



# iNTELWASH

iNTELWASH does away with the need to manually wash the milking system as the controller executes a pre-set wash program at the completion of milking. Elimination of possible human error means that the correct wash is carried out every time including dosing of detergents. Once the controller has finished the washing process the plant is shut down.

Installing an iNTELWASH system means that the operator can carry out other important tasks while the machine is fully washed thus decreasing the operator workload while increasing the efficiency your farming operation.

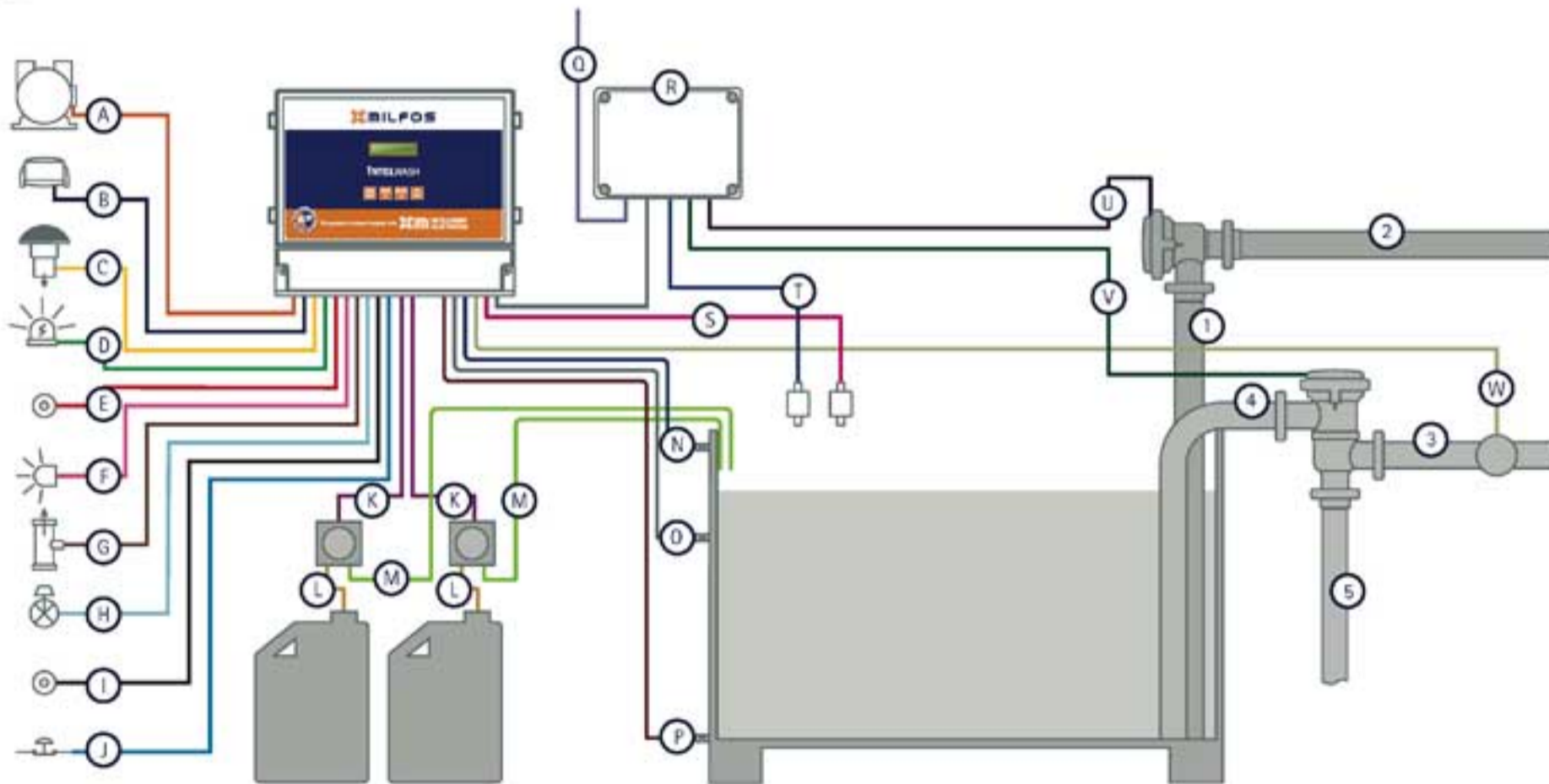
The controller software is fully programmable and highly flexible. iNTELWASH is suitable for any milking installation regardless of brand of equipment or detergent supplier's cleaning programme.

A full weeks wash program can be entered and automatically executed without the need to select an individual wash, the operator simply presses one key. iNTELWASH controls filling the wash tub with cold, warm or hot water and detergent dosing along with automatic re-circulation of wash solutions. The iNTELWASH system has many other control options to suit the level of automation required.



## KEY FEATURES

- 14 fully adjustable wash programs
- A possible six stages in each wash program, each stage is fully adjustable
- A maximum of four liquid detergent dispensers
- Automatic control over pulsation, including vacuum delay, air injector and vacuum pump
- Automated control of wash tub filling
- Ability to fill wash tub with hot, warm and cold wash water
- Ability to add extra wash water to any wash cycle
- Recirculation of any type of wash water using time or temperature
- Air purging using the pickup valves to air dry the milking system
- Error shutdown safety device including alarm output during error conditions
- Milk / wash safety switch
- Milk / wash bulk tank valve automation between milking and washing
- Milk purge control



REF	DESCRIPTION
1	Pick up valve suction
2	Jetter delivery line
3	Milk pump delivery
4	Wash return line
5	Wash drain line

- A** Vacuum pump control 230V
- B** Pulsator control 230V
- C** Air injector control 230V
- D** Alarm 24V
- E** Hold & wait push button
- F** Milk mode indicator 24V
- G** Purge valve 24V
- H** Bulk tank actuator 24V

- I** Remote start push button
- J** Safety switch
- K** Detergent pump 230V
- L** Detergent pump suction
- M** Detergent pump delivery
- N** Cold level tub switch
- O** Hot level tub switch
- P** Low level sensor

- Q** Vacuum supply
- R** Valve box control 24V
- S** Cold fill valve control 24V
- T** Hot valve signal
- U** Pick up valve control
- V** Recirculation valve control
- W** Temperature sensor control



## SYSTEM FEATURES

**REMOTE ENABLE** – Allows the INTELWASH to be remotely started and changed into different operating modes

**SAFETY SWITCH ENABLE** – A safety switch may be installed on the bulk milk tank to ensure that the fill valve is configured correctly before milking or washing commences

**DETERGENT DISPENSE TIME** – The time in seconds for operating the detergent dispensing pumps

**EXTRA DETERGENT TIME** – The extra time in seconds that the detergent pumps will operate for once the tub has filled

**AIR PURGE CYCLE TIME** – The pick-up valves are pulsed during washing, forcing air into the Jetter line, Jetters and Clusters so the equipment will be flushed correctly for the next wash stage

**MILK PURGING SYSTEM** – Set to purge at the end of milking and at the end of each wash cycle

**VACUUM DELAY** – Delay time in seconds to assist with getting the plant to vacuum before switching on of the pulsation and other devices that consume vacuum

**VACUUM OPERATION** – The vacuum pump can be switched off when filling the tub to save on power

**RECIRCULATION DELAY TIME** – The time delay in seconds used to dump the initial cold water that comes back from the plant before recirculating the hot water

**RECIRCULATION TIME** – The time in seconds that the recirculation valve will be open to recirculate the wash water back to the washtub

**TEMPERATURE BEFORE RECIRCULATION** – The temperature taken by the sensor before the recirculation valve is operated and the wash water is recirculated

**TEMPERATURE BEFORE DUMPING** – The temperature taken by the sensor before the recirculation valve is opened allowing wash water to waste

**WARM FILL** – Allows the tub to be filled with warm water

**MAXIMUM WASH TUB FILL TIME** – The maximum time in seconds that the system will wait for a high level switch signal before shutting down and reporting an error

**PRESET WASH TIME** – This is the total time for the wash stage

**DETERGENT TYPE** – The type of detergent that will be added to the wash water during filling. The system can dose up to 4 different detergents or be programmed not to dose any detergent at all

**WATER TYPE** – The water type being either hot, cold, warm.

**EXTRA WATER FILL** – Allows extra water to be added to any wash cycle

**HOLD AND WAIT** – Allows a pause to be programmed in any wash stage so that filter sleeves may be changed or other duties carried out

## SPECIFICATIONS

INPUT FUSE	15 amps
OUTPUTS	230V-3 amps (resistive load) 24V-(re-setable fuse)
MAXIMUM CURRENT	1.6 A
MAIN 24VAC FUSE (top centre)	2 amps
MAIN CONTROLLER FUSE (bottom right)	2 amps
MAIN 230V OUTPUT FUSE (bottom right)	10 amps

## OPERATOR FEEDBACK AT MILKING TIME

Four keys are located on the front cover of the INTELWASH controller. These are the Milk, Wash, Select and Off Keys

**MILK KEY** – is used to start the milking process. When pressed, the vacuum pumps, pulsation and milk pumps are switched on and the milking can commence

**WASH KEY** – The wash key initiates the wash mode. The top line of the screen indicates the mode of control. i.e. system wash and the bottom line indicates the function being performed. i.e. fill cold, fill hot, wash in progress and dumping water

**SELECT KEY** – The select key is used to progress through the different preset wash cycles

**OFF KEY** – The off key is used to shut down the plant

**ERROR CODES AND TIMERS** – are displayed on screen to keep the operator informed of the milking and washing process

