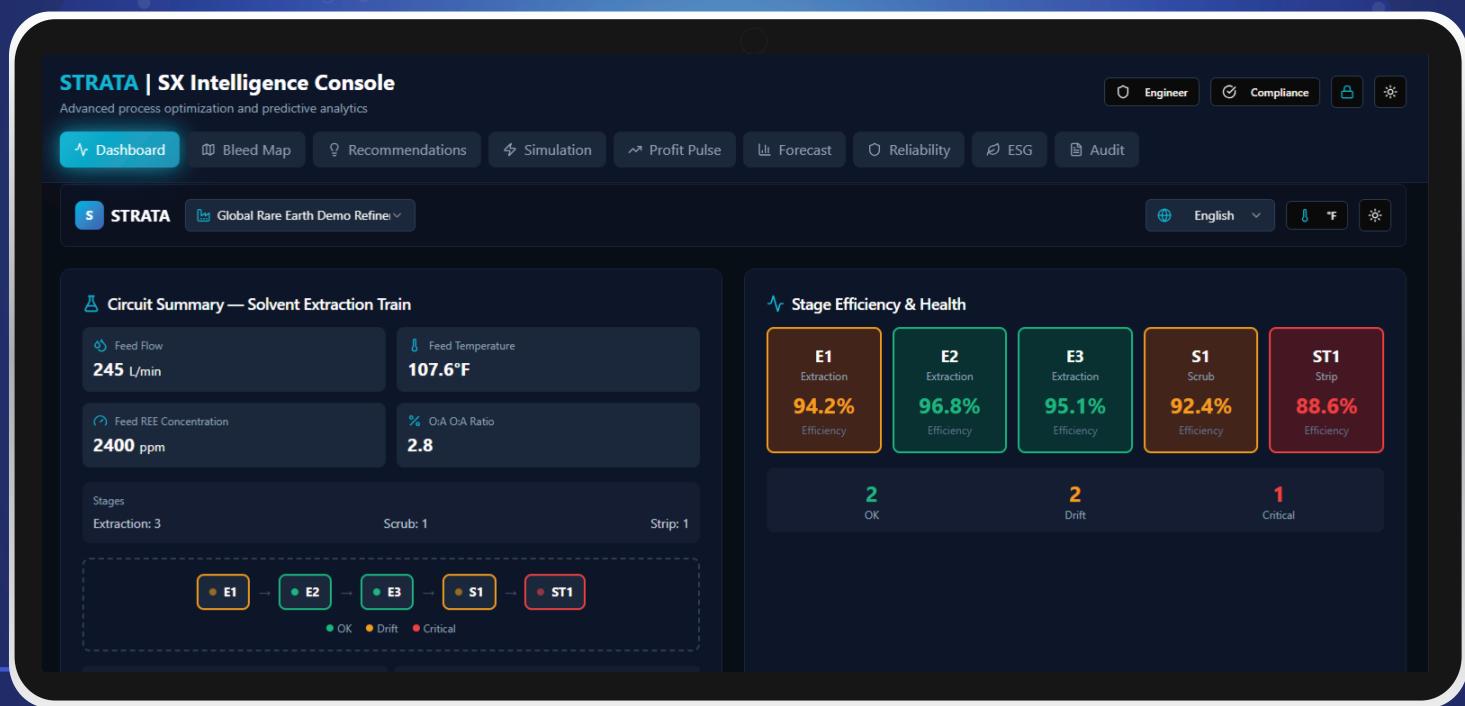


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STRATA

SOLVENT EXTRACTION SEPARATION MONITORING

Built by Sabian Global Inc.



POWERED BY SABIAN AI

What STRATA Is

STRATA is a solvent extraction separation monitoring system for operating and commissioning SX circuits.

It connects to existing process historian data and runs in parallel with live SX operations.

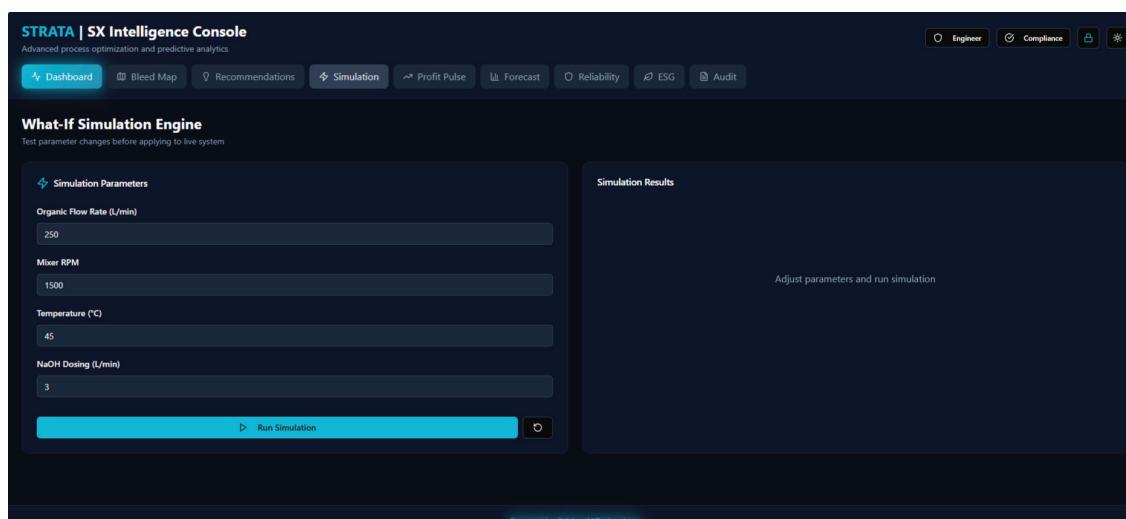
STRATA observes separation behavior continuously and generates real time operational insight.

How STRATA Works

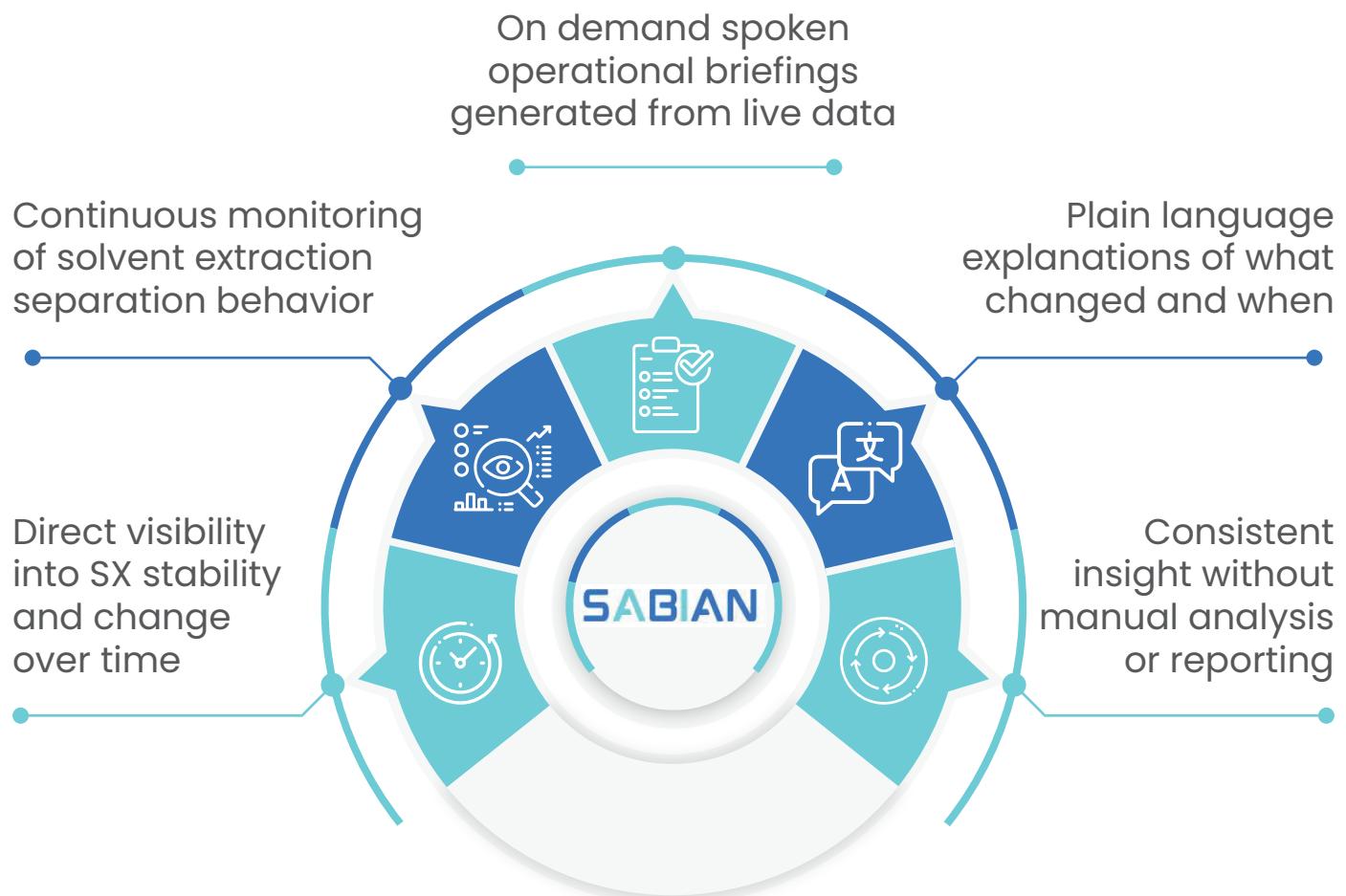
STRATA ingests live and historical SX process data from existing plant systems.

It monitors separation behavior across operating windows and detects changes in stability, drift, and state.

STRATA converts this behavior into clear operational podcast insights that can be reviewed instantly or generated on demand.



What STRATA Delivers



Audio Insight

STRATA includes a built in audio insight engine.

At any time, operators can generate a spoken SX briefing based on current and recent operating data.

The system explains separation behavior in plain language without dashboards, charts, or interpretation.

This allows SX performance to be understood immediately by operators, metallurgists, and management.

Dashboard

Bleed Map

Recommendations

Simulation

Profit Pulse

Forecast

Reliability

ESG

Audit

Circuit Summary — Solvent Extraction Train

Feed Flow
245 L/minFeed REE Concentration
2400 ppmStages
Extraction: 3

Scrub: 1

Strip: 1

Organic Loss Rate 0.12% Residence Time 8.5 min



OK Drift Critical

Stage Efficiency & Health

E1
Extraction
94.2%
EfficiencyE2
Extraction
96.8%
EfficiencyE3
Extraction
95.1%
EfficiencyS1
Scrub
92.4%
EfficiencyST1
Strip
88.6%
Efficiency2
OK2
Drift1
Critical

Critical KPIs Over Time

Phase Disengagement Time Mixer Power Draw O/A Ratio Temperature REE Loading

Last 2 Hours Last 24 Hours Last Week

STRATA v2 — Ranked Efficiency Insights

⚠ Critical

Strip Stage ST1 Efficiency Degradation

Strip stage ST1 showing 7.4% below design efficiency with extended phase disengagement time (+31%).

Impact: Estimated 2.1% recovery loss, \$1,840/hr economic impact

Where STRATA Is Deployed

1 Operating SX circuits

3 New or expanded separation capacity

2 Commissioning and ramp up phases

4 Ongoing SX monitoring during production

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How STRATA Is Installed

01

Connects to existing historian and process data

02

Runs independently alongside operations

03

Does not modify controls, chemistry, or procedures

04

Can be deployed as a pilot or continuous system

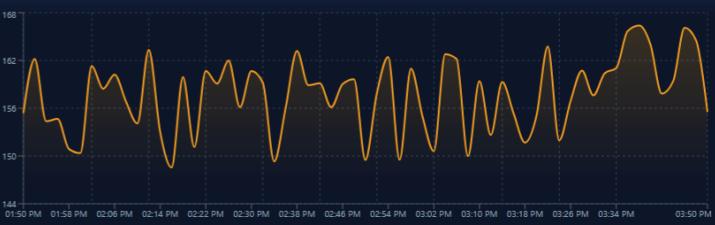
STRATA | SX Intelligence Console
Advanced process optimization and predictive analytics

Dashboard Bleed Map Recommendations Simulation Profit Pulse Forecast Reliability ESG Audit

Critical KPIs Over Time

Phase Disengagement Time Mixer Power Draw O:A Ratio Temperature REE Loading

Last 2 Hours Last 24 Hours Last Week



Actual Mixer Power Draw **155.51 kW**

STRATA v2 — Ranked Efficiency Insights

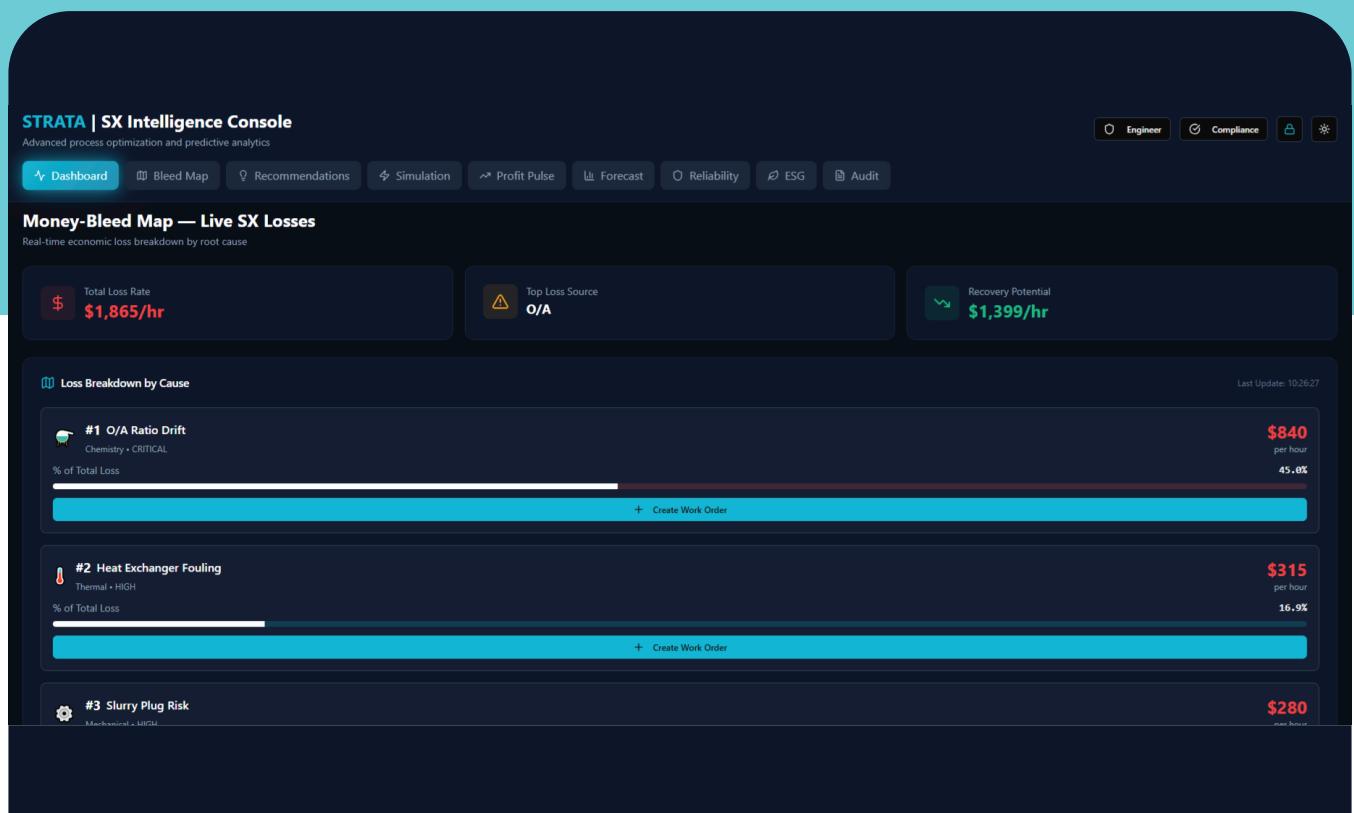
Extraction E1 Phase Time Drift (High)
E1 phase disengagement time increased 32% above design baseline over past 6 hours. Impact: Reduced throughput capacity, 1.2% yield impact

Scrub S1 Temperature Variance (Medium)
Scrub stage running 3°C below optimal range, affecting separation kinetics. Impact: 0.8% efficiency reduction, minor reagent overconsumption

O:A Ratio Minor Drift (Low)
Organic to aqueous ratio drifting 0.15 above setpoint over past 2 hours. Impact: Minimal current impact, monitor for trend continuation

Powered by Sabian AI Technology

Who Uses STRATA



Contact

STRATA

*Solvent Extraction
Separation Monitoring*



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Intelligence Console

Loss optimization and predictive analytics

Disclosure

STRATA does not alter plant controls, chemistry, setpoints, or operating procedures.
STRATA operates independently alongside existing systems.

Current Rate

\$ 521/hr

Loss per hour

24h

7d

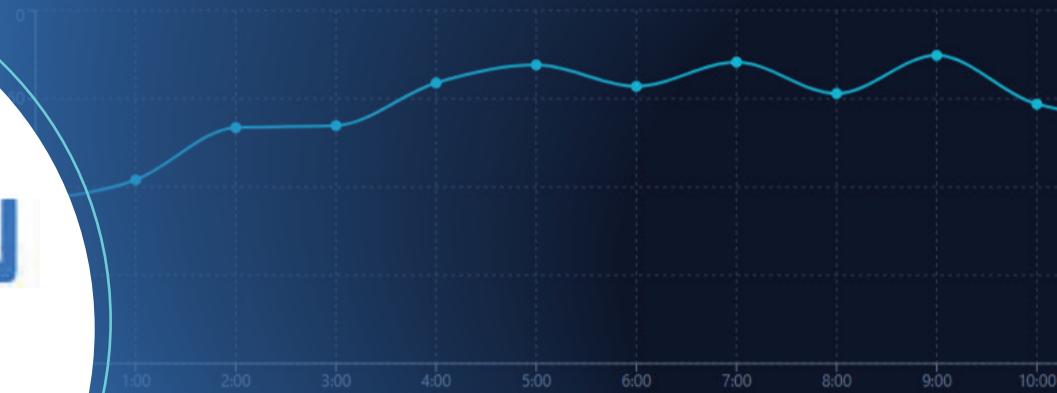
30d

Cumulative (24h)

\$ 12499

Total loss

Profit/Loss Rate Over Time



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