



SOIL ABSORPTION SYSTEM

*Complete System for On-Site Treated Wastewater
Dispersal Through Soil Absorption*

DISPERSAL PUMP STATION COMMERCIAL & INDUSTRIAL

The Dispersal Pump Station “DiPS” is a major component of the SURFLO SYSTEM.

Position the skid, connect four pipes and wires, and you are ready to run.



The SURFLO Control Panel incorporates a Touch Screen Operator Interface. Adjust settings with the touch of your finger on the system display screen. Automatic or Hand controls of all functions.

Air-Sparging Filters deliver superior backwashing, coupled with more efficient pumps.

Features Prefab • Tested & Certified • Operator Interface Console
Data Collection • SCADA & Telemetry Ready
Air-Sparging Filter System

Benefits Simple Installation • Operator Field Configured • Full Factory Support
Designed for Easy Service • Reliable Proven Components

Contact SURFLO for Complete Systems including Bioline
Pressure Compensating Dripperline for Wastewater, Valves,
ARI air/vacuum Relief Valves, Solenoid Control Valves, Fittings and Pumps

www.surflo.net

(512) 259-1993

DiPS SPECIFICATIONS

Skid

- Skid base 4' x 4' or 4' x 8'; maximum height 60"
- Skid structural components hot dipped galvanized
- Fully loaded skid weight under 1000 lbs
- Major components fully integrated & secured
- 12 hour dosing capacity – up to 90,000 Gallons +
- All piping utilizes Parker Fast & Tite fittings
- All major components can be isolated for removal
- Only four plumbing attachment points required
- Terminal J-Box for all external wiring

Major Components

- TEI Controls DICP 06-424 control panel
- JNM Technologies "Air-Sparging" filter units
- Adjustable pressure discharge valve/flush open
- Craftsman oil-less single-stage air compressor
- Arad axial turbine digital flow meter
- Manual Throttling field flush valve
- Murphy 2" Swichgase differential pressure switch

DICP 06-424 CONTROL PANEL

Major Components

- Color Touch-Screen Operator Interface Console
- Allen Bradley Micro Logics 1500 PLC
- Isolation boards with HOA & LED for outputs
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- Motor Circuit Breakers & Starters (2 each)

Operator Interface Console

- Adjusts screens to number of filters and zones
- Easy-to-navigate, color, pictorial, touch screen
- Separate control screens for zones, filters, pumps
- Allows full control of all operating parameters
- Provides access to data logs and meters

Allen Bradley PLC

- PLC SCADA ready with RS232 port – DH485/DF1
- PLC fully integrated to Operator Interface Console
- All OIC functions integrated for SCADA control
- External digital input circuits use 24 Vdc
- PLC fully programmed to support:

Float Operation

- Five float system used on holding tank level
- Float failure detection and alarming
- Continuous operation with one failed float
- High and low level alarm call out
- High duty logic to increase dosing
- Float HOAs allow manual system tests

Pump Operation

- Two pump alternation logic
- Automatic removal of failed pump
- Fail-to-run and fail-to-produce-flow alarm logic
- Automatic cutoff if no zone is available for dosing
- Large pump and small pump operating modes
- Hardware & software HOA on pumps
- Elapsed run time meters

Zone/Block Operation

- Up to 24 zones/blocks operated automatically
- Software and hardware HOA for each zone
- Zone failure detection and removal from AUTO
- Single or dual zone dosing in AUTO
- Zone dosing controlled by time or gallons
- Automatic field flush of zones
- Operator adjusted dosing time for each zone
- Operator adjusted dosing quantity for each zone
- Operator adjusted rest time for each zone
- Operator accessible zone elapsed dosing time
- Operator accessible zone cumulative dosed gallons

Filter Unit Operation

- Up to 4 filter units operated automatically
- Flushes initiated by hand, time, or backpressure
- Operator adjusted backpressure setting
- Operator adjusted dosing time between flush
- Hardware HOA for each filter unit

Autodialer Outputs

- Alarm 1 – high holding tank level
- Alarm 2 – pump failure
- Alarm 3 – float failure
- Alarm 4 – other alarms

AIR-SPARGING FILTER UNITS

Major Components

- NETAFIM Spin-Klin ring disk filters
- Two-gallon back flush reservoir with air inlet
- Electric solenoid activated isolation valve
- Air actuated backflush valve
- Air actuated air-sparging valve

Filter Operation

- Depth-filtration of normal dosing stream
- Sequential air-activation of backflush valving
- Backflush utilizes pressurized air/water mixture
- Backflush flow lifts filter spine, frees up disks
- Injector spray spins disks to remove entrained solids

ORDERING INFORMATION

DiPS X A BC D E

X = C centrifugal pump S submersible pump

A = # of pumps 1 or 2

BC = horsepower 10 – 1hp 15 – 1-1/2hp 20 – 2hp
30 – 3hp 50 – 5hp

D = # of filters 1- 30,000gpd 2 – 60,000gpd

3 – 90,000gpd 4 – 90,000gpd + filtration

E = Size of Flow meter 2 – 2" 3 – 3"

Stipulate voltage – Single Phase 240 Vac

Three Phase 240 Vac

Three Phase 480 Vac