

NORTON

SAINT-GOBAIN®

GRIND  SMART

Powered By **neo**™

A Smart IIoT Solution To Enhance Grinding And Manufacturing Operations





GRIND SMART

Signal Monitoring & Analysis in Real-Time Tool

Over the past century, we have been creating innovative abrasive products and providing cutting-edge solutions for the rough and precision grinding industries. Our products and solutions are comprehensive and robust. We are now implementing an Industrial IoT platform to efficiently monitor OEE & production and to troubleshoot & optimize grinding process and boost machines' health in real time.

GRINDING PROCESS DIAGNOSTICS

An extensive set of data collection

- Grinding parameters
- Spindle power load
- Post process quality data
- Data from vibration and other sensors

In order to

- Troubleshoot grinding issues
- Optimize grinding process
- Alert process and quality deviations
- Analyze and compare grinding cycles

OPERATIONAL EFFICIENCY

An extensive set of data collection

- Machine operational data
- Controller data

In order to

- Customized Dashboard and KPIs
- Grinding assistance and Alert notifications
- Set operational targets

How do we enhance your Grinding Process?

We have combined our experience in grinding with the power of Industry 4.0 technologies to assist you. It is a smart grinding system that helps you optimize and troubleshoot the grinding process in real-time. It improves the machines' productivity and efficiency. Our AI and ML models help you predict part rejections and machine failures.



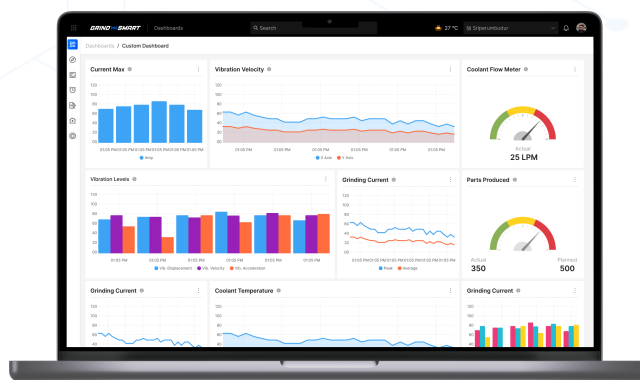
Grinding Insights

- Dressing frequency optimization
- Prediction of grinding burn
- Process & quality deviation alerts
- Wheel behavior analysis
- Ideal grinding cycle selection
- Actual vs displayed cycle time analyzer

Smart Grinding Features

Data visualization for asset monitoring

Live and historical data trends with a custom time range selection and statistics to help you analyze multiple metrics and monitor process and asset health.



Parts and dressing statistics

Parts produced between a dressing cycle and the number of dressing cycles per hour can be monitored visually to improve process efficiency and grinding wheel life.

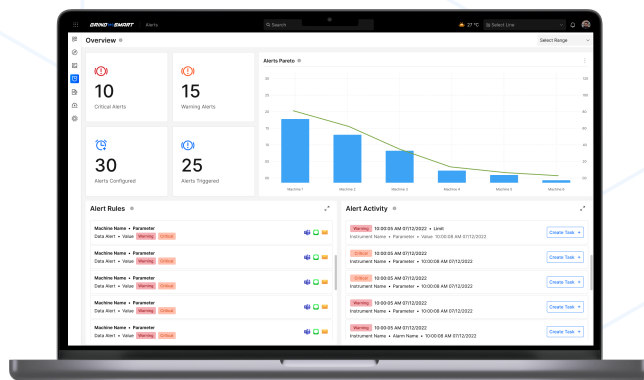
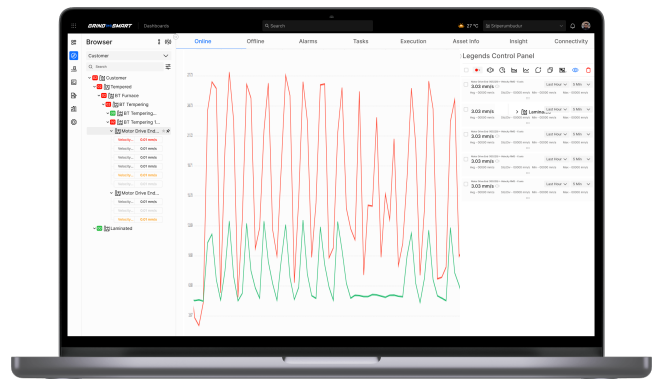
Live production comments

Comments and descriptions can be added to parts post-production for correlating with process parameters and track rejections.

Smart Grinding Features

Explore asset and sensors

A quick access to the data for a descriptive analysis of the signals acquired from the grinding machine.

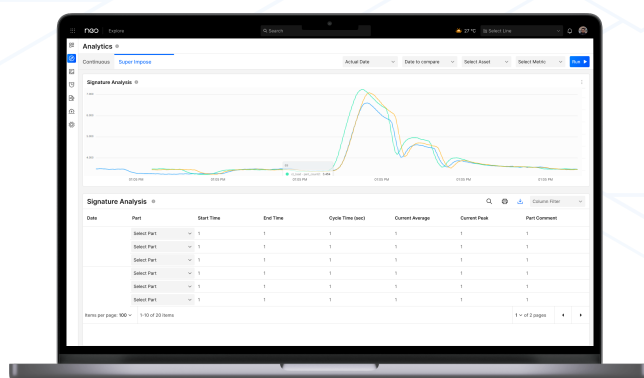
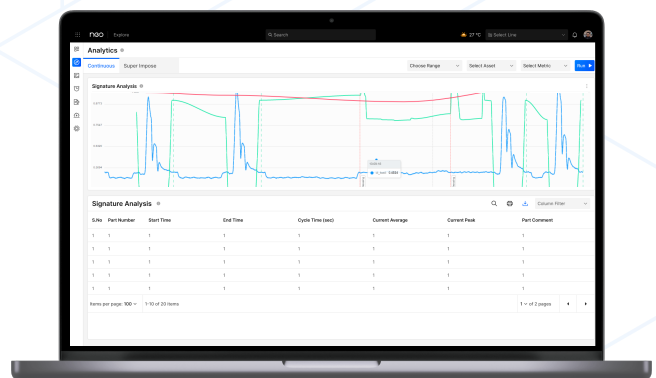


Deviation and connectivity alerts

Emails and SMS based alerts to warn the users about process deviations and data connectivity.

Continuous cycle analysis

Variations and abnormalities in the grinding process can be visualized by superimposing grinding signatures against process parameters such as feed rate, axes position & other sensor data along with statistical trends for diagnostic analysis over any custom time range selections.



Superimpose cycle analysis

Multiple grinding cycles can be simultaneously compared and studied using historians and custom range selection to analyze the process and its implications on quality.

Production Monitoring Features

OEE Dashboard

Real-time production dashboard for a quick overview of the entire shop floor. Colour codes and visual analytics for faster insights in order to improve productivity.

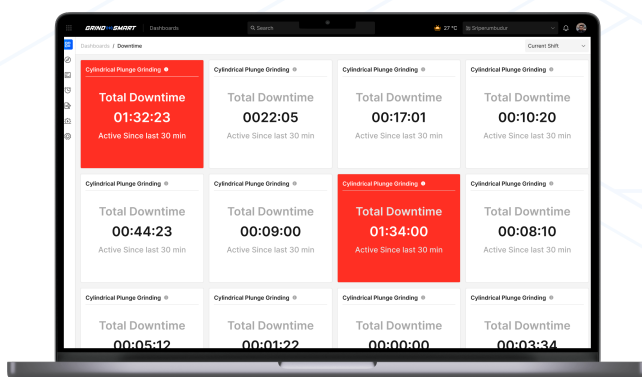
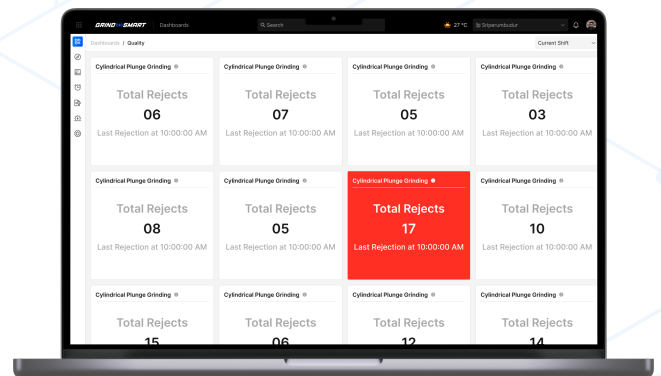


Production Dashboard

Track the asset OEE in real-time. Machine downtime & quality tracking with operator inputs. Insights on machine performance, availability and production status to monitor KPIs for the manufacturing team.

Quality Dashboard and Reports

Dashboard for quality analysis with real-time rejection and rework paretos. Charts for an overview of defects along with detailed defect trends report.

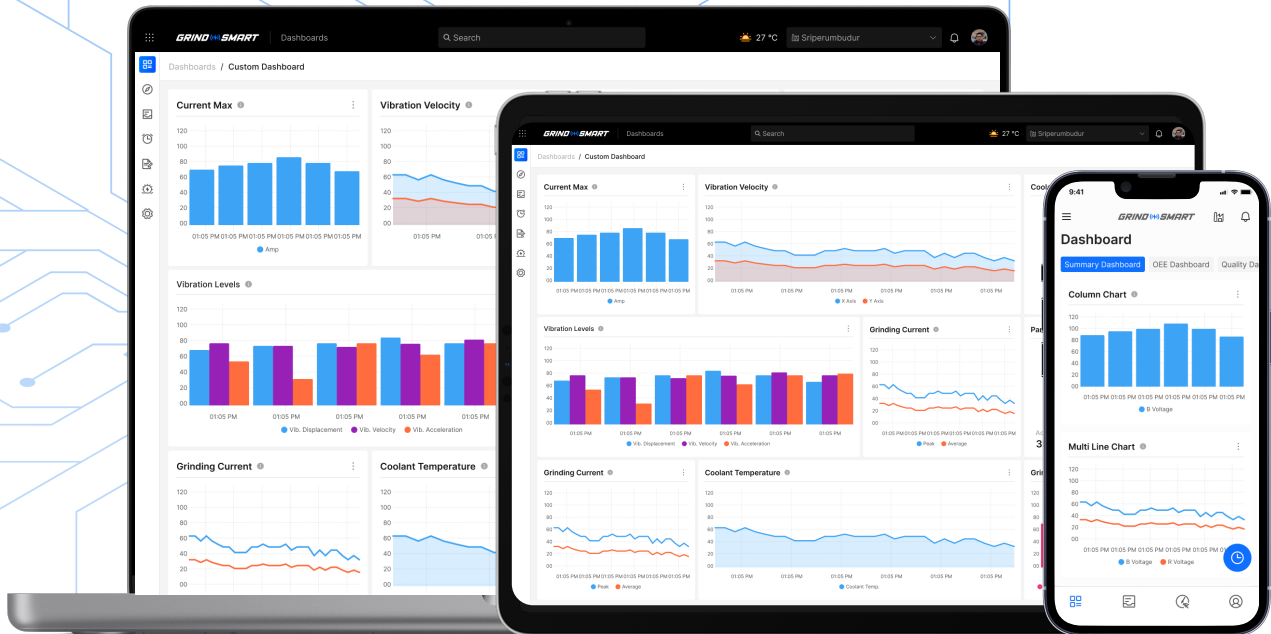


Downtime Dashboard and Reports

Dashboard for downtime analysis with planned & unplanned downtime paretos. Machine breakdown & operator availability reports along with part production and changeover reports.

#ConnectingEverything

Cloud/Internal Connectivity & Security



Reach out to us now for further queries

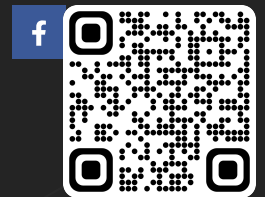
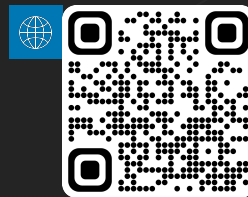
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