



ARNESON

SURFACE DRIVES

MISSION ACCOMPLISHED

ARNESON



When the mission requires the critical balance of speed, payload and fuel economy, military operations around the world rely on Arneson Surface Drives to optimize their mission profile. From coastline security and defense to rapid response in emergency situations, Arneson Surface Drives are the fastest, most efficient, fuel-friendly propulsion systems on the planet.



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SPEED IS JUST THE BEGINNING

SUPERIOR ENGINEERING

With conventional propulsion systems, a fully-submerged propeller at high revolution cavitates, losing bite and suffering severe metal erosion. Arneson surface-piercing propellers completely eliminate cavitation, thus increasing propeller performance while reducing erosion.



LESS DRAG

With no conventional underwater shaft, strut and rudder, an Arneson Surface Drive reduces hydrodynamic drag by 50%, compared to conventional submerged propeller systems. The only Arneson propulsion equipment surfaces to contact the water are the propeller blades, protective skeg, and the lower portion of the thrust tube. The result is higher overall speed, quicker acceleration and a better payload to power ratio.

GREATER OPERATING EFFICIENCY

The Arneson system's reduced drag and more efficient thrust yield more propulsion from less horsepower. In some instances, your craft design might accommodate a smaller powerplant and still get the required performance. This would reduce acquisition cost. But regardless of the engine size, Arneson Surface Drives can improve fuel efficiency up to 15%.

VECTOR THRUST STEERING

Conventional propulsion systems turn the boat by a propeller deflecting water against a rudder mounted on the bottom of the hull. Compared to an Arneson drive, this is slow and inefficient. Arneson drives, mounted on the transom and inline with the boat's waterline, hydraulically articulate to vector the full thrust of the propellers to steer the turn. Fast or slow, wide or tight turns, the boat responds instantly like it's on rails.



LOW MAINTENANCE

For all their sophisticated performance, Arneson drives feature a less mechanically complex design than stern drive propulsion systems. In fact, Arneson models have fewer than 20 moving parts. Since there's a more efficient relationship between parts, there's less to go wrong.



DUTY-BUILT

Twin Disc manufactures Arneson Surface Drives for maximum duty applications and to last the life of the vessel, using high-quality, corrosion-resistant materials matched to exacting tolerances. Small to medium size models are available in NiBrAl for maximum corrosion resistance and strength. Larger models use marine grade aluminum along with proven corrosion-resistant ceramic coatings for long-lasting durability and weight savings.



ROLLA PROPELLERS

The Rolla name has been synonymous with the best performing, highest efficiency, highest quality propellers in the world since 1963. Rolla surface-piercing propellers are designed, developed and manufactured to provide the most efficient solution to any performance and application requirement. In combination with the Arneson system, the result is the ultimate in marine propulsion.



SERVICE-PROVEN

 Arneson Surface Drives are operating in agencies all over the world, including the following:

ASIA – India, Singapore, Taiwan, China, Japan, Indonesia, Malaysia, Sri Lanka, Thailand, Pakistan

AMERICAS – United States, Canada, Mexico, Venezuela, Brazil

EUROPE – United Kingdom, Sweden, Italy, Slovenia, Turkey

AFRICA & MIDDLE EAST – Israel, United Arab Emirates, Kuwait, Malawi, Eritrea

FOR MORE ABOUT
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