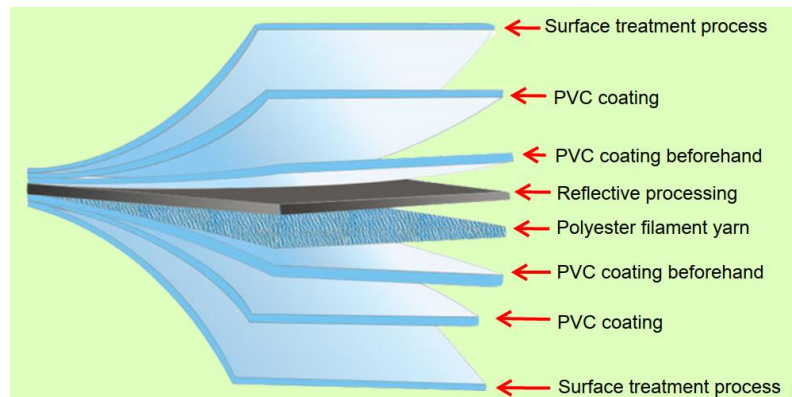


## The advantage and the Disadvantage of Red Mud biogas digester:

### Advantage:

Red mud soft biogas digester is a modified material, and incomparable to the general plastic. It has the following characteristics:

Excellent thermal and aging resistance, good weather resistance, tensile strength, elongation, permeability



resistance, low temperature flexibility; Flame retardant, heat stability, acid and alkali corrosion resistance, especially excellent waterproof, corrosion resistance and tensile performance. So it's very safe to put in outdoor, and it's durable than other materials commonly.

1. Excellent heat absorption. Biogas fermentation temperature is the key factor, because we require it to be above 10 degrees.

Red mud effect is 5-10 degrees higher than the general biogas



digester insulation effect, biogas digester can provide more gas than any other styles. This is red mud's unique advantage.

2. Strong pressure resistance, the pressure difference is a big problem when we use it. And afraid of pressure is too large, resulting in explosions and other situations. In fact, the pressure



of biogas digester is about 2 kpa, and the Red Mud soft biogas digester can withstand 10 kpa. So there's nothing to worry about.

3. Good air tightness, our products use imported high temperature welding machine, instead of ordinary manufacturers of high frequency machine, in the production of air pressure, temperature and other conditions. Stronger air tightness, plus the welding strip reinforcement advantage, can better meet the fermentation anaerobic environment.



4. Strong weather resistance, the red mud material can remain soft in cold winter(-40°C). It can also withstand hot summer temperatures (60°C). According to the data, its service life is 20 years.

5. Cost saving. Soft biogas digester can save 50% of the cost than traditional biogas digester and glass fiber reinforced plastic biogas tank. Less investment, quick effect, post-maintenance is almost zero.

6. Easy installation and convenient transportation. The traditional biogas digester system installation needs at least half a month, and the soft biogas digester can be installed in an hour.

After feeding (advance fermentation) the next day can produce gas to use, gas production rate is higher than traditional ones. The volume is very small after folding. For example, 1m<sup>3</sup>



Red Mud digester is less 0.1m<sup>3</sup> and less 10KG after folding.

Completely solve the problems of slow construction, difficult to build, slow gas production, less gas production, difficult to transport, difficult to install and so on.

7. Simple and easy to learn. Traditional biogas system requires to master the air tightness process, knowledge of engineering drawings, master brick arch technology, understand biogas tank leakage, water leakage judgment treatment and protection, training





time needs more than three months, and maintenance is difficult. The Red Mud biogas is simple and easy to master. 4 hours of training can be learned to achieve a comprehensive grasp, the success rate of

construction is 100%, maintenance and replacement is very simple and easy to operate, only 3 or 4 minutes to repair, the balloons body permanent use.

### **Disadvantage:**

Red mud biogas digesters can be punctured by sharp objects, and can also be damaged by fire for a long time. In the process of use, protective measures must be taken.