

Proven, Innovative. Contractors, Fabricators, Engineers.



**PITTSBURG**  
**TANK & TOWER**  
**COMPANY INC.**



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# Diverse experience... engineered solutions.



President and CEO Don Johnston,  
Pittsburg Tank & Tower Company, Inc.

Consistently ranked among the  
top 15 steel erectors by McGraw-Hill  
*Engineering News Record*  
Top 600 Specialty Contractors.

One of North America's leading full-service suppliers of field-erected tanks, maintenance and inspection services.

Beginning in 1919, Pittsburg Tank & Tower Company committed its resources to providing engineered structures and exemplary service for municipal water storage and industrial storage facilities.

Today, our diverse experience makes us **uniquely qualified** in many instances to deliver the value-added, engineered solutions you demand.



## Fabrication

### Broad Municipal and Industrial Experience

- Municipal Water Storage
- Industrial Storage Facilities
- Pulp and Paper
- Chemical
- Petroleum and Power Industries
- Commercial Sprinkler
- Chilled Water



## Construction

### Fully Equipped Mobile Erection Crews

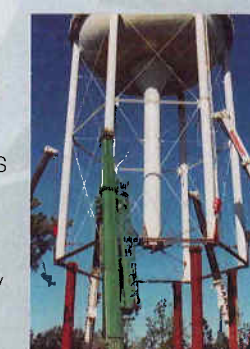
Experienced teams, fully equipped with cranes, welding equipment, generators and specialty tools. Our field crews construct small or large water storage facilities and the most complex vessels such as blow tanks, chilled water, chemical processors, clarifiers and digestors.



## Modification

### The Industry Leader, Moving and Re-erecting

- Elevation Changes
  - Tank Moving
  - Capacity Modifications
- Pittsburg truly stands alone as the industry leader in its ability to move and re-erect tank facilities.



## Inspection

AWWA, IMSHA, NFPA, API, NACE, EPA, NBFU, AWS, ACI, ASME, Factory Mutual® and OSHA

are among the codes and standards utilized during inspection. Wet or dry inspections are performed to meet your needs. Our inspection department includes: Professional Engineers, NACE Coating Inspectors, API 653 Inspectors and AWS Level II Weld Inspectors.



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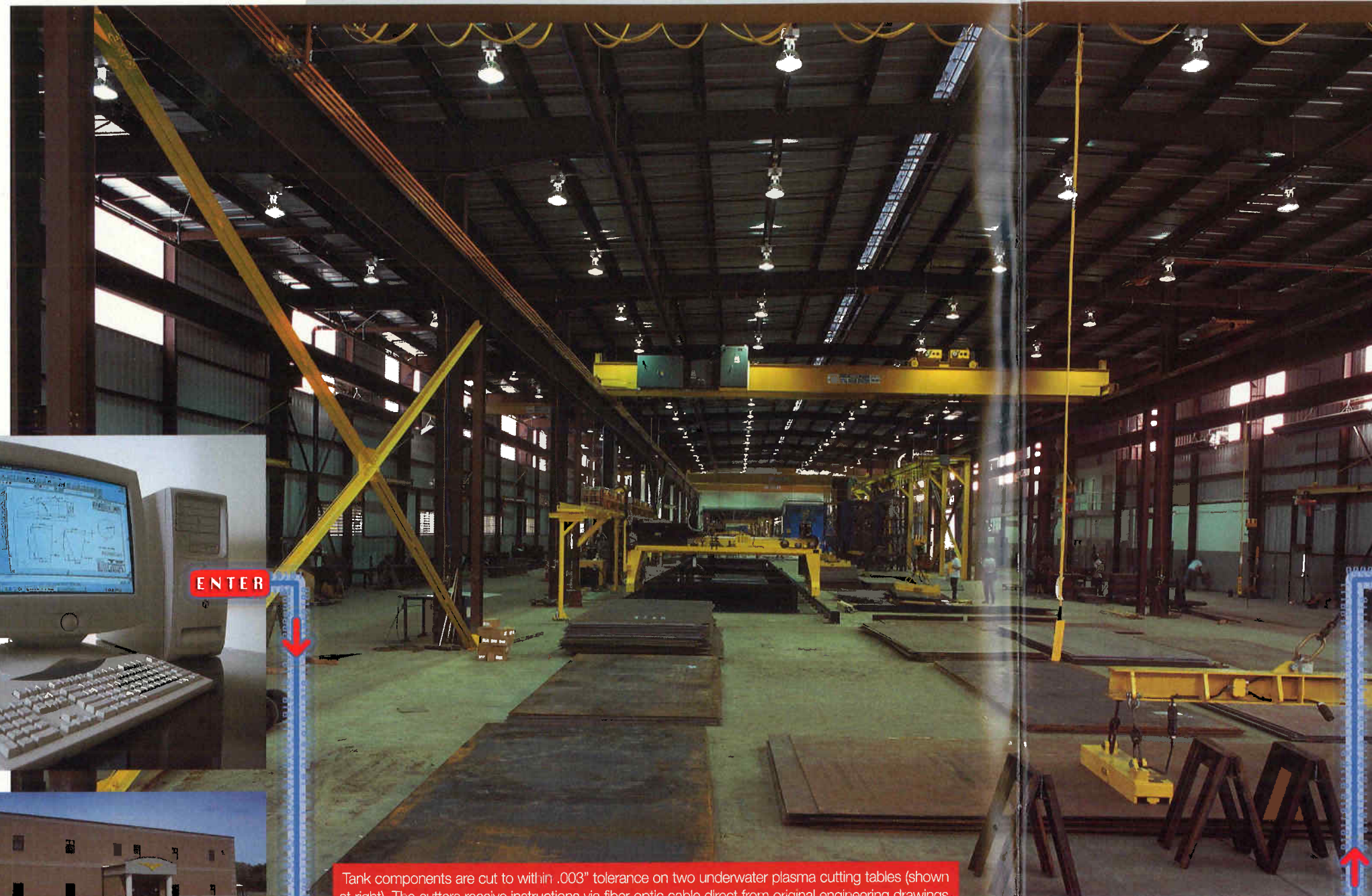
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## Facilities



### Diverse experience. Modern resources.

Pittsburg has long been recognized as a diverse fabricator, drawing from years of experience with hundreds of tank designs and thousands of applications.

Our experience multiplies every year, and we continue to improve our manufacturing environment with state-of-the-art equipment. Know-how and the most efficient resources allow Pittsburg to remain a leader in delivering cost-effective fabricating solutions.

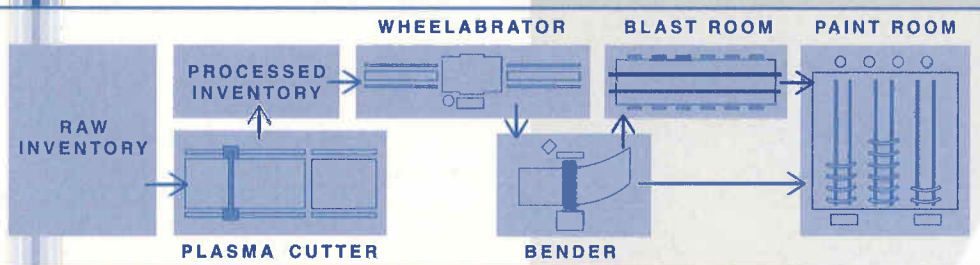
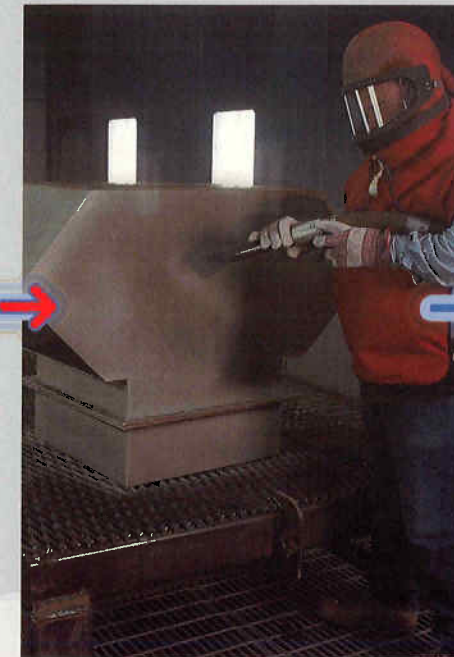
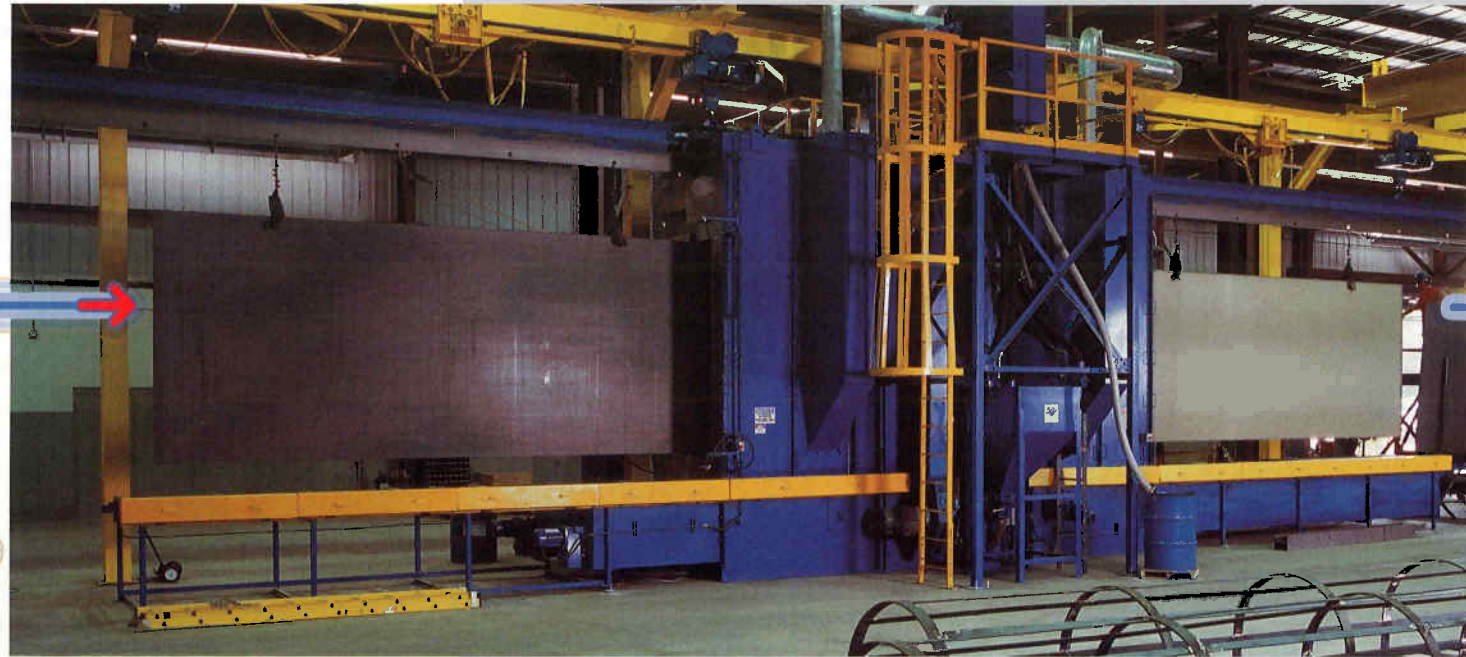
Our main facility includes more than two acres under roof, twelve overhead cranes, and 24 jib cranes.

Unique to the industry, our new facility is custom designed to provide the most efficient fabrication process. The quality of the finished materials is second to none, and the protection given to the natural environment is unmatched.



Tank components are cut to within .003" tolerance on two underwater plasma cutting tables (shown at right). The cutters receive instructions via fiber optic cable direct from original engineering drawings.

## Facilities



### Simultaneous: Environmental protection, safety, manufacturing efficiencies, quality fabrication.

When we combine one of the largest paint rooms in the Midwest with a plant layout designed for maximum safety and efficiency, the Pittsburgh fabricating plant becomes a model of economy – providing quality products, delivered on time.



### Specifically

The wheelabrator and blast room are positioned at the end of the production cycle. The elapsed time from shaped, clean material to applied coatings is a matter of hours as opposed to days in competitive facilities – avoiding oxidation which can lead to premature coating and lining failures.

### Wheelabrator

**Purpose:** To perform surface preparation of steel plates prior to coating. The process achieves cleanliness standards defined by NACE and SSPC. Coatings manufacturers require these standards be achieved for surface profile and cleanliness prior to application of protective coatings.

**How Does it Function:** Eight, 100-horse power electric motors propel steel shot on to the surface of the steel at speeds up to 400 mph inside a closed chamber.

**Efficiencies:** The machine recycles metal blast abrasive in lieu of single-time usage and disposal. The steel abrasive minimizes surface contamination occurring with other forms of blast material, including sand. The closed chamber and automatic recycling reduces potential employee injury and exposure to blast media. All processed parts receive a consistent surface profile and cleanliness.

### Blast Room

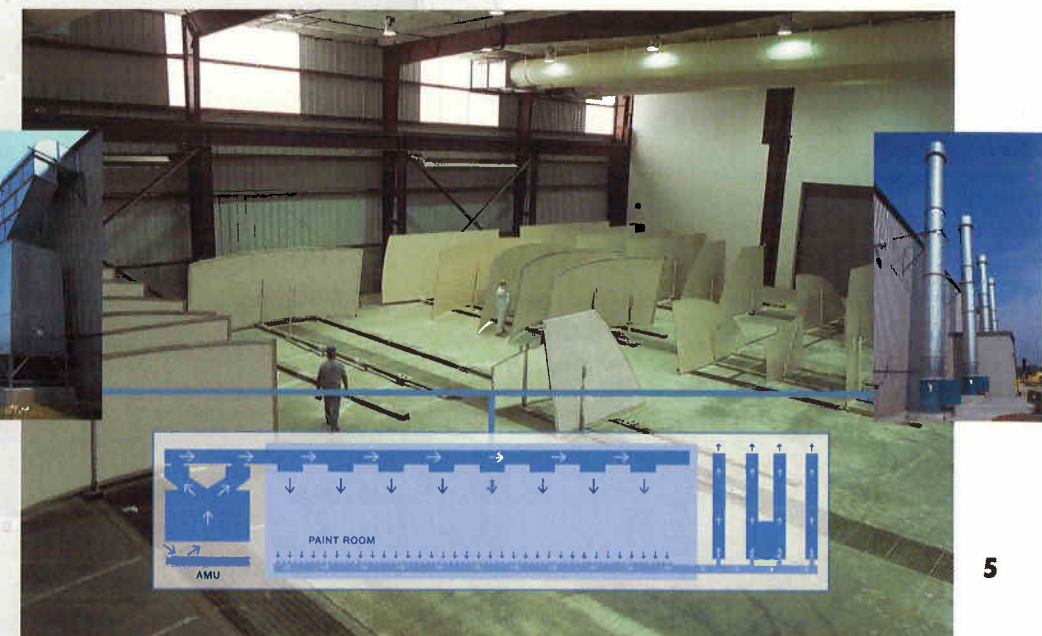
The sealed blast room allows environmentally-friendly surface preparations for fabricated sections too large for the wheelabrator. The room is positioned directly between our manufacturing plant and our paint room, complete with over head crane and cart trolleys for immediate transfer to painting, preventing unwanted oxidation to steel surfaces. The blast room is a full-recovery shot blast machine that requires no disposal of blast media and is equipped with dust collectors to reduce worker exposure to dust. The blast room exceeds current EPA and OSHA requirements.

*The diagram shows the 15 million BTU air make-up units that create a controlled environment for year-round coating of large pieces. A powerful down-draft filtration system is utilized to comply with environmental regulations, protect workers, and to eliminate overspray.*

### Paint Room

Our fully automated paint facility is a 110' x 90' room (10,000 sq. ft.) with a 20' height under crane hook. One of the largest paint rooms in the Midwest, the room is equipped with 15 million BTU air make-up units, allowing the controlled environment to be used for year-round painting. Exhaust ducts located under the room's floor are equipped with filters and scrubbers to minimize emissions to meet or exceed EPA standards.

Parts may be painted immediately after they have been cleaned and prepared by moving along the continuous trolley or crane from the blasting areas to the paint room.



# Municipal Tanks

Ground and Elevated Storage



50' x 35', 500,000-gallon municipal water reservoir



46'6" x 40', 500,000-gallon municipal water reservoir

## Steel Water Reservoirs, Standpipes, Elevated Tanks.

Welded-steel water storage structures are of lower initial cost than most other materials used in tank construction. Maintenance costs are proven to be lower with a steel tank. And the elasticity of steel and its ability to absorb large amounts of energy safeguard against the shifting of foundations and the effect of earthquakes (a primary design consideration).

Other design considerations include live and dead loads, including wind and seismic requirements.

**Reservoirs** are defined as ground storage tanks with a shell height (wall height) equal to or less than the tank diameter. Reservoirs are most economical when located in elevations high enough to provide pressure from gravity.



32,000-gallon municipal water bolted storage tank

**Standpipes** are storage tanks with a shell height greater than the tank diameter. Standpipes use the height of the tank to create water pressure. The same design considerations for the reservoir also apply to the standpipe, with even greater significance being placed on the load bearing capacity of the soil (to support the column of water in the standpipe).

When a standpipe design reaches an excessive height (generally greater than 100 feet), an **elevated tank** should be considered (see pages 10-11 for Standard Capacity Charts).



The use of this unique roof design enabled Pittsburg to increase the overflow elevation by eight feet and increase the tank capacity by

## Design, Build, Lease

Pittsburg can help secure financing for tax-exempt municipal leases. The company is truly committed to making water storage available in municipalities. Pittsburg can design and build the water storage in a community and help secure the lease for the entire system, including storm and sanitary sewers. **Contact our home office for details.**



## Pre-Owned Systems

An innovative program offering pre-owned tanks delivers financial benefits to communities and businesses, providing the same appearance and life expectancy of new tanks at reduced costs.

In fact, because early tank models were constructed of even heavier materials than they are today, pre-owned tanks meet or exceed current codes and have the same appearance and life expectancy of new tanks. **Ask us about our inventory of pre-owned tanks.**



74' x 40', 1,000,000 gallon water treatment tank



27' x 24', 100,000-gallon wastewater digesting vessel



Above: 10' x 80', 100,000-gallon municipal water standpipe



33' x 32', 200,000-gallon municipal water treatment facility



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# Industrial Tanks

Ground Storage Facilities

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## Industrial Storage

Over the years, Pittsburg Tank & Tower has designed, fabricated and erected thousands of welded-steel tanks (including carbon steel and stainless steel structures) for fire protection, chemicals, petroleum, jet fuel, food processing, power cooling, pulp and paper and bulk commodity storage.

Our tanks include both fixed and floating roof designs. Our technical experience extends to virtually any type of welded-steel storage facility in accordance with API standards 620, 650, and 653 as well as NFPA-22 and AWWA standard D100.

Proven, effective Pittsburg secondary containment and leak detection systems have been utilized

of licensed, professional engineers includes certified API 653 inspectors and memberships on the NFPA-22, 326, 329® technical committees.

We are proud to list among our customers the world's leaders in their respective industries. Pittsburg is the "repeat choice" of contractors, engineers, and final owners of industrial ground storage tank facilities.



throughout North America for chemicals and petroleum products, keeping your facility in compliance with all local, state and federal regulations (see the sketch of the Double Bottom on page 17).

Pittsburg designs include an extensive list of Factory Mutual® (FM®) pre-approved sprinkler tanks. Our staff



Liquor storage vessel – installed inside an operating pulp & paper facility

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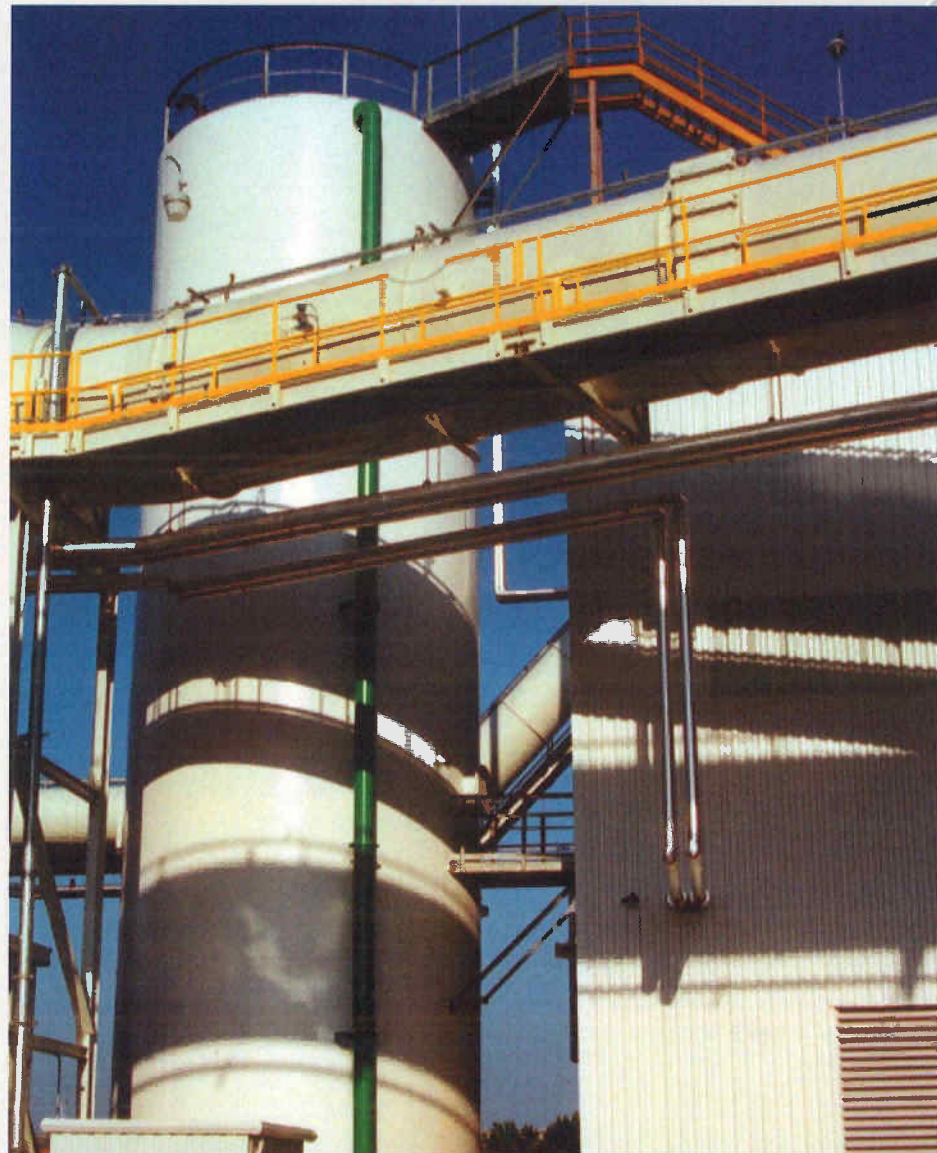
**Above:** 80' x 24', 900,000-gallon fuel storage tank

**Far Left:** 32' x 28', 304L stainless steel effluent treatment tank

**Left:** 33' x 16', 100,000-gallon fire protection tank – industrial warehouse



28' 6" x 32', 3,500 barrel fuel oil tank



25' x 65' cone-bottom process tank – industrial power plant



Two 40' x 30' fuel tanks in construction

# Industrial Tanks

Ground Storage Facilities



Above: 15' x 18' cone-bottom steel process hoppers – iron pellet storage

Terminal facility. 50 tanks designed, fabricated and installed over four years. Sizes range from 5,000 barrels (210,000-gallon) to 35,000 barrels (1,470,000-gallon). Floor and roof replacements were performed on tanks in excess of 200' in diameter.



46' x 40', 490,000-gallon liquor storage – pulp & paper mill

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## Flexible – To Meet Your Requirements

Shell height and diameter are flexible to meet the demands of your environment and product. Supported roof or self-supported roof designs may be applied. Larger diameter tanks typically have column-supported roofs. Smaller diameter tanks may utilize self-supported roof designs. The easy-to-maintain knuckle radius may be used on supported and self-supported roof designs.

52' x 32', 500,000-gallon insulated chilled water storage tank – institutional power facility



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# Standard Capacity Charts

Ground Storage Facilities

**Determining A Tank Size** The charts below indicate typical capacities and sizes of tanks. Please note:

- As space permits, only selected sizes are listed. Custom sizes, including those over 1,000,000 gallons, are available.
- A given capacity may be accomplished with varying diameter and height to meet specific demands.

## API Tank Capacities

| Barrels | Diameter | Height |
|---------|----------|--------|
| 2,500   | 21'-3"   | 40'-0" |
| 5,000   | 30'-0"   | 40'-0" |
| 7,500   | 37'-0"   | 40'-0" |
| 10,000  | 42'-6"   | 40'-0" |
| 12,000  | 46'-6"   | 40'-0" |
| 15,000  | 52'-0"   | 40'-0" |
| 20,000  | 60'-0"   | 40'-0" |
| 25,000  | 67'-0"   | 40'-0" |
| 30,000  | 73'-6"   | 40'-0" |
| 35,000  | 79'-6"   | 40'-0" |
| 40,000  | 85'-0"   | 40'-0" |
| 50,000  | 86'-0"   | 48'-0" |
| 55,000  | 100'-0"  | 40'-0" |

## Factory Mutual Tank Capacities

| Gallons   | Diameter | Height |
|-----------|----------|--------|
| 50,000    | 20'-0"   | 24'-0" |
| 100,000   | 27'-0"   | 24'-0" |
| 125,000   | 30'-6"   | 24'-0" |
| 150,000   | 28'-6"   | 32'-0" |
| 200,000   | 33'-0"   | 32'-0" |
| 200,000   | 42'-0"   | 20'-0" |
| 206,000   | 34'-0"   | 32'-0" |
| 250,000   | 37'-0"   | 32'-0" |
| 265,000   | 38'-6"   | 32'-0" |
| 275,000   | 39'-0"   | 32'-0" |
| 300,000   | 40'-6"   | 32'-0" |
| 350,000   | 44'-0"   | 32'-0" |
| 400,000   | 46'-6"   | 32'-0" |
| 500,000   | 46'-6"   | 40'-0" |
| 500,000   | 52'-0"   | 32'-0" |
| 600,000   | 46'-6"   | 47'-0" |
| 600,000   | 53'-0"   | 40'-0" |
| 650,000   | 50'-0"   | 45'-0" |
| 750,000   | 64'-0"   | 32'-0" |
| 1,000,000 | 74'-0"   | 32'-0" |

## Bolted Steel Tank Capacities

| Gallons | Diameter | Height |
|---------|----------|--------|
| 14,000  | 12'-3"   | 16'-1" |
| 32,000  | 18'-5"   | 16'-1" |
| 34,000  | 15'-4"   | 24'-2" |
| 45,000  | 15'-4"   | 32'-2" |
| 88,000  | 21'-6"   | 40'-3" |
| 125,000 | 29'-9"   | 24'-2" |
| 150,000 | 32'-8"   | 24'-2" |
| 200,000 | 32'-8"   | 32'-2" |
| 250,000 | 32'-8"   | 40'-3" |
| 318,000 | 47'-6"   | 24'-2" |
| 500,000 | 59'-5"   | 24'-2" |
| 606,000 | 65'-4"   | 24'-2" |
| 755,000 | 72'-10"  | 24'-2" |

## Standard Steel Tank Capacities

| Gallons   | Diameter | Height |
|-----------|----------|--------|
| 50,000    | 24'-0"   | 16'-0" |
| 100,000   | 27'-0"   | 24'-0" |
| 150,000   | 28'-6"   | 32'-0" |
| 200,000   | 31'-0"   | 32'-0" |
| 250,000   | 37'-0"   | 32'-0" |
| 300,000   | 40'-6"   | 32'-0" |
| 350,000   | 44'-0"   | 32'-0" |
| 400,000   | 46'-0"   | 32'-0" |
| 450,000   | 50'-0"   | 32'-0" |
| 500,000   | 46'-6"   | 40'-0" |
| 500,000   | 52'-0"   | 32'-0" |
| 750,000   | 64'-0"   | 32'-0" |
| 1,000,000 | 74'-0"   | 32'-0" |
| 1,500,000 | 90'-6"   | 32'-0" |
| 2,000,000 | 104'-0"  | 32'-0" |

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## Standard Capacity Charts

Water Storage

Welded-steel tanks are a win-win proposition. They can be provided at low initial cost relative to other options, are less costly to maintain, and are very reliable. It is not unusual to find a properly maintained tank in operation which was installed 50 to 60 years ago.

### Double Ellipsoidal



The double ellipsoidal tank has been used by municipalities and for fire protection for decades. It is often called "the standard of the industry."

| Gallons | Diameter | Head Range |
|---------|----------|------------|
| 20,000  | 18'-0"   | 11'-8 3/8" |
| 25,000  | 18'-0"   | 13'-8 3/8" |
| 30,000  | 22'-0"   | 12'-0"     |
| 35,000  | 22'-0"   | 13'-5"     |
| 40,000  | 22'-0"   | 15'-6"     |
| 50,000  | 22'-0"   | 18'-10"    |
| 60,000  | 22'-0"   | 22'-2"     |
| 75,000  | 30'-0"   | 16'-0"     |
| 100,000 | 30'-0"   | 20'-8"     |
| 125,000 | 30'-0"   | 25'-5"     |
| 150,000 | 32'-0"   | 28'-0"     |
| 200,000 | 36'-0"   | 28'-3"     |

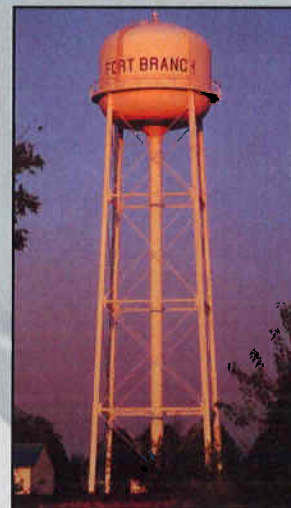


### Elevated Toro



Our standard multi-column design elevated toro is available in the sizes shown.

| Gallons   | Diameter | Head Range | Columns |
|-----------|----------|------------|---------|
| 200,000   | 36'-0"   | 28'-3"     | 4       |
| 250,000   | 43'-0"   | 26'-6"     | 5       |
| 300,000   | 43'-0"   | 31'-0"     | 5       |
| 400,000   | 50'-0"   | 30'-8"     | 6       |
| 500,000   | 50'-0"   | 37'-6"     | 6       |
| 500,000   | 56'-0"   | 31'-0"     | 6       |
| 500,000   | 64'-0"   | 25'-0"     | 8       |
| 600,000   | 56'-0"   | 36'-6"     | 6       |
| 750,000   | 60'-0"   | 40'-0"     | 8       |
| 750,000   | 65'-0"   | 35'-0"     | 8       |
| 1,000,000 | 70'-0"   | 40'-0"     | 8       |

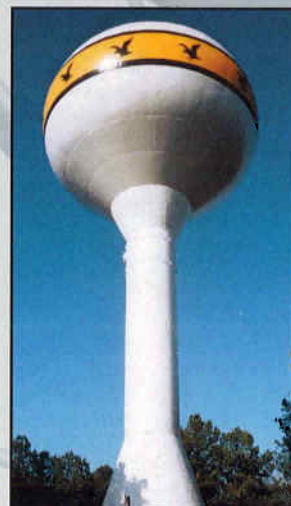
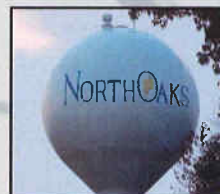


### Sphere



The classic smooth single pedestal sphere is available as shown.

| Gallons | Shapes | Diameter | Head Range |
|---------|--------|----------|------------|
| 25,000  | Sphere | 19'-6"   | 15'-6"     |
| 30,000  | Sphere | 20'-6"   | 16'-3"     |
| 40,000  | Sphere | 22'-0"   | 20'-0"     |
| 50,000  | Sphere | 24'-0"   | 21'-3"     |
| 60,000  | Sphere | 25'-0"   | 22'-9"     |
| 75,000  | Sphere | 27'-0"   | 25'-0"     |
| 100,000 | Sphere | 30'-0"   | 26'-0"     |
| 125,000 | Sphere | 32'-0"   | 29'-6"     |
| 150,000 | Sphere | 34'-0"   | 31'-4"     |
| 200,000 | Sphere | 37'-6"   | 34'-0"     |
| 250,000 | Sphere | 44'-0"   | 31'-0"     |
| 300,000 | Sphere | 46'-6"   | 32'-6"     |
| 400,000 | Sphere | 51'-6"   | 35'-0"     |
| 500,000 | Sphere | 55'-6"   | 37'-6"     |



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### Ped-Cone



A ped-cone has a unique appearance which combines aesthetics with economy for functional service.

| Gallons | Diameter | Head Range | Stem Diameter |
|---------|----------|------------|---------------|
| 50,000  | 29'-1"   | 20'-0"     | 6'-6"         |
| 75,000  | 33'-3"   | 24'-0"     | 6'-6"         |
| 100,000 | 36'-8"   | 26'-8"     | 6'-6"         |



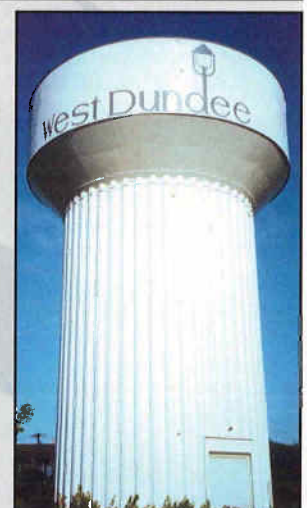
Note: Smaller capacities also available upon request.

### Fluted Pillar



In addition to its large water storage capacity the fluted pillar elevated tank provides dependable storage space inside the shaft for offices and pumping facilities.

| Gallons   | Diameter | Head Range |
|-----------|----------|------------|
| 250,000   | 42'-0"   | 30'-4"     |
| 300,000   | 44'-0"   | 30'-8"     |
| 400,000   | 44'-0"   | 39'-6"     |
| 500,000   | 50'-0"   | 37'-6"     |
| 750,000   | 64'-0"   | 40'-0"     |
| 1,000,000 | 74'-0"   | 40'-0"     |
| 1,500,000 | 86'-0"   | 42'-6"     |
| 2,000,000 | 100'-0"  | 40'-0"     |



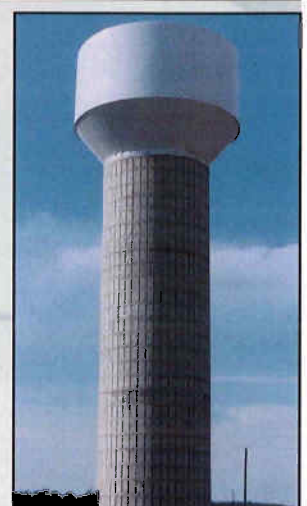
### Composite



Composite tanks offer unique aesthetic options and ease of maintenance over the life of the tank. Storage space inside the shaft is also an option with composite structures.

Our composite tanks can be manufactured from Carbon Steel, Stainless Steel, or be erected with any of our bolted tank containers (Glass-lined, Galvanized or Factory Powder Coated).

| Gallons   | Shaft Diameter | Tank Diameter | Head Range |
|-----------|----------------|---------------|------------|
| 500,000   | 24'-30'        | 54'-64'       | 27'-35'    |
| 750,000   | 30'            | 67'-6"-80'    | 30'-35'    |
| 1,000,000 | 30'-40'        | 74'-87'       | 30'-40'    |
| 1,500,000 | 40'-46'        | 80'-98'       | 35'-45'    |
| 2,000,000 | 46'            | 88'-110'      | 40'-50'    |



## Raised/Lowered/Modified



*Above: 250,000-gallon municipal water tank. Raised 11'. Increased height to match existing system overflow elevation.*

Pittsburg Tank & Tower is the proven industry leader in tank elevation modifications. A changed elevation or capacity requirement caused by growing usage requirements, system reconfigurations or other causes does not always require new tank design and construction. Pittsburg has saved municipalities and industrial customers millions of dollars over the years by raising or lowering tank elevations, rather than supplying a new tank. All work is performed to applicable standards and codes. The resulting storage tank performs to the new specifications without compromise. Installation is a fraction of new construction time, and the savings to the final owners can be tremendous.

Raising and lowering tanks is not limited to size and elevation. A 3,000,000-gallon standpipe was raised 20' recently to match existing pressure zones. The greater elevation increased the tank capacity by 500,000 gallons. Raising or lowering a tank by 20 to 50 feet is common.

### Container Replacement... Increased Capacities

Since it is not unusual to find a properly maintained, welded-steel tank in operation which is 50 to 60 years old, it is not unusual to replace the container on a tank while continuing to use existing pedestals and other supporting structural members.

Container replacement is usually required because the container

is no longer serviceable or the capacity demands to be increased. In either case, the savings over new engineering, fabrication and construction are considerable.

Each elevation change or replacement project, however, must be thoroughly reviewed based upon particular requirements, including soil bearing capacity, all applicable codes and other structural and design considerations.

### Pre-Owned Tanks

With proper maintenance, a welded-steel tank will last indefinitely. As the North American leader in dismantling and removing steel tanks, we have compiled a large inventory of properly maintained pre-owned tanks.

In fact, because early tank models were constructed of even heavier materials than they are today, we offer a 12-year guarantee on pre-owned tanks (compared to today's standard of one year on most new construction).

Pre-owned tanks meet or exceed current codes and have the same appearance and life expectancy of new tanks at reduced costs. **Ask us about our inventory of pre-owned tanks.**

## Moving/Re-Erecting

Relocating a tank or tanks within a system to alter performance is proven to be a cost-effective alternative to new

*A 1,000,000-gallon industrial water storage tank is shown as it is being moved on air over 1,700 feet. On-site completion was four days.*



tank construction. The resulting systems experience no compromise in specified performance. Many engineers are "repeat customers" of Pittsburg's move and re-erect operations. Your project may be right for a move and re-erect program. Ask Pittsburg to review the possibility.

*Below: A 300,000-gallon water tower was moved and re-erected (shown here before and after painting) – delivering the same appearance and life-expectancy of a new tank.*



## Demolition

When the tank owner determines that the best course of action is to dismantle and remove a tank, they typically call Pittsburg. Our professionals have safely performed tank removals since 1919.

*A 100,000-gallon municipal water tower is shown being removed utilizing Pittsburg's proven dismantling procedures.*



*Above: 1,000,000-gallon municipal standpipe. Raised 30' to increase capacity and overflow elevation.*

*In the air: A large-capacity municipal standpipe was moved 30 miles to a neighboring community.*

*Right: 500,000-gallon municipal water tower. Raised 12'.*

*Far right (facing page): One of two 1,000,000-gallon toro pillars raised 11' to alleviate low pressure zone in the system.*



*300,000-gallon municipal water tower. Raised 35 feet.*



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## Inspection/ Maintenance – Industrial

Tank Inspection, Repair,  
Alteration and Reconstruction  
*API Standard 653*

*Roof and bottom repairs may range from repair of defective welds and foundation repairs to complete height modification and roof replacement as shown below.*



### Compliance and Repair

All tanks will eventually require maintenance. Some will need minor repairs while others will need more extensive alterations or reconstruction. To be assured that your tanks are in compliance with the latest federal, state, local and industry environmental regulations and codes, a certified API 653 inspection may be required. Pittsburg's staff of certified inspectors and experienced workforce are qualified to perform the tank inspections and maintenance that will bring your tank into compliance and, at the same time, provide you with many years of safe performance from your tanks.

To suit your operational needs, inspections can be performed while the tanks are either in-service or out-of-service. After the inspections are completed, a written inspection report is furnished which includes a detailed component evaluation, photographs, recommendations for compliance and cost estimates.

The extent of maintenance resulting from the inspections could include:

- Shell, roof and bottom repairs or replacements;
- Roof structural repairs or replacements;
- Nozzle and manway repairs, relocations or replacements;
- Repair of defective welds;
- Bottom annular rings;
- Double bottoms;
- Secondary containments;
- Leak detection systems;
- Cathodic protection;
- Cut-down, move and re-erect;
- Foundation repairs and modifications;
- Special equipment;
- Cleaning and painting;
- Testing.

### Call On Experience

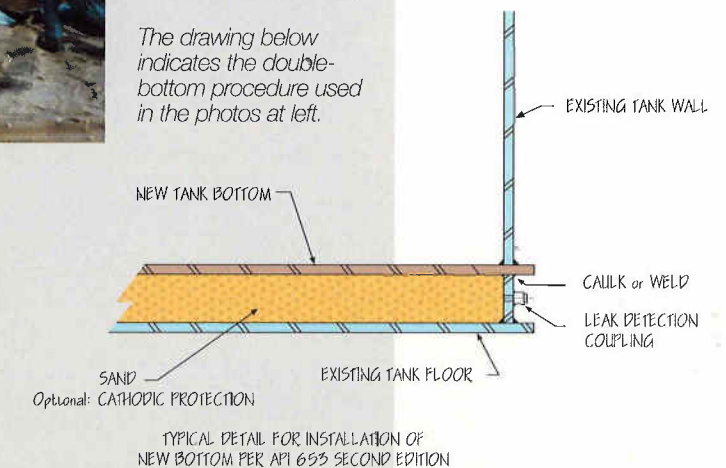
Pittsburg has the experienced staff, engineering, fabrication and erection capabilities to handle any maintenance requirements that will bring your tanks into acceptable compliance. Call on us for help.



### Double Bottom

A Pittsburg crew is shown retrofitting an existing tank with a double-bottom, secondary containment system – including leak detection ports. This installation as shown is compliant with API 653.

The drawing below indicates the double-bottom procedure used in the photos at left.



## Managed Tank Care (MTC)

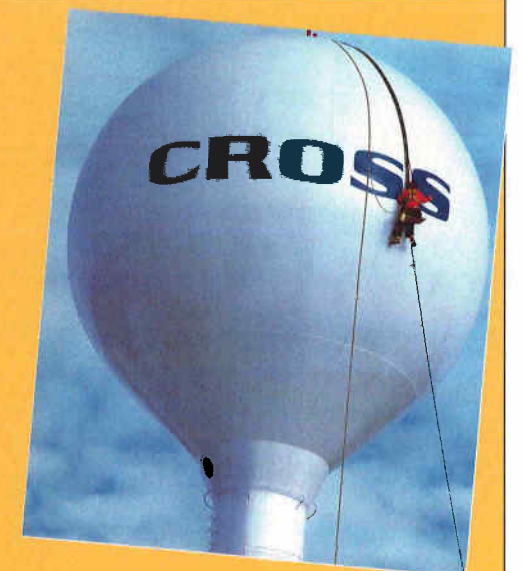
*One annual,  
budgeted expense.  
We take care of the rest.*

Pittsburg will customize a maintenance program to meet your exact requirements – taking into account the age of your tank(s) and the maintenance history. Your organization takes care of one scheduled, budgeted expense per year. We take care of the rest.

The MTC program will:

- Eliminate unexpected and large "lump sum" expenditures.
- Assure owner officials that the tank(s) will actually appreciate in value rather than depreciate over time.
- Assure that the tank(s) will always be aesthetically appealing to the community.
- For municipal water tanks, assure that the tank(s) will be properly cleaned and disinfected on the interior to assure ongoing safe, sanitary conditions.

**Contact the Pittsburg main office,  
extension 228 for details.**



## Inspection/ Maintenance – Municipal

Managed Tank Care,  
Code Updates, Coating  
Systems, Renovations,  
Emergency Repairs



*Above and Right: Underwater inspections are performed when a tank cannot be drained. Although this is not the preferred method of inspection, it is much better than delaying inspection. Minor repairs can be performed under water.*



Proven, Innovative. Contractors, Fabricators, Engineers.

### Inspections

To extend the life of your tank and prevent service failures, regular professional inspections (dry or scuba) are essential to determine the tank's exact maintenance requirements. Inspections can detect inadequate conditions, non-compliance with current codes and possible latent defects. Pittsburg's thorough reports are prepared by an engineering-led

committee and are complete with color photographs, recommendations and cost estimates. A small investment in an inspection helps your organization make informed maintenance decisions and saves costs in the long run.

### Managed Tank Care (MTC) Program

Pittsburg will customize a maintenance program to meet your exact requirements (taking into account the age of your tank(s) and the maintenance history). Your organization takes care of one scheduled, budgeted expense per year. We take care of the rest.

This program will:

- Eliminate unexpected and large "lump sum" expenditures.
- Assure owner officials that the tank(s) will actually appreciate in value rather than depreciate over time.
- Assure that the tank(s) will always be aesthetically appealing to the community.
- For municipal water tanks, assure that the tank(s) will be properly cleaned and disinfected on the interior to assure ongoing safe, sanitary conditions.

**Contact the Pittsburg main office, extension 228 for details.**

### Code Updates

Water storage tanks must meet a number of standards and codes that are constantly being revised. Some of these include AWWA, NFPA, OSHA, EPA, NSF, IRI, and UL as well as federal, state and local regulations

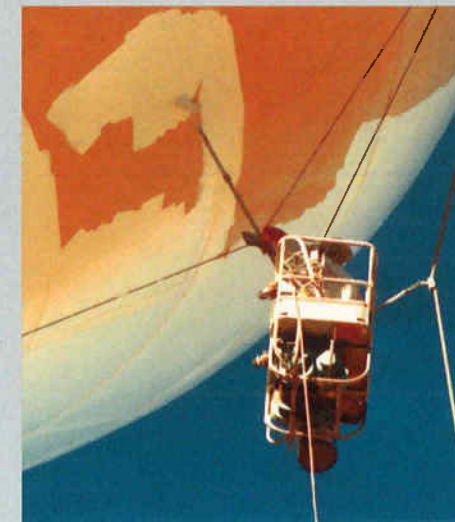
and SSPC and NACE inspection criteria. We deal with these standards and codes every day and even assist in writing some of them. Let us keep you up to date by appraising your tank and advising you of any needed updates that may be required, such as Second Shell Manways, Handrail Height Requirements, Additional Roof Openings, Safety Climbing Equipment, Ladders, Roof Vents, Ladder Gates, Vacuum Pressure Frost Proof Vents, Lightning Protection, Batwing and Circumference Railings... to name but a few.

### Seismic (Earthquake)

Many tanks do not meet current earthquake codes. Pittsburg can identify any deficiencies your tank may have. Further, we can engineer and perform the required seismic modifications.



*These photos illustrate the extent of severe damage found during inspections. Even this level of damage may be repaired. This dangerous severity, however, can be avoided with a proper maintenance schedule. The damage shown above and top right (on the vent) is especially easy to avoid, thereby preventing serious contamination potential.*



### Coating Systems

Protective coatings which isolate a structure from its environment will maintain a tank indefinitely.



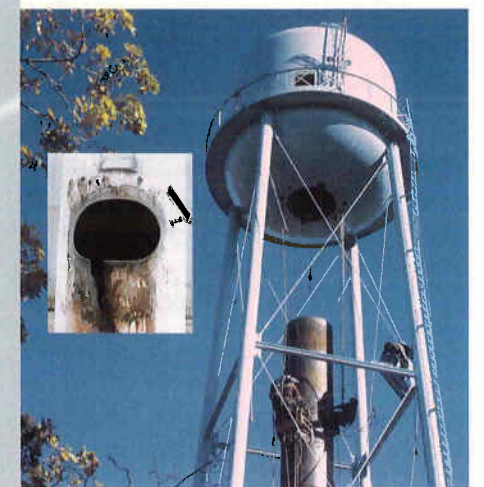
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TANK & TOWER  
COMPANY INC.**

SINCE 1919

*Pittsburg's Managed Tank Care Program (MTC) includes planned coatings and ensures, among other things, that your tank will remain aesthetically pleasing to the community.*

### Renovations

The need for renovation may be determined during inspection or may arise unexpectedly due to circumstances including severe weather, extended freezing temperatures or earthquake. Whatever the case, Pittsburg stands alone in the industry as the tank company which has moved, re-erected or renovated thousands of tanks originally installed by other manufacturers. Our broad familiarity with the tanks often makes us the best choice to perform required tank renovations.



*Pittsburg thawed the ruptured riser (inset), drained the tank, and replaced the damaged riser with a larger diameter pipe to eliminate a recurring problem.*

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## Emergency Response

365 Days a Year

*Below: An improperly vented tank can cause a sudden failure such as this "sucked-in" roof. Pittsburg replaced the damaged roof sections and installed an AWWA approved frost vent to ensure that the problem would not recur. The project required only fourteen days from contract to completion.*



### Safety

It is the priority of Pittsburg management to assure the safest possible working environment for its employees.

To this end, we are committed to maintaining a pro-active, ongoing and effective injury and loss prevention program designed to protect Pittsburg personnel from injury or occupational illness, and to protect private and company property from loss or damage. Pittsburg's safety program

is developed and implemented to accomplish our goal of zero work injuries/illnesses and zero accidents. Our EMR has remained below 1.0 for many years.

Safety is Pittsburg's highest priority. Management is committed to operating under the highest safety standards available and to hold itself and its employees to these high standards.

### Environmental

Pittsburg is committed to protecting the environment from contamination resulting from construction, repairs, painting and demolition of tanks and towers.

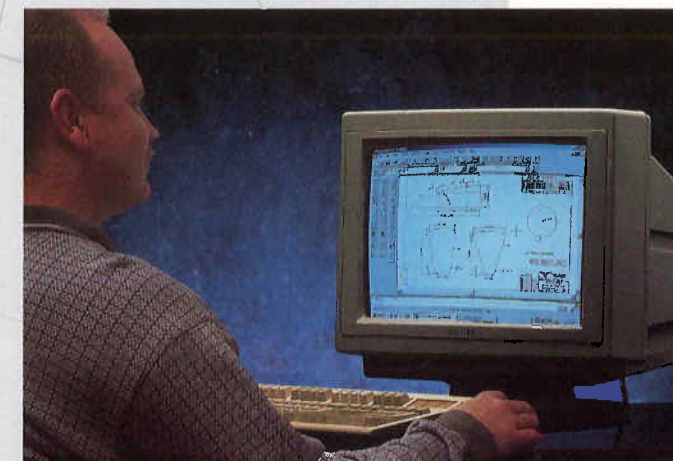
We utilize the latest technological advances available to perform our work in compliance with all federal, state, and local environmental regulations.

### A truly unique position:

*Since 1919, we have not only fabricated and erected our own tank designs, but have also cut down, moved and re-erected thousands of tanks that were originally installed by other tank manufacturers. This broad experience places us in a unique position whereby we can now handle the repair and maintenance of virtually any tank facility on a routine or emergency basis, often without interrupting service.*

## Engineering Services

Pittsburg's staff of licensed professional engineers have long tenures in the elevated and ground storage tank manufacturing industry. Each is trained in the preparation of designs and drawings that will meet and exceed your individual



*Each member of our professional design, drafting and engineering team is trained to meet and exceed your individual requirements, while complying with all applicable standards and codes.*

requirements, in addition to complying with all applicable standards and codes (industry, federal, state and local). When required, all designs and drawings prepared by our engineering staff will be signed by a professional engineer. Among our many engineering accomplishments is membership on the NFPA-22, 326, 329® technical committees.

PITTSBURG  
TANK & TOWER  
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**Since 1919,**

one of North America's leading full-service suppliers of field-erected steel tanks and maintenance services.

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- **Industrial Tanks**
- **Raised/Lowered/Modified**
- **Moving/Re-Erecting**
- **Demolition**
- **Inspection/Maintenance**
- **(MTC) Managed Tank Care**
- **Emergency Response**
- **Engineering Services**



Serving the World Market  
in the new Millennium.

## **PITTSBURG TANK & TOWER COMPANY INC.**



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Pittsburg Tank & Tower Company, Inc.

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Henderson, KY 42419  
**Phone:** (270) 826-9000 Ext. 228  
**Fax:** (270) 827-4417  
[www.watertank.com](http://www.watertank.com)

**Street Address:** 1 Watertank Place  
Henderson, KY 42420



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**Environmental protection, safety,**  
**manufacturing efficiencies,**  
**quality fabrication.**

When we combine one of the largest paint rooms in the Midwest with a plant layout designed for maximum safety and efficiency, the Pittsburg fabricating plant becomes a model of economy, providing quality products, delivered on time.

**Ask Pittsburg about the products and services provided by our sister companies:**

**International Tank, Dry and Liquid Storage** - Full-service supplier of bolted storage tanks. [www.internationaltank.com](http://www.internationaltank.com)  
**Allstate Tower, Inc.** - Servicing towers for the communications industry. [www.allstatetower.com](http://www.allstatetower.com)