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COURSE BROCHURE

Production Shift Operations and Upset Response Training Course

jupiterprime.uk

info@jupiterprime.uk

Registered in the United Kingdom and Saudi Arabia

Production Shift Operations and Upset Response Training Course

Production Shift Operations and Upset Response is a 1-week training course for production operators and facility engineers who run separators, dehydrators, water treatment trains and compressors around the clock, and it ends with a shift operating envelope and upset response card set for one facility. As surface plants run closer to their limits with leaner crews, the quality of each shift decides throughput, flaring and equipment life. The course is delivered by Jupiter Prime Training.

Why Production Shift Operations and Upset Response Matters Now

Three forces shape shift operations today. Ageing surface plants handle higher water cuts and changing gas rates, so operating windows narrow and upsets arrive faster. Experienced operators are retiring, taking unwritten knowledge of trips, slugs and foaming with them. Control systems raise more alarms than a console operator can act on, which buries the signal that matters. A facility whose shifts hold clear operating limits, respond to upsets in a rehearsed order and keep honest logs avoids trips, flaring and lost barrels; one that does not repeats the same incidents. The course draws on alarm management practice and the hierarchy of operating limits used in process safety.

Who Gains Most from Production Shift Operations and Upset Response

- Operators responsible for console monitoring, setpoint changes and alarm response on separation and compression units
- Field operators responsible for routine rounds, sampling, drains and local equipment checks
- Shift supervisors responsible for handover, permit coordination and first-line upset decisions
- Facility engineers responsible for operating limits, troubleshooting support and trip investigations
- Process technicians responsible for chemical injection, dehydration and produced water quality

A complete shift crew, console and field operators with their supervisor, gains most when its members attend together and leave with one shared way of reading limits and handling upsets.

Production Shift Operations and Upset Response Capabilities

Participants turn separator levels, glycol temperatures, compressor surge margins and water quality readings into firm shift decisions.

- Specify operating envelopes for key surface units with normal, warning and trip limits — console operators and engineers
- Diagnose common upsets such as slugging, foaming, hydrate formation and compressor surge — shift supervisors
- Apply a rehearsed upset response sequence of stabilise, isolate, recover and report — the whole crew
- Design routine field rounds with check points, readings and acceptance values — field operators
- Write operating log entries and handover notes that the next shift can act on — incoming crews
- Assess shift performance through trips, flaring events and deferred production — facility managers

Key Production Shift Operations and Upset Response Terms

- Operating envelope — the range of pressure, temperature, level and flow within which a unit runs safely and on specification.
- Upset — any departure from normal operation that threatens product quality, equipment or safety and needs operator action.
- Trip setpoint — the value at which an automatic shutdown acts to protect equipment or people.
- Operator round — a planned walk through the plant to read gauges, check equipment and record conditions.
- Shift handover — the structured transfer of plant status, open work and risks between outgoing and incoming crews.
- Alarm flood — a burst of alarms faster than an operator can respond, hiding the alarms that require action.

Production Shift Operations and Upset Response Day by Day

Day 1: Surface Plant Flow and Operating Limits

- Wellhead to Export Flow Path — Where Each Unit Can Constrain Throughput
- Three-Phase Separator Levels and Pressures — Setting Normal Bands
- Glycol Dehydration Temperatures — Holding Water Dew Point on Specification
- Produced Water Treatment Trains — Oil in Water Targets per Stage
- Hierarchy of Operating Limits — Normal, Warning and Trip Values

Day 2: Reading the Console and the Field

- Control Loop Behaviour and Valve Response — When to Override Automatic Control
- Alarm Prioritisation and Flood Handling — Which Alarms Demand Action First
- Field Round Route Design — Readings, Checkpoints and Acceptance Values
- Sampling and Analyser Checks — Trusting the Numbers on Screen
- Compressor Surge Margin Monitoring — Recycle Valve and Load Decisions

Day 3: Recognising and Diagnosing Upsets

- Slugging and Liquid Carryover Signatures — Separator and Scrubber Actions
- Foaming and Emulsion Problems — Chemical Injection Adjustments
- Hydrate Formation Warning Signs — Methanol Injection and Heating Choices
- Compressor Trips and Restarts — Sequencing After an Unplanned Stop
- Cause Tree Troubleshooting — Separating Symptoms from Root Causes

Day 4: Response, Logs and Handover

- Stabilise, Isolate, Recover, Report Sequence — Crew Roles During an Upset
- Upset Response Cards per Unit — First Five Operator Actions
- Operating Log Entry Standards — Facts the Next Shift Needs
- Structured Shift Handover Checklist — Open Work, Bypasses and Risks
- Shift Performance Indicators — Trips, Flaring and Deferred Production

Day 5: Practising the Shift Operating Envelope and Upset Response Card Set

- Envelope Drafting for a Chosen Facility — Applying Day One Limits
- Simulated Console Upset Drill — Applying Alarm and Diagnosis Methods
- Field Round and Log Review Exercise — Testing Checkpoints and Entries
- Peer Challenge of Response Cards — Gaps and Conflicting Actions
- Shift Operating Envelope and Upset Response Card Set — Final Assembly

Applying Production Shift Operations and Upset Response After the Course

- Run a one-month trial of the response cards on one unit, recording each upset, the actions taken and the time to stabilise.
- Rewrite the field round route and log template for one area, then compare missed readings before and after the change.

Production Shift Operations and Upset Response Questions FAQ

What is production shift operations and upset response, and why does it matter now?

It is the daily craft of running surface plant within set limits and acting fast when conditions drift. It matters now because leaner crews, older plants and alarm-heavy consoles leave less margin for slow or inconsistent shift decisions.

Which roles gain most from production shift operations and upset response skills?

Console and field operators, shift supervisors and facility engineers gain most. You benefit if you hold limits, answer alarms, walk rounds or support crews during trips, in oil and gas production or in gas processing and utility plants.

How does a production shift operations and upset response course differ from a facilities design course?

It looks at the plant from the operator's seat rather than the designer's desk. A facilities design course sizes separators and compressors; this one sets how a shift runs them, reads them, logs them and recovers them after an upset.

What do you bring back from production shift operations and upset response training?

You bring back a set of operating envelopes and upset response cards for one facility, a revised round route and a handover checklist your crew can start using on the next shift.

Production Shift Operations and Upset Response: The Way Forward

The shift operating envelope and upset response card set first informs which limits and first actions every crew on a unit will follow. Console operators, field operators and supervisors use it each shift, and engineers use it when investigating trips. After its first month of use, revisit the warning limits and response steps against the upsets the logs actually recorded.