

# Marine Industry

## Case Study: HDPE with the waterjet

**Challenges:** An marine company have been testing the use of high-density polyethylene as a material for an unmanned vessel that requires parts with no imperfections and additional tapping and countersinking. Typically they have found HDPE tends to crack with traditional machining methods.

**Solutions:** Using our world class precision pneumatic drill and top of the range Waterjet machines enabled us to mitigate any issues with cracking and remove the requirement to “pierce” the material. The waterjet process ensured that each piece was cut to precise dimensions. The requirement was also to provide precision countersinking and tapped holes to ensure the parts were ready for assembly once they arrived on site.

**Benefits:** The customer benefited from the mitigation of hairline cracks that have been found using traditional methods, using the OMAX nesting facilities reduced material usage and cost, we also provided short lead times and parts that fitted the application without further machining reducing further costs and ensuring parts aligned with the drawings provided.

