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 twenty-five [25] 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.