

# RSA-MIL-SPEC-28

## ***EXTERNALLY MOUNTED COMPOSITE TOW BAR FOR 0 TO 60 TON GVM VEHICLE: PRELIMINARY SPEC FOR***

### **SCOPE**

#### **1. Introduction**

Tow bars of welded steel construction have been used extensively in the past on most military vehicles used by the SANDF. Steel tow bars are heavy and require a minimum of two to three personnel to remove the tow bar, apply it to tow or push another vehicle and replace it in its mounting position after use. Developments in composite material technology make the manufacture of a light weight tow bar feasible. The composite tow bar can be removed, used and replaced by one person because of the significant reduction in weight achieved. The tow hooks and couplings on all vehicles used by the SANDF conform to a uniform standard that allows different tow bars to be used on different vehicles without interface problems. Composite tow bars can be manufactured to be a direct and improved replacement for current steel tow bars by implementing the standard tow hook interface. The reason for the shift from steel tow bars to that manufactured from composite materials are based on component mass and ergonomic considerations.

#### **2. Purpose**

The purpose of this specification is to specify the preliminary performance-, design-, physical-, test- and qualification requirements for a composite tow bar, and is generic for all new and existing military land vehicle developments for the vehicle classes as defined in table 1. The vehicle classes are in agreement with the application of recovery vehicles as indicated in Appendix A.

**Table 1 – Vehicle classes**

<b>Vehicle Class</b>	<b>Capacity</b>
light	0 to 6 ton
medium	6 to 20 ton
heavy	20 to 35 ton
extra heavy	35 to 60 ton

#### **3. Application**

This specification shall be applicable to the design and procurement of externally mounted composite tow bars for use by the SANDF for vehicles in the 0 to 60 ton GVM classes.