

# On Demand, Differential Pressure Controls



## 20 Series Pulse Controller

The Goyen 20 Series Pulse Controller is an advanced microprocessor controller of the cleaning system in reverse pulse filters in pneumatic systems.

The 20 Series Pulse Controller can operate in the following modes:

- Off
- Manual
- Automatic

In AUTOMATIC mode, sequential cleaning is initiated only when the differential pressure (DP) across the filter reaches a predetermined level. Once the DP is reduced to an acceptable level, sequential cleaning ceases.

Features of the 20 Series Pulse Controller include:

- Adjustable pulse on time to 1m sec. Range 10 to 999ms.
- Adjustable pause time to 1sec. Range 1 to 999 sec.
- Microprocessor control eliminates drift.
- Pause in after cleaning option adjustable to 1sec. Range 1 to 999sec.
- Fast set up.
- Number of after cleaning cycles adjustable from 0-99.
- Automatic shutdown from integral Delta P switch (no wiring).

- Alarm options.
- Fast set up
- Valve diagnostic display.
- Low air pressure option
- Self-diagnostic function



## 200 Series Pulse Controller

The Goyen 200 Series Pulse Controller is an advanced microprocessor controller of the cleaning system in reverse pulse filters in pneumatic systems.

The 200 Series Pulse Controller can operate in the following modes:

- Off
- Manual
- Automatic

In AUTOMATIC mode, sequential cleaning is initiated only when the differential pressure (DP) across the filter reaches a predetermined level. Once the DP is reduced to an acceptable level, sequential cleaning ceases.

Features of the 20 Series Pulse Controller include:

- Adjustable pulse on time to 1m sec. Range 10 to 999ms.
- Adjustable pause time to 1sec. Range 1 to 999 sec.
- Microprocessor control eliminates drift.
- Pause in after cleaning option adjustable to 1sec. Range 1 to 99sec.
- Fast set up.
- Number of after cleaning cycles adjustable from 0-99.

- Automatic shutdown from integral Delta P switch (no wiring).
- Alarm options.
- Fast set up
- Valve diagnostic display.
- Low air pressure option.
- Self-diagnostic function.
- Valve firing display.
- Display of current differential pressure.



## **GC3000 Series Cleaning System Controller**

*(USA ONLY)*

The Goyen Go-Co GC3000 series cleaning system controller was designed to satisfy the requirement for reliable 'demand' cleaning. The unit has two major components:

- A differential pressure gauge with adjustable high and low set points, and
- Integral solid state relay electronics, a programmable, microprocessor based timer card.

Three modes of operation can be programmed; 'off', 'continuous' or 'demand'. Off is primarily used to isolate the system during maintenance. Continuous mode sequentially switches valves on and off. Demand mode is when the cleaning cycle is initiated by the pressure drop across the filter.

In practice demand cleaning reduces the number of cleaning pulses in a given period of time resulting in extended bag life, reduced compressed air consumption, longer valve life, lower emissions and less service downtime.



Economist Model -  
MCS

## Economist Model MCS

The economist model "MCS" uses advanced microprocessor technology, expressly designed to control the interval and the pulse time of diaphragm valves using the DP and focusing on reverse pulse-jet systems with pneumatic cleaning procedures. All the technical characteristics satisfy the "CE" Directives which relate to isolation and low voltage power. The unit has been tested by an authorised institute and is in conformity with the European Regulation 89/336 EEC and 93/68 EEC.

The MCS is available with a minimum of 4 outlets (MCS4) up to a maximum of 128 outlets (MCS128). The intermediate models increment in multiples of 4 (MCS4, MCS8, MCS12, etc.).

The principle of the MCS is as follows: an internal sensor registers the progress of the DP in the filter and when it exceeds the value of the set DP, the unit automatically sends a signal to the diaphragm valves in sequence (skipping the outlets which are not connected or where there is no charge recognised).

The unit also allows you to set the MANUAL CYCLE TIME (this is the time it takes for all the valves to complete an entire cleaning cycle). This way you obtain the automatic regulation of the Pause Time between one valve and the next. All this is possible thanks to a sophisticated algorithm, which is able to automatically optimize the Pause Time, starting from the set Manual Cycle Time. On the digital display of the unit, you are able to identify all the operating values, such as the Set DP, DP Alarm, Pause Time, Hour Counter, No. of cycles for Shut Down Cleaning and the relative Pause Time.

The Economist also has the PRECOATING function, which subordinates the start of the cleaning cycle until such time that a preset DP value for PRECOATING has been reached (this DP value has to be greater than the Set DP). This allows the filtering elements to overload with reagents and preparation powders. It is possible to set an independent

value for the DP ALARM as well.

### **Main Features**

- Timed sequential control of the electronic valves with zero-crossing to eliminate electrical interference.
- Short-circuit alarm, microprocessor malfunction alarm and alarm of exceeded DP.
- Regulation of the set DP, pulse time, no. of cycles in final cleaning, with indication on the display.
- Setting of the MANUAL CYCLE TIME (this is the time it takes for all the valves to complete an entire cleaning cycle).
- PRECOATING function (start of the cleaning sequence subordinated to the achievement of the DP PRECOATING), for filters that have to be overloaded with reagents and preparation powders.
- Easy predisposition outlets voltage (AC/DC) and inlet voltage (AC).
- Automatic system for the command of one or more cycles for the final cleaning.
- Hour counter (indicates the number of hours which the filter has actually worked. From 0 to 9999 hours).