

TS<sup>®</sup>

節能環保通風降溫系統

Environmental Ventilation Cooling System

舒適工作環境

節能高達80%

提高投資報酬率

*COMFORTABLE WORKING ENVIRONMENT*

*ELECTRIC POWER SAVING UP TO 80%*

*SHORTEN INVESTMENT PAYBACK PERIOD*



双星集团

TWIN STAR GROUP

[www.twinstar-group.com](http://www.twinstar-group.com)

# TS<sup>®</sup> 節能環保通風降溫系統

## Environmental Ventilation Cooling System

TS系統適用於各種廠房，可降溫5~10°C。

TS System Is Suitable for all kinds of factory to reduce the temperature from 5°C to 10°C

### TS系統提供舒適工作環境的原理：

一般廠房內的高溫，熱氣難流通。悶熱停留在廠內影響員工工作效率，一直是令經營者頭疼的問題，因此如何以低的經費達到通風，降溫目的就顯得額外重要。

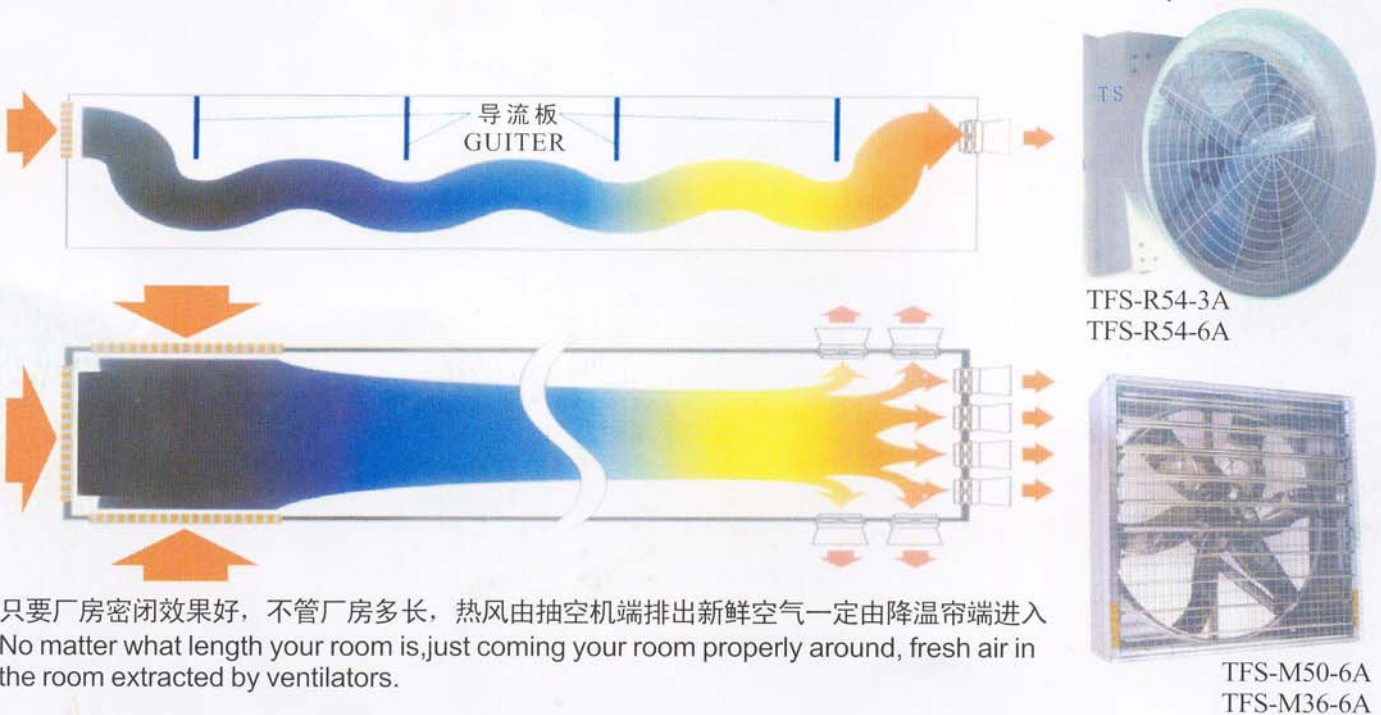
大部分工廠的硬骨結構以水泥牆和烤漆板擋強烈陽光照射下依然無法排除熱氣，令人既不舒適的熱緊迫情況還是存在着，造成高溫的不外乎是：廠房屋頂及四周牆壁所吸輻射熱和人員機械散發出熱量。

降溫窗式通風降溫系統，就是將廠房四面八方全部密封，然後在兩端分別裝置降溫窗及抽風機，利用抽風設備將廠內熱氣排出造成負壓效果迫使外界的空氣經由降溫窗進入廠內並且蒸發水分，是空氣相對濕度提高並降低空氣溫度，此時已創造出一個舒適的工作環境。

### TS NEGATIVE PRESSURE VENTILATION COOLING SYSTEM:

Inside a typical factory, The temperature is usually high and the air is stuffy. This is caused by heat radiating from the production machines and the building walls and roofs which are exposed to the sun. Consequently, The workers experience discomfort and a drastic drop in their efficiency and productivity. It is therefore, Imperative that a factory has a cool and comfortable production or working area to realize higher efficiency and productivity.

In Negative Pressure Ventilation Cooling System cooling effect is achieved through the evaporation of cooling pads, GSI Wind Chill Effect and negative pressure ventilation which help to remove odour and stale air in the building, thereby introducing freshness and maintaining a more consistent internal temperature.

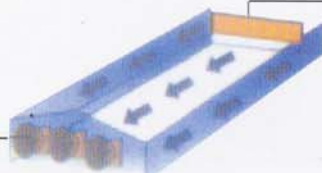
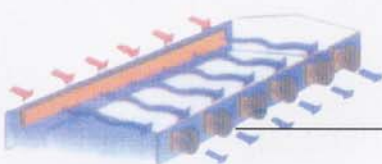


1. Across Exhaust Cool Down System  
橫向抽風，降溫系統

2. Vertical Exhaust Cool Down System  
縱向抽風，降溫系統

3. Cooling Pad Ventilation Cool Down System  
經降溫片降溫通風，降溫系統

TS "S" Type High Efficiency Exhaust Cone Fen 喇叭型抽風機  
Cooling Pad 降溫片



## TS 负压式降温系统的功能:

能在一分钟从厂房的一边把人员和机械产生的热气迅速排出室外，同时在厂房的另一边引进新鲜的空气，透过降温帘达到降温效果。

## TS 负压式降温系统的主要特点:

1. 投资少，效能大。
2. 耗电少，节能高达80%。
3. 全自动电子控制可根据上下班时间设定启动和停止。
4. 能于1分钟内将厂房的热气抽出，导入新鲜空气。
5. 增加空气含氧量，提高工作效率。
6. 通风，换气，防尘，除味，降温集于一体。

## TS 节能环保降温系统适用范围:

- 纺织，机械，陶瓷，化工，冶金，玻璃，五金，皮革制造业。
- 制衣，制鞋，印染，印刷，电镀，电子，包装，食品等加工业。
- 温室，花卉，家禽，畜牧等种养殖场。
- 现有冷气空调及送风机设备的改装及安装。

## The function of TS Negative Pressure Ventilation Cooling System:

It replaces hot and stuffy air in a building, generated by workers, production machines and the sunshine, within one minute with fresh cool air which enters the building through a series of moist cooling pads.

## The main features of TS Negative Pressure Ventilation Cooling System:

1. Low financial investment but high in returns.
2. Frugal electricity consumption, saving up to 80% in electricity bills.
3. Automatic control box enables the system operates according to the shift time.
4. Ability to expel hot and stale air in a building and replacing it with fresh cool air within one minute.
5. Ability to increase the incoming air and ionizing it, thereby raising the productivity of the workers in a building.
6. Ventilation, dust control, removal of odour and cooling effect are achieved simultaneously through this system.

## TS energy-saving Ventilation Cooling System is suitable for many industries such as:

- textile, mechanical, pottery, chemical, electro-plating, glass, hardware, leather, etc.
- garment, shoes, printing, electrical, packaging, food, etc.
- greenhouse, nursery, animal husbandry such as poultry and pig farming, etc.
- air-conditioned buildings wishing to convert to energy-saving cooling system.

## TS 节能降温系统和空调在投资、节能效益对比

### Comparing TS Environmental Air Conditioner and Traditional Air Conditioner in Investment Cost and Energy Expenses:

例 e.g.: 厂房 Factory 长 L40m × 宽 W25m = 1000m<sup>2</sup>, × 高 H4m = 4000m<sup>3</sup>

按每天10小时的运行时间计 Based on operating 10 hours per day

|                                  | “TS”节能降温系统<br>“TS” Ventilation Cooling System   | 分体柜式空调<br>Multi-split Type Air Conditioner   | “TS”降温系统的节能效益<br>“TS” System Benefits    |
|----------------------------------|---|--|--|
| 投资费用。<br>Investment Capital      | 15000美金(6台抽风机降温系统包括安装费, 材料费)<br>USD15000 Including 6 fans, installation, material fee | 22500美金 (15台5HP分体包括保温铜管及安装费, 材料费)<br>USD22500(Including 15 pcs 5HP, pipe, installation and material fee) | 节省投资费US7500<br>Investment-Saving US7500  |
| 总输入功率<br>Total Input Power       | 7kw   | 57kw   | 节省用电功率50KW<br>Energy-Saving up to 50KW   |
| 每年电费<br>Electricity Expenses (Y) | US2300  | US18600  | 节约电费US16300<br>Energy fee-Saving US16300 |

## TS 投资额与运行成本分析 TS Analysis of Investment Cost and Operational Fee:

|   | 设备投资成本 System Investment | 年运行成本 Yearly Operational Fee |         |                 |
|---|--------------------------|------------------------------|---------|-----------------|
|   |                          | 抽风机 Fan                      | 水 Water | 保养 Maintainance |
| (抽风机、降温帘、其他)<br>(fan, cooling pad, etc) |                          | US2300                       | US800   | US330           |
| 总计 Total                                | US15000                  | US3430                       |         |                 |

## TS 成本回收期 TS Investment Return Period:

| 未装降温系统每年工厂收益<br>Factory Yearly Profit Before Install Cooling System | 安装降温后每年生产率提高(12%)<br>Productivity Increased 12% After Installed Cooling System | 每年运行成本<br>Maintainace Fee Yearly | 每年实际多获得的收益<br>Actual Additional Profit (Yearly) | 设备及安装投资<br>System Investment |
|---|--|----------------------------------|---|------------------------------|
| US330000  | US39600  | US3430                           | US36170   | US15000                      |

设备回收期: 设备投资/每年的多获得的收益=0.4年或5个月

System Investment Return Period: System Investment / Actual Additional Profit=0.4 year or 5 months



# TS<sup>®</sup> 環保節能空調機 Environmental Air Conditioner

## Theory of TS Positive Pressure Environmental Air Conditioner:

TS Environmental Air Conditioner is suitable for opened and semi-opened space, it can directly conduct natural wind and the cooling air. When the fresh air from outdoor is passing the TS Environmental Air Conditioner, it will be filtrated and cooled and then sent to indoor continuously, this will vent the smelly, dusty, turbid and stuffy air to outside. TS Environmental Air Conditioner is able to do the air circulation, cooling and increasing the content of oxygen in the air concurrently, especially useful for high temperature or populous area.



KLF-18AXP



## TS正压式节能环保空调机的换气原理:

TS节能空调机适用于开敞式及半开敞式环境使用，能够直接输送自然风及输送经降温后凉风，室外新鲜空气经TS节能空调机降温换气机组过滤、降温后向室内源源不断地大量输送，将室内带有气味、粉尘和混浊闷热的空气排出室外，同时兼顾换气、降温及增加空气含氧量等多种效果，特别适用于高温及人群密集场所。

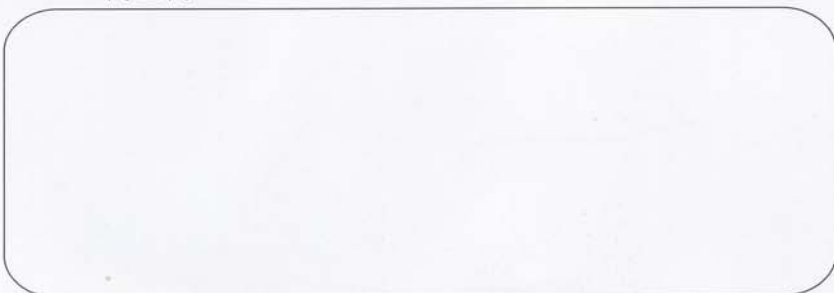


Manufacturer & Distributor 制造与销售总部

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注塑厂 Plastic Injection Factory



电子厂 Electronic Factory