*...because modern day baghouse is NOT a box filled with bags .....* 



# We have developed our PULSE JET CARE system It makes the difference

## WHAT IS Pulse Jet Care

It is a state-of-the-art , modular, configurable pulse jet filter control system It is a combination of instrumentation, control hardware, algorithms and software based on in-depth understanding of filtration process and decades of experience. It is a vital part of our LONGER BAGS TECHNOLOGY

### WHAT PURPOSE DOES Pulse Jet Care SERVE

It serves the purpose of making pulse jet operation effective, economical and trouble-free by saving energy and labour, extending bags life and preventing equipment failures, and system downtime. It saves money.

# HOW DOES Pulse Jet Care DO THE JOB

It collects and analyzes measurements it controls the bags cleaning cycle. It provides advanced diagnostics of equipment It prevents problems from happening It signals that problems may happen before they show It tells where the problem is when something has gone wrong It is better to know

# **GETTING TO THE NITTY-GRITTY**

#### **Cleaning cycle control**

Vast majority of industrial applications follows one of the two patterns :

- **time based cleaning** the most simple method, applied from the beginning of industrial application of pulse jet filters
- classic differential pressure algorithm (based on fixed switching points )

First of the above methods gives little control over the system, may lead to 'over-cleaning' resulting in reduced bags lifetime and/or increased compressed air consumption or , on the contrary , to inadequate cleaning resulting in bags blinding. The second method is adequate only for applications wherein gas flow and temperature are near-constant, a point often missed in industrial applications.

Besides obvious implementation of these two methods our **PJC system**, unlike competitive systems, is capable of realizing two sophisticated algorithms of differential pressure based cleaning

- differential pressure algorithm with variable switching points

( cleaning cycle starts when pressure drop reaches HIGH level and stops at LOW level, while both high and low switching points are modified using actual gas flow value )

- quasi continuous differential pressure algorithm

( pressure value set point is flow dependent and controlled value is break time between valve pulses or between compartment cleaning cycles )

Apart from cleaning cycle control, our **PJC system** may and often does perform control of associated equipment : hopper heaters, rappers , dust conveying system, emergency dilution damper or may control negative pressure at suction point

### **Advanced diagnostics**

Our **Pulse Jet Care** system offers the most extensive diagnostic features based on integrated measurements featuring :



# The hardware

Our PJC system hardware includes :

- control panel with 5,7" or 10,4" TFT touch screen.



- a number of junction boxes with field I/O up too needs.



- optional connection to higher level control system via field networks like Modbus,
  Profibus or Device Net or to SCADA system via Ethernet
- measuring equipment to monitor and control gas pressure, flow, optional dust concentration, dust level etc. Selection is always tailored to meet actual needs ofthe system









