Safer | Smarter | Greener

Digital Mine APM

Practical | Effective | Asset Performance Management

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Digital Mine APM

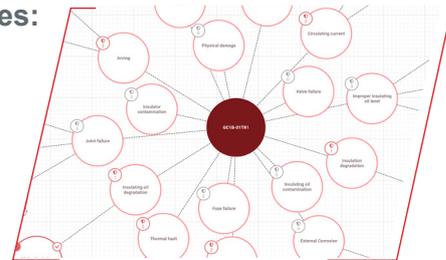## Our mission is to protect every asset

Industrial asset failure can disrupt production, increase operating costs and expose front line workers to safety risks. We believe the use of proven reliability engineering techniques applied in a simple to use process is the key to proactive management of assets for increased performance.

The Asset Twin

Effective Asset Performance Management (APM) translates your asset strategy from a static plan into a dynamic automated digital reality.

The Digital Mine APM Asset Twin defines:

- Risk
- Failure modes
- Monitored conditions
- Specific maintenance actions

The Asset Twin continuously analyzes operational state, asset condition and maintenance activities to provide prescriptive advisories when emerging failure risks are detected.
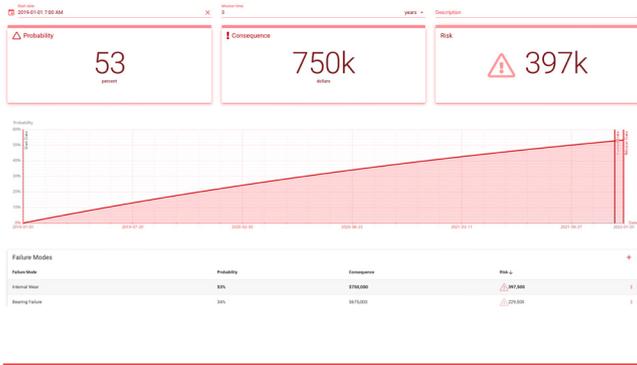
Prescriptive advisories:

- Collect evidence
- Recommend corrective actions
- Allow your experts to collaborate on remediation
- Capture learnings so asset strategies are continually optimized.

Delivering Value

One integrated platform helps companies realize the value of APM with our digital asset twin technology.

	ASSESS RISK	PROTECT ASSET	MONITOR TWIN	ACT ON THREATS	
Optimize Cost	●	●		●	↓ 5% - 25% Cost Savings
Availability			●	●	↑ 1% - 4% Availability Increase
Productivity		●	●	●	↑ 10% - 25% Productivity Gain

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Digital Mine APM Process

Assess Risk

Identify high-risk assets. Assess dominant failure modes and ensure your business mission is met.

- Mission Time
- Failure Mode Definitions
- Qualitative and Semi-quantitative Risk

Protect Asset

Apply Asset Twin protections to monitor conditions and activities. Identify emerging failure risks and drive prescriptive actions.
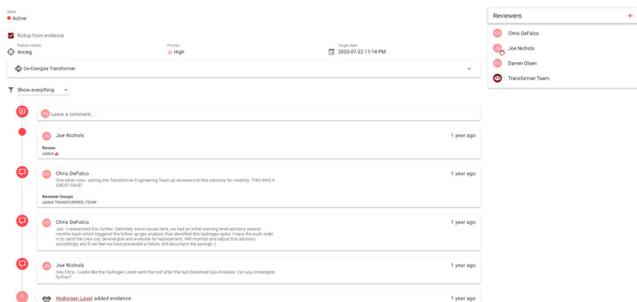
- Condition and Activity Protections
- Historical Simulation
- Implementation Tracking

Monitor Twin

Use real-time indicators, health scoring, and excursion logging to analyze current asset state and detect emerging threats.

- Automated Monitoring
- Excursion Tracking
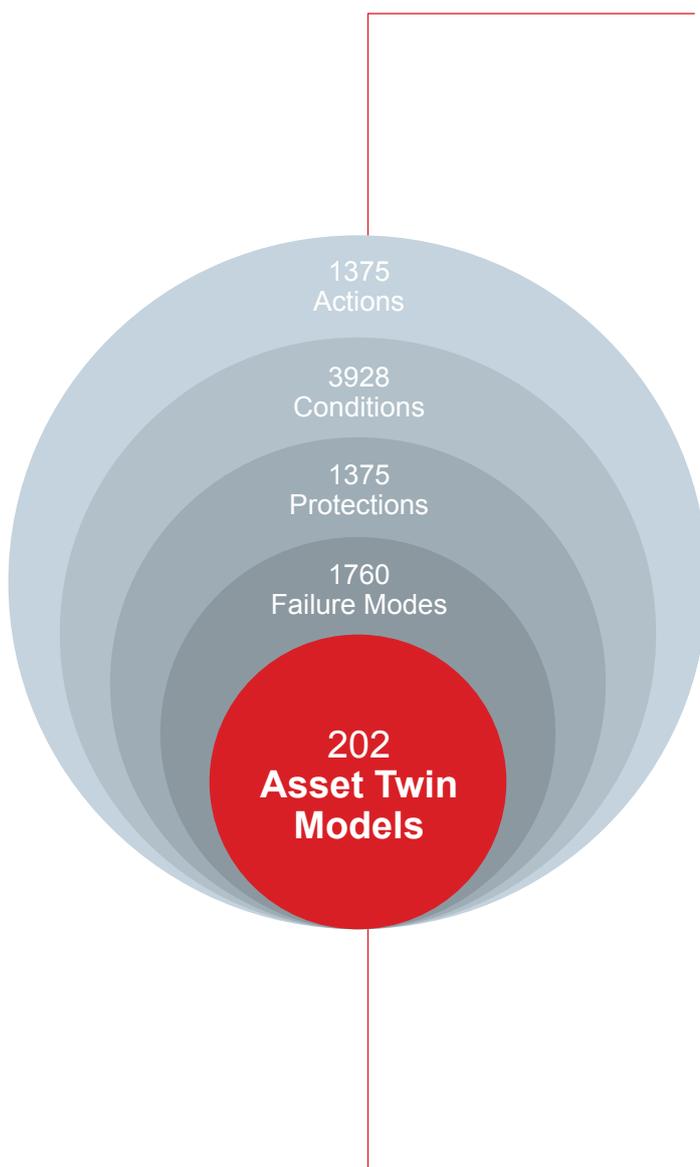- Prescriptive Advisories

Act on Threats

Act upon proactive advisories and insights from asset twins. Mitigate failure risks and ensure continual strategy optimization.

- Advisory Collaboration
- Work Request Integration
- Impact Assessment

Asset Twin Library

The Digital Mine APM Asset Twin library allows you to leverage existing domain expertise and model libraries that specify failure modes, preventative maintenance activities, analytics, and prescriptive actions that you can tune to your assets' operational context.

1375
Actions

3928
Conditions

1375
Protections

1760
Failure Modes

202
Asset Twin Models

Actions

Prescriptive advisories provide proactive warning of failure risk tuned to your asset and operating context.

Conditions

Interval, condition and analytic triggers to notify and advise of emerging failure risk.

Protections

Activity and Condition protections that include scope, interval, and analytics to guard against failure mode risk.

Failure Modes

Potential failure risks that can be extended based upon strategy development rigor.

Asset Twins

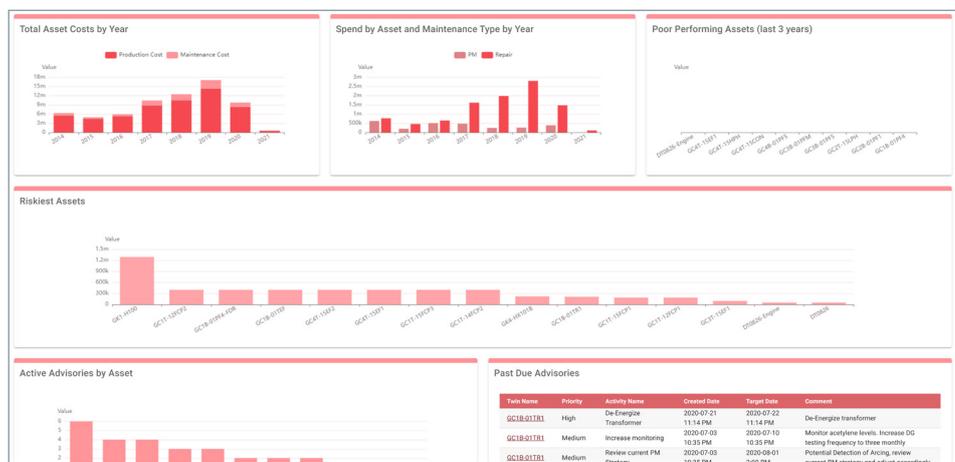Covering common industrial equipment classes, including base failure rates.

Whenever you need to protect an asset from failure, pull a model from the library, map toyour data sources, adjust for operating context, and activate.

Itus Digital APM will monitorthe asset in real-time and advise you if any threats emerge from that point forward.

Application Framework

The Digital Mine APM solution is built upon an application framework with a modern architecture and a focus on optimal user experience.

- ISO-based Asset Taxonomy Structure
- Platform for product extensions
- Flexible Deployment (Cloud / On-premise)
- In-app Video Tutorials

Connectivity

The Digital Mine APM solution leverages your existing industrial data sources.

- OSI PI Interface
- OPC UA interface
- Secure Edge Connectivity

- SAP EAM Interface
- File Server (Excel / CSV)
- Custom Integration Available

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