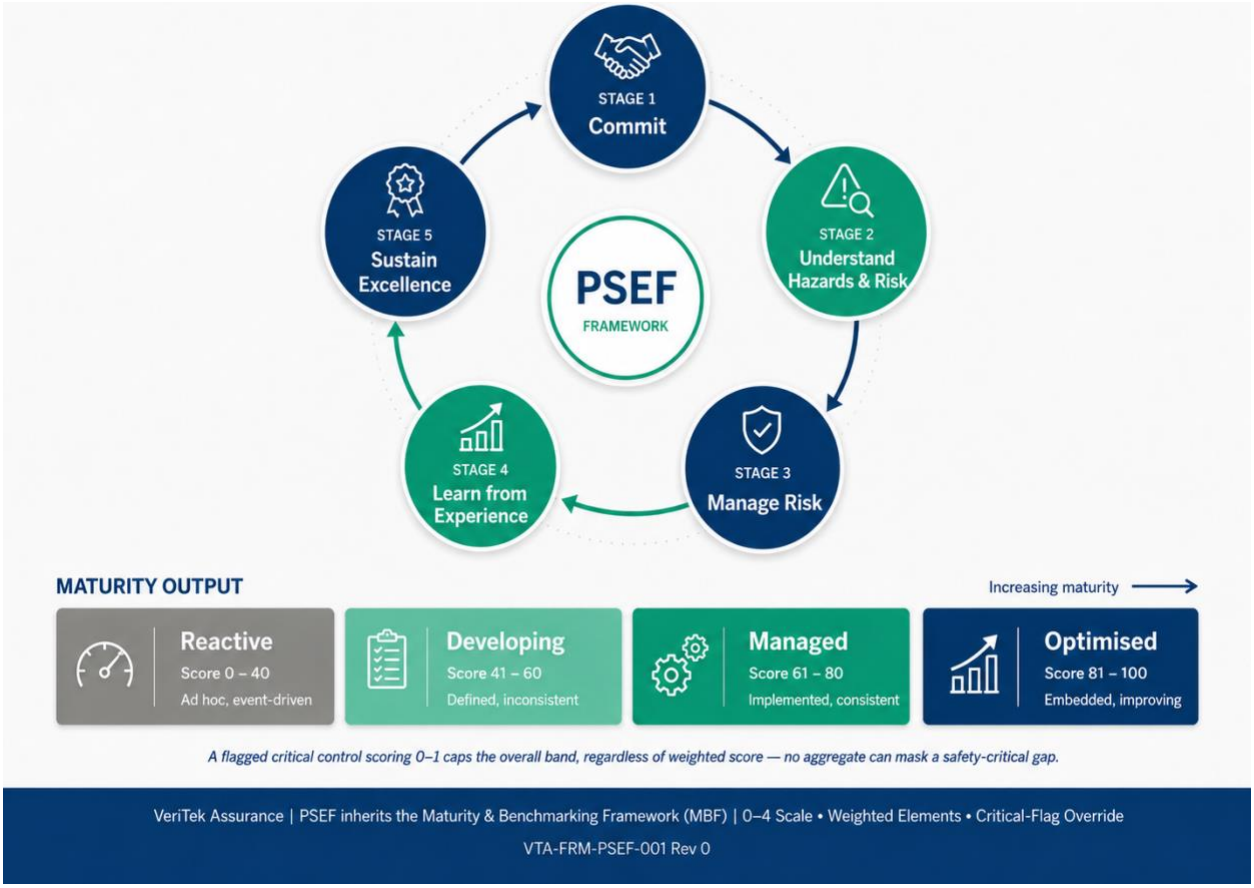
MECHANICAL PROCESS SAFETY EXCELLENCE(PSE) FRAMEWORK

Risk-Based Process Safety, Structured on the CCPS Twenty-Element Architecture



Overview

PSEF governs VeriTek Assurance Process Safety Engineering, structured on the CCPS Risk-Based Process Safety (RBPS) twenty-element architecture and delivered through the PSM instrument. It spans culture, hazard understanding, risk management, learning, and sustained excellence.

The VTA Difference

PSEF questions are deliberately written to defeat paper compliance. Every question is framed to require evidence of operating practice, not confirmation that a procedure exists, which is the most common failure mode VeriTek Assurance encounters in third-party process safety audits.

The 5-Stage Methodology:

Stage	Name	Function
1	**Commit**	Verify process safety culture and leadership commitment, the foundational RBPS pillar without which all subsequent elements operate as paper compliance.
2	**Understand Hazards & Risk**	Confirm hazard identification, Process Hazard Analysis (PHA) currency, and risk assessment rigour are evidence-based, not merely documented.
3	**Manage Risk**	Assess operating procedures, asset integrity interfaces, management of change, and contractor management as the operational risk-control layer.
4	**Learn from Experience**	Evaluate incident investigation quality and depth, near-miss reporting culture, and whether lessons learned demonstrably change practice.
5	**Sustain Excellence**	Confirm metrics, audits, and management review close the loop, converting findings into accountable corrective action.

Scoring Logic via the AIMS Instrument

PSEF inherits Maturity & Benchmarking Framework (MBF) through the PSM instrument: 10 weighted elements, 40 maturity questions, and 5 critical-flag overrides. Questions are written at senior process safety consultant register using four audit disciplines: evidence over existence, failure mode named inside the question, practice over paper, and consultant framing of intent. This question-writing discipline is itself a PSEF differentiator.

The VTA Difference:

PSEF questions are constructed to surface whether a control is operating, not whether a document exists. The instrument is engineered to defeat paper compliance.

Instrument Family MBF in Production:

This framework deploys the Maturity & Benchmarking Framework (MBF) through the following instrument(s). Each applies the same 0–4 response scale, weighted-element structure, four-band model, and critical-flag override logic, calibrated to the domain.

Code	Instrument	Mat. Q	Elem.	Flags	Codes
PSM	**Process Safety Management**	40	10	5	CCPS RBPS · OSHA PSM · Seveso III

Engagement:

This framework deploys through a Tier-1 Health Check as the entry diagnostic, followed by the full Tier-2 Maturity Assessment and an engineer-issued Initial Assessment Report. The report delivers the full element profile, the critical-flag register, the maturity band, and a risk-weighted priority-gap list with an improvement roadmap.