



AIChE
120 Wall Street, 23rd Fl. New York, NY 10005
ccps@aiCHE.org | ccpsonline.org

PROCESS SAFETY AT A GLANCE

A Roadmap to CCPS Tools,
Management Systems and
Technical Resources

PROCESS SAFETY AT A GLANCE

CCPS MANAGEMENT RESOURCE TOOLS

COMMIT TO PROCESS SAFETY

- G/L for Implementing Process Safety Management Systems, 2nd ed.
- G/L for Process Safety in Outsourced Manufacturing Operations
- Local Emergency Planning Committee Guidebook: Understanding the EPA Risk Management Program Rule
- Inspiring Process Safety Leadership: The Executive Role (online and DVD)
- Process Safety Boot Camp
- Foundations of Process Safety for Offshore Operations
- Process Safety Culture Toolkit
- Introduction to Process Safety for Undergraduates and Engineers
- The Business Case for Process Safety, 4th ed.
- Essential Practices for Creating, Strengthening, and Sustaining Process Safety Culture
- G/L for Integrating Process Safety into Engineering Projects

20 CCPS ELEMENTS OF PROCESS SAFETY

- Process Safety Culture
- Standards, Codes, Regulations and Laws
- Process Safety Competency
- Workforce Involvement
- Stakeholder Outreach

CCPS TECHNICAL RESOURCE TOOLS

ELECTRONIC APPLICATIONS

- Process Safety Incident Database (PSID)
<http://psidnet.com>
- RAST/CHEF
<https://www.aiche.org/ccps/resources/risk-analysis-screening-tool-rast-and-chemical-hazard-engineering-fundamentals-chef>
- CCPS Glossary
<https://www.aiche.org/ccps/resources/glossary>
- Evergreen/LOPA Database
<https://www.aiche.org/ccps/resources/tools/lopa>
- Safe Work Practices (SWP)
<https://www.aiche.org/ccps/resources/tools/safe-work-practices>
- CCPS Process Safety Incident Evaluation (PSIE) Tool
- NOAA/CCPS Reactive Chemistry Worksheet Tool
- Vision 20/20 Assessment Tool

VENTING AND EMERGENCY RELIEF

- Deflagration and Detonation Flame Arresters
- Emergency Relief Systems Design Using DIERS Technology
- G/L for Pressure Relief and Effluent Handling Systems
- Safe Design and Operation of Process Vents and Emission Control Systems

CHEMICAL REACTIVITY HAZARDS

- Chemical Reactivity Hazard Training CD-ROM
- Essential Practices for Managing Chemical Reactivity Hazards
- G/L for Process Safety in Batch Reaction Systems, 2nd ed.
- G/L for Reactivity Evaluation and Application to Process Design
- G/L for Safe Storage and Handling of Reactive Materials
- Reactivity Evaluation Software Tool

SAFE DESIGN

- Continuous Monitoring for Hazardous Material Releases
- G/L for Engineering Design for Process Safety, 2nd ed.
- G/L for Fire Protection in Chemical, Petrochemical, and Hydrocarbon Processing Facilities
- G/L for Safe Warehousing of Chemicals
- Inherently Safer Design, 2nd ed.

CONSEQUENCE MODELING

- G/L for Consequence Analysis of Chemical Releases
- G/L for Evaluating Process Plant Buildings for External Explosions, Fires, and Toxic Releases, 2nd ed.
- G/L for Vapor Cloud Explosion, Pressure Vessel Burst, BLEVE, and Flash Fire Hazards, 2nd ed.**
- Understanding Explosions
- Wind Flow and Vapor Cloud Dispersion at Industrial and Urban Sites
- G/L for Determining the Probability of Ignition of a Released Flammable Mass

BIOPROCESS SAFETY

- G/L for Process Safety in Bioprocess Manufacturing Facilities
- PSM Biodiesel eLearning
- PSM Bioethanol eLearning

DUST EXPLOSION HAZARDS

- G/L for Safe Handling of Powders and Bulk Solids
- G/L for Combustible Dust Hazard Analysis

HUMAN FACTORS

- Human Factors: Methods for Improving Performance in the Process Industries
- G/L for Preventing Human Error in Process Safety

SAFETY INSTRUMENTED SYSTEMS

- G/L for Safe and Reliable Instrumented Protective Systems
- G/L for Safe Automation of Chemical Processes, 2nd ed.

R&D

- Making EHS an Integral Part of Process Design

UPSTREAM

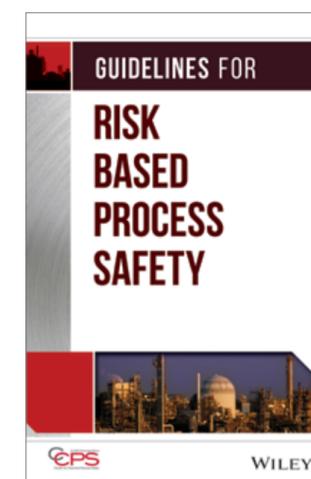
- G/L for Process Safety in Upstream and Shale Operations
- Most CCPS titles apply equally to upstream processes. (Please see appropriate RBPS element or technical topic.)

ADDITIONAL RESOURCES

View the **CCPS Video** "Leading the Way to a Safer World" at aiche.org/ccps/safety.



Find **CCPS resources** to meet your needs from the chart on this page. Additional information can be found at aiche.org/ccps.



It always makes sense to start with "Guidelines for Risk Based Process Safety".*/***

Find CCPS Management Resource Tools

Look up CCPS resources based on the 20 CCPS Elements of Risk Based Process Safety categories. Find the applicable elements from the center column and look left to find more detailed resources.

CCPS Technical Resource Tools

Look up CCPS resources for specific technical topics by searching the right-hand column for the topical area, then searching for a title within the area.

Most **CCPS books** are available at wiley.com/go/ccps.

Deep Search CCPS by searching for "CCPS" and keywords on Knovel.com.

CCPS Education

Tools and courses are available at aiche.org/ccps/resources/education.

Translated Materials

Mandarin, Japanese, Portuguese, Spanish and Italian versions available at aiche.org/ccps/QuickLinks.

* Available in Spanish, Japanese and Portuguese

** Available in Chinese

*** Available in Mandarin