# venlosyslem

# As an engineering and trading company, we offer:

- Equipment for natural ventilation
- Engineering calculations for natural ventilation in facilities of high thermal load
- Assembly of a delivered equipment or, alternatively, instructions and supervision of assembly on its initial stage
- Automation of control for devices delivered by us
- Comprehensive consultations for designers in scope of ventilation and automation





#### **REALIZATIONS**

- Opole Power Plant
- > Kozienice Power Plant
- > Synthos Oświęcim
- Głogów Copper Smelter Upgrading of Anodic Furnaces, Flash Furnace and Electrical Furnace, HRSG House
- Głogów Copper Smelter House P-27
- Gorzów Heat & Power Plant
- Urban Waste Treatment Station in Białystok
- Ardagh Glass Gostyń
- ➤ Incineration Plant in Konin
- Gdynia Heat & Power Plant
- Miasteczko Śląskie Zinc Smelter
- > Stolzle Częstochowa Glasswork
- FOLPLAST Production Building
- Ardagh Glass Ujście
- > Elblag Heat & Power Plant
- Kozienice Power Plant Roof overhaul
- > LMG Heat & Power Plant
- Kozienice Power Plant Pumping station
- Zakłady Azotowe Puławy
- Bełchatów Power Plant Turbine and Boiler Houses





# SOFTWARE CONTROLLING OPERATION OF VENTILATION – AUTOMATED OPERATION OF NATURAL VENTILATION

- > Increases efficiency of removal of heat gains
- > Ensures maintenance of adequate air parameters on volume net area
- ➤ Enables effective utilisation of information concerning pressure difference and air temperature, direction and strength of wind for natural ventilation control
- Ensures permanent relations with controllers via Internet and remote supervision over operation of the whole system

Huta szkła - hala pieca

Wywietrzaki otwarte:

4 z 18

Czeronie ścienne otwarte:

z 48

Temperatura pod dachem

t<sub>ww</sub>= 70.9 °C

W stosunku do

poprzedniego pomiaru

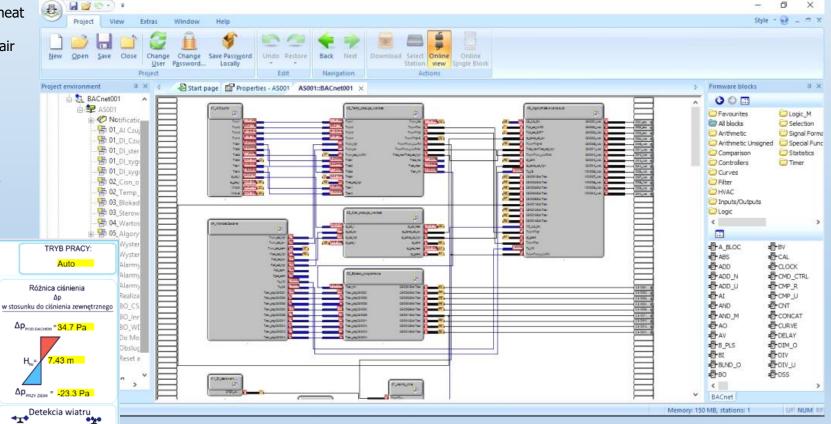
Temperatura wewnatrz hali

(poziom ok. 1,5m)

twen= 10.6 °C

Temperatura na zewnątrz

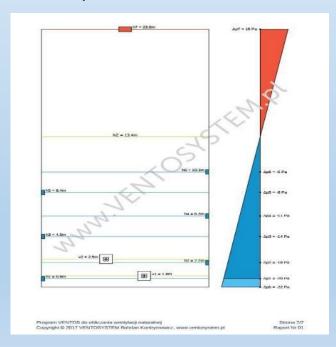
(Nawiew do hali) t<sub>zewn</sub>= 4.8 °C

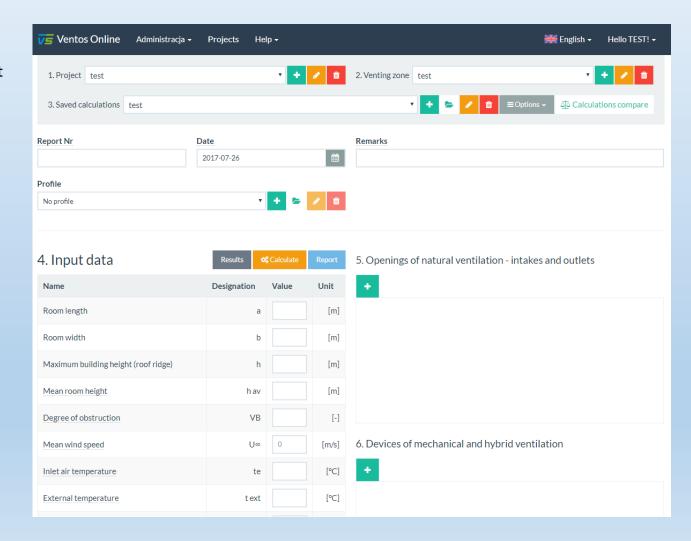




#### **DESIGNERS' SUPPORT**

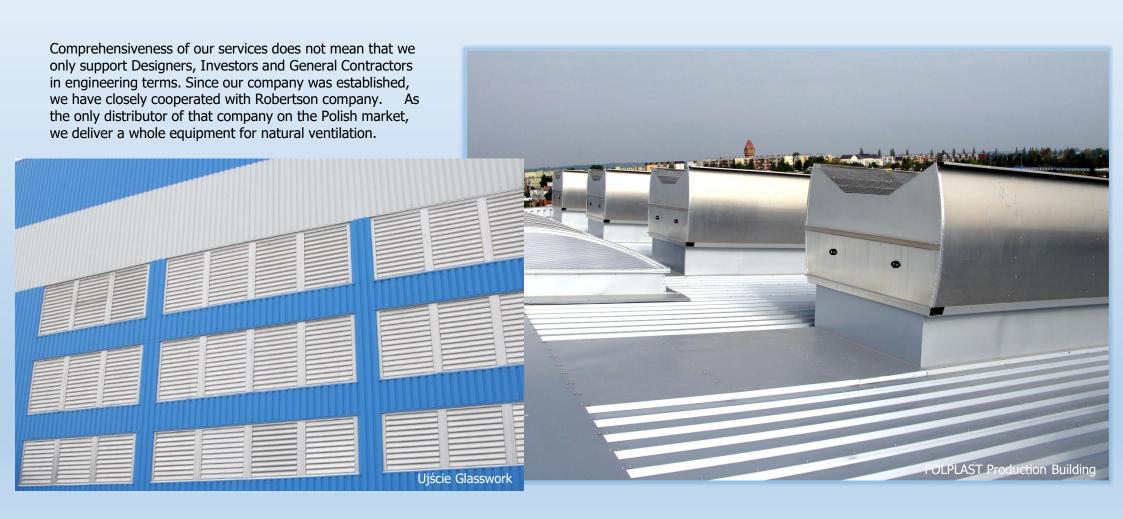
- > We help to calculate natural and mixed ventilation
- ➤ We make our VENTOS software, enabling calculation of natural ventilation in one-house facilities of high heat gains, available
- > We help to choose an equipment
- > We agree guidelines for control of natural and mixed ventilation system







# **REVIEW OF EQUIPMENT SELECTED FROM OUR OFFER**





# **GRAVITY ROOF VENTILATORS**

Are used for ventilating facilities of high heat load

 Contrary to the equipment for mechanical ventilation, do not require continuous power supply

 Ensure full exhaust air stream with simultaneous protection against penetration of precipitation to interior of facility

Kozienice Power Plant





# **VULCAN II BI-FUNCTIONAL**

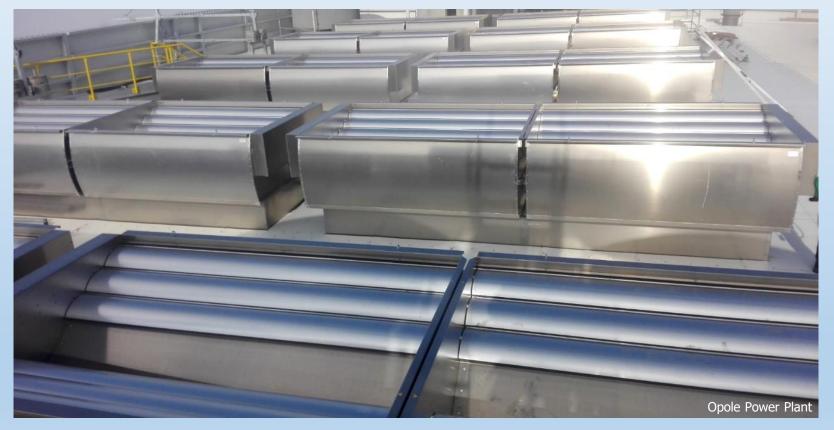
- ➤ Bi-functional ventilator is recommended for natural ventilation in industrial facilities, and for venting smoke from facilities
- ➤ Compliant with PN-EN 12101-2
- ➤ Equipped with an actuator having letter of acceptance issued by CNBOP (Scientific and Research Centre for Fire Protection), and a heat responsive element
- > Excellent for heat dissipation
- ➤ Two functions in one device lower the costs of smoke venting system and heat dissipation, and save rooftop space





# **VULCAN II UNI-FUNCTIONAL**

- > Uni-functional ventilator
- > Excellent for heat dissipation
- ➤ Excellent for facilities where bi-functional Vulcan II ventilators are installed, and aerodynamically active area larger than necessary for smoke venting is needed
- > Any actuator can be installed





# **HEATMOVER-S**

- Owing to high capacity, recommended especially for facilities of very large demands in terms of heat dissipation, e.g. in glass and metal smelters as well as generating units
- > Four standard widths of modules
- > Any length

Ujście Glasswork

Can be made of various metals, including stainless or acid resistant steel





# **HEATMOVER (CLASSIC)**

- Has many years of proven practical use in generating units, smelters and waste incineration plants
- Low structure enabling numerous applications
- > Larger modules can be easily assembled
- > Can be applied on sawtooth roofs







# **HYBRID VENTILATION**

- ➤ Thanks to application of rooftop ventilators of VentoHybrid type and series, enables connection of two types of air circulation – the natural one and the mechanical one
- > Ensures significant saving of energy and environment protection with simultaneous noise abatement
- Excellent for facilities where gases forming explosive mixtures with air are depositing; in such circumstances, hybrid ventilation operates as emergency ventilation





# **SILENCERS**

- Can be applied in natural, mixed and hybrid ventilation
- > Ensure noise abatement
- Each silencer is designed individually according to Client's requirements







# **INTAKE VENTS**

#### **THUNDERBIRD**



- Moveable intake vents
- Equipment designed for atmospheric air intake and inserting it to ventilation duct or directly to the interior of a building
- Protect against penetration of precipitation to the interior of a facility when ventilation shaft is open
- Applied in ventilation systems in industrial facilities
- Excellently operates as an incoming air intake vent for natural ventilation systems, and excellently works in collaboration with mechanical air exhaust fans
- Can be used as a compensating air intake in smoke venting systems

#### **AIR INTAKE SETS**





# PRESSURE RELIEF DAMPERS

- > Prevent the effects of excessive pressure strike in a facility, which can be caused by an explosion
- Recommended for potentially explosive closed rooms
   Manufactured according to the state of the art
- > Adjusted for assembly in outer walls of buildings







# **ASSEMBLY OF EQUIPMENT**

Supported by long-term experience of our Subcontractors, we offer both comprehensive assembly and one- or few-days-long training in assembly with supervision on its initial stage







### **PARTNERS**















