

Variable Flow Systems

Design & Operation of Pressure Control Valves

Introduction

- FloControl & FlowCon background & capabilities

Learning Objectives

Hydronic System Balancing & Control Evolution

- Why Balance
- Constant Flow System Balancing
- Why the evolution
- Hydronic System development in the UK

Variable Flow Systems

- Dynamic Valves – Principle & Terminology
- UK hydronic system development - introduction of Differential Pressure Control Valves
- UK hydronic system development - introduction of Dynamic Valves
- Balancing & Control with Dynamic Valves no slide
- Benefits of Dynamic Systems Vs Static Systems

Pressure Independent Control Valves

- How do they work
- What makes a good PICV?

Hydronic System Design Considerations

- PICV & ABV locations
- Valve arrangements
- System and terminal unit flushing methodology
- Actuation & Control
- E.O.L valve requirements and impact on return temperature
- Low flow pump protection

Smart Valve Introduction

- What is a smart valve?
- Remote monitoring and setting
- Addressing Low ΔT Syndrome

Key Take Aways

Duration 45 min. presentation, 15 min. Q&A
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