

平衡阀型号编制

Balancing Valves Figure Number System

种类Type	标准Standard	连接Connection	结构Style	材质Material
丝扣静态流量平衡阀: STAD			Static Balance Valve Thread: STAD	
法兰静态流量平衡阀: STAF			Static Balance Valve Flange: STAF	
丝扣自力式压差控制器: STAP-T			Differential Pressure Controllers Thread: STAP-T	
法兰自力式压差控制器: STAP-F			Differential Pressure Controllers Flange: STAP-F	
对夹动态流量平衡阀(限流阀): TE128			Automatic Balancing Valve Wafer (Flow Limiter): TE128	
丝扣动态流量平衡阀(限流阀): TE108			Automatic Balancing Valve Thread (Flow Limiter): TE108	
法兰动态流量平衡阀(限流阀): TE118			Automatic Balancing Valve Flange (Flow Limiter): TE118	
丝扣动态平衡电动调节阀: EDRV-T			Pressure Independent Balancing And Control Valve Thread: EDRV-T	
法兰动态平衡电动调节阀: EDRV-F			Pressure Independent Balancing And Control Valve Flange: EDRV-F	

平衡阀概述

Balancing Valves Overview

水力平衡是使水力系统稳定、易于控制，以最低的运营成本达到预期的室内环境的一套手段和方法。这是一个能让项目中涉及的所有人员感到省心放心的解决方案。对于设计顾问，水力平衡是一项不贵的保险政策，使您的专业声誉免受损害。对于运营人员，它是无故障运行和轻松维护的强效药方。对于财产的所有者，它是避免经营成本过高的长期保证。

图尔水力工程专长在于管理和控制，我们通过改进技术，使之能精确平衡一个系统内的有限细节，同时准确地管理整个系统。我们的专业知识涵盖了所有类型的水力系统 – 定流量和变流量，静态平衡和动态平衡。

是的，我们提供一流的产品系列，包括平衡阀和控制阀，差压控制器，执行器和一系列附件，但这只是故事的一半。我们在竞争中脱颖而出的是我们的知识，我们还提供规划软件和技术来帮助您设计最佳效率和测量性能的安装，以确保您从各类供热通风与空气调节系统获得最佳效果。

Total Hydronic Balancing is a set of means and methods for making hydronic systems readily controllable so they provide the intended indoor climate at minimum operating cost. For the design consultant, Total Hydronic Balancing is an inexpensive insurance policy against loss of professional reputation. For the operations staff, it is a potent prescription for trouble-free operation and ease of maintenance. For the property owner, it is a longterm guarantee against excessive operating costs.

TOOE Hydronic Engineering specialises in controllability. Our technology creates optimum conditions for controls to take control – and stay in control. Our expertise covers all types of hydronic systems – constant flow and variable flow, static balancing and dynamic balancing.

Yes, we deliver a superb range of products, including balancing and control valves, differential pressure

controllers, actuators and a range of accessories, but that's only half the story. What sets us apart from the competition is our knowledge, we also provide planning software and technologies to help you design installations for optimal efficiency and measure performance to ensure you achieve the very best results from every type of HVAC system.

全面水力平衡Total Hydronic Balancing

1、水力失调及其解决途径 Hydraulic disorders and their solutions

水力失调分为静态水力失调和动态水力失调。

由于设计、施工、设备材料等原因导致的系统管道特性阻力数比与设计要求的管道特性阻力数比值不一致，从而使系统各用户的实际流量与设计要求的流量不一致，引起系统的水力失调，叫做静态水力失调。

静态水力失调是稳态的、根本性的，是系统本身所固有的，是暖通空调水系统中水力失调的重要因素。

通过在管道系统中增设静态水力平衡阀，在暖通空调工程水系统初调试时对系统管道特性阻力数比值进行调节，使其与设计要求的管道特性阻力数比值一致，此时当系统总流量达到设计流量时，各末端设备流量均同时达到设计流量。因此，对于一个调试合格的系统，在运行过程中是不存在静态水力失调的。

系统实际运行过程中当某些用户开度变化引起水流量改变时，系统的压力产生波动，其它用户的流量也随之发生改变，偏离系统要求流量，而导致的水力失调，叫做动态水力失调。

动态水力失调是动态的、变化的，它不是系统本身所固有的，是在系统运行过程中产生的。

通过在管道系统中增设动态水力平衡设备，当其它的用户阀门开度发生变化时，通过动态水力平衡设备的屏蔽作用，使自身的流量并不随之发生变化，末端设备流量不互相干扰。因此，选择合理的动态水力平衡设备，可以消除系统运行过程中的动态水力失调。

Hydraulic imbalance is divided into static hydraulic imbalance and dynamic hydraulic imbalance.

Because of the design, construction, equipment and other reasons, the number ratio of the system pipeline characteristic resistance is not consistent with the ratio of the design requirements, which makes the actual flow of the system users disagree with the design requirements, causing the hydraulic imbalance of the system, called the static water force imbalance.

Static hydraulic imbalance is steady and fundamental, and is inherent in the system itself. It is an important factor of hydraulic imbalance in HVAC water system.

By adding the static water balance valve in the pipeline system, the ratio of the resistance number of the system pipeline is adjusted in the initial debugging of the HVAC engineering water system, so that it is consistent with the ratio of the resistance number of the designed pipeline. When the total flow of the system reaches the design flow, the flow of the terminal equipment reaches the design flow at the same time. Therefore, for a debugging qualified system, there is no static hydraulic imbalance during operation.

In the course of the actual operation of the system, the pressure of the system fluctuates when the change of some user's opening changes, the flow of other users is changed, and the flow of the system is