ACME Universal Reconfigurable Robotic Chassis Specifications

S000 The chassis is a circle of diameter sixteen [16] inches comprised of 1/8” aluminum.

S001 A drive train assembly is mounted on a line bisecting the circular chassis.

S002 Useful payload for the chassis is twenty [20] pounds.


S004 Drive wheels are uncoupled. A reversible geared DC permanent magnet motor assembly drives each.

S005 An unloaded drive assembly rotates a wheel at fifty-five [55] RPMs when a twelve [12] volt DC source is applied. Under these conditions the motor draws 1.6 amps.

S006 The platform is not expected to balance on the drive wheels. Two [2] swivel castors mounted fore and aft of the driveline are utilized to keep the platform level.

S007 Drive assemblies utilize approximately fifty [50] percent of the available chassis real estate.

S008 Clearance from chassis bottom to the ground is approximately one and one half [1.5] inches.

S009 Duty cycle for the motors TBD.