Armstrong Videotapes/DVDs

What Is Steam?
15:07 Minutes
This is the basics-of-steam primer… the "Steam 101" short course on the principles of steam that leads to a thorough understanding of the concepts outlined in the many Armstrong training tapes and materials. Both live action video and clear, simple animation are used to illustrate steam properties and behavior. Everyday demonstrations and a straight-forward style help make this an informative and entertaining tape, whether used as an introduction or as a refresher.

Guidelines for Steam System Efficiency
15:17 Minutes
This educational program covers basic considerations in the design, piping and trapping of steam systems. Topics include correct sizing and installation of steam supply and condensate return lines; steam velocities in the system; proper steam trap installation; trap safety factors; the use of air vents, vacuum breakers and safety drains; and how non-condensables affect the performance and service life of heat exchanger equipment.

Guidelines for the Prevention of Water Hammer
16:15 Minutes
The purpose of this educational tool is to help customers understand the nature and severity of the water hammer problem.

Using live action video and computer animation, this program identifies the most likely causes of water hammer and provides solutions that can be implemented to prevent its occurrence. With a better understanding of the problem, more preventive measures and equipment can be designed into new or existing installations. The results will be safety for personnel, lower maintenance costs and reduced system downtime.

Let's Talk Steam Traps/Update
32:00 Minutes
Part one uses animation techniques to help viewers see and understand the operating principles of the three types of traps: mechanical, thermostatic and thermodynamic. In addition, the tape helps steam trap users understand the internal operation of inverted bucket steam traps, differential condensate controllers, float and thermostatic traps, thermostatic traps, and disc traps.

The second part of this 32-minute videotape discusses 10 steam system operating conditions that must be considered in evaluating steam trap performance. The five types of traps are then rated on how they respond to these 10 different operating conditions.

Guidelines for Steam Trap Troubleshooting and Testing
18:40 Minutes
Just as properly functioning steam traps contribute to the efficient operation of a steam system, those that are malfunctioning can result in lost steam, lost heat and, especially, lost dollars. Guidelines for Steam Trap Troubleshooting and Testing not only outlines the need for establishing a preventive maintenance program, but details what to look and listen for in your testing.

This videotape recommends a step-by-step approach plant energy technicians can take to steam trap testing and problem solving. It emphasizes use of the faculties of both sight and hearing in gathering information, then applying training and experience to properly evaluate the results.

The Anatomy of the I.B.
15:00 Minutes
The Anatomy of the I.B. uses production techniques to look inside the inverted bucket steam trap. This videotape uses both cell animation and an operating glass-bodied model of an inverted bucket steam trap to show its components and observe its performance.

Guidelines for Unit Heater Efficiency
9:44 Minutes
Every winter industry relies on unit heaters to provide a comfortable environment for workers. The heating season is no time for the nuisance and discomfort of unit heater repair or replacement.

This video program discusses how correct selection, installation, and maintenance of steam supplied unit heaters ensures longer service life and reduces unnecessary repair and replacement costs.

Guidelines for Freeze Prevention
10:52 Minutes
Freezing in outdoor steam systems is a costly maintenance and production problem. Certain guidelines can be followed to minimize damage and process interruptions due to freezing. In addition to highlighting these piping and trapping guidelines, the tape covers an often overlooked problem that can prevent total drainage of the system.

Graphics and glass piping illustrate why condensate remains in or upstream of various types of traps after steam systems are shut down. The tape discusses what can be done to get rid of remaining condensate by the use of temperature and pressure actuated safety drains.

It's the Humidity
Part 1—24:58 Minutes
Part 2—20:57 Minutes
Part one is a video documentary covering the essentials of humidity and outlining the primary reasons for humidity control. What is humidity? Relative humidity? What is dew point? Enthalpy? How does evaporation affect comfort? How does humidity conserve energy? All of these questions are answered in practical and entertaining demonstrations.

Part two is a look at the four basic methods of large scale humidification. Through animation, the tape discusses the operation of evaporative pan, wetted element, water spray and steam humidifiers, and rates their ability to meet efficiency, maintenance, controllability, sanitation and cost requirements.

Guidelines for Steam Trap Repair
20:41 Minutes
This tape begins by outlining a plan for identifying faulty traps and returning them to effective operation. The first part of the tape provides guidelines for the inspection and repair of any trap.

The second part addresses specific trap types—inverted bucket, float and thermostatic, disc, and thermostatic. Each trap requires individual considerations, and attention is given to the differences as well as the common concerns.

The Armstrong Differential Condensate Controller
18:36 Minutes
To the paper, textile and boxboard industries, proper condensate drainage from steam heated cylinder dryers is necessary to optimize production and conserve heat energy.

This videotape discusses the standard steam trap drainage method and the blow-through method of condensate removal.

The Armstrong differential condensate controller, the tape points out, combines features of both methods, and overcomes the drawbacks of both. The result is efficient removal of condensate and air, minimum steam loss, and higher and more uniform temperatures across the dryer surface.

Let's Talk PRVs
30:00 Minutes
Pressure reducing valves, or PRVs, are important to the efficient use of fluids and gases in industry.

Let's Talk PRVs is an in-depth look at the reasons for, configurations of, and means of evaluating pressure reducing valves.

Through animation, the viewer looks inside several different types of PRVs to gain an understanding of their operating principles. This understanding will help the viewer select the right PRV for a particular application.

Guidelines for Steam/Air Coil System Design
13:12 Minutes
This educational video program explains the major causes of frozen steam coils, and the steps that can be taken to prevent the problems. The program uses the air handling system assembled in the Armstrong demonstration lab to illustrate problems and solutions. Glass piping and glass-bodied traps allow viewers to see the flow of condensate and to witness adverse effects of improper system design, as well as the benefits of corrective measures.

Guidelines for Ultra Capacity Steam Trap Repair
23:00 Minutes
This tape begins by outlining a plan to return individual faulty traps to effective operation. The first part of the tape provides guidelines to be followed in the inspection and repair of any trap.

In the second part, Armstrong's ultra capacity F&Ts (Models J, K, L and M) are disassembled, repaired and returned to service. Both single orifice and dual orifice variations are covered.