



Basic Operations Troubleshooting

Potential PDH: 16

Outline:

INTRODUCTION

- Objectives and approach
- Importance of Troubleshooting

TROUBLESHOOTING CONCEPTS AND TECHNIQUES

- Integration of process and equipment
- Troubleshooting techniques
- Troubleshooting tools
- Typical problem areas

Purpose, Types, and Problem Areas for following equipment

VALVES

INSTRUMENTATION

HEAT EXCHANGERS

FURNACES

PUMPS

COMPRESSORS

DISTILLATION

- Chemistry & concepts
- Control objectives
- Malfunctions & constraints
- Pressure surveys
- Temperature surveys
- Damaged equipment
- Entrainment and product quality

FLUID FLOW

REACTORS



Subject Matter Expert (SME):

Michael (Mike) Bober holds a BS in Chemical Engineering from the New Jersey Institute of Technology. He served as a Process Engineer, Project Developer, Economist, and Manager at Exxon's Bayway Refinery for twelve years. He then joined Mobil Research and Development as an FCC Specialist. He managed technical training for Engineering, worldwide, until Exxon and Mobil merged in 2000. At this point, he managed



worldwide technical training for ExxonMobil Research and Engineering and then retired from managing the Technical Portfolio for ExxonMobil's Global Manufacturing Training initiative – with a combined service of 37 years to the two companies.

