



# TECH NOTES

## VITRIFIED CLAY PIPE – A PIPELINE OF PROGRESS

	<p>When Alexander Graham Bell talked to Watson in another room via telephone, a new era in communication was launched.</p>	<p><b>1880—1900</b></p>	<p>Clay Pipe industry begins in America.. Pipe made in short lengths...Major cities begin to install clay pipe sewers.. Joints made in the field by contractors.</p>
	<p>In 1908, Ford introduced the Model “T”. The “Tin Lizzy” became the first car produced by production-line techniques.</p>	<p><b>1900-1920</b></p>	<p>First Clay Pipe Engineering Manual...Development of steam press extrusion.. Clay body and firing cycles refined... First ASTM specification on clay pipe.</p>
	<p>In 1927, Charles Lindberg made the first non-stop flight from New York to Paris. This flight covered 3,600 miles and heralded a new era in aviation.</p>	<p><b>1920-1940</b></p>	<p>Extra strength pipe introduced... Larger pipe diameters produced... Automation widely adopted... First tunnel kilns built... Vacuum deairing reduces permeability... Pipe lengths increased to 3 feet.</p>
	<p>Associated Press photographer Joe Rosenthal took what is probably the best-known picture of the war, the raising of the U.S. flag over Mount Suribachi on Iwo Jima. A less dramatic shot of the actual first flag raising was taken earlier by Marine combat photographer Louis R. Lowrey.</p>	<p><b>1940-1960</b></p>	<p>Slip seal joint developed to replace unreliable field jointing.. Pipe lengths increased to 4 feet and diameters to 42 inches...New extrusion auger produces stronger pipe... Steel jacketed periodic kilns boost efficiency...Factory applied compression joints revolutionize installation.</p>
	<p>In 1969, the first man on the moon took “one giant step for mankind.” This major event was witnessed by 600 million people via television.</p>	<p><b>1960-1980</b></p>	<p>Pipe lengths increased in all diameters.. High efficiency insulation installed in kilns... Recycled waste heat lowers energy usage... Jointing systems improved.. First air test standard developed... Bedding systems improved.</p>





Computerization becomes a dominant force in American life	<b>1980-2000</b>	Longer, stronger, straighter and denser pipe achieved by improved body preparation and process control.. Computerized drying and firing schedules refined... Jacking and tunneling pipe developed... Field test programs expanded.
---	------------------	--

### **ALSO – CONSIDER THIS**

#### **The Value of the Hole in the Ground**

A comparison of the progress of the clay pipe industry with America’s development will show that both have come a long way. However, unlike the early telephones and Model “T”s, nearly all of the clay pipe of the same era is still in service. What does this mean to the owner of a clay pipe system? Simply this. When it becomes necessary to rehabilitate the system, engineers are finding out, that in most cases, the clay pipe structure is still intact.

Agencies too are discovering, that when it comes to fixing an older sewer, the “hole in the ground” is a great asset especially when that hole is maintained by vitrified clay pipe.

#### **Today’s Vitrified Clay Pipe**

Modern methods of extrusion, drying, firing and testing have made today’s vitrified clay pipe better than it ever has been. And when nature’s most inert material is fitted with the latest compression joints, it is clear to see that the clay pipe of today is a good choice for a community’s domestic, commercial and industrial sewers.

If you are interested in discovering how the National Clay Pipe Institute can help you build long lasting sewer systems, send in for the NCPI Publication list. It includes complimentary video programs, engineering and design aids, installation and testing handbooks, ASTM specifications and computer programs which are yours for the asking.

\*\*\*\*\*

For more on the history of VCP and NCPI, visit the History page of our website.