SEAHORSE WORKBOATS

HDPE (High Density Polyethylene)

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breaking the mould

HDPE (HIGH DENSITY POLYETHYLENE)

HDPE (High Density Polyethylene) use in the marine industry is not new, it has been a project construction solution from harbour and port security barriers, heavy duty dockside fendering systems to residential docks.

'HDPE, the material of choice across the marine sector '

HDPE has become the material of choice for many marine applications because it is lighter than water providing intact buoyancy, is highly resistant to corrosion, chemicals and marine growth, has no moisture absorption, is an excellent insulator with minimal heat transfer (copper transfers heat > 2700 times greater, has elasticity durability due to a high tensile strength that can withstand fatigue and surges, and is long-lasting and impact resistant. HDPE is climate transferable from the artic to the tropics - its weather resistance can withstand freezing (frozen water will not crack or break HDPE) and carbon black added to HDPE provides UV resistance therefore ideal for tropical climates.

HDPE components are constructed using fusion welding which provide a seamless join with 100% strength that yields a long-lasting lightweight robustness. The outcome is a lighter weight easier workboat to launch at the water's edge.

The carbon footprint for manufacturing HDPE is lower than its GRP or metal alternative – 5 times less than that of aluminium. It is the most environmentally stable of all plastics because it does not contain BPA, phthalates, heavy metals or allergens or release damaging fumes into the environment. It can be 100% recycled making it very sustainable. Products i.e. milk and detergent bottles made from Type 2 HDPE recycled plastic are considered Eco-friendly because they are made from post-consumer products and recyclable.

When the advantages of HDPE are brought together, it is clear there are significant advantages that outweigh GRP, aluminium and steel as a construction material along with the opportunity to design out the traditional 'inflatable tubes' of RCBs, and replace them with rubber or plastic fendering increasing deck space by 50%. The HDPE Seahorse workboat is the environmental option because being non-toxic, corrosion and chemical resistant means there is no anti-fouling and hull painting that potentially contaminate the seabed and the wider marine environment. As a lighter construction material this further yields fuel efficiency and therefore lower fuel emissions.

"HDPE is the genius of workboat construction'"

HDPE constructs vessels with remarkable adaptability and cost-efficiency. The result is an almost indestructible and unsinkable functional workboat that offers tremendous strength, intact buoyancy and a safe working platform, with one last advantage; shorter construction times - an 8M hull can be manufactured within 6-8 weeks.