

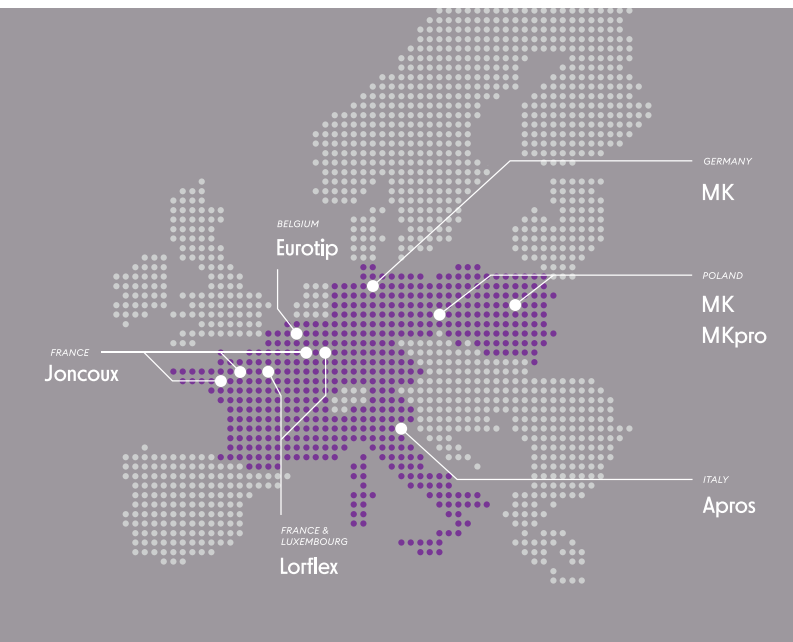


Innovation that matters



# Sphering group: a front line player in Europe

With a renowned expertise in design, manufacturing & distribution of innovative high-quality chimney and ventilation systems



6

COMPANIES



6

PRODUCTION PLANTS



600

EMPLOYEES



22

DISTRIBUTION BRANCHES

- Privately owned with strong stability
- Domestic markets: France, Belgium, Germany, Poland & Italy
- Export market

# Our purpose: CARE & our core values

We CARE to do well by doing good with customers, employees, secured and efficient products, the environment and the society



Everything has changed except our values since 1919



Reliable partner



Leading Edge



Long-term family horizon



No shortcut



Local approach

# ●●● Meeting all needs for flue and air

●●● A complete range of solutions for all markets



## Hearth Market

Wood, Pellets and Gas  
stoves, inserts, fireplaces



## Central Heating

Gas, Pellets, Oil and Coal  
boilers / Residential,  
Commercial and industrial



## Industrial Market

Power Generators (UPS)  
& Cogeneration (CHP)



## Ventilation & Technical insulation

# Anticipating your future with our R&D



Our long-term family horizon “we are here to stay” implies requirements above industry standards

## Safety

- Resistance to abnormal high temperatures
- Preventing gas leakage
- Preventing water or condensate leakage
- Mechanical stability

## Performance

- Guarantee the correct draught
- Good balance between Air and Flue

## Durability

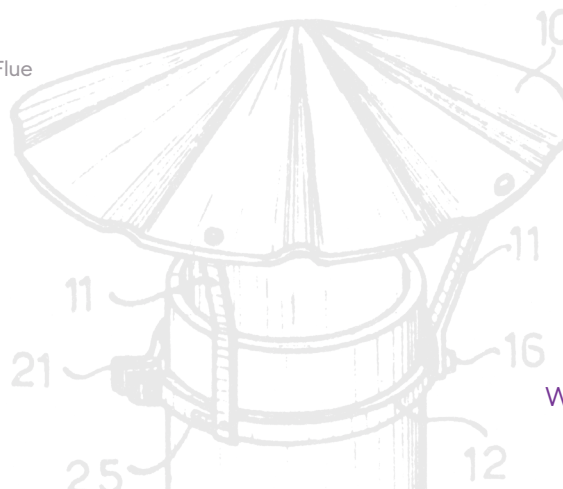
- Resistance to corrosion
- Up to 30-year warranty

## Easy installation

- Compatibility of connection between systems
- Innovative accessories to fit all installations

## Design

- Aesthetic design of our products



# ●●● EU leading edge WeLab

## Our objective

Enhance our ability to innovate and stay one step ahead of the energy transition.

This facility has allowed the group to comply with the newest European standards (including the NZEB: nearly zero energy building) in terms of security and performance of appliances, but also to adopt a responsible innovation approach.



# WeLab

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### We

Together with  
our clients  
and partners

### Lab

A facility  
to test our  
products with  
appliances

# Powering your business with innovation that matters

## What WeLab can do for you?

With our WeLab, we have developed our own test protocols, more demanding than market standards, in order to comply with and to anticipate the requirements of today's and tomorrow's appliances.

### Key missions

- Advise
- Pro active co-development
- Test and pairing
- Certification

### Being better for

- Reputation
- Efficiency
- Effectiveness
- Peace of mind



# Our WeLab assets for you

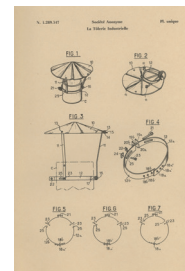


## Joint collaboration with WeLab, local R&D and Group innovation teams

- Expertise in European standards & national building regulations
- Competence in design of chimney systems & terminals
- Expertise in appliances & combustion
- Competence in industrial property

## 100 years of R&D and innovation

Innovation that matters has always been our key priority. The company's history has been shaped with inventions and patents in order to develop new products and adapt to changing market needs.



# First class products & services thanks to our tests rigs

These tests are based on requirements we have set up in order to guarantee our clients the highest levels of security and performance:

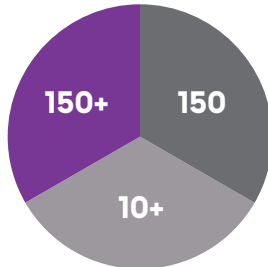
## Flue chimney test

- Initial type test for development and CE marking
- Thermal test up to 1000 °C
- Tightness test up to 5000 Pa
- Mechanical tests (traction, torsion)
- Wind test
- Corrosion comparison
- Recirculation test for flue balance

## Pairing test with appliances

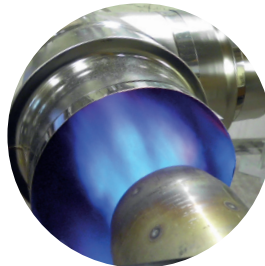
- Room sealed test
- Efficiency test
- Appliance thermal test

Tests per year

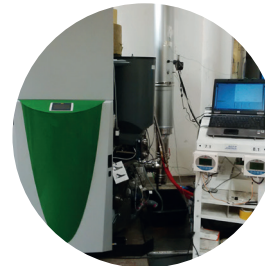


Years of expertise

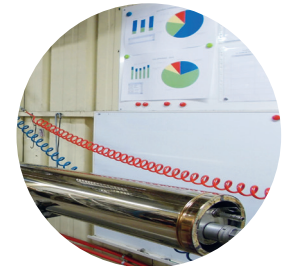
Different test benches



Thermal test



Pairing test



Tightness test

# Partner with the best

## Institutional partners



## Manufacturers

MCZ

EXOFLAM

RED

PALAZZETTI

GODIN

SEGUIN

OKOFEN

JIDE

SUPRA

CMG

SKIA

THERMOROSSI

BESTOVE

INVICTA

COLA

JOTUL

CHAZELLES

LAMINOX

CHEMINÉES

NOBIS

PHILIPPE

HAAS + SOHN

DOVRE

HASE

EDILKAMIN

# Test for improvement: Room sealed pellet stoves

## Objectives

- Test and check compatibility between the stove & chimney (Concentric Apollo Pellets & Triple wall Octans)
- Recommended installation list for safety & efficiency
- Test report for CSTB technical approval

## Tests

### Stove test

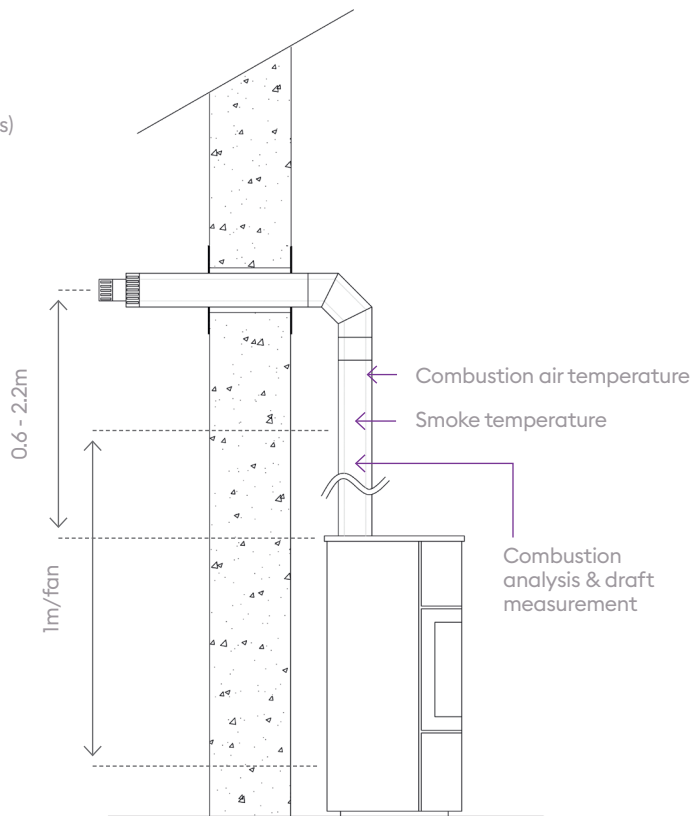
- 2 tightness tests (10 and 50 Pa)
- 2 safety tests (stove turned off & heat diffusion)

### Pairing test

- 18 installation cases with different lengths & horizontal/vertical configurations

## Results

- Validation of compatibility with recommended installations (showing efficiency gain) & specific components
- Test report of stove's safety and tightness
- Report of pairing test with measurement of efficiency, draught...
- WeLab test reports accepted by CSTB for technical approval "Avis Technique"



# Test for improvement: Room sealed wood stoves

## Objectives

- Test & check compatibility between the stove & Orion double wall / Octans triple wall chimney systems
- Recommended installation list for safety and efficiency

## Tests

### Stove test

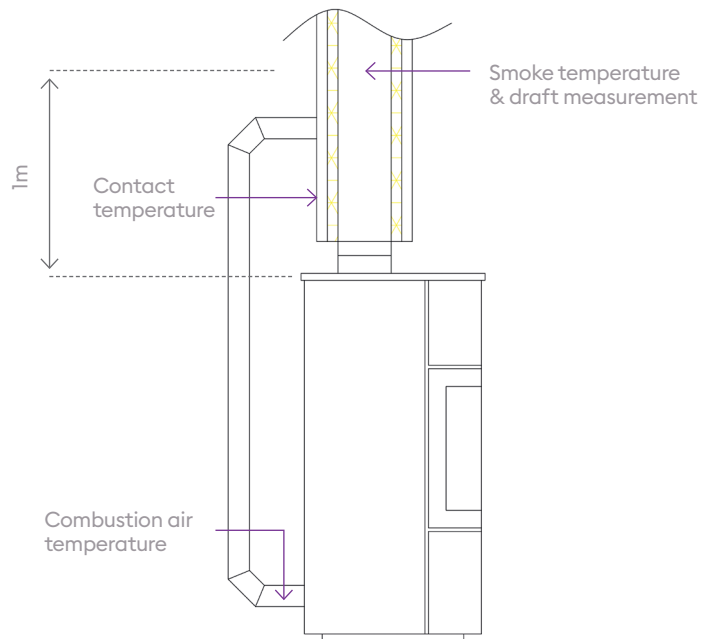
- Tightness test (10 Pa)

### Pairing test

- 4 installation cases with different lengths

## Results

- Validation of compatibility with recommended installations & specific components
- Test report of stove's tightness
- Report of pairing test with measurement of efficiency, draft...



# Test for improvement: Room sealed gas fireplaces

## Objectives

- Test and check compatibility between the fireplace and chimney system (Concentric Apollo GasFire)
- Recommended installation list for safety and efficiency

## Tests

### Fireplace test

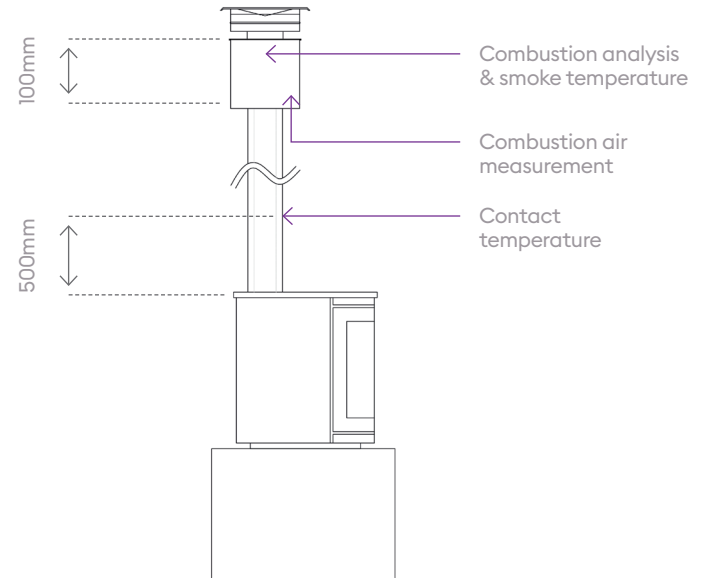
- tightness tests (50 Pa)

### Pairing test

- 4 installations case with different lengths and horizontal/vertical configurations (with / without wind load resistance)

## Results

- Validation of compatibility with recommended installations and specific components
- Test report of fireplace's tightness
- Report of pairing test with measurement of efficiency, draft...



# Test: Room sealed pellet condensing boilers

## Objectives

- Test and check compatibility between the boiler & chimney (Concentric Apollo Pellets & Triple wall Octans)
- Recommended installation list for safety & efficiency
- Test report for CSTB technical approval

## Tests

### Boiler test

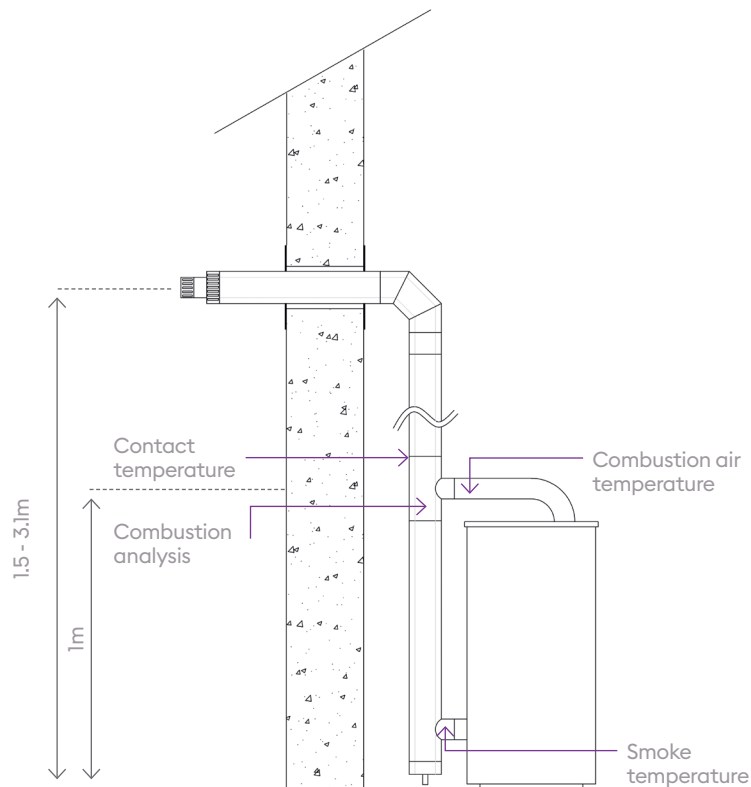
- 2 tightness tests (10 and 50 Pa)
- 2 safety tests (stove turned off and heat diffusion)

### Pairing test

- 10 installations case with different lengths & configurations

## Results

- Validation of compatibility with recommended installations & specific components (connectors, condensate drains, gasket...)
- Test report of boiler's safety & tightness
- Report of pairing test with measurement of efficiency, draft...
- WeLab test reports accepted by CSTB for technical approval "Avis Technique"



# Comparative test: Corrosion test

## Objectives

- Compare resistance to corrosion of different materials for pellet appliances
- Have a better test protocol than V2 test designed for oil appliance (1856-1)

## Tests

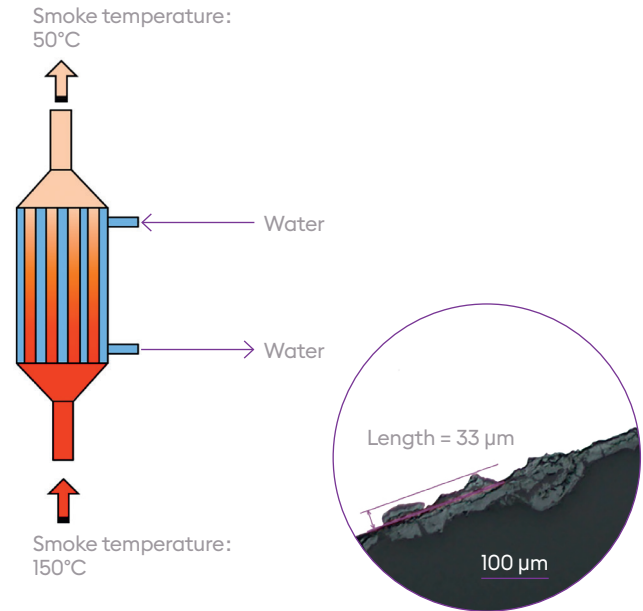
- Test protocol: smoke temperature below 50°C for 1 month / 8 hour per day

### 5 steels tested

- 304 stainless steel (1.4301) / Thickness 0.4 mm
- 316L stainless steel (1.4404) / Thickness 0.4 mm
- 444 stainless steel (1.4521) / Thickness 0.4 mm
- Black steel (1.0038) / Thickness 1.2 mm
- Aluminium coated steel (1.0226) / Thickness 0.7 mm

## Results

- Classification of material by performance
- Black steel not suitable for condensing appliances





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JONCOUX    EUROTIP    LORFLEX    MK    APROS    WELAB

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