



# Waterspheroid®

ELEVATED WATER STORAGE

[www.cbi.com](http://www.cbi.com)





Modern sleek design

## Why choose a Waterspheroid® elevated tank?

Proven to be the most popular of all single pedestal elevated water storage tank styles, the Waterspheroid elevated tank is available in storage capacities from 150,000 to 2,000,000 gallons. It offers low capital and maintenance costs, enhanced safety/security, convenient storage, and a small footprint that minimizes land requirements.

With its sleek design and pleasing contours the Waterspheroid tank is well suited for high visibility locations such as school grounds, commercial developments, residential neighborhoods, parks and other prominent locations.

We invented the Waterspheroid tank design, and we have built more single pedestal steel spheroidal elevated tanks than any other company, including the tallest and largest capacity tanks in service. We have the most experience in the industry in the art of forming the ball. We use larger steel plates than our competitors which leads to a smoother ball shape with fewer weld seams, minimizes potential areas of paint failure and reduces long-term paint maintenance of the tank.

Additionally, we use double-curved, hot pressed knuckles between the bell and the shaft and between the shaft and the ball. Not only does this add to the smooth line aesthetics of the tank, it eliminates the potential lamellar tearing that could occur on tanks using dollar plates and coned sections in these areas.

Waterspheroid tanks are all-steel, all-welded structures that have proven reliability, serving thousands of municipalities and industries for decades. Properly maintained and operated, steel tanks offer an extremely long life, with some structures exceeding 100 years of service.

Since the construction of our first elevated tank in 1894, we have become a global leader in the design and construction of elevated water storage tanks. We pioneered the transition to welded steel tanks in the 1930s, invented the original Watersphere® tank in 1939, the larger Waterspheroid® tank in 1954, and have been improving the concept ever since. We also have been instrumental in the development of the AWWA standards, beginning with the first D100 Standard in 1941, continuing today through active organization and committee participation.

## Taking the Lead with QHSES

McDermott is committed to setting a leading example in all areas of Quality, Health, Safety, Environment and Security, and encourages our partners, subcontractors and clients to join us in the pursuit of outstanding QHSES performance. Taking the Lead is a company-wide initiative that brings a single, united QHSES culture to our diverse workforce and organization, a culture where setting the right example in QHSES attitude and behavior is simply 'In our DNA.'



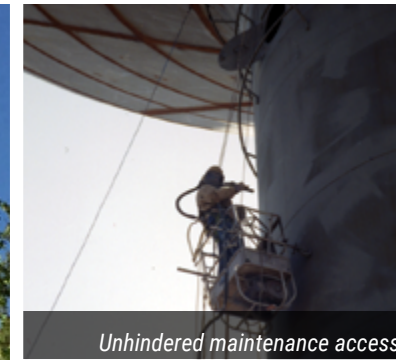
Visually pleasing contours blend well with surroundings



Attractive graphics enhance community identity



Optional roof mounted antennae



Unhindered maintenance access



Piping and valves in base



More pleasing appearance, lower maintenance and superior security than multi-column tanks

## Selecting a Waterspheroid elevated tank

CB&I provides sample specifications and detail drawings for engineers and owners who are planning Waterspheroid projects. Contact our regional sales force to receive guidance on specifying your tank or visit [www.cbi.com/water](http://www.cbi.com/water) to view our standard specifications and drawings.

### Aesthetic design

- Smooth contours
  - The most popular single pedestal style in use
  - Visually pleasing, modern design
- Blends well with surroundings
- Capitalizes on high visibility locations
  - Optional lettering and logos enhance community identity and pride
  - Custom ornamental and specialty paint designs available

### Economics

- Low capital expenditure
- All-steel composition permits cost effective, year-round construction
- Small footprint permits "tight sites" and minimizes land cost
- Turnkey supply of foundation and painting offers cost and schedule savings
- Eliminates costly and unsightly fencing
- Height can be modified if pressure requirements change after installation
- At end of life cycle, tank can be demolished at minimal cost

## Maintenance

- Style minimizes interior and exterior painted surface area and future maintenance
- Interior dry surfaces are weather protected and seldom need repainting
- Maintenance access to all exterior surfaces is unhindered

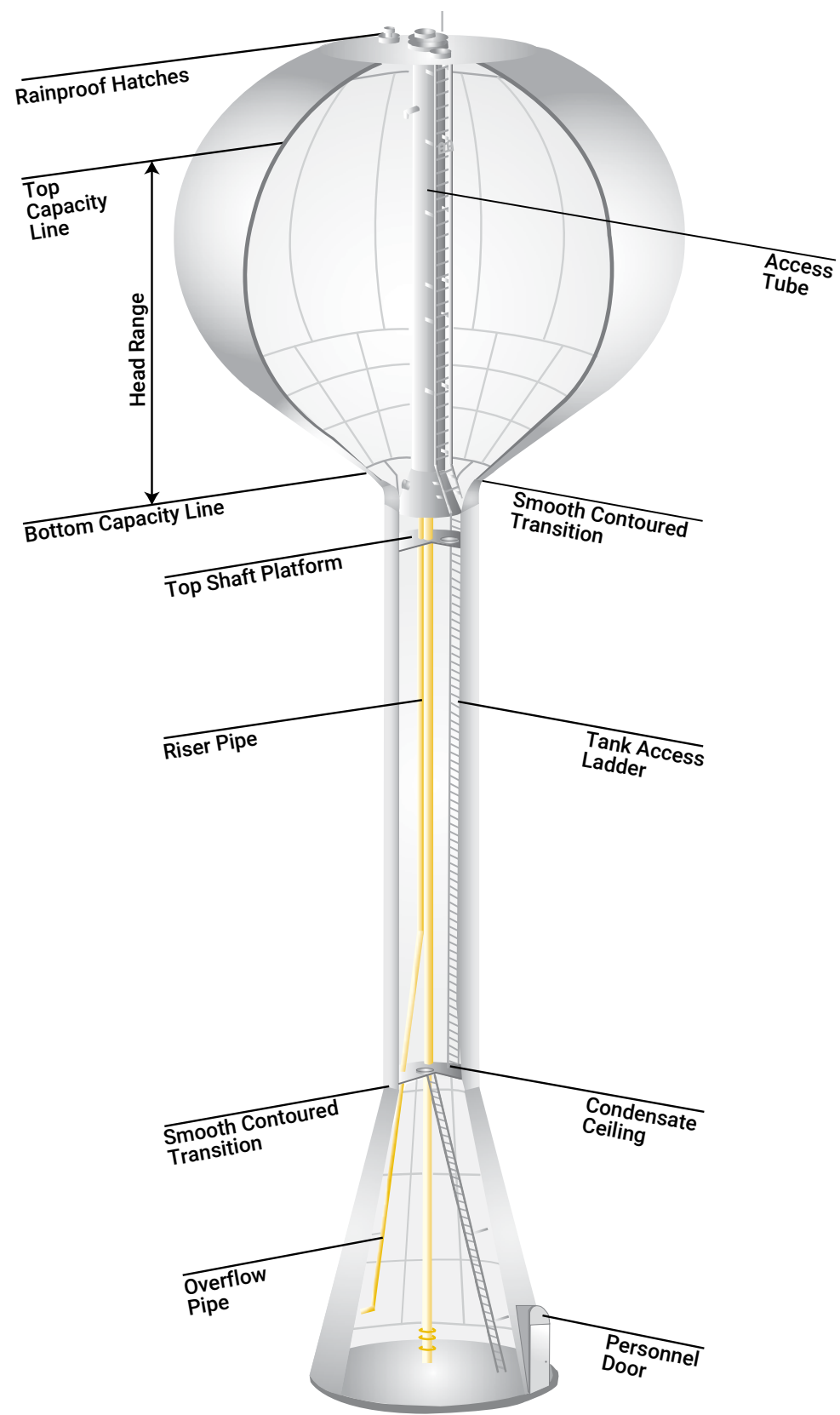
## Safety and security

- Solid, flush threshold steel door with deadbolt lock restricts unauthorized entry
- Enclosed interior access ladders
  - Minimize vandalism and unsightly graffiti
  - Minimize unauthorized tank access
  - Facilitate climbing during inclement weather
- Proven performance in high wind events (tornadoes and hurricanes)

## Multi-purpose space inside bell

- Optionally insulated and heated
- Provides space for multiple uses, such as:
  - Tool and equipment storage
  - Pumps, valves, piping and controls
  - Telecommunication equipment
- Flush threshold personnel door allows easy access for storage

## Standard features and options



### Standard features

- One 36 in. wide by 80 in. high steel personnel door with flush threshold
- Concrete floor inside base
- Steel riser pipe with expansion joint
- Steel overflow pipe to grade with splash block
- Steel condensate ceiling with drain
- Ladders in pedestal and access tube
- Safety devices on ladders as required by state and federal regulations
- Steel top shaft platform with one 30 in. diameter manway in top shaft platform
- One 30 in. diameter manway in condensate ceiling
- One 42 in. diameter access tube
- Painter's rings at top of pedestal
- One 24 in. diameter painter's ring hatch
- Two 30 in. diameter roof hatches
- One 24 in. diameter painter's ventilation roof hatch
- Minimum 1/4" thick steel roof plates
- Seal welding underside of roof
- Fail-safe roof vent
- Interior lighting in pedestal and access tube

### Options

- Lettering, logos and decorative graphics
- Alternative style as composite elevated tank or Hydropillar®
- Ornamental and specialty styling
- FreshMix™ circulation system
- Double personnel door
- Overhead door
- Valve vault inside base
- Control room in base
- Dual risers
- Stainless steel riser
- Stainless steel overflow
- Riser insulation and heat tracing
- Intermediate platforms
- Seal welding of pedestal appurtenances
- Upsized 48 in. diameter or 60 in. diameter access tube
- Tank drain
- Internal tank ladder on access tube
- Roof handrail
- External security or decorative lighting
- FAA lighting
- Instrumentation
- Telemetry
- Cathodic protection
- Lightning protection
- Antenna penetrations and supports

### Standard capacities and dimensions

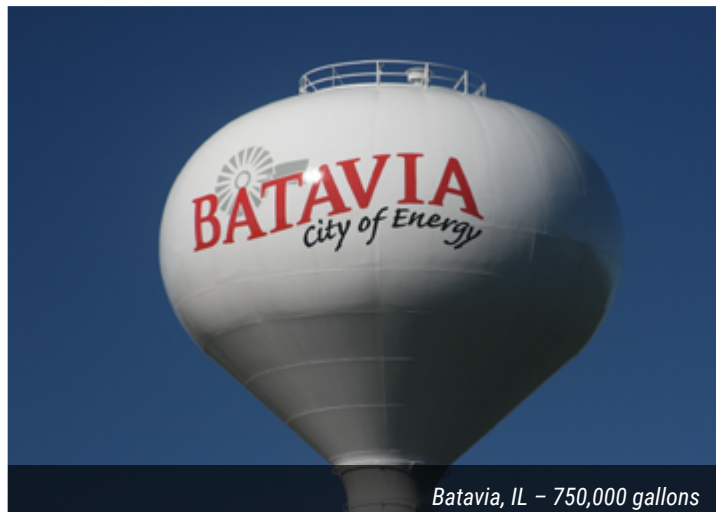
Capacity U.S. Gallons	Spheroid Diameter ft-in.	Head Range ft-in.
150,000	35 - 0	30 - 0
200,000	39 - 10	30 - 0
250,000	42 - 10	32 - 6
300,000	46 - 6	32 - 6
400,000	50 - 8	37 - 6
500,000	55 - 10	37 - 6
600,000	58 - 2	40 - 0
750,000	64 - 8	40 - 0
1,000,000	74 - 8	40 - 0
1,250,000	79 - 2	45 - 0
1,500,000	86 - 0	46 - 0
2,000,000	93 - 0	52 - 0



Northville, MI - 1,000,000 gallons



Gonzales, LA - 1,000,000 gallons



Batavia, IL - 750,000 gallons



Shorewood, IL - 1,500,000 gallons



Wentzville, MO - 2,000,000 gallons



Custom paint options

CB&I is the world's leading designer and builder of storage facilities, tanks and terminals. With more than 59,000 structures completed throughout our 130-year history, CB&I has the global expertise and strategically located operations to provide our customers world-class storage solutions for even the most complex energy infrastructure projects.

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