

RSA-MIL-HDBK-62

HANDBOOK FOR MOBILITY

SCOPE

This Handbook, as well as the accompanying Standard [2.2.1.1.1], provides background information pertaining to the specification, simulation, design and evaluation of wheeled vehicle mobility.

The target user is specifically Armscor Programme Managers and mainly the SA Army, although the software developed during the compilation of this document may also be used by military vehicle industry during the design and development process.

Firstly, past and present mobility research carried out in South Africa is summarised, after which the basics of soil mechanics and terra-mechanics will be discussed. This will be followed by information on the various approaches available to simulate mobility, after which the basic principles pertaining to the design suspension and propulsion systems (the major design drivers of mobility) will be provided. Finally, test procedures are provided that can be tailored and used to test and evaluate mobility. Examples are provided throughout the text and are included in the software for demonstration and educational purposes.