

### CASE Study: Strengthening of Buoy Strength for Use in Sea Aquaculture

In recent years, there has been increasing pollution of the oceans by plastics, and measures are needed to address plastic spills caused by fishing gear and aquaculture equipment. For example, most of the buoys used in Japan's marine aquaculture industry are Styrofoam (plastic), but considering Styrofoam's poor resistance in the natural environment, there is a risk of plastic leaking into the ocean due to degradation over time.

At Taiyo A&F Co., Ltd., they began switching to buoys made of HDPE (high-density polyethylene), a stronger material, in order to reduce such risks. They are already being introduced at all five locations (Okinawa, Kashiwa Island in Kochi, Goto in Nagasaki, Yuya in Yamaguchi, and Naru in Nagasaki), and the number of fish tanks to be introduced will be increased in the future.



Buoys made of conventional Styrofoam materials



Buoys made of HDPE materials with enhanced strength