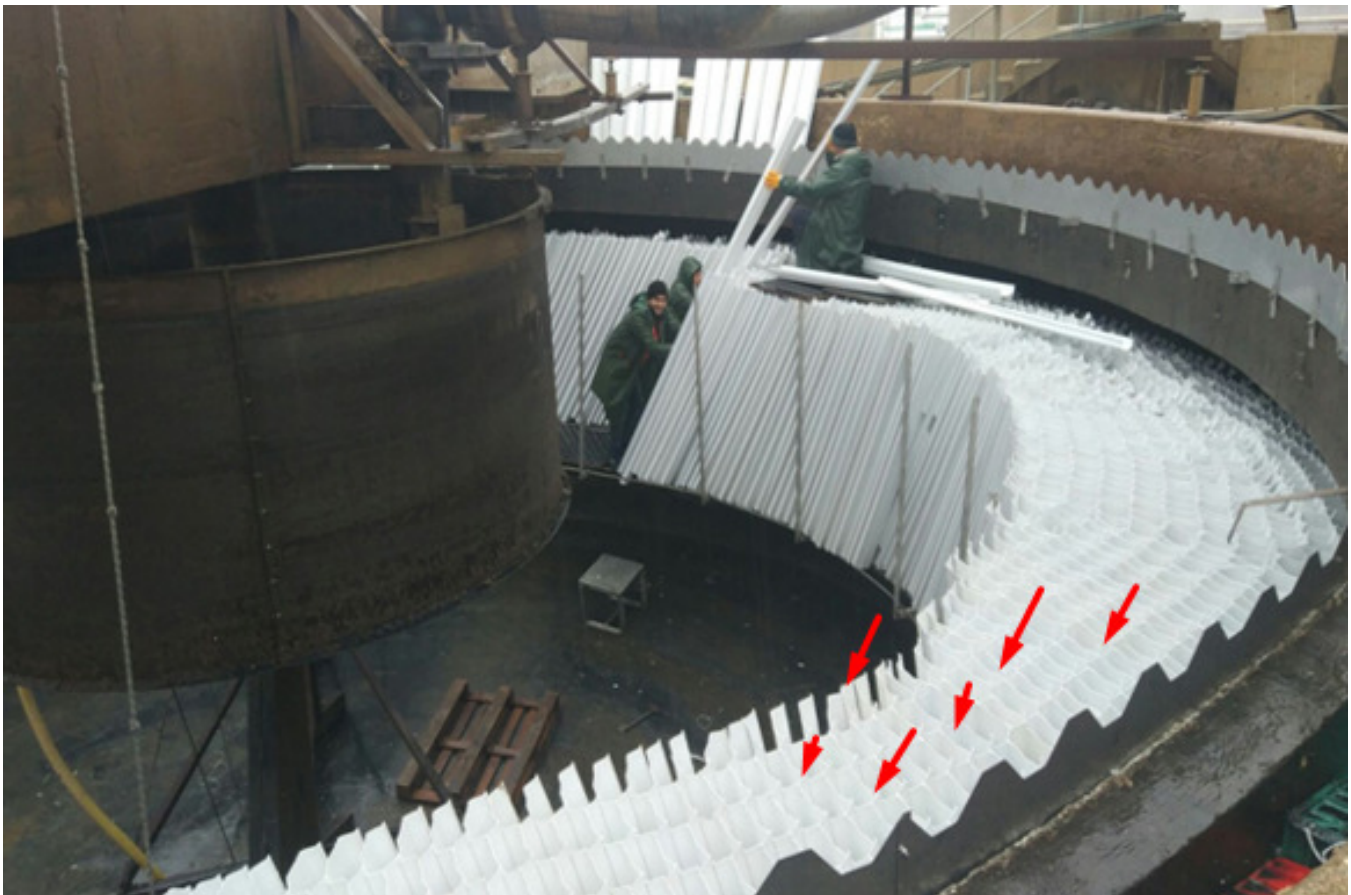


TECHNICAL EVALUATION ON THE SUITABILITY OF INTERLOCKING (SLIDING) LAMELLA FOR CIRCULAR TANKS

Finding:

The interlocking (sliding) lamella system is not suitable for circular tanks. The technical reasons are explained below:



“This photo was taken from the internet for illustrative purposes. The product and its manufacturer are unknown.”

1- Structural Incompatibility

Due to the geometry of circular tanks, the radius continuously decreases from the outer wall towards the center. During the installation of interlocking lamella, numerous tabs must fit into counter profiles. However, because of the circular form, many edges remain unfastened, which compromises the integrity of the installation.

Over time, the accumulation of sludge causes the lamella system to bend, twist, deform, and eventually break, resulting in severe damage. This issue is particularly observed during the drainage of the tank when the buoyancy of the water disappears and the lamella cannot withstand the weight of the accumulated sludge.

2- Supporting System and Clogging Risk

Since interlocking lamella are made of small profiles, dense and strong grids are required at the bottom to prevent them from falling and to withstand the sludge load. This not only increases costs but also raises the risk of clogging.

Clearing these clogs requires shutting down the system, additional labor, and extra energy consumption.

3- Floating Risk and Additional Cost

When lamella are manufactured from PP (polypropylene), top grids are required to prevent floating. This leads to extra cost as well as difficulties in service and maintenance.

4- Assembly Difficulty and Occupational Safety

Interlocking lamella systems require on-site assembly. In circular tanks, this installation process is both risky

in terms of occupational safety and difficult to perform. Consequently, work quality decreases and sustainability cannot be ensured.

Conclusion and Recommendation:

Considering all the technical and cost-related disadvantages stated above, the use of interlocking (sliding) lamella is **not suitable for circular tanks**.

As the final solution, lamella systems specifically designed for circular tanks should be preferred. (Our company has a proven and advanced solution in this regard.)

It is also recommended that a detailed technical evaluation be carried out by an expert, taking into account cost/benefit/quality parameters.

Note: The attached photos were recently taken in a large-scale facility's circular type clarifier tank and demonstrate the observed damage. (01-09-2025)







