Smart Metals Manufacturing

falkonry

Line-scale automated condition monitoring

Early warnings
Discover actionable anomalies with minimal analysis effort

Proactive actions
Condition-based actions before they impact the production

Fully automated
No set-up and training required. Perform plant-scale live monitoring

Metal makers using Falkonry throughout plants

|	**Continuous Caster**	**Hot Run Tables**	**Rolling mills**
Problem:	Lost revenue due to unplanned downtime from unanticipated equipment failures.	Unidentified motor failures or jammed rollers cause surface defects on passing strips/plates	Variability in rolled metal requires identifying factors that contribute to surface defects or strip breakage
Solution:	Get advance warnings of possible failures. Time series AI can detect patterns in caster operating parameters that precede failures.	Monitor hundreds of motors and couplers simultaneously, in real time, to detect the emergence of precursor conditions to failure	Monitor parametric data from multiple sources to identify signal conditions that introduce surface defects
Benefit:	Weave inspections or repairs into the production schedule thus avoiding unscheduled production downtime and revenue losses.	Early diagnosis of precursor conditions helps avoid quality defects in the steel surfaces	Gain deeper insights on gradual and unnoticeable deviations in equipment performance. Minimize equipment failures & surface defects.

> "With our asset performance management solution, powered by Falkonry's Time Series AI, Ternium operations teams receive actionable warnings before an event could impact the business."
>
> ***Roberto Demidchuk***
> ***CIO at Ternium***

Falkonry Time Series AI Cloud is data-ready, no set up required
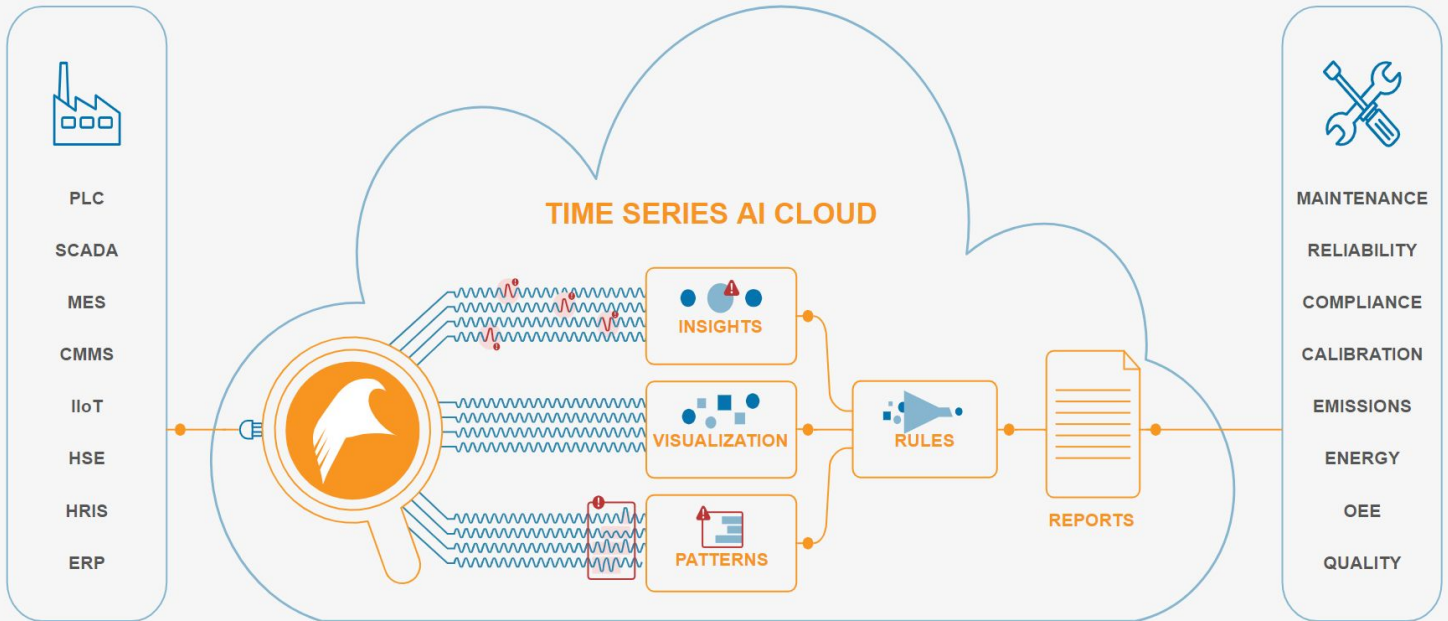
Customer Success: Early Fault Detection and Resolution at Plant-Scale

A leading North American steel manufacturer deployed Falkonry Time Series AI to continuously monitor the operations in the melt shop, hot mill and, finishing mill for early detection and diagnosis of real-time operational anomalies that impact productivity.

Within a period of one month, the line personnel developed trust in Falkonry's findings and took proactive interventions to prevent unplanned downtimes and surface quality issues.

BENEFITS:

- Fully Automated AI, **no setup** required

- **Condition-based actions** on operational inconsistencies

- Time to **value within weeks** of deployment

- **Scalable** approach that applies to entire plant and multiple sites

RESULTS:

Prevented production losses worth $285,750 per incident

Productivity increase ~ $4.5 mn / yr