



THE LATEST INNOVATIONS FOR DALWORTH SUPERMILL'S

MILL AUTOMATION CONTROL CENTER

OPTIONAL FOR ALL OIL LUBRICATED MODELS

This is a self-contained 7" Touchscreen designed by Dalworth® to control and protect your Dalworth Supermill®. This unit can be stand alone or work with existing controls in place. We have programmed many protective sequences to be activated automatically during common situations that occur in many Asphalt processes every day. You can never know when a problem may occur so this system **will be ready at all times** to activate the warnings, increase seal system pressure and let you know where the problem is. If the situation is not resolved, it will activate preventative measures to protect the mill first and then it will shut the mill down to protect this valuable component and your operator.



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THE MILL LUBRICATION IS FULLY AUTOMATED WITH THIS SYSTEM.

1. 7-inch Touchscreen HMI/PLC Combo unit with ethernet output in a 12" enclosure on a stand.
2. Expandable modules available to control other mill related equipment.
3. Easily works with existing automation by sending a permissive signal when mill is ready.
4. Backup program can be saved on USB and updated, modified or reinstalled anytime.
5. Easy to install: Just plug the Control Center into any 110V outlet and make a couple of connections. It has a numbered terminal strip for connections.
6. The New SXF lubricator, Automatic Mill Lube Flush valve, Pressure transducers and Thermocouples several relays, Estop Button and a 24V power supply are all included.
7. Leads are 18 ft long so this system can be put close by or in a control room.

THE AUTOMATIC MILL PROTECTION IS ALWAYS ACTIVE.

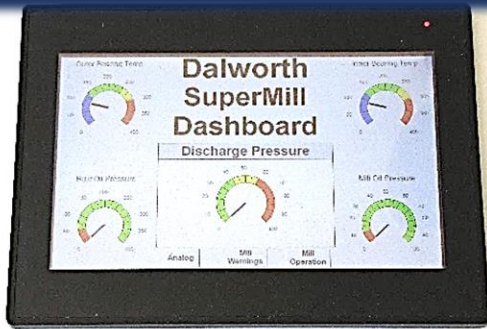
Here is what this system is monitoring;

1. MILL OIL PRESSURE – by Ashcroft A2 Pressure Transducer or equal (included)
2. LUBRICATOR OIL PRESSURE - by Ashcroft A2 Pressure Transducer or equal (included)
3. MILL DISCHARGE PRESSURE- by Ashcroft A2 Pressure Transducer or equal (included)
4. MILL INNER BEARING TEMP- Type J Thermocouple (included)
5. MILL OUTER BEARING TEMP- Type J Thermocouple (included)

THE AUTOMATIC MILL CONTROL FUNCTIONS.

This is controlled automatically;

1. For Discharge Overpressure < 40 PSI - Lubricator activates for up to 2 minutes to increase mill oil pressure to prevent seal damage / Activates warning buzzer and light
2. For Emergency Discharge Overpressure < 60 PSI - Activates Lube flush / Mill Motor Shutdown / Emergency Asphalt Supply Bypass (optional / must be tied into current mill controls & Asphalt supply valve)
3. For Mill Low Oil pressure - Lubricator Activation until mill oil pressure is > 10 PSI or 2 minutes run time when warning occurs.
4. For Lubricator Low Oil pressure - Lubricator Activation until Lube oil pressure is > 50 PSI or 2 minutes run time when warning occurs (This helps if someone forgets to add oil to the lubricator)
5. For Mill Over Temp < 280 F - Lubricator activates to decrease mill inner bearing temp to prevent bearing & seal damage. Warning light & Buzzer will sound but milling process continues.
6. For Mill Over Temp < 300 F - Lubricator activates & flush activates to decrease mill inner bearing temp to prevent bearing & seal damage, activates warning buzzer/ light. If not resolved after two minutes system will bypass asphalt supply & shut down mill and continue to run lube flush.
7. It is used to start and stop the mill components, like the oiler and the cooler. Others will be optional.
8. When you start the oiler, it opens the automatic flush (yellow) valve to fill the mill before starting the mill motor. No more need to manually flush the mill.
9. It has lock outs that will prevent the mill start unless the oiler & cooler are running.
10. It will not let the mill start in a warning mode if there is a problem.
11. When the "On Screen" Mill Stop is used, or if there is an emergency shutdown, the control system will automatically activate the Lube Flush to pressurized and flush the inner bearing chamber.
12. Warnings stay on screen until problem is resolved & reset to let the operator know what was wrong.



DALWORTH SUPERMILL DASHBOARD

This screen has the FIVE MAJOR GAUGES that are critical to the operation of your Supermill. This is like the Dash in your automobile you drive every day. If there is something wrong, one glance and you see what it is. All gauges have GREEN ZONES for normal ranges, YELLOW ZONES for reading that are concerning and of course RED ZONES for readings that need immediate attention.

DALWORTH SUPERMILL START/STOP SCREEN

This screen has the TWO MAJOR FUNCTIONS. To Start and Stop the mill and to Start and Stop the Mill Lubricator and the Inner Bearing cooler if equipped. This system has Lockouts that will not allow the mill to start or run if the Lubrication & Cooling systems are not functioning properly.



DALWORTH SUPERMILL WARNING SCREEN

This screen has ALL the important warnings to help the operator figure out what the problem is should one occur. These warning indicators stay one until the problem is resolve. This system will not allow the mill to start if these critical warnings are not

ALL GREEN!

INCLUDES

This is controlled automatically.

1. Main control sloped top enclosure with floor mount stand.
2. 7" HMI Touchscreen with expandable multifunction preprogrammed PLC
3. SFX Lubricator w/ momentary contact for emergency lube activation
4. One Automatic Flush valve for mill lube Emergency Flush/ pre-Purge and post-Purge
5. Two precision Pressure Transducers to monitor oil pressure on mill & lubricator
6. One High Temp Diaphragm sealed Pressure Transducer to monitor discharge pressure
7. Three multifunctional relays to control included components and buyers system if required
8. All requires fuses and terminal strip
9. Estop Button
10. Cooler plug outlet
11. Chemical resistant two part epoxy paint
12. Easy installation instructions & wiring diagram
13. Two Type J Thermocouples to monitor mill bearing temperatures w/ 18ft lead



KICKIN' ASPHALT FOR 40 YEARS

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