks up the asbestos-cement slurry and transfers it to the mandrels around which pipe is formed.



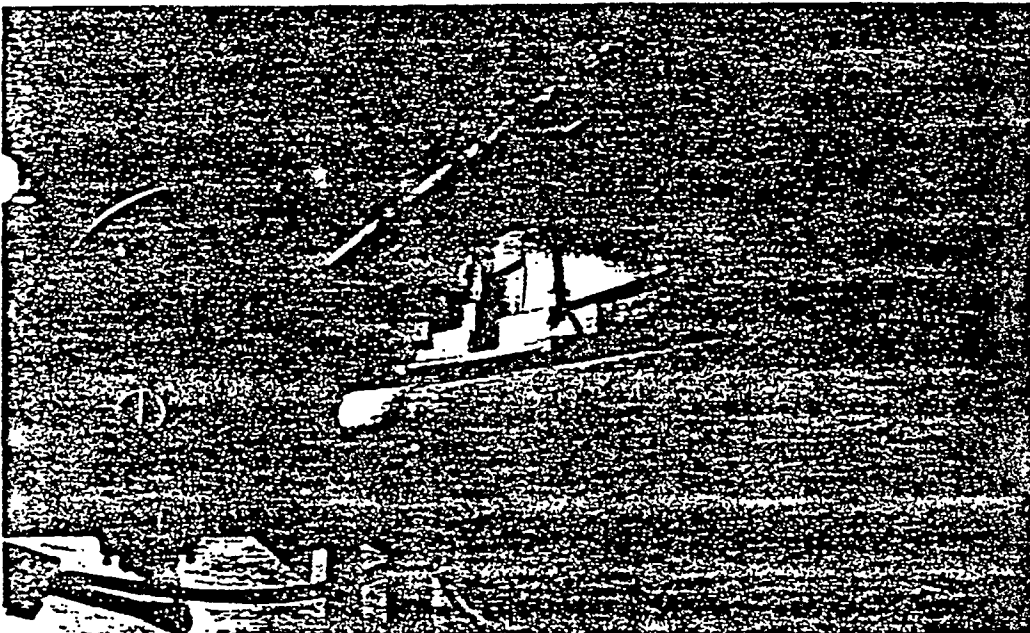
A pipe is formed by pressing the material under hydraulic pressure onto a steel mandrel.



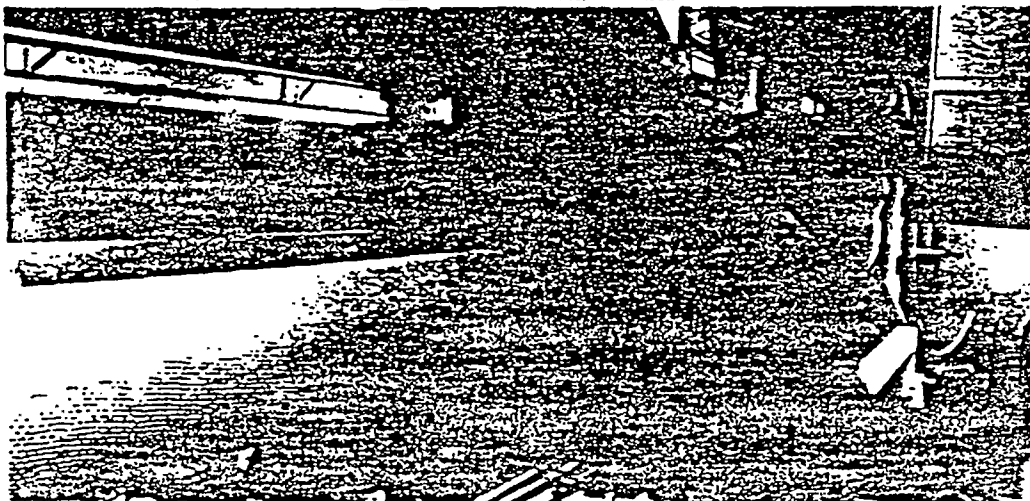
High-pressure steam curing autoclave brings A-C pipe up to full strength.



Ends of pipe are machined to proper size so couplings can be added later.



Every piece of four-, six-, and eight-inch pipe is mechanically flexed at specified applied loads to be certain it meets stringent standards.



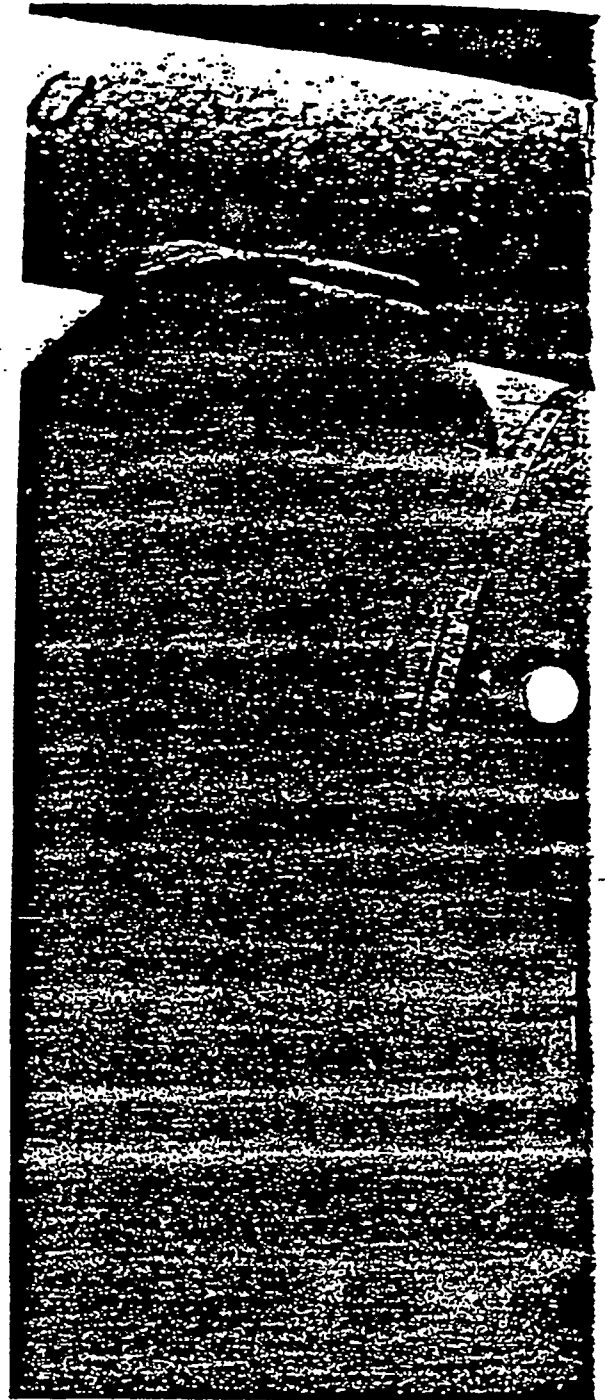
Hydrostatic testing of each piece of A/C pipe at $3\frac{1}{2}$ times rated pressure assures structural integrity.

Quality Control

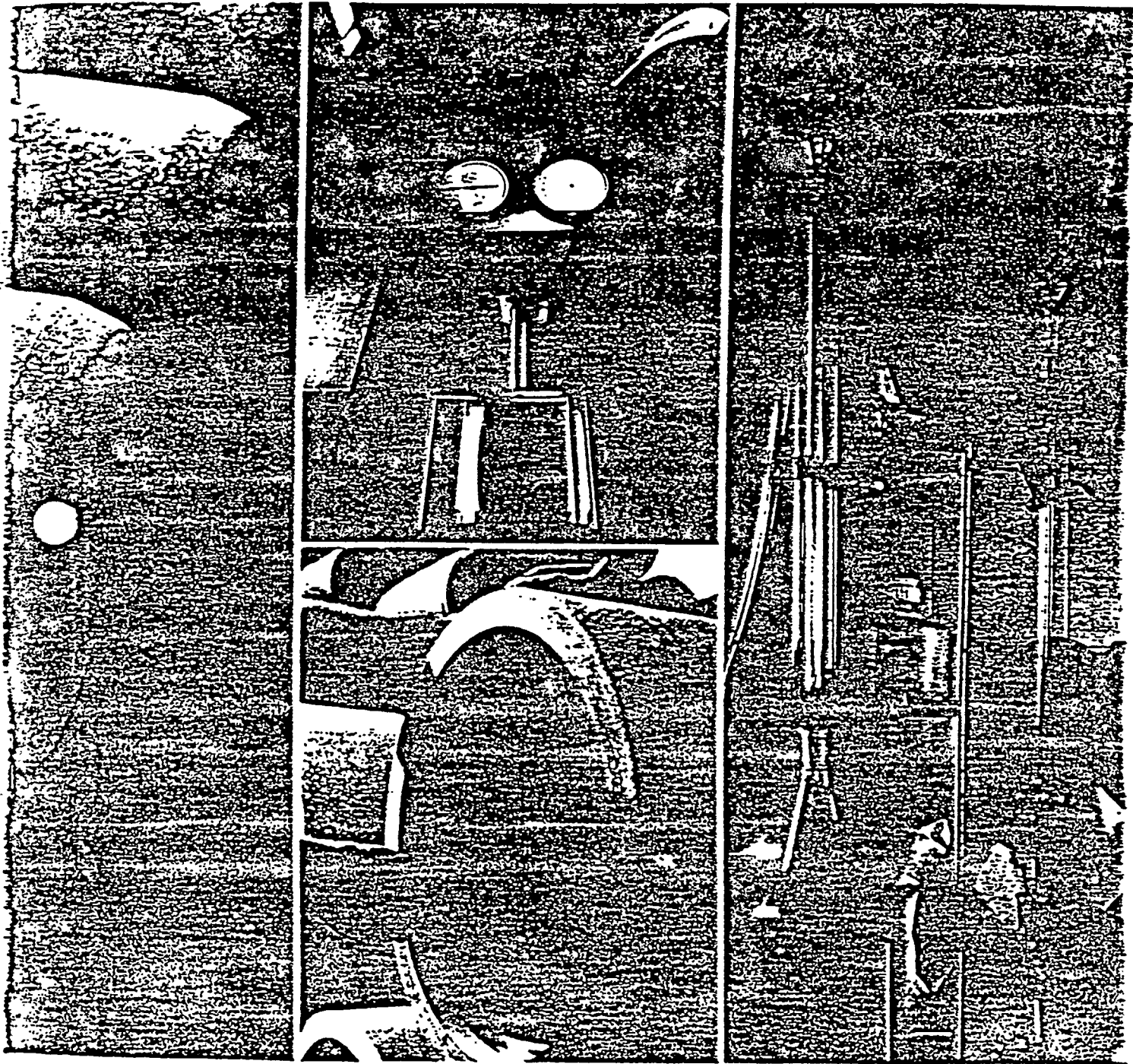
Quality control is as important to Capco as it is to the customer. On-site laboratory facilities staffed by qualified technicians at both the Ragland and Van Buren plants enable Capco to closely monitor the entire production process. The asbestos fiber, silica and portland cement are all carefully checked when received to be certain they conform to the manufacturer's specifications. Once these materials are combined to form a slurry, the slurry is regularly sampled and tested for chemical and physical properties. The flexural strength and hydrostatic tests performed on the pipe as it moves down the production line are monitored by quality control personnel.

Capco's in-plant laboratories also perform all the compliance testing required to assure conformance to applicable AWWA and ASTM specifications.

Inspectors make certain that Capco A/C pipe conforms to dimensional specifications.



Crushing strength of Capco's
A/C pipe is tested in
accordance with current
ASTM standards.



All-important fit
between coupling and
pipe is checked
before shipment.

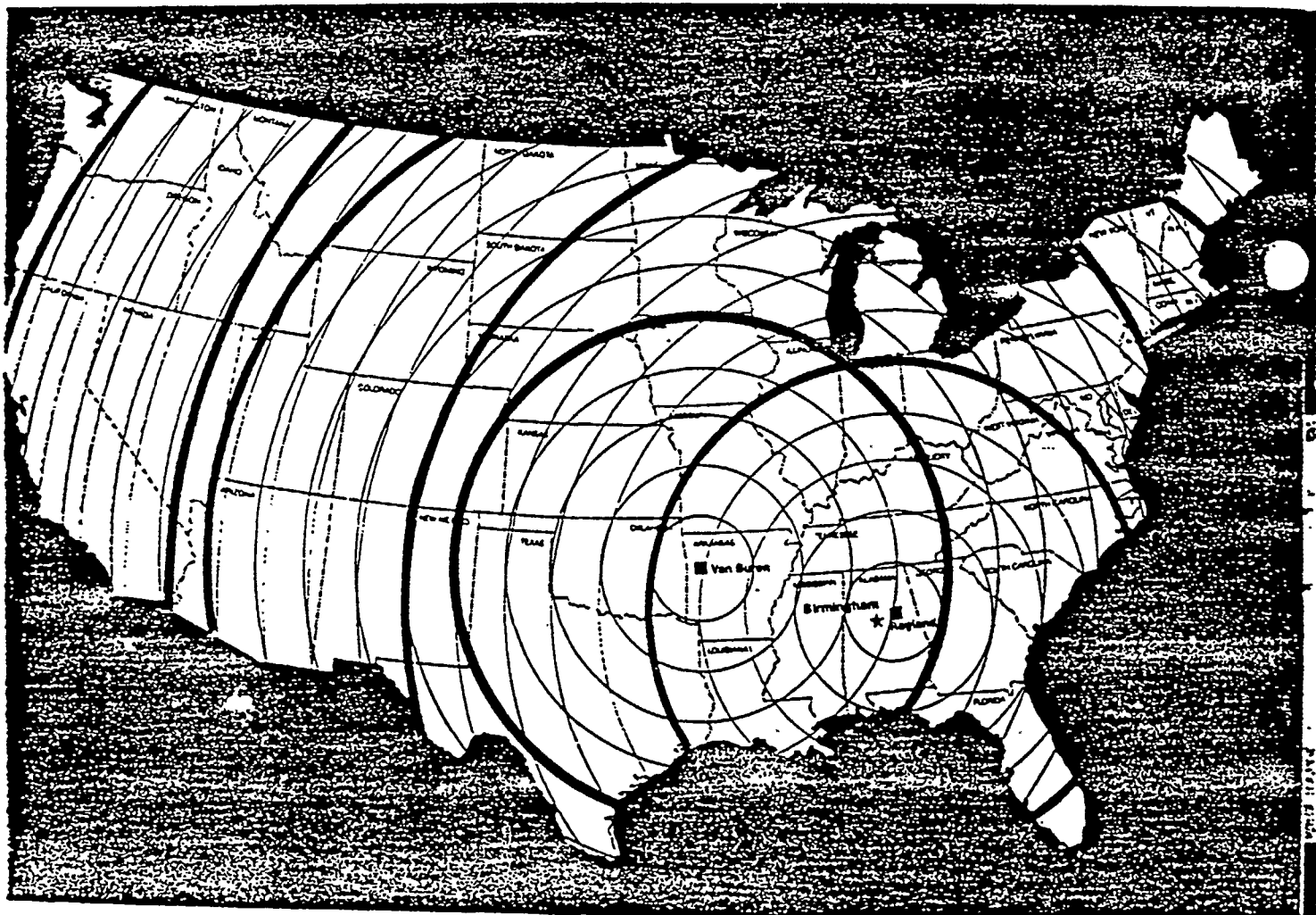
Laboratory technician checks
uncombined calcium hydroxide
content of pipe to be certain
it's within specified limit.

Sales and shipping

Territorial managers cover the U.S. and link A/C pipe users to Capco, acting as conduits for valuable product and application information. The territorial managers also are in close touch with Capco's inside sales office to follow up on orders to make sure they are processed quickly.

The best-made A/C pipe is of no use unless it's delivered where and when it's needed.

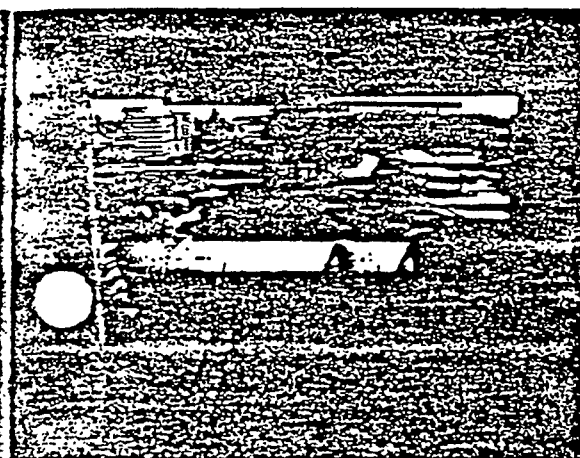
That's why Capco ships orders promptly so that they arrive at the job site on time. The map below shows typical shipping times from the Ragland and Van Buren plants.



★ Capco headquarters
 ■ Production Point
 Each heavy circle equals one day in transit
 for an order received before 12:00 noon.

Securely strapped and protected at both ends by sheets of plywood, this 24" pipe is destined for the export market.

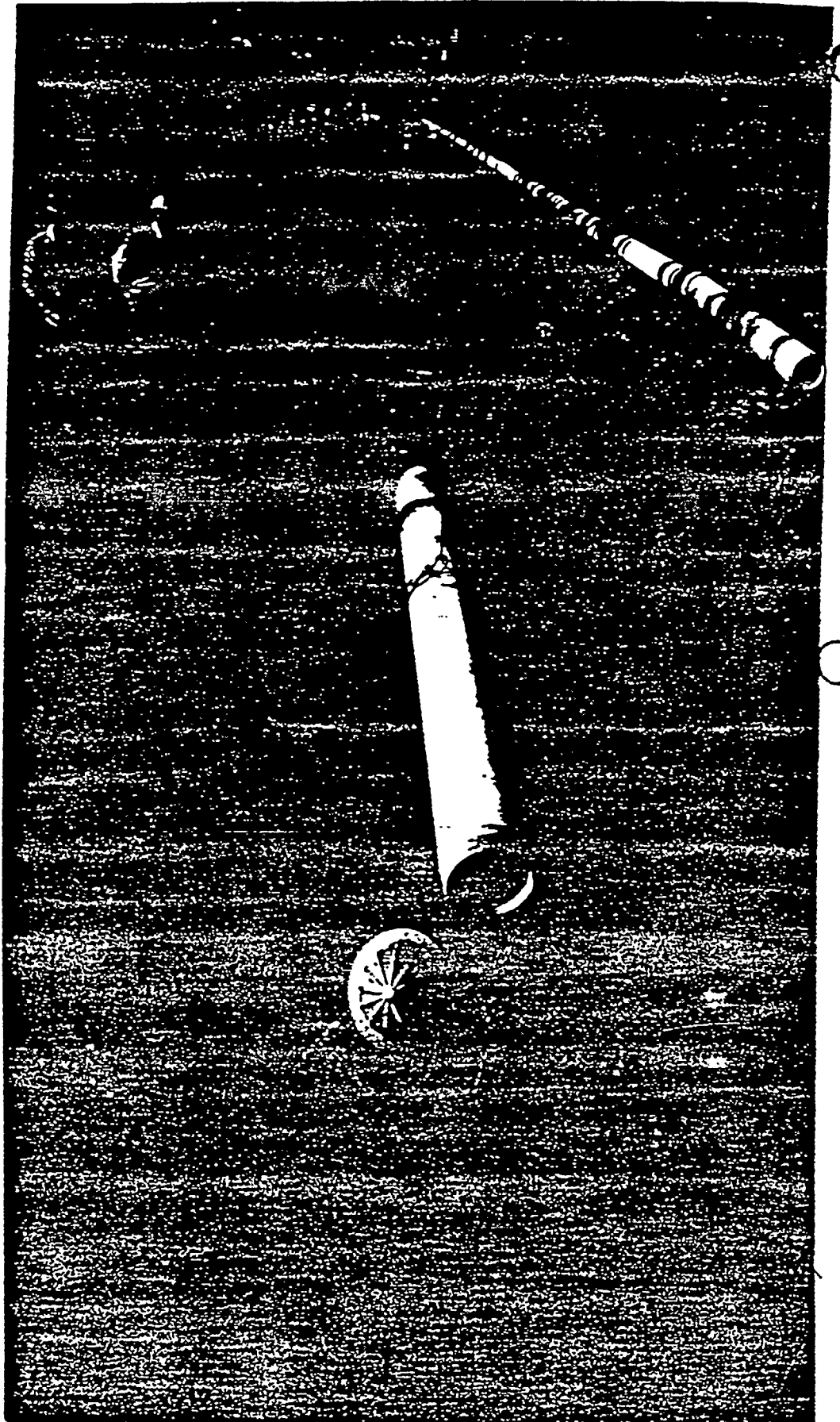
Large container ships such as this help Capco serve the overseas market economically.



Efficiency in shipping is assured by rail sidings at both the Ragland and Van Buren plants.

Truck shipments bring Capco's A/C pipe right to the job site, ready for installation.

Capco field service
representatives provide
on-site assistance to
customers' installation
crews.

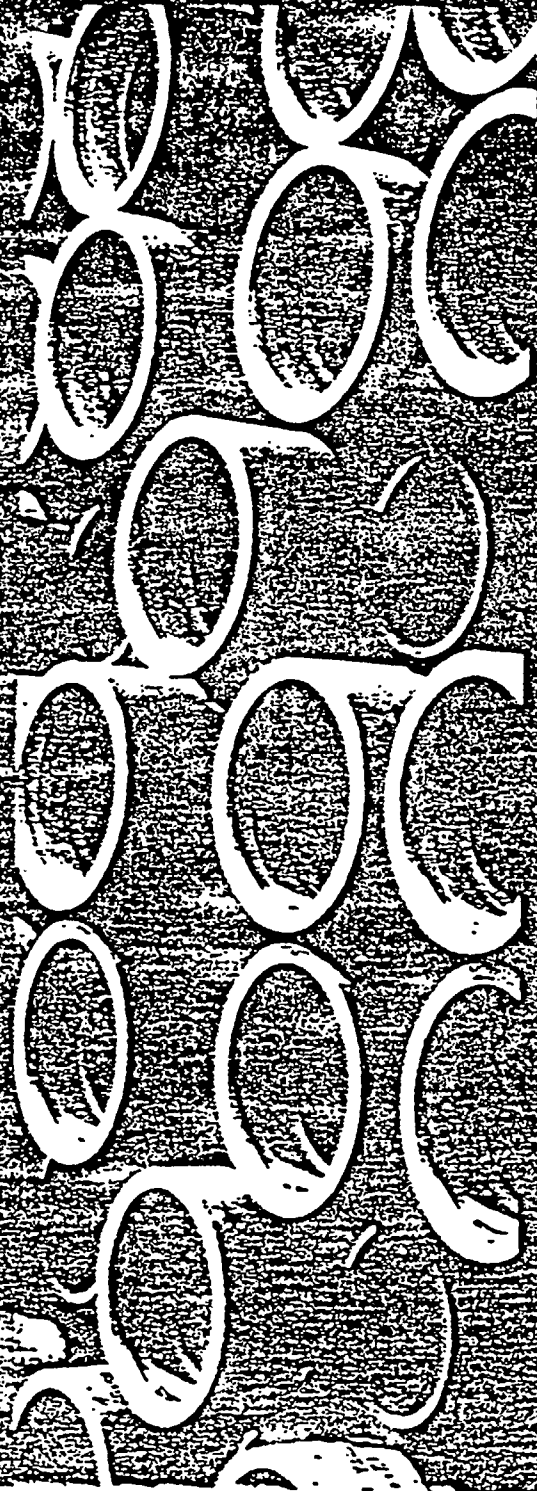


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