

# Light Weight Magnetic Pipe Climbing Robot



## Helical Robotics Mag Series



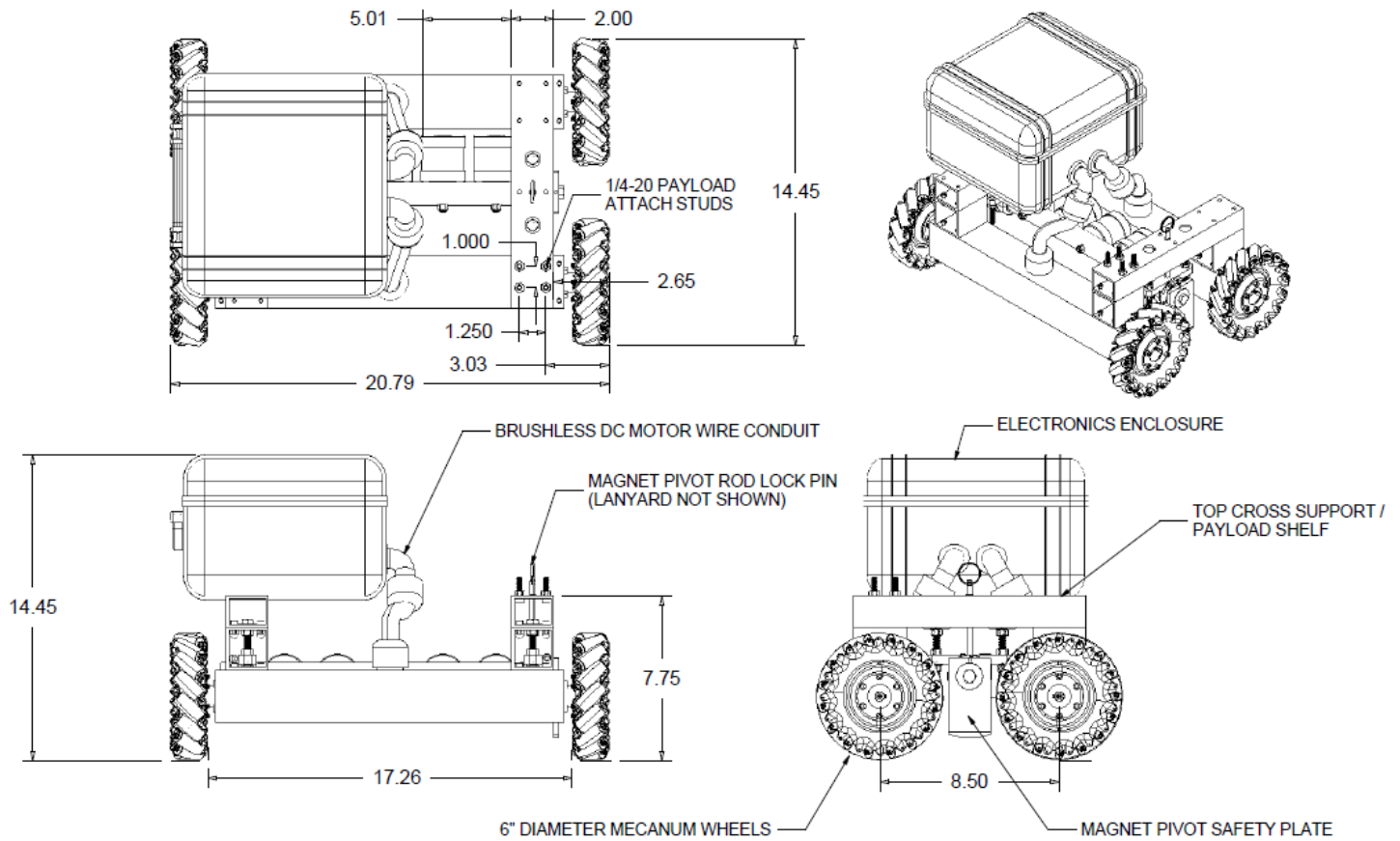
## PipeLiner-20 Features

PipeLiner-20 is a single man portable, climbing robot for pipes and cylindrical objects.

- Lightweight and portable design for easy deployment, use, and transport.
- Payload surface allows for a wide range of tooling and equipment compatibility.
- Mecanum wheel drive system offers best in class maneuverability.
- Magnetic adhesion system does not touch the work surface.
- Works on surfaces from 8-70 inch (20-178 cm) diameter in any orientation.
- Full wireless operation allows for expanded work environment.
- Optional integration with other devices such as cameras, sensors, inspection equipment (e.g. ultrasound)
- Multiple chassis sizes and capacities engineered to order per customer specifications.



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- NOTES:
1. DRY WEIGHT: WITHOUT PAYLOAD (NOT SHOWN) OR BATTERY PACK
  2. PAYLOAD CAPACITY: 20 LB (SEE NOTE 3)
  3. CAPACITY WHERE PAYLOAD CG WITHIN 6 INCHES OF TOP CROSS SUPPORTS WITH MAGNETS 0.25 - 0.375 INCHES OFF WORK SURFACE
  4. CYLINDER OPERATING DIAMETERS: 8-70
  5. TRAVEL SPEEDS: 30-500 IPM
  6. SHOWN WITH MAGNETS IN STOWED POSITION
  7. OPERATING TEMPERATURES -40 TO +85 C
  8. DO NOT SPRAY WITH PRESSURIZED WATER
  9. DIMENSIONS FOR REFERENCE ONLY
  10. DRAWING UNITS = INCHES UNLESS OTHERWISE NOTED

Model	PipeLiner-20
Dry Robot Mass	46.0 lbs (20.8 kg)
Footprint	20.8 x 14.5 in (52.8 x 36.8 cm)
Height	14.5 in (36.8 cm)
Cylinder Diameter Range	8 - 70 inches (20 - 178 cm)
Max Climbing Payload Capacity	20 lbs (9 kg)
Max Non-Climbing Payload Capacity	100 lbs (45 kg)
Minimum Speed	30 ipm (0.8 m/min)
Maximum Speed	500 ipm (12.7 m/min)
Adhesion System	5 Neodymium Magnets Minimum
Drive Batteries	1 NiMH Helical Robotics Battery Pack (8.2 Ah Capacity)
Drivetrain	24V Brushless DC Motors with Closed Loop Velocity Control
Control Mode	2.4 GHz Wireless Controlled with Helical Robotics Mecanum Drive Control System
Wireless Control Range	2500 ft (762 m) Line of Sight
Telemetry	Temperature/Drive Motor & Controller Battery Voltage/Signal Strength
Operating Temperature	-40 °F to 185 °F (-40 °C to 85 °C)

Information subject to change without notice.  
Based on optimal conditions.