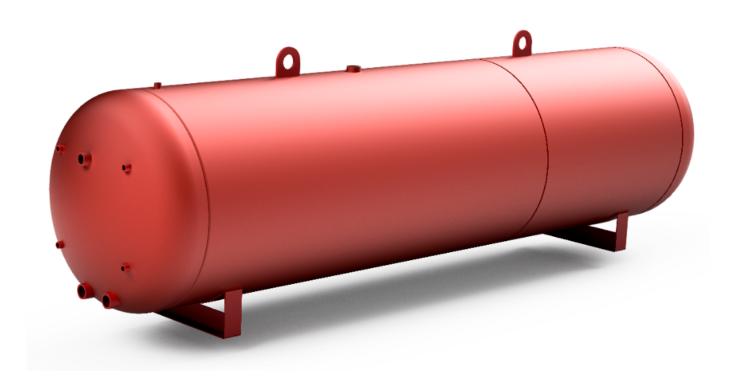
# HYDRO-PNEUMATIC TANKS

**For Domestic Water Systems** 







### Hydro-Pneumatic Tanks for Domestic Water Systems



Storage to 30,000 Gallons

# The RECO CS Hydro-Pneumatic Tanks

Reco CS hydro-pneumatic tanks are designed to store both water and compressed air. Without an internal bladder to separate the two, the compressed air is in direct contact with the stored water and acts to either absorb or exert pressure on the water.

#### **Applications**

Schools, Sports Centers,
Commercial Laundry, Sub
Divisions, Plant Sites, Trailer Parks,
Camp Ground, Office Complexes,
Truck Stops, Apartment Buildings,
Fire Protection.



#### **We are RECO Commercial Systems**

#### **The Water Heater and Pressure Vessel Experts**

We are recognized as one of the country's leading suppliers of water heaters and pressure vessels for the commercial, institutional, industrial, pulp and paper, oil and gas, power generation and chemical industries.

In fact, it is hard to find an industry, market, or application today that doesn't rely on the quality, safety, and convenience that RECO Commercial Systems brings to their most critical services and processes.

RECO CS hydro-pneumatic tanks are used in well water systems, fire protection systems, or as buffer tanks in large pumping systems. They improve performance in three ways:

- **Pressurization** maintains a minimum positive pressure throughout the system. This provides a rapid response to demands for water without having to continuously run the system pumps.
- Pulsation Dampening dampens pressure fluctuations and any hydraulic shock (water hammer) caused by pump cycling or rapid valve closures. This helps extend the life of those components.
- **Safety** serves as a back-up safety device, supplying water for critical needs during unplanned power outages.



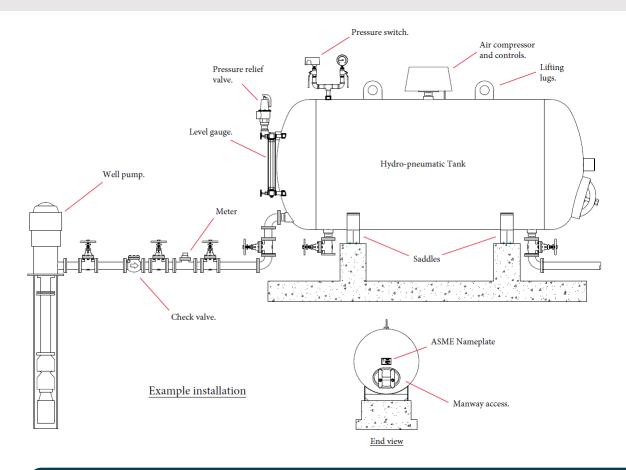
#### **Typical Hydro-pneumatic Tank Installation**

A hydro-pneumatic tank contains pressurized air and water. It does not have a bladder and air is in direct contact with the water. The compressed air acts as a cushion exerting or absorbing pressure. This type of tank serves three main functions:

- 1 Delivers water within a selected pressure range so the well pump is not continuously running.
- 2 Prevents a pump from starting up every time there is a minor call for water from the distribution system.
- 3 Minimizes pressure surges (water hammer).

Well pumps and booster pumps work with the tank to maintain a consistent pressure range in the system. The tank helps maintain the pumping-cycle rate required to avoid overheating the pump motor and premature motor failure.

Hydro-pneumatic tanks work best with an air cushion of  $\frac{1}{4}$  to  $\frac{1}{2}$  the tank capacity. This cushion decreases as water absorbs air and the tank loses its ability to pressurize the system. To keep that from happening, there should be an automatic system to replenish the air volume.





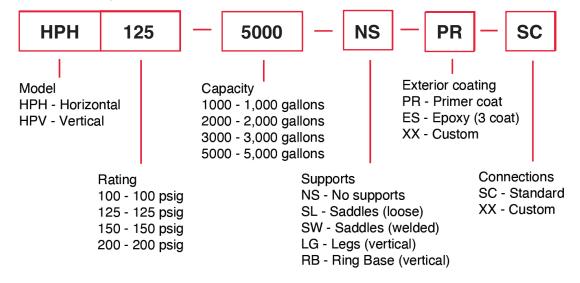
#### **RECO Commercial Systems Hydro-Pneumatic Tanks**

Standard hydro-pneumatic tanks are available from stock and ready for immediate delivery in 1,000, 2,000, 3,000 and 5,000 gallon sizes.

KEY FEATURES	
Materials	Carbon steel vessel and connections are standard.
Specifications	Designed to ASME B & PV Code, Section VIII, Division I.
Ratings	Standard vessels are rated to 125 psig @ 250°F.
Connections	All standard connections are NPTF. Flanged connections are optional.
Interiors	Sandblasted per SSPC-SP 6, with a red oxide primer or (3) coat paint system applied to a 10 to 15 mils final dry film thickness.
Orientation	Horizontal or vertical.

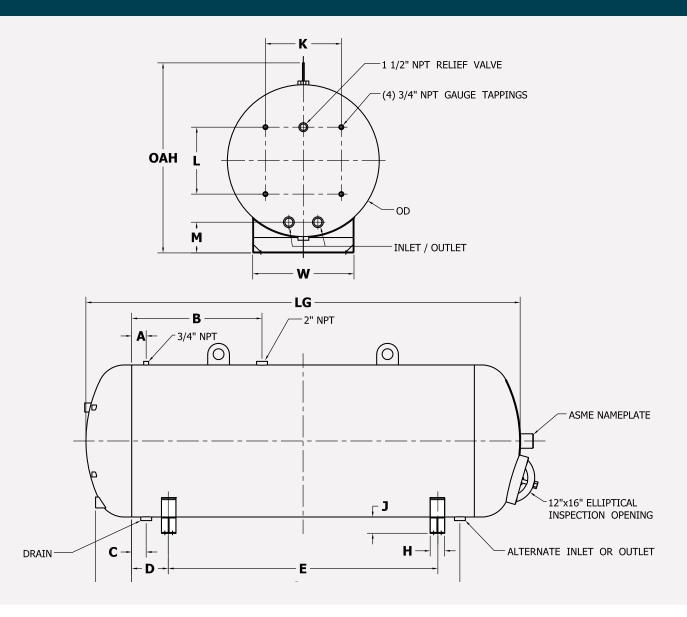
All tanks include connections for a sight glass and separate relief valve, air inlet, vent, and drain. A 12" x 16" manway is included as standard. interiors are epoxy lined to prevent corrosion.

- Epoxy lining is NSF 61 certified.
- Vessels can be designed for higher pressure rating or with additional corrosion allowances.
- Custom sizes and connections are available.
- We are able to offer special exterior coatings and colors.
- Supports can be provided to suit specific seizmic requirements.
- Internal piping can be provided to optimize water circulation.





## **Dimensions of standard tanks**



Capacity (Gals.)	Water Inlet/ Outlet	A	В	С	D	E	F	G	Н	J	K	L	M	W	ОАН	OD	LG	Weight (lbs)
1,000	2"NPT	4	54	4	10.4	121.75	10	138.7	4	4.5	21	19.5	8.5	28	54	42	168	1,891
2,000	3"NPT	4	54	4	14.9	103.75	13.1	129.6	4	4.75	30	26.5	10.8	40	72	60	168	3,944
3,000	3"NPT	4	54	4	16.6	133.5	14.5	162.6	4	4.75	33	29	11.8	44	78	66	204	5,122
5,000	4" NPT	4	54	6	20.2	207.25	16.1	241.6	4	4.75	36	31.5	13.3	48	84	72	288	8,316



To learn more, contact us or any one of our North American sales representatives.

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