

Defense Industry Case Study

LIGHTWEIGHT YET TOUGH DRIVESHAFT FOR AMPHIBIOUS ASSAULT VEHICLE



When it comes to military applications, your product must stand up to the harshest of environments. Recently, the development and manufacture of a complete shaft assembly for an amphibious assault vehicle demonstrated Belden's commitment to tackle the toughest applications.

Designed to withstand both nuclear and biological contamination, the joint yokes and shaft of the vehicle were constructed of 7075- T651 aluminum to provide a lightweight, high strength, corrosion resistant solution. It was necessary to modify standard pin and block designs in various materials to create a custom assembly. The bushing and pins were

made from hardened 416 stainless steel to combat corrosion and prevent galling and premature wear of the yoke components. The pin and block section of the universal joints were covered with neoprene boots to prevent contaminants from invading the assembly. The boots were molded specifically for the shaft assembly to protect the joints and provide maintenance-free operation for extended periods of time. The end result was a solid solution that met the customer's exact application specifications.