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ACMA 4000

Brazing is done at lower temperatures and does not melt the base metals, eliminating these weaknesses, as well as lowering energy cost. Providing the correct brazing material is used, it will be just as strong as a weld. It can also be used to link dissimilar metals.

e) The frame could also be bolted together, which is an inexpensive and easy solution but adds weight and creates failure points in the joint.

The frame could also be glued or bonded together, adding little extra weight. Bonding can be a time-intensive process however, and some bonding materials are flammable.

4. a) The material must be airtight, must be of a high Yield Stress to prevent rupture, must be low density to make wearing comfortable, must be machinable to allow the creation of attachment point for valves and hoses, and must not corrode in salt water.

b) Aluminium has a low density, increasing wearer comfort out of the water, and does not corrode in water. However, it has a low Yield strength, making it unsuited for use as a pressurised container. It could be used but is undesirable.