



**腾旋**科技是研制、开发和生产旋转接头及其相关产品的高新技术企业。公司长期致力于密封与磨擦技术的研究，在旋转接头领域处于国内领先地位。旋转接头研发中心已为腾旋公司赢得了203项专利。

公司拥有加工中心、数控车床及其它专业设备110余台套。严格按照ISO9001质量规范组织生产、销售、服务等业务。产品已在造纸、钢铁、瓦楞、纺织、印染、橡塑、化工、工程机械和机床等行业得到广泛应用。

我们不仅提供优质的产品，更提供无时不在的精诚服务；我们不仅提供技术支持，更提供行业的整体解决方案。

Tengxuan Technology Company specializes in research, development and the manufacturing of rotary joints and related products. Tengxuan is also the leading sealing technology and steam syphon expert in China, accumulating 203 technical patents over the years. Tengxuan has a large machine shop facility, with over 110 state-of-the-art machines. Our products are manufactured to ISO9001 quality management standards. We have our own sales and service staff, assisting customers around the world. Tengxuan products are widely used in industries such as paper, steel, corrugating, textiles, non-wovens, rubber, plastics, chemical, machine tool, construction machinery and food processing.

Along with our high quality products, we offer our customers the highest level of aftermarket sales and service.

适用行业

Industries

- |            |                              |
|------------|------------------------------|
| • 造纸及纸制品行业 | • Paper and Paper Converting |
| • 钢铁行业     | • Steel                      |
| • 瓦楞行业     | • Corrugating                |
| • 机床行业     | • Machine Tool               |
| • 印刷行业     | • Printing                   |
| • 塑料行业     | • Plastics                   |
| • 食品加工行业   | • Food Processing            |
| • 纺织行业     | • Textiles                   |
| • 无纺布行业    | • Non-wovens                 |
| • 化工行业     | • Chemical                   |
| • 橡胶行业     | • Rubber                     |
| • 工程机械行业   | • construction machinery     |

**精心设计、精工制造**  
**国际品质、国内价格**  
**完善的技术支持**  
**快捷的售后服务**  
**提供维护保养培训**  
**提供低成本配件及维修服务**  
**提供现场指导安装、调试服务**

*Design and manufacturing capabilities*  
*In-house and field technical support*  
*Maintenance training*  
*Installation guidance and trouble shooting*



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# 蒸汽冷凝水系统

## Steam & Condensate System

值得信赖的伙伴  
更高的烘干部效率  
更优的冷凝水排放  
[www.tengxuan.net](http://www.tengxuan.net)

如 本 有 说 变 明 动 书 照 不 通 资 料 版 权 归 向 腾 旋 公 司 所 有 未 经 允 许 不 得 转 载 。  
（ 腾 旋 市 场 部 ）

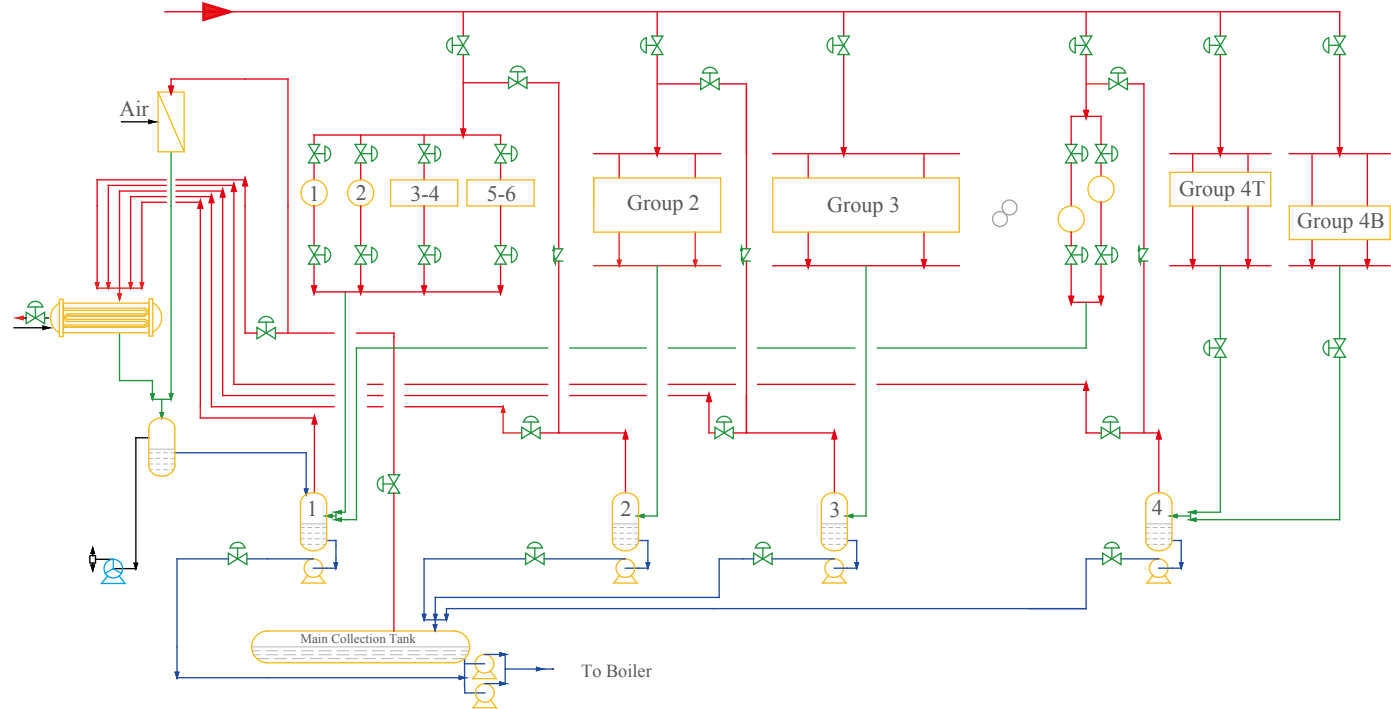


# 为纸机干燥部提供全方位服务

## Serve Paper Machine Dryer Section

腾旋科技的蒸汽冷凝水系统可服务于造纸行业的干燥部，公司拥有雄厚的技术支持和专业的系统技术团队，为您提供优质的蒸汽冷凝水系统，能够最大限度地节省蒸汽的消耗，并且提供完善的售后服务，根据您的需求以及生产状况从而提供多段通气系统或者热泵系统。

Tengxuan Technology Company's steam & condensate system specially serve the dryer section in paper machines. As for now, Tengxuan has a professional system group with strong and qualified knowledge, which assures good performance steam & condensate systems are designed and provided to customers, to help them maximally save energy. Along with system, Tengxuan also provide quality after-sales services such as installation, diagnostics and troubleshooting. Tengxuan can offer both cascade and thermo-compressor systems for customers' options.



### 我们的服务范围包括

#### Tengxuan steam & condensate system service includes

- 蒸汽冷凝水系统的设计  
System design and integration
- 设备的选型供应  
Equipment supply
- 系统安装调试诊断  
Installation and troubleshooting
- 蒸汽冷凝水系统旧线改造  
Old system rebuilds

### 我们的宗旨

- 有效降低纸机运行成本
- 纸机干燥系统能满足各种纸机和生产规模需求，并追求减少蒸汽消耗为目的
- 蒸汽系统设计合理，安装简单，操作方便
- 提供可靠冷凝水排放，最大热传递效率及有效蒸汽使用

压榨后纸页的干度范围在40%-50%，其余的水分需要烘缸蒸发，要将纸页的干度提高到92%-95%，提高纸机的干燥性能的关键因素包括蒸汽冷凝水系统的设计和操作、恰当的选用合适的干网、安装有效地通风系统以及良好的汽罩。腾旋科技蒸汽冷凝水系统可以为您的纸机的干燥部提供最优质的服务。

Normally after press section in a paper machine, the dryness range is 40%-50%. The rest moisture shall be dried by dryer section to achieve 92%-95% reel dryness, which is mainly controlled by the steam & condensate system. Tengxuan technology can provide good performance system to serve your dryer section.

江苏腾旋科技股份有限公司 系统部  
( Tel : 0510 - 68787000 - 8056 )

现在常见的蒸汽冷凝水系统主要有以下两种：

Two popular steam & condensate systems are now listed as follows:

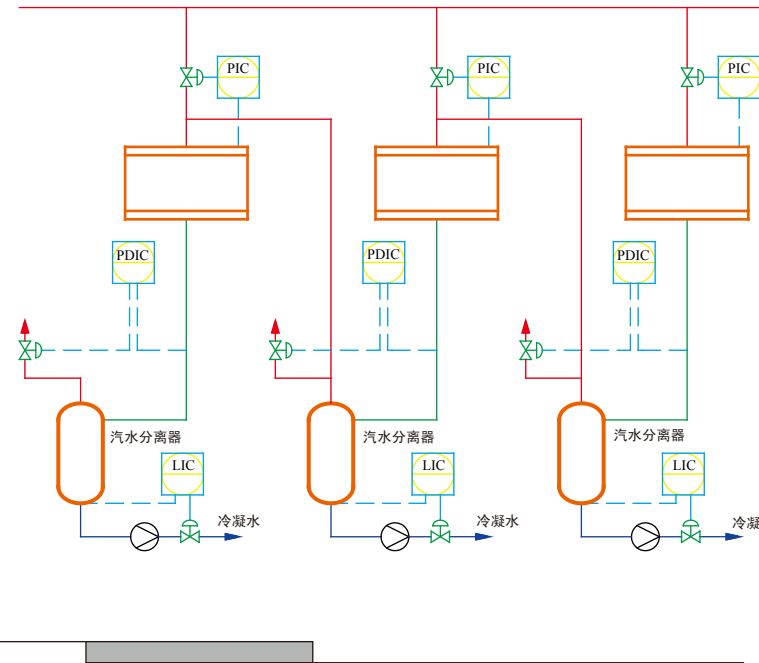
### 多段通汽系统

#### Cascade System

将高压段烘缸蒸汽分离出来用于下一段的低压区烘缸，如果二次蒸汽量不能满足需要，可以将生蒸汽直接补充加入到下一段烘缸中。

多段通汽系统各段之间存在一定的压力差以保证闪蒸汽的充分利用。

Steam separated from high pressure dryer group, normally called blow-through steam (B-T steam), goes into the next lower-pressure dryer group, if steam in the lower-pressure group is not enough, some fresh steam will be added into this section. Cascade systems rely on differential pressure between dryer groups, so it will contribute to the usage of the steam.



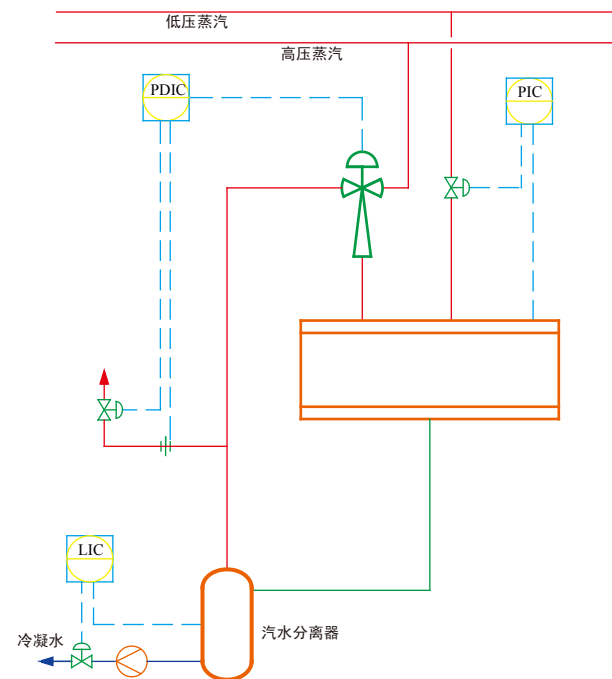
### 热泵系统

#### Thermo-compressor System

烘缸使用的蒸汽为两部分，其一为低压蒸汽经压力控制阀直接进入烘缸，这是烘缸主要的蒸汽来源，其二为烘缸排出的蒸汽冷凝水进入一级汽水分离器后，产生二次蒸汽经热泵增压后烘缸加热用。

热泵系统是将烘缸部分成几个独立的单元，一般来说二次蒸汽在本单元内循环，因此较易调节各段的烘缸温度，建立最佳的干燥曲线，并且控制比较灵活。

In this system, there are two types of steam: high pressure steam (8-10Bar) and low pressure steam (5Bar). Low pressure steam goes into the dryer directly, while the high pressure steam is mixed with B-T steam in thermo-compressor and goes into dryer for reusing. Thermo-compressor systems divide the dryers into different groups, and B-T steam circulates in each group. This system is flexible and can easily control the temperature of the dryers.



腾旋公司根据客户的需求，结合纸厂实际情况以及纸的工艺特性从而为客户提供合适的蒸汽冷凝水系统。

### ● 提高蒸汽利用效率 Improve the steam efficiency

纸机干燥部的设备费用和动力消耗均占整个纸机的一半以上，蒸汽消耗占纸的成本的5%-15%，因此，纸机干燥部的设计对于提高产量，保证成品质量和降低生产成本有着密切的联系。无论是多段通气系统还是热泵系统，我们均加强了蒸汽循环利用设计，大大提高蒸汽利用率，创造了很好的经济效益。

The dryer section is the largest consumer of steam energy in a paper machine, and steam consumption takes up 5%-15% of paper manufacturing cost. A good steam and condensate system increases production capacity, improves product quality and decreases manufacturing cost. Tengxuan cascade and thermo-compressor systems help circulate the steam at its maximum, improve steam efficiency, and lead to increased profits.



### ● 提高冷凝水排放性能

#### Improve condensate discharge performance

在服务于蒸汽冷凝水系统的同时，腾旋还配套生产蒸汽冷凝水系统的相关配件，主要有旋转接头、虹吸器、扰流器等。

腾旋公司的多种虹吸器适用于低中高速纸机，能够及时有效地排出烘缸里的冷凝水，从而提高烘缸的传热效率。

腾旋公司的整体式或分离式扰流器，均能有效破坏烘缸中的水环，提高烘缸传热效率。

With steam systems, Tengxuan also provide other system related equipments, such as rotary joints, siphons and turbulator bars.

Despite the machine speed, Tengxuan rotary or stationary siphon can discharge the condensate from the dryers timely and efficiently.

Tengxuan turbulator bars can destroy the rimming to improve the heat transfer.

### ● 控制纸页的质量 Control the sheet quality

进一步改善成纸横幅水分

Improve the moisture uniformity in CD of the sheet

与QCS系统配合达到一定的性能指标

Ensure the sheet property combined with QCS



GS  
Rotary Joint & Hard Cantilever Stationary Syphon