

LANDFILL SIDESLOPER RISER PUMP SYSTEM INSPECTION AND MAINTENANCE

JACOB GALLA – GUNNCO PUMP AND CONTROL, INC.

GunnCo "SIDESLOPER"™ Pump Systems







“SIDESLOPER”™ PUMPS

Discharge Head
from 20 ft – 1750 ft

5 GPM – 1100 GPM

All Stainless-Steel
Construction

Teflon® Bearings and
Seals



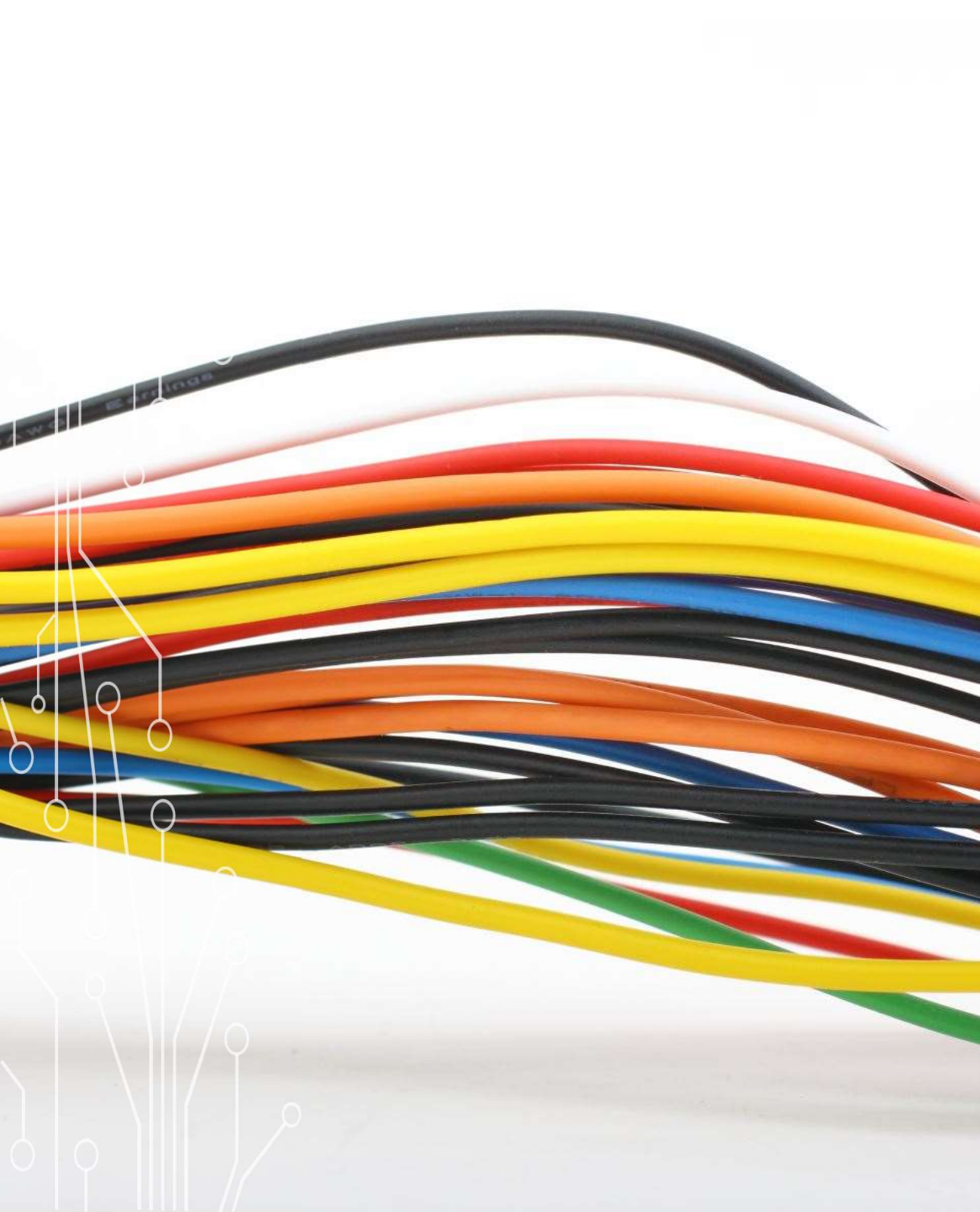
MOTORS

- 0.5 HP – 75 HP
- 115 / 230V. Single-Phase
- 200 /230 /460V. Three-Phase
- Stainless-Steel Construction
- Optional High Thrust Motors



CARRIERS

- All stainless steel construction
- Strainer on carrier intake
- Wheels of HDW for risers from 12 –24 inches



POWER CABLE

- CPE / XPLE Jacketed Cable
- Santoprene® Jacketed Cable



TRANSDUCERS

- Pressure Cell Sensing Technology
- With a 316 Stainless Steel
- diaphragm.
- 316 Stainless Steel Housing with Teflon Wetted Materials.
- Cable is heavy-duty polyurethane jacketed and shielded with a polyethylene breather tube.
- Standard pressure range for leachate cell pump applications:
 - 0-5PSI (0-138.6"). Other ranges
 - are available upon request.
- Accuracy is +/- 1.00% of Full Range (for 0-5 PSI Accuracy is +/- 1.4" Minimum)
- FM, CSA, and UL for Class 1, Div. 1, Groups A, B, & C, and Class II, Div 1, group E, F, & G, and Class III, Div 1 hazardous locations. Hazardous location approvals are accomplished using approved electrical barrier

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CONTROL PANELS

Sidesloper® GC101 Operation

(1) GunnCo 332-
Level indicating
controller.
(See separate sheet)

**(2) High Level Alarm
Light (RED)** - (on top of
panel). Indicates Level is
above Normal Limits.

**(3) OVERLOAD
Light (RED)** - Indicates
motor problem.
- See Overload RESET

**(4) Main
Disconnect-
Interlocks to
Main Circuit
Breaker**
- Turns OFF
power when
interior door is
open.

**(5) FAULT Light
(Amber)**
Phase or Voltage Fault
Light indicates problem
with power: loss of phase,
reverse phase, or low

**(6) ETM- Elapsed Time
Meter:** Measures to 1/10 of
an hour.

**(7) PUMP RUN Light
(Green)** -Indicates Pump is
Running.

(8) HOA Switch-
Hand: (For Testing).
OFF.
Auto: (Normal Operation).

**(9) LOCK OUT Light
(Amber) (Optional
Feature)** - Indicates when
pump is locked out due to
remote signal.

**(14) Flow Meter Display
(Optional Feature)** -
-Upper (large) numbers
indicates Gallons per
Minute.
-Lower (small) numbers
indicate Total Gallons
Pumped. (See separate
sheet)

(16) Level Simulator (Optional Feature) -
Used to test level control circuit for correct
operation.

(10) Cycle Counter -
Counts the number of
times your pump has
started.

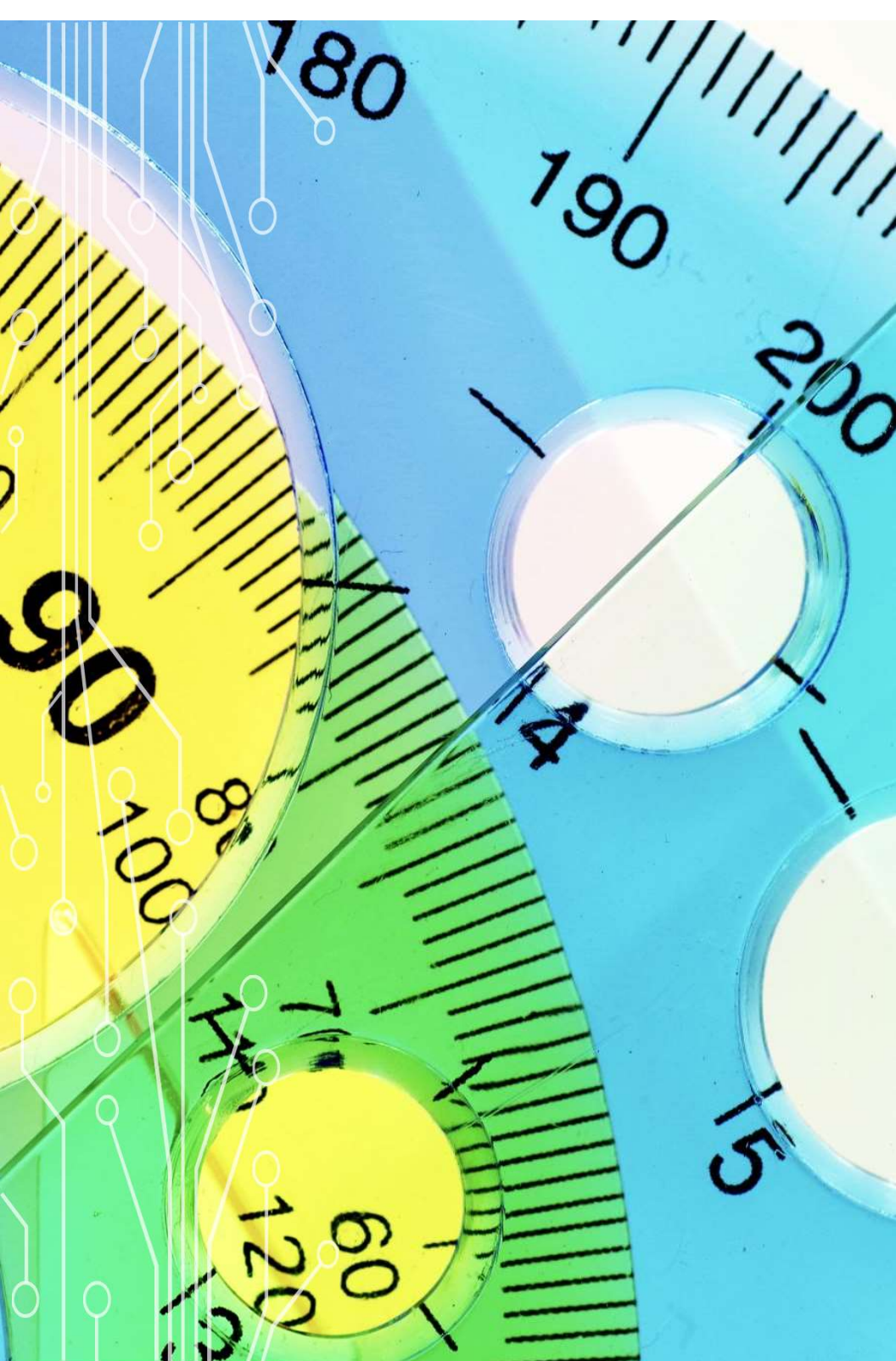
**(11) Control Circuit
Breaker(s) (CCB)**

**(12) Motor Circuit
Breaker (MCB)**

**(13) Motor Monitor
Device (Optional
Feature)** - Monitors
Voltage and Amperage,
while providing motor
protection from several
faults. (see separate sheet)

**(15) OVERLOAD
RESET Button-** If
MOTOR OVERLOAD
Trips (Red overload light
is on), press RESET
button and try starting
system again. If it trips
again call GunnCo for
service Do Not exceed
three resets per hour.
- Also, see single phase
module RESET buttons
(RED) on single phase
box in panel.






FLOW METERS

- Magnetic and Paddle Wheel Sensors
- Rate and Totalizer Displays



**A PREVENTATIVE
MAINTENANCE
PLAN PROVIDES
PEACE OF MIND.**



**THE BENEFITS
OF HAVING A
REGULAR PM
SCHEDULE ARE:**

- **Ability to Identify potential problems and correcting them before they cause pump problems.**
- **No “Rush” repairs**
- **Less Down Time**
- **No Leachate Overflows or Spillage**



A GunnCo Preventative Maintenance Plan

CONTROL PANEL/ELECTRICAL

- Clean Enclosure Exterior & Interior.
- Inspect Enclosure Condition.
- Lubricate Enclosure Moving Parts (Latches, Hinges, Clasps)
- Touch Up Enclosure Paint as Required.
- Check/Tighten Wire Terminals as Needed.
- Clean Terminals (As Required/Possible).
- Confirm Level Indicator Range.
- Adjust Levels if Applicable.
- Check All Lights/Indicators and Fuses.
- Inspect and Check Relays and Components.
- Test Overload Device.
- Inspect Surge Protection Devices.
- Record Operating Hours of Pump.
- Inspect Electrical Conduit System.
- Inspect and Re-Seal Control Panel from Gas/Moisture Intrusion.
- Check Cycle Times (As Possible – If Enough/Not too Much Liquid).
- Test Dry Run Protection Devices and Settings (As Applicable).
- Inspect and Seal Junction Boxes (As Applicable).
- Inspect Level Sensor Drier Tubes/Bellow Breathers (As Applicable).
- Operational Pump Test & Check Level Indication.
- Test LOCK OUTS (As Applicable).
- Record Panel “Particulars”.

PUMP/FLOW METER/RISERS/WET WELLS

- Check and Record Voltages During OFF and RUN Conditions.
- Check and Record Amperage of Operating Pump Motor.
- Ohm and Record Pump Motor Resistance.
- Inspect for Leaks in Exit and Discharge Pipe and Fittings.
- Check Valves for Leaks and Proper Position.
- Check and Record Local Flow Meter Rate/Total if Applicable.
- Inspect Flow Meters; Clean if Required.
- Check and Record Flows using **ULTRASONIC FLOW METER** as Required/Possible.
- Inspect Riser Discharge and Electrical Exit Arrangement, Seal as Possible.
- Inspect Riser Cover Fasteners and Lubricate where Required.
- If Pump Flow Rate is Low and Clogging is Suspected – Pull, Inspect, and Clean Pump.
- If Pump is Pulled, Inspect Cables and Discharge Hose and Fittings. Record Lengths.
- Check Pressure Gages (As Applicable).
- Check Air Release Valves (As Applicable).
- Inspect and Test Float Switches (As Applicable/Required).
- Inspect Test Actuated Valves (As Applicable/Possible).

Additional

- Review system Operation with System Operator and Review Proper Operating Techniques as Required.
- Review Data to Determine system Design Problems.
- Provide Inspection Report, Confirm Checks/Recordings, Scope of All Additional Services Provided, and Recommendations.