# NDT Series Networked Day Tank Level Controller

The Networked Day Tank Level Controller (**NDT**) is a UL-508 listed PLC-based control panel, designed with features and control option flexibility to accommodate basic and advanced fuel control needs.

**NDT** panels are intended for use where day tanks rely on remote supply pumps such as submersible turbine pumps or a duplex pump set. For applications where day tanks are equipped with local, dedicated supply pumps integral to the assembly, use Standard Day Tank (**SDT**) panels.

The **NDT** has been designed for integrated operation with a **DPC** Duplex Pump Controller or **MCP** Master Control Panel via Ethernet LAN. The **NDT** communicates operational and alarm conditions to the Building Automation System (BAS) via ModBus RTU, ModBus TCP or via consolidated points list available from the **DPC** or **MCP**. Optional BACnet IP available.



#### **Panel Features**

Cabinet: 24" Wide x 30" High x 10" Deep

Enclosure: NEMA 4/12, 14 GA. Steel, Continuous Seam Welded

Mounting Style: Wall-Mounted Open Style: Right to Left

Door Hinge: Formed Steel Hinge w/ Stainless Steel Hinge Pins

Assembly: Mounted, Wired and Labeled per UL on a

Removable Sub-Plate

Optional: OSHPD Shake-Table Seismic Certified

Finish: Prime-coated and Painted

Interior: White Baked Enamel Exterior: Grey Textured Enamel

Optional: Stainless Steel NEMA 4X Construction

The **NDT** Networked Day Tank Level Control Panel is designed to monitor the following Input devices:

- Up to (6) Day Tank Level Switch Points
- Generator Run Contact
- Day Tank Level 4-20mA Transmitter
- Day Tank Fuel Temperature 4-20mA Transmitter
- Inlet Flow Switch
- Day Tank Leak Switch
- Tertiary Containment Leak Switch
- Return Pump 4-20mA Analog Current Sensor
- Motorized Valve Open / Close End Switches





Control Systems International, LLC 5024 Lambskin St SW Ste B

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Office: (360) 459-5580 Fax: (360) 923-0708 www.CSI-Control.com The **NDT** is equipped with the following control features and alarm indicators:

- ♦ Control Power On/Off Switch, Door-mounted
- ♦ Control Power On Indicator Light
- Fill Control Hand / Off / Auto Selector Switch, Illuminated Green
- ♦ Return Pump Hand / Off / Auto Selector Switch, Illuminated Red
- ♦ Alarm Indicator Light
- ♦ Alarm Horn \*optional
- ♦ Horn Silence Push Button \*optional
- ◆ Cooling Fan w/ Thermostat control \*optional
- ♦ Cabinet Heater w/ Thermostat control \*optional
- ♦ Operator Interface Terminal (OIT) Touch-Screen Display
- Day Tank Level Switch Status Indicators
- Day Tank Level Volume Readout
- Day Tank Fuel Temperature Readout
- ♦ Leak Sensor Status Indicators
- Alarm Reset Soft-Key
- Pump and Valve Status Indicators
- Digital Input / Output Display Screen(s)
- Maintenance Screen(s)
- ♦ System Set-up Screen(s) Password Protected
- Alarm Status Screen
- ♦ Lamp / Horn Test Soft-Button
- ♦ Event Log Screen Password Protected Log Deletion



## **Day Tank Refresh Cycle**

The **NDT** panel OIT includes a Maintenance screen for programming a weekly day tank refresh cycle schedule for each day tank. Refresh cycle allows fuel in day tanks to be recirculated back to main tank for filtration/maintenance, as well as performs system automatic testing on a regular basis outside of emergency run conditions. Day Tank Refresh can be initiated on a weekly automatic schedule or ondemand via OIT.

## **NDT Panel Model String**

| MFR  | PANEL<br>TYPE | VOLT-<br>AGE | PHASE | SUPPLY<br>PUMPS | НР | RETURN<br>PUMPS | НР | NEMA | OPTIONS   |
|--|---------------|--------------|-------|-----------------|----|-----------------|----|------|-----------|
|  |               |              |       |                 |    |                 |    |      | ES-AL-AH- |
| CSI-   | NDT           | 115-         | 1-    | <b>X</b> -      | X- | 1-              | 1- | 4-   | CF-H-UPS  |
| Networked Day Tank Panel, 115vAC, 1-Phase, (1) Return Pump, NEMA 4 Enc. w/ OPTIONS |               |              |       |                 |    |                 |    |      |           |

#### Options:

ES - Emergency Stop, Door-mounted

AL – Alarm Light

AH - Alarm Horn

CF – Cooling Fan w/ Thermostat H – Cabinet Heater w/ Thermostat UPS— Integrated UPS

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