

- The Company
- The Product
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The Company

RYPOS Inc., a privately owned company founded in 1997, is engaged in research and development to design and construct an active exhaust emission control system for the reduction of harmful emissions from Diesel engines.

Company History

2000

2001

2002

2003

2004

8 Dunham Street, Attleboro, MA
820 Wellington Ave., Cranston, RI

3 Industrial Park Road, Medway, MA

3 Industrial Park Road, Medway, MA

Basic research and proof of concept
First prototype on pickup truck
Second prototype on a 150kW Genset

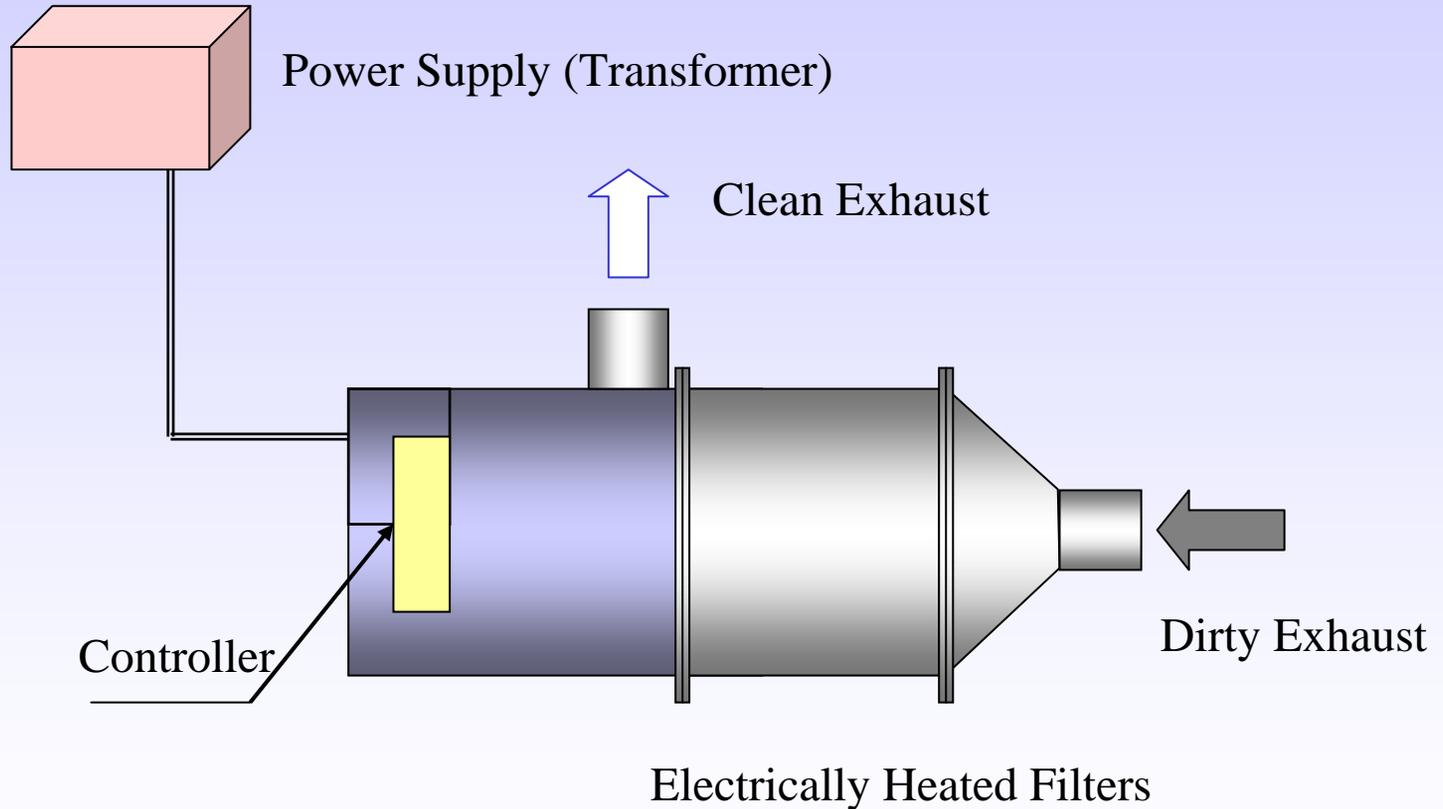
Product development
Third generation
Test at Environment Canada
First field test program

Product development
Forth Generation
Second field test program

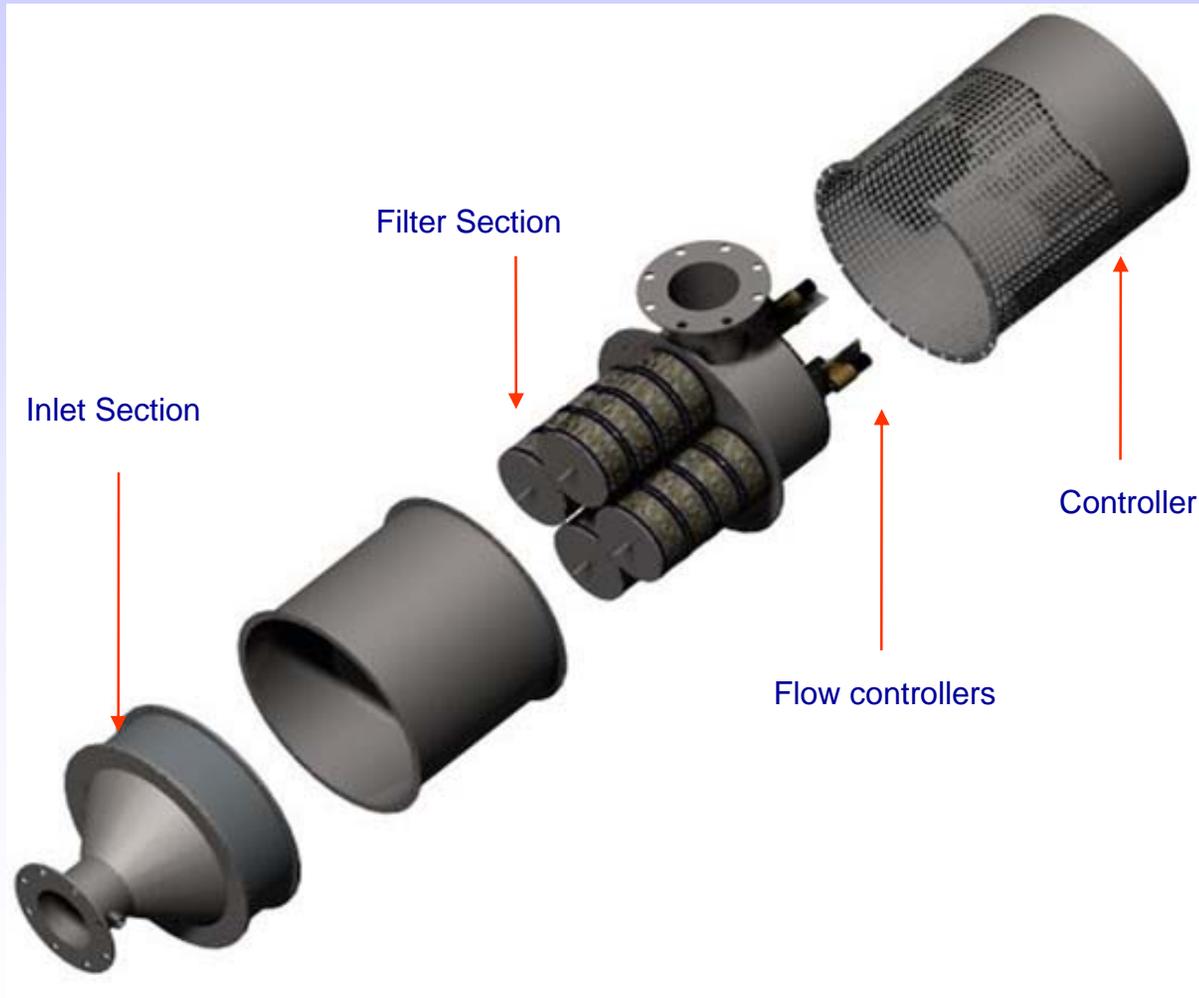
Applications
Diesel generators
Large engines
Marine generators



The product

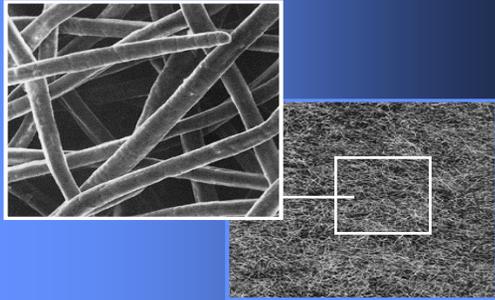


The product



The product

Active Filter Design



- o Electro conductive
- o High porosity
- o Low back pressure
- o Withstands high temperatures
- o Heats up fast (low thermal mass)
- o High filter efficiency



The product

Electrical Control System

The operation of the RYPOS Trap is controlled by a microprocessor.

The controller monitors the trap and periodically, as required, an electric current is passed through a filter element, which then acts as a heating element.

- Automatic regeneration cycles
- Timing sequence, duty cycle, flow control and filter unit selection
- Pressure sensing is used to initiate regeneration cycles
- Electronic switching of high current to filter elements (automatic)
- Monitoring and remote display

Demonstration Projects

Falcon Steel, Newark, Delaware

CumminsVTA28-G1

567kW (760 hp)

2RT16



Southworth-Milton, Warner, NH

CAT 3406

350kW

RT24



UNC Health Science Library, Chapel Hill, NC

Perkins D150P4

150kW

RT8



NAVSEA-Philadelphia

DDC12V-71N

434 hp

RT32-2C



RYPOS Testing

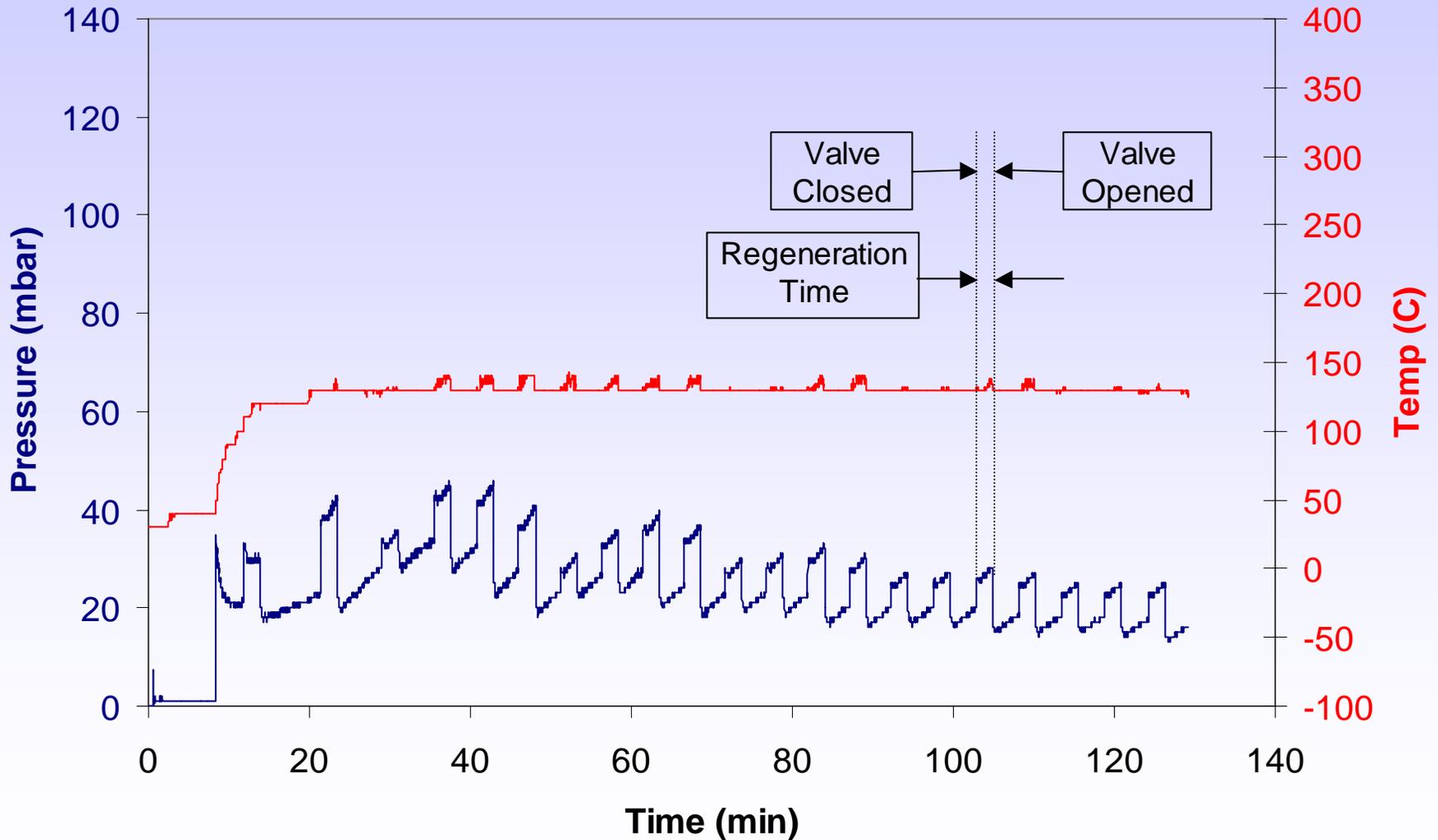
Komatsu
SA6D108E-2

180kW

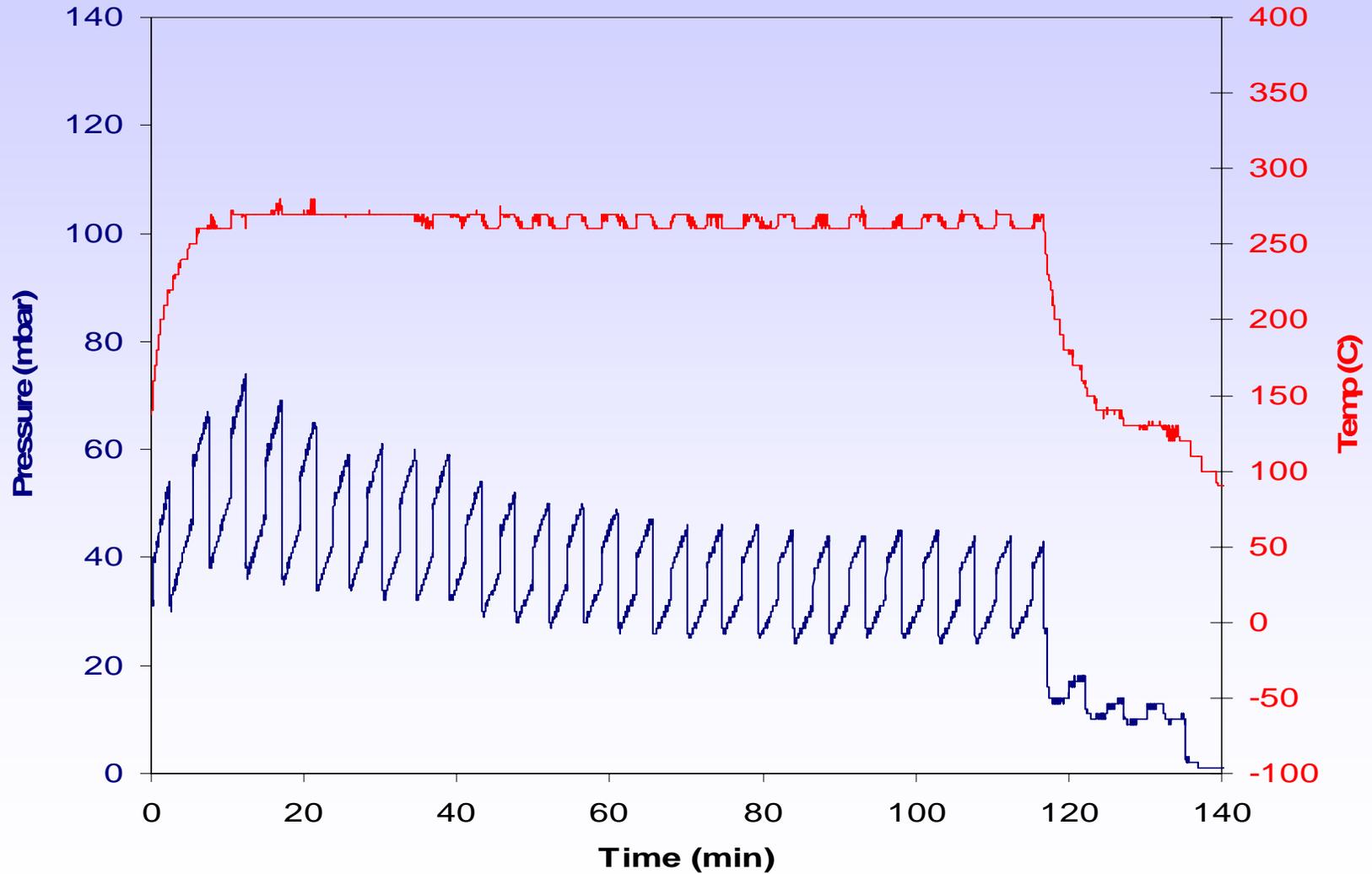
RT08



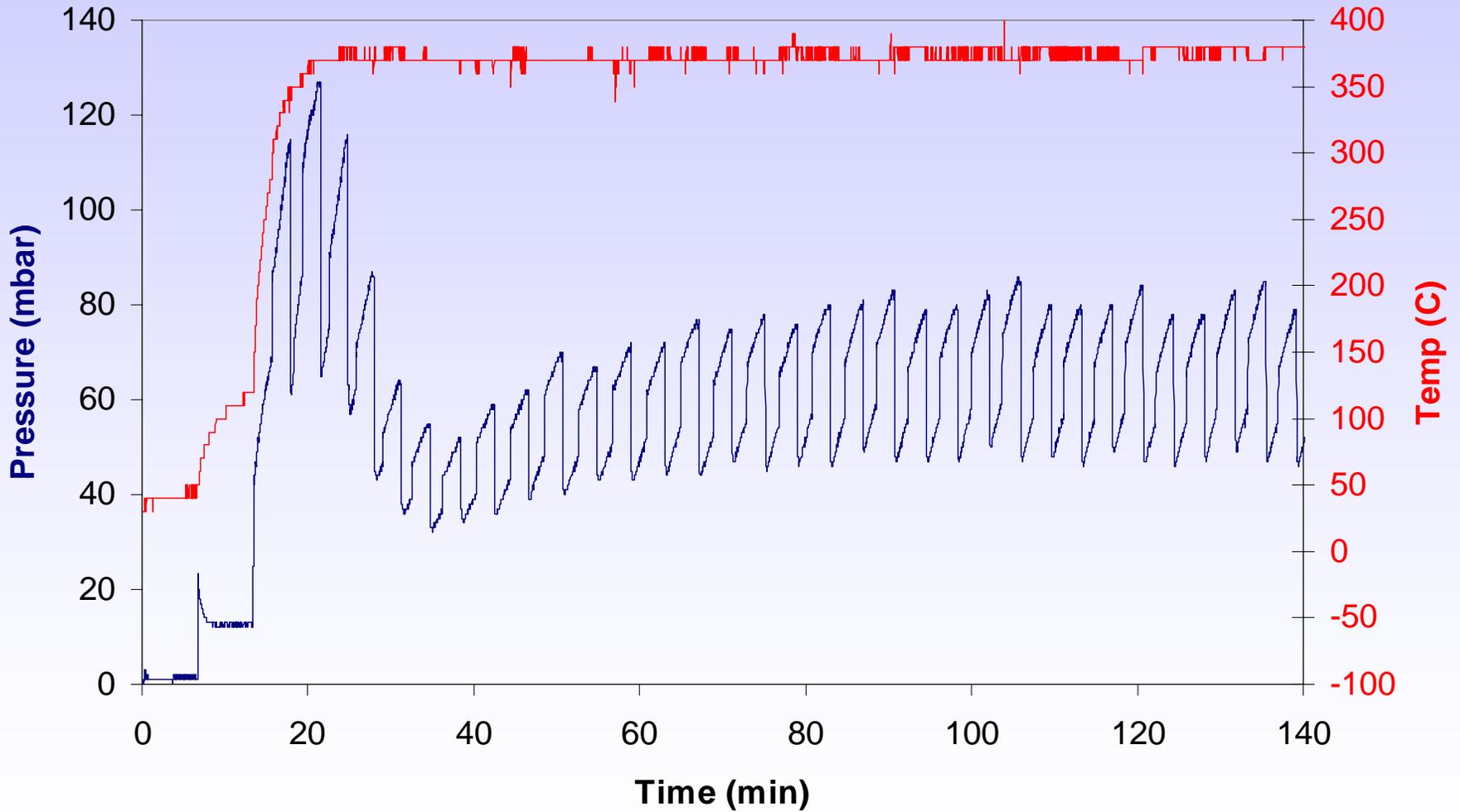
No Load



Mid Load (75 kW)



High Load (150 kW)



Conclusions

- Reliable regeneration independent of exhaust temperature
- Consistency in maintaining low engine back pressure
- High Performance, up to 90% of soot.
- Low energy consumption.