

Oberflächentechnik  
Surface Engineering

# The High-Tech Spray Booth

WOLF TAIFUNO<sup>®</sup>vision - the Premium Class



Spirit of Air





## ■ TAIFUNO<sup>®</sup>

### The intelligent and efficient Spray Booth

TAIFUNO<sup>®</sup> is the worldwide renowned top product in the range of spraying and drying booths - synonymous for high-class technology, quality and energy efficiency.

The experience gained by more than 1800 realized TAIFUNO<sup>®</sup>-booths and consistent developing work mark the current standard of booth technology."

**TAIFUNO<sup>®</sup> vision** is the new generation of TAIFUNO<sup>®</sup> spray booths. Future technologies like Red-Eye<sup>®</sup> for recording the object temperature, VARIO<sup>®</sup>HR - the dynamic heat recovery around the year or the integration of alternative energies make TAIFUNO<sup>®</sup> vision to a premium-class high-tech product.

The TAIFUNO<sup>®</sup> -technology is conducted by a highly modern control system. The multitude of functions is unified in a central station, functional and easy to survey. The user friendly control system is very easy to handle."

**Intelligent energy management and efficient heat recovery systems are the key components of operating costs.**

**TAIFUNO vision - the premium brand stands for this.**

A Premium-Class Top Product

## Control System

### Intuitive to handle

With the new, expansible control system of TAIFUNO<sup>®</sup>vision, you have the future technology fully under control. You are being led safely through the working process.

- ▶ without manual
- ▶ without long instruction
- ▶ once explained and you are fit

### Intelligent Energy Management

- ▶ process navigation system
- ▶ automatic connection of operating modes
- ▶ dynamic, temperature-controlled heat recovery\*

- ▶ Red-Eye<sup>®</sup> Process control\* and -visualization in Online-layout
- ▶ programme-controlled ventilating processes
- ▶ programm-controlled drying processes
- ▶ Automatic Standby-System
- ▶ Automatic Energy-Saving
- ▶ energy evaluation and operating costs recording\*



### Automatic Standby-System

This energy-saving function puts TAIFUNO<sup>®</sup>vision automatically to a reduced air and heating capacity, when in mode of operation Spraying the spray gun is not actuated. When actuating again, the full capacity is reached again within few seconds.

### Online Connection

Each TAIFUNO<sup>®</sup>vision is equipped for connection to the WOLF-owned Service-Center. We only need your internet connection at our switchboard.

In case of a failure, experienced specialists in our headquarters do a first check „online“. Quickly and professionally - saving time and money.

So don't worry if you are far away from us.

### Mode Lamp

With the Mode Lamp, even from a distance you have under control if your employees are using the efficient booth technology optimally.

In the modes of operation Cleaning, Spraying, Evaporating, Drying, Cooling and Energy-Saving, the lamp in the respective colour is shining. When Multi-Air is switched on additionally, the signal lamp is flashing.

# TAIFUNO<sup>®</sup> vision

### Survey of Advantages

- ▶ most modern control technology
- ▶ intelligent energy management
- ▶ maximal energy efficiency
- ▶ high ease of use
- ▶ absolute process security
- ▶ own production
- ▶ finish quality according to WOLF quality standards
- ▶ long lifecycle
- ▶ care of environment
- ▶ lowest operating costs
- ▶ first-class WOLF-service

\* optional



The Spray Booth with Whirlwind

### Multi-Air

#### The ultimate Evaporation System

The Multi-Air System is integrated between filter ceiling and lighting. The jets are installed sunk in the inclined side cladding; their blasting direction can be adjusted individually.

The Multi-Air System provides maximal process acceleration when evaporating and drying.

Time saving is up to 70% compared to the method without Multi-Air. A partial flow of process air is acting as accelerator flow-ing at high speed out of the jets downwards and producing a turbulent flow around the object.

### Automatic Evaporation

The TAIFUNO<sup>®</sup> vision control system offers you various evaporating programmes. The software also includes special evaporating programmes which are pre-adjusted in coordination with the leading paint manufacturers, simplifying considerably the use of water paints.

With these automatic programmes, the parameters temperature, air exit velocity and time are optimally adjusted to the respective paint, guaranteeing a maximum of process security.

### Aluminium Filter Ceiling

The D.A.D filter ceiling made of aluminium is equipped with high-grade ceiling filters, make Viledon.

By the design in aluminium, the static loading is considerably reduced compared to steel design. Due to their low weight, the ceiling elements can be folded down easily by one person for exchanging the filters.



## Red-Eye®

### New Drying Technology acc. to Object Temperature

By Red-Eye® technology, drying in a combi-booth is newly defined. The system is marked by two decisive advantages: high process security and a clear reduction of heating costs.

During Red-Eye® process, a laser-beam supported infrared temperature sensor is directed to the object by the multiple-axle swivel arm.

The heating installation is now regulated exactly according to the current object temperature which is permanently compared to the nominal value.

The booth is heating only to the temperature actually required by the object / the paint. In standard drying process, the booth is running on "blind" after heating up to the nominal value, as you can see in the layout (black curves). "

### Maximal Saving by Red-Eye® and Multi-Air

By the combination Red-Eye® and Multi-Air, up to 45 % of drying costs can be saved. Depending on the programme adjusted, the Multi-Air System is switched on immediately or after a certain delay.

The advantages of the Multi-Air-System in drying process are very well-known. Multi-Air is leading the warm air much more quickly and evenly to the object.

The temperature differentents between upper and lower components is only minimal.

Therefore, the recirculating air temperature can still be decreased (cf. layout); moreover, the recirculating air quantity is automatically reduced as soon as the object temperature is reached."

## Light Evolution®

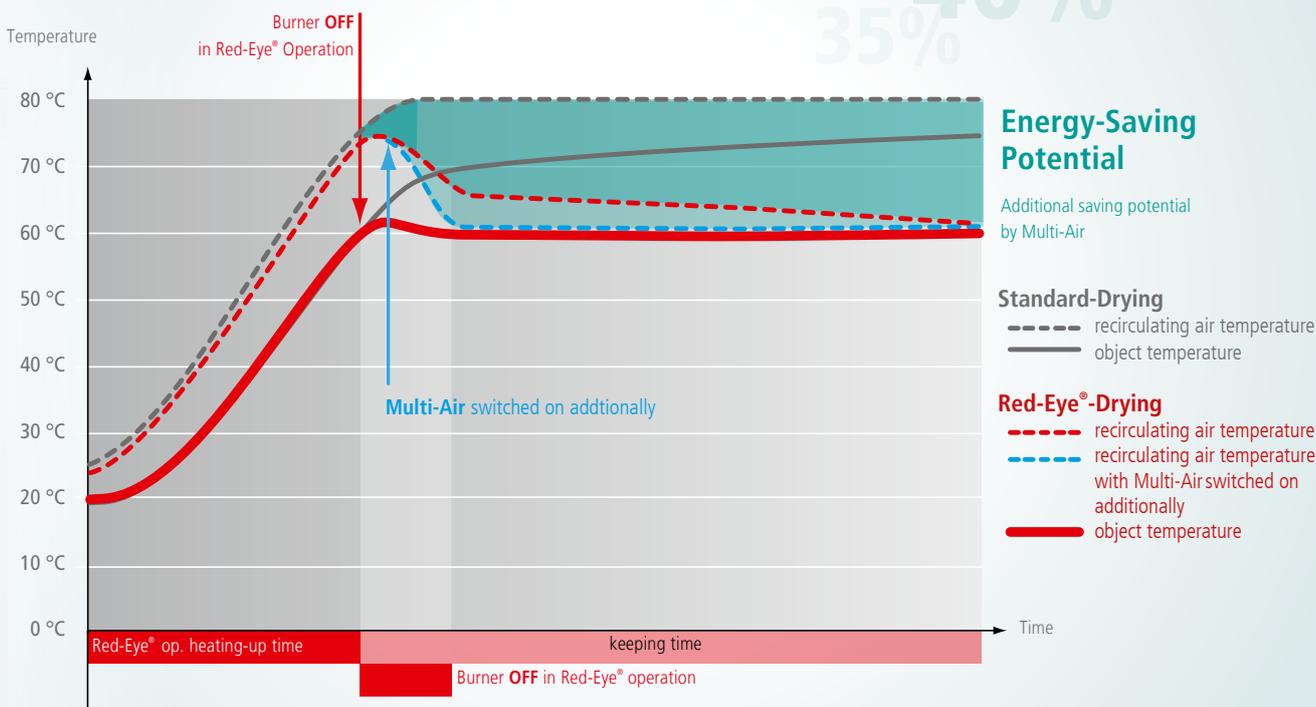
### WOLF LED-Technology

The booth lighting with LED-technology offers clear advantages like low electricity costs, best light power, long life cycle.

The Light Evolution® LED-lighting is integrated in the TAIFUNO® vision booth control. Though, the light intensity can be adjusted automatically to the respective operating mode. This leads to a drastic saving potential in power consumption. The electricity costs can be reduced up to 70 % in comparison to fluorescent lamps.

## Saving Potentials with Red-Eye® und Multi-Air

Heating not a degree too much, not a minute too long!



\* optional

Convincing in Technology, Design and Efficiency

## Machinery Technology

### Capacity as required

The power of TAIFUNO<sup>®</sup> comes from the high-performance machinery, series WLE-S, in compact design. It is available in different capacities. Attractive in shape and design, convincing by performance, technology and reliability.

Our long experience in developing air heaters and our competence as one of the leading manufacturers of ventilating and air-conditioning units is standing behind this directive product.

### Heating Systems

All heating systems like gas, oil or warm water are available. Also line burners for direct air heating belong to our programme.

### Machinery Construction

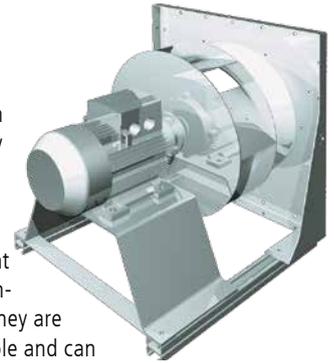
The housing consists of galvanized, insulated double-shell panels, incombustible A2 acc. to DIN 4102. Designed as compact unit with smooth outside surfaces in extremely solid frame construction. All inspection openings are equipped with quick-closing devices or doors.

### Filter Monitoring

Generally, all filter steps of the booth are supervised. The operating display tells you automatically when to replace the filters. In the machinery, there is a prefilter on the air inlet side and a subsequent filter on the air outlet side before the heat recovery.

### Fans

Plug Fans with high efficiency acc. to the Ecodesign Directive ErP provide a silent operation without failures. They are easily accessible and can be cleaned quickly and simply.



### Frequency-controlled Fans

The serial equipped includes frequency converters with direct drives. By the stepless regulation of air volumes, the regulating flaps in the fresh and exhaust air pipes are no longer necessary.

In combination with the mode control system, you can profit of many advantages:

- ▶ adjustment of air volumes as required by modification of rotational speed
- ▶ reduction of components, thus fewer failure sources
- ▶ precise pressure regulation by fine adjustment via motor speed
- ▶ wear-resistant operation
- ▶ considerable saving of electric and heating energy

### Automatic Pressure Control\*

With the automatic pressure regulation, the nominal value is adjusted once and needn't be corrected later.

The machinery WLE-S with heat recovery. Here with additional drying booth machinery, completely insulated\* series ECONVECT<sup>®</sup>.





## The WOLF Heat Recovery - Your Profit Zone

### Heat Recovery in all Modes of Operation

The classic Heat Recovery (HR) systems for spray booths are only in function during spraying. During drying, the warm exhaust air (up to 100 °C) is blown outside unused.

The TAIFUNO<sup>®</sup>vision puts an end to this waste of energy.

The heat recovery is fully in function in all modes of operation.

### Dynamic VARIO<sup>®</sup>HR

A new development by WOLF is the Dynamic Heat Recovery.

So far, the plate heat exchangers have to be removed from one booth in summer in order to avoid undesired high booth temperatures.

Thus, on cold summer days or in cooler morning hours, the HR cannot be used. With the dynamic VARIO<sup>®</sup>HR\*, the heat exchanger remains in the booth.

The air flow is only led through the heat exchanger, when the booth control signalizes heat requirement. When no heat is required, the air is automatically flowing past the HR. A further advantage of VARIO<sup>®</sup>HR is the spontaneous availability of the HR.

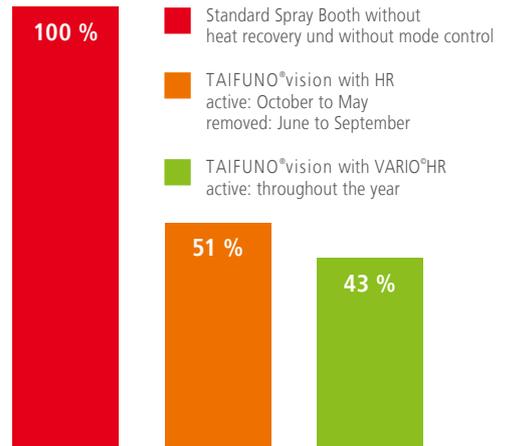
Even when in spraying operation at high outside temperatures the air flow is led past the HR, there is high heat requirement during subsequent drying. The control system recognizes this and automatically switches to heat recovery immediately.

You are saving energy even in summer around the clock.

### Saving Heating Capacity by HR

Heating energy consumption of a combi-booth in % per year.

Comparison valid at a mean annual temperature of 9 °C

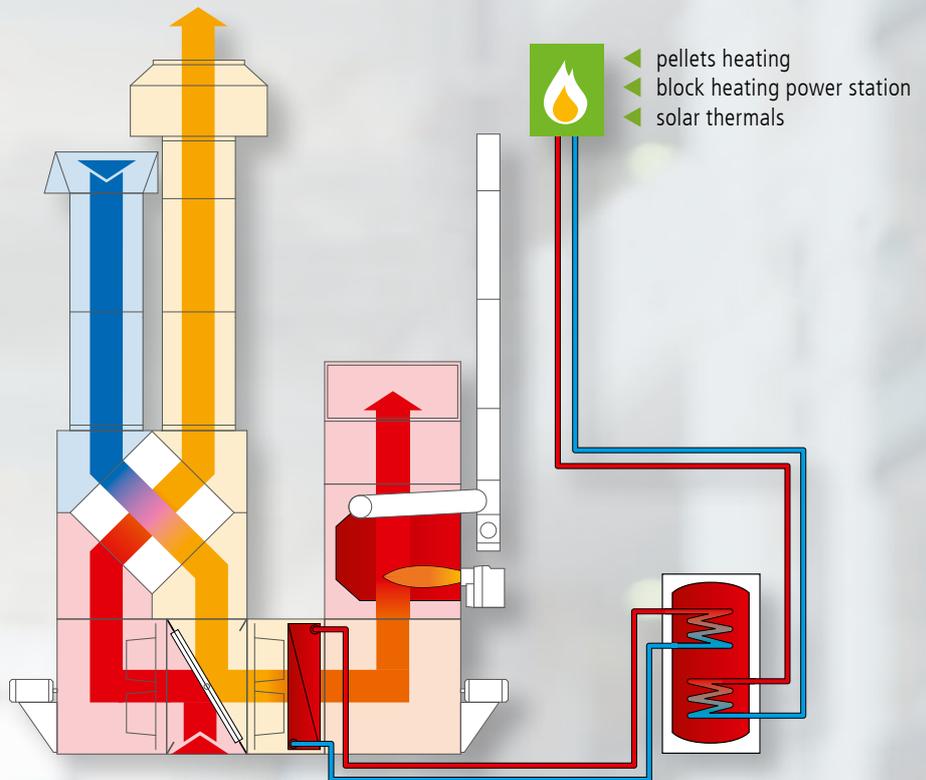


## WOLF Green Technology

Alternative energies and existing waste heat, for example from block heating power stations, pellets heatings or solar thermals, can be integrated into machinery technology as a warm water circuit.

In most cases, these energy forms are used as supporting heating for an oil or gas heating. At low expense, the primary energy consumption can be reduced drastically.

Our engineers are kindly prepared to support you in your planning.



\* optional



WOLF Anlagen-Technik GmbH & Co. KG  
Division Surface Technology  
Münchener Str. 54  
85290 Geisenfeld, GERMANY  
Phone +49 (0)8452 99-0  
Fax +49 (0)8452 99-350  
E-Mail info.ot@wolf-geisenfeld.de  
Internet www.wolf-geisenfeld.de

