



**PSR**

PERFORMANCE | SAFETY | RELIABILITY

PSR INTERACTIVE



## EQUIPMENT 01 - DISTILLATION

This program is designed to give your production personnel the knowledge, skills and focus to maximize the performance, safety and reliability of your distillation towers, covering in detail topics such as:

- key physical characteristics
- tower design
- tower internals
- tower operating problems
- causes of mechanical damage

CONTENT	DESCRIPTION
Introduction	A brief introduction designed to prepare trainees for the modules that follow
Module 01 - Principles of Distillation	Effect of pressure and temperature, vapor pressures, boiling points, partial pressures, sensible and latent heat  Fundamentals of single stage and multi stage continuous separation, vapor-liquid contacting and tower design basis
Module 02 - Distillation Equipment	Trayed towers - tray selection, sieve trays, bubble cap trays, valve trays, high capacity trays, chimney trays, trays supports, tray installation, tray layout, downcomers, weirs, weepholes, trap-outs and demister pads  Packed towers - packing selection, random/structured/grid packing, packing supports, packing installation, liquid distributors and redistributors, liquid collectors, hold down plates, bed limiters and wall wipers  Factors influencing trays versus packing - size, weight and cost, foaming, fouling, corrosion, pressure drop, ease of maintenance, side draws and turndown  Tray operating problems - entrainment, flooding, weeping, dumping, dry trays and foaming  Causes of mechanical damage - presence of water, presence of air, pressure surges and overfilling
Test	Trainees answer a random selection of questions to demonstrate understanding of the content covered throughout the modules

## PROGRAM INFO

CATEGORY:  
Equipment

MODULES:  
2

PROGRAM DURATION:  
150-180 mins (approx)

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As with all our programs, the content is self-paced. Users are able to validate their understanding of the material through embedded interactive quizzes

Our programs are based on internationally recognized best practices and are designed to enable your production personnel to make a personal contribution to maximizing your profits and minimizing your losses

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For further details of the style and methodology of our training programs, please refer to our website, where you can watch a demo video and apply for a free trial:

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