

Process Operations



Do your operations personnel have the knowledge to navigate your processes and drive your operations' success?

Operations personnel need to know how to minimize accidents and downtime by promoting safety and efficiency. Whether training new employees or refreshing experienced personnel, OverNite Software, Inc.'s Process Operations library is key.

OSI's Process Operations library includes 16 versatile courses that are intended for process plant operators but that are equally useful for maintenance and other plant personnel. The courses in this series range from general knowledge courses, including process chemistry and reading P&IDs, to courses about specific equipment such as distillation towers, heat exchangers, and reactors.

Our courses are delivered via a state-of-the-art learning management system that allows you to customize curricula, adjust testing parameters, and even customize courses with site-specific content and photos.



For more information call 1.888.228.2473 or visit OverNiteCBT.com

PROCESS OPERATIONS

612 Distillation Basics examines batch distillation, multiple still distillation, reflux, and re-distillation, types of trays used in distillation, and the relationship between trays and fractionating tower size. (30 min)

613 Operating Distillation Towers addresses changing variables and the effect on other variables, common distillation process problems, and normal operations. (30 min)

617 Reading P&IDs and PFDs examines P&IDs, PFDs, and their differences as well as the symbols and what they represent. (25 min)

618 Centrifugal Pumps: An Introduction examines functions of centrifugal pumps, how to prevent casing leaks and air infiltration, packing and seals, and how to determine if a pump is performing properly. (55 min)

619 Centrifugal Pumps: Installation, Troubleshooting, and Safety addresses five pump problems, the use of a troubleshooting tree, and safety precautions that preserves equipment and protects operators and maintenance personnel. (45 min)

620 Heat Exchangers examines the main function and parts of a heat exchanger, ways heat is transferred in a shell and tube exchanger, factors that affect the rate of heat, and the steps for running a heat exchanger. (40 min)

621 Valves addresses the importance of valves, the major types of valves, and the consequences of inadequate valve maintenance. (35 min)

622 Cooling Towers: An Introduction examines the basic types, function, products, and components of cooling towers, how a cooling tower works, and how to remove the solids caused by inhibitors. (40 min)

623 Cooling Towers: Operation and Troubleshooting explores variables that affect control mechanisms, the steps for cooling tower operation, and use of protective equipment. (35 min)

624 Reciprocating Compressors explores compressors and compressor speed, how a compressor works, the parts of a compressor and a v-belt-driven motor, and how to start up, run, shut down, and troubleshoot a compressor. (30 min)

625 Process Chemistry Basics explores the building blocks of process chemistry, including atoms, subatomic particles, and elements. The course also discusses the periodic table, electron behavior, and chemical bonding. (20 min)

626 Process Chemistry: Chemical Combinations and Properties explains the basics of chemistry, including chemical properties, chemical formulas and mixtures, chemical bonds and reactions, and pH values. (35 min)

627 Process Chemistry: Organic Compounds describes and illustrates the different functional groups that make up organic compounds and explains how hydrocarbons form. (30 min)

629 Cargo Trucks examines rules for accepting hazardous transport material when loading a cargo truck, how and what may be loaded into a cargo truck, types of unloading, and properly marking the cargo truck. (30 min)

631 Tank Cars explains the process of loading or unloading tank cars and the general requirements for documentation, inspections, and hazardous material handling. (40 min)

633 Reactors addresses process reactor design and basic operation, the parts and types of reactors, operator responsibilities for reactors, and how the reaction runs in batch. (30 min)