

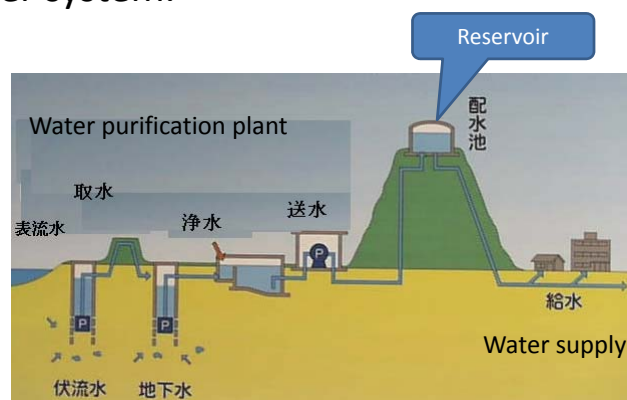
Pre-Stressed Concrete Tank



Pioneer of the PC Technology
ABE NIKKO KOGYO CO., LTD.

A distributing reservoir is a required matter of a water system.

- A distributing reservoir must be got ready in a water system.



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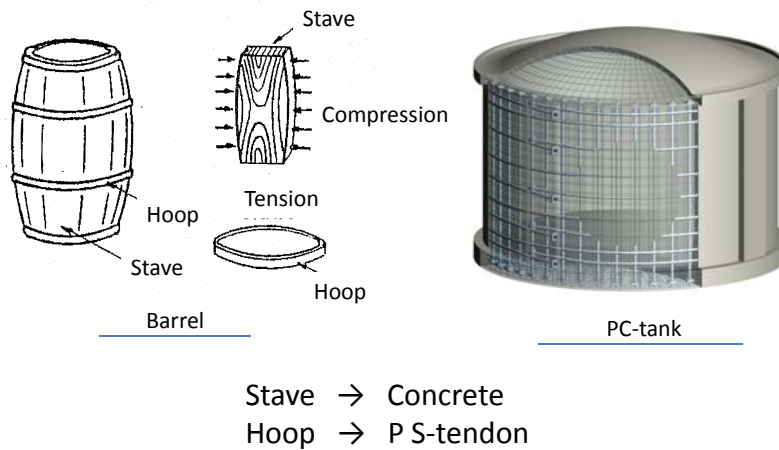
Pre-stressed Concrete Tank

- The PC tank is strong structure and resistant to [an earthquake and a tsunami](#).
- The PC tank is superior durable and water-tightness by using a high-strength concrete and PC tendon. There is [no limitation of the depth of the water](#). The required area for the construction [may be narrowed](#).

Pre-stressed Concrete Tank

- [Construction cost is cheap](#). The PC tank of 3000m³ or more will be cheaper than the RC tank. However, when the PC tanks which are smaller than 3000m³ are constructed on a highland and hillside, the amount of earthwork and site area will be reduced, as a result it is more economical. Therefore, the PC tank is now widely recognized in the Japanese tank market.

The principle of PC-tank



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CHARACTER of PC TANK TECHNOLOGY

Our Technology



① CONSTRUCTED THE FIRST PC WATER TANK IN JAPAN.

We designed and constructed the first PC water tank in Japan in 1957. More than 8,000 PC tanks have been built before now, and we engaged in more than 60% of them. [We have much technical know-how about design and construction.](#)

② AIR DOME METHOD

We developed and have diffused the breakthrough method of building the dome roofs, which is [ecological, safe and durable.](#)

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CHARACTER of PC TANK TECHNOLOGY

Advantage of products and technology

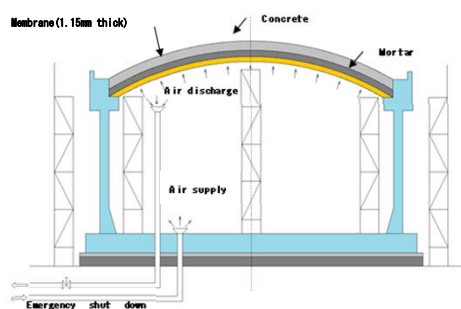
① The PC tank needs low materials and lightweight. It will not occur cracks and leakage. There is no limitation of the depth of the water, so the required area for the construction may be narrowed. PC tanks have been in widespread use because of the economic efficiency.

② Air-Dome Engineering is safety construction method and doesn't require formwork and support.

It is superior in term of durability of inside of the dome because the membrane remained in inside of the dome. There are 227 results in Japan.

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Air-Dome Engineering



Rising the air pressure

A Formwork and support is unnecessary.
Not require the skilled workers and also
can sharply reduce labors.

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Air Dome Engineering

Characteristics

- The air dome Engineering is a labor-saving method for building the dome roofs of pre-stressed concrete tanks.
- Instead of the conventional formwork materials and shoring materials, it is used a membrane material which is fixed by air pressure and mortar shell that is placed on the membrane.

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ON-SITE APPLICABILITY

- Most materials are “local production and local consumption”, and construct by local labors.
Cement , aggregate and rebar are local materials. Limited materials, for example, PC steel is supplied from neighbor countries. Local labors construct forms , cast concrete and so on.
- Bring up PC engineers
From designing to constructing , engineers need much technical know-how.
So we'll coach and bring up local engineers , and engage in technology transfers.

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