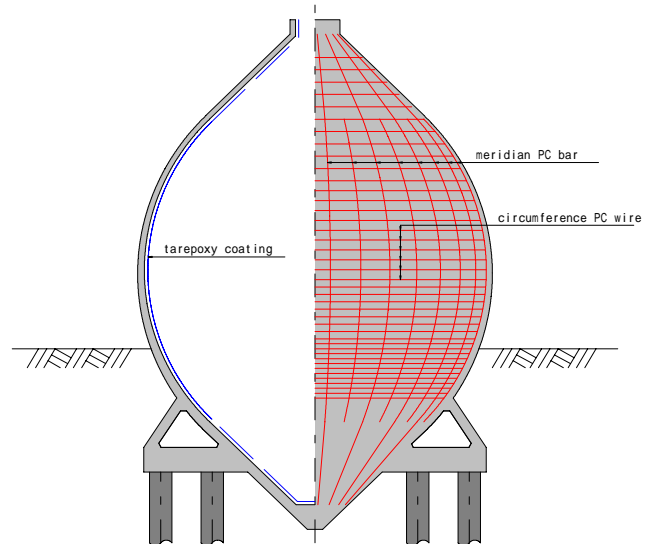


# Egg Shaped Digester

## DESCRIPTION

In the process of sewage disposal, sewage treatment has been an important issue. Increased efficiency of sewage treatment is enabled by using an egg shape digestion tank.



## Advantages

### Perfect and efficient churning

Continuous curvilinear shape and small maximum section of tank increases flow velocity of sludge. Perfect mixing state is obtained easily by small churning energy and temperature is also equalized.

### No congeries of sand

The slope of a tank facilitates sand collection and extraction.

### Facile extraction of scum

In an egg-shaped case, there are few gas-liquid contact at the top of sludge and produces less scum. it becomes easy to take scum out.

### Little diffusion heat loss

Since an egg shape has little surface area as compared with an ordinary form, there are few amounts of heat dissipation.

### Harmonize with the surrounding environment

Since the structure has curved surface, it harmonizes with the surrounding environment and excels in sight.

### Excel at water and air tightness

Post-tensioning in the circumferential direction and the meridian direction by high strength PC steel materials to high quality concrete prevents cracking. Water tightness and air tightness level is high enough to prevent corrosion of steel materials.

### Ovoid shape is optimal for PC structure

In an egg shaped sludge digestion tank, axial tensile force prevails and PC structure is optimal solution.

# Egg Shaped Digester

## CONSTRUCTION



Excavating work

Piling work

Mortar shooting

Form work at lower circular cone



PT arrangement at lower circular cone

Bar arrangement at ring foundation

Concrete casting at ring foundation and lower circular cone



Form work at side wall

PT arrangement at side wall

Concrete casting at side wall



Meridian PT tensioning

Circumferential PT tensioning

Appurtenant work

Completion



### 3000m<sup>2</sup> Standard process

|                            | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|----------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|
| Earth work                 | ■ | ■ | ■ |   |   |   | ■ | ■ |   |    |    |    |    |
| Piling work                |   | ■ |   |   |   |   |   |   |   |    |    |    |    |
| Ring foundation work       |   |   | ■ | ■ | ■ |   |   |   |   |    |    |    |    |
| Side wall work             |   |   |   | ■ | ■ | ■ | ■ | ■ | ■ | ■  |    |    |    |
| Crowning pit work          |   |   |   |   |   |   |   |   |   | ■  | ■  |    |    |
| Inside waterproofing work  |   |   |   |   |   |   |   |   |   |    | ■  | ■  |    |
| Insulation exterior finish |   |   |   |   |   |   |   |   |   |    |    | ■  | ■  |