



KruseDQM

Pipeline Dredging Quality Management System



Event Management Screen

Tested & Certified by the US Army Corps of Engineers

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Compliance with the National Dredging Quality Management

Program monitored by the U.S. Army Corp of Engineers (USACE) is

here. **Kruse Integration**, an industry leader in dredge automation, has the solution and the system to keep your pipeline dredging operation in compliance. Working closely with the Army Corp DQM division, **Kruse**

Integration has developed a user-friendly DQM interface package that meets all required specs with nonproprietary software and hardware. KruseDQM works seamlessly with all instrumentation and PLCs and works independent of any selected positioning software system.

Pipeline Dredging Quality Management System

KruseDQM

KruseDQM System Features:

- Quick and easy install, setup and configuration
- User friendly, intuitive graphics interface for events entry
- Dredge Specific System (DSS) computer as well as DQM ship server and UPS
- A complete Dredge Plant Instrumentation Plan (DPIP) is supplied with the system
- Uses non-proprietary software and works independently of your current positioning software
- Complies with required data backup and recovery issues upon disconnect
- Provides ongoing sensor maintenance and logs throughout life of contract
- System includes instrumentation, setup, calibration, and user friendly graphics
- Connects to any GPS receiver via serial port or ethernet
- Communication drivers for all PLC brands included. If your dredge isn't equipped with a PLC, we include an instrument box with an A/D converter
- Initial field calibration and startup
- Onsite setup and training

Contact Jay Wise at Kruse Integration to schedule a free DQM system consultation

The screenshot displays the DQM Setup-Config Screen with several sensor configuration panels:

- Vacuum Transmitter:** 4 ma = 0.0000 Hg, 20 ma = 30.00 Hg
- Production Transmitter:** In situ SpG = 1.55, 4 ma = 0.0000 TPH, 20 ma = 3450.00 TPH
- Product Flow Velocity Transmitter:** 4 ma = 0.0000 ft/sec, 20 ma = 20.72 ft/sec
- Density Transmitter:** 4 ma = 1.02 SpG, 20 ma = 1.60 SpG
- Draft Transmitter:** Sensor Depth = 60.90 H2O, 4 ma = 0.0000 H2O, 20 ma = 277.00 H2O
- Discharge Pressure Transmitter:** 4 ma = 0.0000 psi, 20 ma = 300.00 psi
- Ladder Angle Inclinator:** 4 ma = 0.0 deg, 20 ma = 360.0 deg
- Engine RPM Transmitter:** Pump Rate = 2.30, 4 ma = 0.0000 RPM, 20 ma = 1000.00 RPM

Below these panels are instructions for **Calibrate Ladder Angle Sensor** and **Antenna Offset to Ladder Trunkon**.

DQM Setup-Config Screen

The screenshot shows the Manual Data Recovery Screen with the following fields:

- MANUALLY SEND DATA TO TXT FILE**
- Select start date/time:** September 30 2020 12:00 AM
- Select end date/time:** September 30 2020 02:09 PM
- START** button

Manual Data Recovery Screen

The screenshot displays the GPS-OPC Interface screen with the following information:

- GPS-OPC Interface**
- Current status:** TCP connection to 10.1.16.80:2112, Received characters: 80528, [STOP]
- UTC Time:** 22/25/2020 01:16:00
- Mode:** Diff Forward
- Latitude:** 39°13.885' N
- Longitude:** 87°29.895' W
- Altitude:** 41.427 m
- HDOP:** 2.4
- Course Over Ground:** 88.8°
- Speed Over Ground:** 0.8 m/s
- Heading:** 88.8°
- Offset Starboard:** 2.2 m
- Offset Forward:** 88.8 m
- Cutter Latitude:** 39°13.795' N
- Cutter Longitude:** 87°29.895' W
- UTM Zone:** 18
- UTM Easting:** 378938.57 m
- UTM Northing:** 4362873.17 m
- Cutter Easting:** 378938.57 m
- Cutter Northing:** 4362873.17 m
- Serial Input:** Port: COM1, Baudrate: 4800
- Network Input:** Protocol: TCP, IP Address: 10.1.16.80, Port: 2112
- [Set Configuration]** button

GPS-OPC Interface

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