Software Brochure

Fluid Intelligence for Predictive Maintenance

Spectro Scientific / AMETEK

TruVu360

Insight. On-site.



Your Complete Solution for On-site Oil Analysis

TruVu 360™ Enterprise Fluid Intelligence simplifies and streamlines the on-site oil analysis process so high-quality information and actionable intelligence lead to effective decision making.

With advanced maintenance dashboard and KPI trending, the software closes the gap between recommendations on the oil analysis report and required maintenance actions for continuous improvement.

TruVu 360™ Enterprise Fluid Intelligence platform delivers real benefits that meet business goals and objectives:

Intelligence

- Closed loop feedback improves diagnostic accuracy over time
- Dashboard for management views of cost savings and program key performance indicators (KPIs)

Simplicity

- Intuitive interface with built-in intelligence
- Simple flow minimizes human error

Quality

- Highest quality information from freshly collected samples
- Simple process with fewer hand offs ensure higher quality data
- Lab-quality results on-site without the complexity of a traditional lab

Speed

- Real-time reporting enables immediate decision making
- Rapid feedback for continuous improvement



Two versions are offered to meet the needs of a company's size and policies

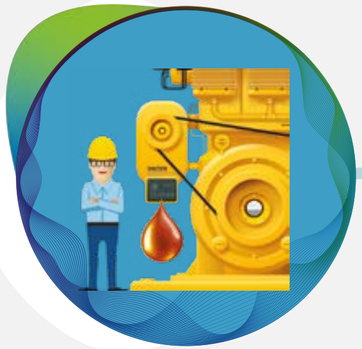
TruVu 360™ Versions	CLOUD	PRO
Installation	mytru360.com	Local PC or company network
Site support	Multiple sites (with enterprise)	Multiple sites (with enterprise)
User license	At least 1 required	At least 1 required
Duration	Annual renewal	Continuous use
User login	Login required, license privilege levels available	Login required, license privilege levels available
Import assets	Available	Available
Email distribution of reports	Available	Available

TruVu360 Process Flow

The TruVu 360™ platform manages process, information flow and an intelligence dashboard with two components:

TruVu 360™ Web Based Software

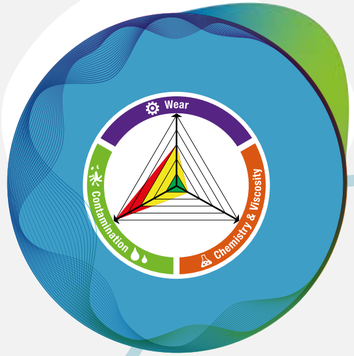
TruVu 360™ Device Console with MiniLab or FieldLab Test System



COLLECT A REPRESENTATIVE OIL SAMPLE FROM ASSET

ON-SITE TESTS WITH MINILAB AND FIELDLAB DEVICE CONSOLE (TDC)





DIAGNOSTICS AND RECOMMENDATIONS WITH TRIVECTOR

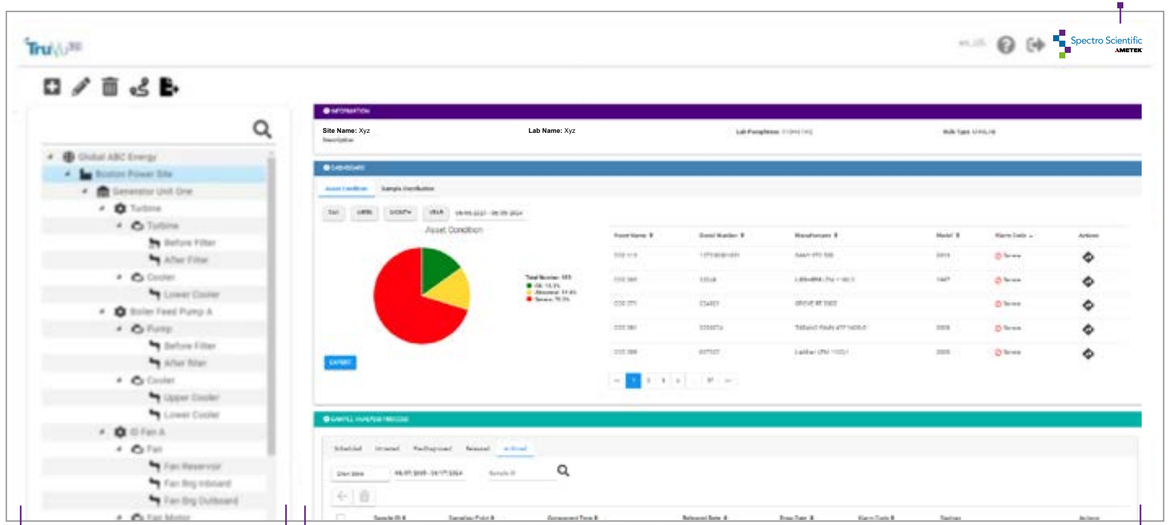
ACTION & CLOSED LOOP FEEDBACK





ARCHIVE FOR FUTURE REVIEW

A True View of Process, Information and Intelligence



ASSET & TOOL BAR

- Create asset database with provided templates of component types
- Customize your own or import existing asset structure
- Assign pre-configured alarm limits that can be adjusted at the component level based upon operating history.
- Assess alarm trends to refine alarm limits.

DASHBOARD

Dashboards bring visibility of lubricant management and savings at the asset, plant and corporate level:

- Oil analysis results by category
- Total repair savings
- Total oil consumption

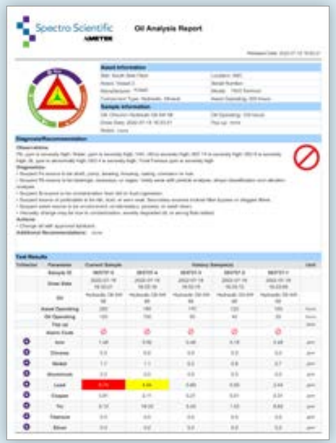


TruVu 360™ login screen

A Simple Path from Data to Intelligence

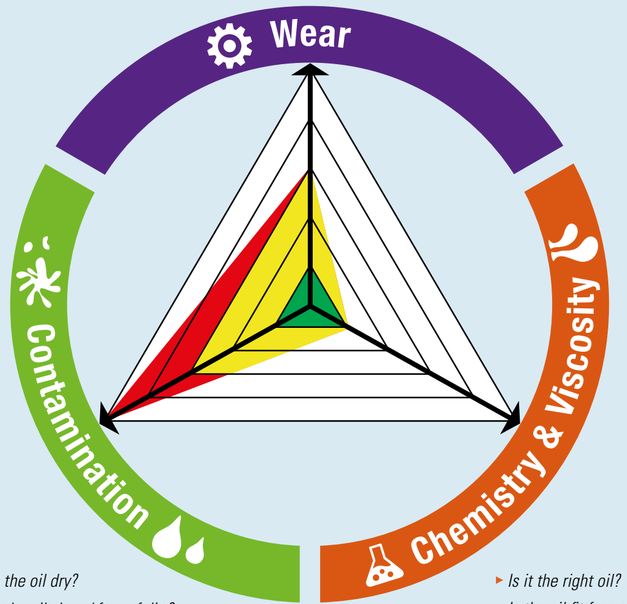
Intuitive TriVector™

Representation of oil analysis diagnostics.



TruVu 360™ report

- *Is the machine healthy?*
- *Can I predict when the machinery will fail?*



- *Is the oil dry?*
- *Is the oil clean/ free of dirt?*
- *Is it the right oil?*
- *Is the oil fit for use?*

User-configurable Diagnostic Sets

Open architecture Diagnostic Sets allows user to easily customize rules for continuous improvement.

- Factory alarm limit tables for common components, customizable for each asset.
- Software generated alarm codes, diagnostics and recommended actions that can be adapted to user requirements.
- Condition Based recommended alarm limits available utilizing ASTM D7720 statistical evaluation.



TruVu 360™ limit table grouped by Trivector parameters

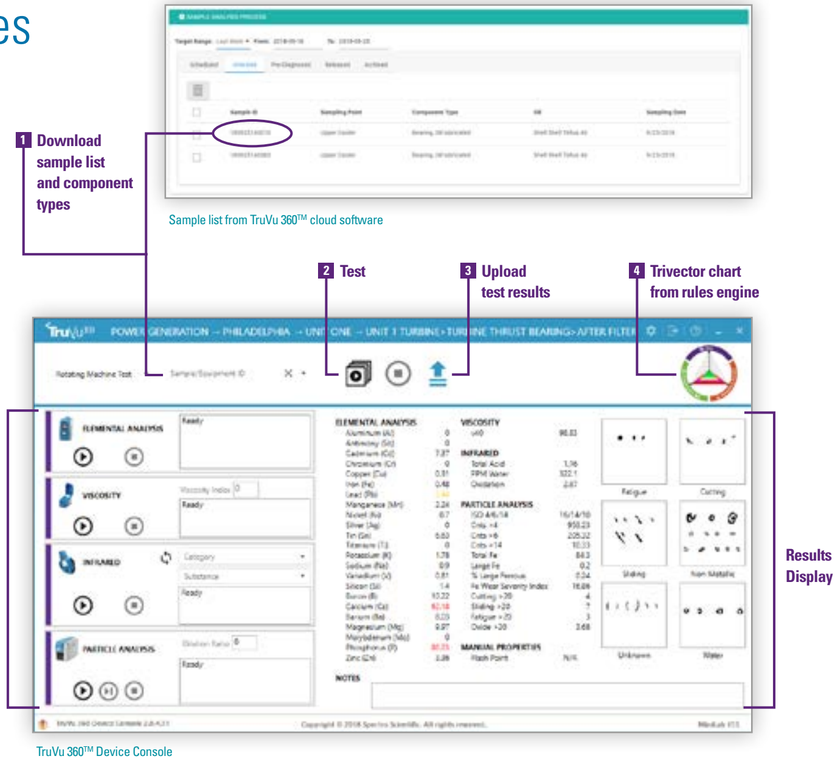
Condition Based Alarms

TruVu 360™ now offers a Condition Based Alarm feature based on statistical evaluation of alarm limits using *ASTM D7720 Standard Guide for Statistically Evaluating Measurand Alarm Limits when Using Oil Analysis to Monitor Equipment and Oil for Fitness and Contamination.*

Using the guidelines outlined in the ASTM D7720, TruVu 360™ produces an output that helps the user:

- Evaluate current alarm limits in each limit set to determine if current alarm limits are effective.
- Recommends adjustments of alarm limits per limit set based on historical data (>80 samples needed).
- Evaluate the effectiveness of current alarms vs recommended alarm limits.
- Carefully and systematically develop an alarm strategy that is achievable and sustainable.

TruVu 360™ Device Console Simplifies On-Site Testing (MiniLab only)



Sample list from TruVu 360™ cloud software

TruVu 360™ Device Console

Adaptable on-site testing solutions tailored to meet industry needs



MiniLab Series
for Industrial and Power Plants

ELEMENTAL
CHEMISTRY & WATER
VISCOSITY
FERROUS
PARTICLE COUNT



MiniLab EL Series
for Racing, Railway, Aerospace and Gen Set

ELEMENTAL
CHEMISTRY & WATER
VISCOSITY
TOTAL FERROUS
FUEL DILUTION



FieldLab Series
For Military, Aviation, Mining, Oil & Gas & Site Service

ELEMENTAL
PARTICLE COUNT
CHEMICAL & WATER
VISCOSITY
TOTAL FERROUS

TruVu 360™ solutions address common hurdles in implementing on-site oil analysis.

CONVENTIONAL LAB	ON-SITE TESTING SOLUTIONS WITH TV360
High capital investment	TruVu 360™ enabled MiniLab or FieldLab costs about 1/3 of a full size laboratory
Large space and special facilities needed	Tabletop with no special facility requirements
Uses Hazmat chemicals	No hazardous chemicals and reagents, small sample volume, minimum waste stream
Lubricant experience required	TriVector report, built-in oil scheduling, easy-to-use interface, default component and alarm limit templates, open rule engine for quick startup and continuous improvement
Start up time can take months	TruVu 360™ based MiniLab or FieldLab start up is less than one week

Tests are all compliant to ASTM standards.

TEST	METHOD	TITLE
Elemental Analysis	D6595	Standard test method for determination of wear metals and contaminants in used lubricating oils or used hydraulic fluids by rotating disc electrode atomic emission spectrometry
Particle Analysis	D7596	Standard test method for automatic particle counting and particle shape classification of oils using a direct imaging integrated tester
InfraRed Analysis	D7889	Standard test method for field determination of in-service fluid properties using IR spectroscopy
Fuel Dilution	D8004	Standard test method for fuel dilution of in-service lubricants using surface acoustic wave sensing
Viscosity	D8092	Standard test method for field determination of kinematic viscosity using a microchannel viscometer
Total Ferrous	D8120	Standard test method for ferrous debris quantification
Particle and Elemental Analysis	D8127	Standard test method for coupled particulate and elemental analysis using X-ray Fluorescence (XRF) for in-service lubricants
Flash Point	ASTM D6450/ ASTM D7094	Standard test method for Flash Point by Continuously Closed Cup (CCCFP) tester/standard test method for Flash Point by Modified Continuously Closed Cup (MCCCFP) tester

TruVu 360 Fluid IQ

Leverage the past.
Predict the future.

TruVu 360™ Fluid IQ is a next-generation oil analysis platform from Spectro Scientific, powered by artificial intelligence and advanced forecasting. It enables organizations to perform real-time, lab-quality oil analysis on-site, transforming raw data into truly predictive insights for smarter, risk-optimized maintenance decisions. With a proprietary knowledge base built over 35 years, TruVu 360™ Fluid IQ delivers actionable recommendations that reduce costs, extend equipment life, and support sustainability goals.

Why TruVu 360™ Fluid IQ

Optimize oil life. Stronger equipment

Optimize drain intervals confidently while protecting critical components and reducing wear.

Smarter sampling decisions

Sample when it matters. Skip it when it doesn't. Reduce oversampling without sacrificing visibility.

Predictive, condition-based maintenance

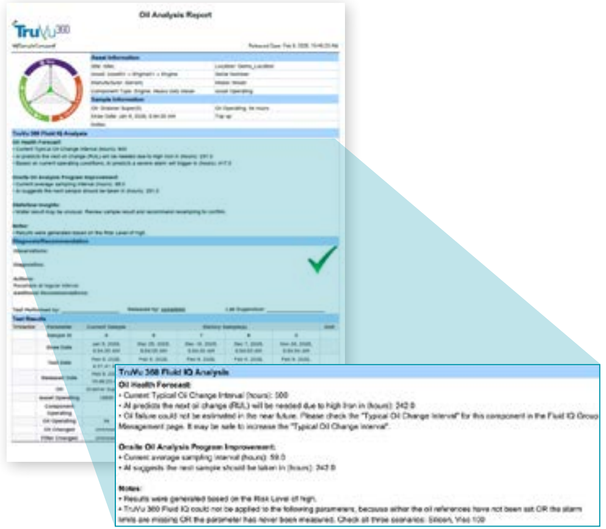
Align maintenance with how assets actually operate, reducing unnecessary work and avoiding premature interventions.

Earlier detection of degradation and risk

Identify subtle changes before they escalate, giving teams time to act proactively.

A true 360° view of oil and equipment health

AI unifies chemistry, wear metals, physical properties, service history and trends into one stream of actionable intelligence.



TruVu 360™ Fluid IQ Dashboard

Enhanced filtering features by component type allow for precise monitoring by component type and are applicable throughout the various dashboards.

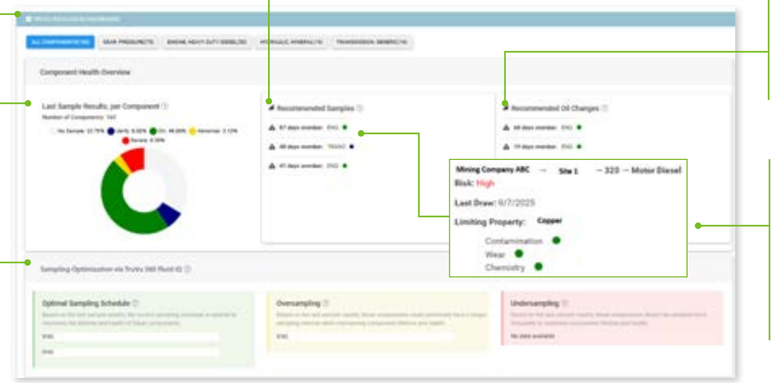
This unique TruVu 360™ Fluid IQ feature suggests the recommended interval (in time or distance) to take the next oil sample from the component.

This unique TruVu 360™ Fluid IQ feature suggests the recommended interval (in time or distance) to change the oil.

The Component Health Overview Graph visually shows alarms from the most recent sample for each component, providing a snapshot of its current condition.

TruVu 360™ Fluid IQ automatically optimizes your sampling schedule by grouping components into Optimal, Oversampling, or Undersampling categories. Using the previous test results and draw date, it ensures sampling frequency is ideal.

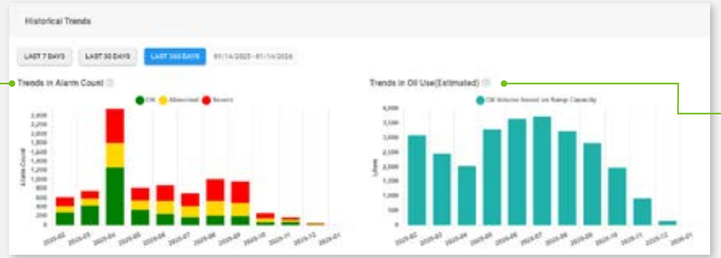
When you hover over ENG you will get more specific information about the component as a pop up. Shows limiting property parameter impacting oil life, risk level used to calculate oil life and current condition of lubricant.



Historical Trends

The Trends in Alarm Count Graph shows alarm trends over time. Use the filters to sort by component type and date, and see when samples are in red (severe), yellow (abnormal), or green (OK) states

The Trends in Oil Use Graph shows oil consumption trends in liters over time. View all components together or filter by component type.Use it to monitor changes and top-offs. Oil volume is based on each component's sump capacity.



Achieve More with Global Access to Local Intelligence

TruVu 360™ Enterprise Fluid Intelligence addresses the need for standardizing workflows on a global scale and sharing data and intelligence across the enterprise.

- One, standard on-site oil analysis process
- High-quality, actionable information applied locally to improve productivity and reduce costs
- Global intelligence accessible by users and management for continuous improvement



Product Knowledge at Your Fingertips with FLUID MANAGEMENT ACADEMY

FLUID MANAGEMENT ACADEMY

Optimize the operation and maintenance of your Spectro Scientific fluid analyzers and software. It's easy with the new Fluid Management Academy™, an online learning tool developed for all users, from the novice to the expert.

Cost and time savings

Eliminate the need for in-person classes, travel expenses and time away from your site. In just one click, access courses that will set you up for success from your current location.

Immediate, accessible content

E-learners can access content from any location, at any time 24/7. Users can log on from any device, whether a desktop, tablet, laptop or smartphone.

Flexibility to choose

Learn at your own pace and build the product knowledge to fit your goals and schedule; courses range from Level 1 to Level 3 depending on your needs.

Ease of use

Designed with an intuitive user interface and dashboard with courses, multimedia content and exams. Content is delivered in short (60-90 minute) online courses led and designed by subject matter experts.

Data security

Ensures security of data and the privacy of users. All transactions, connections and communications are secure with enrollment keys, advanced password authentication, domain-based registrations, backup data storage and data encryption.

The Fluid Management Academy will continue to evolve with new offerings.

Spectro Scientific / AMETEK

Learn more at: **spectrosci.com/fma** or email **support.spectrosci@ametek.com**

SVC164
MiniLab 23 with TruVu 360™ operation I

SVC160
MiniLab 53 with TruVu 360™ operation I

SVC153
MiniLab 153 with TruVu 360™ operation I

SVC150
How to Operate TruVu360™ System I

SVC182
Introduction to Lubrication and Oil Analysis Fundamentals

SVC170
How to Operate the FieldLab 33C

SVC172
How to Operate the FieldLab 58C

SVC198
Radiation Safety Training

How to Operate TruVu 360™ System

This provides an overview of TruVu 360™, connection and operation of the TruVu 360™ Device Console (TDC), how to run samples and configure the software using the Adaptive Rules Engine. The user will gain a better understanding of how the software creates customized oil analysis reports for easy distribution to managers and mechanics. This course is recommended for the technician running the samples on a daily basis and the oil analyst responsible for completing oil analysis reports.

TruVu 360™ Product Information

TruVu 360™ CLOUD	
100-00795	TruVu 360™ Cloud service 1 year, 1 user
100-01144	TruVu 360™ Cloud service, 3 years, 1 user
100-01145	TruVu 360™ Cloud service, 5 years, 1 user
100-00819	TruVu 360™ Cloud enterprise annual fee, 1 user
100-00939	TruVu 360™ Cloud enterprise access (per MiniLab site)
TruVu 360™ PRO	
750-00156	TruVu 360™ Pro, includes 1 TruVu 360™ user license
100-01147	TruVu 360™ Pro enterprise Access (per MiniLab site).
750-00140	TruVu 360™ Pro enterprise server license, 1 user
TruVu 360™ AI-POWERED INTELLIGENCE SUITE	
100-01493	TruVu 360™ Fluid IQ for Cloud (per site)
100-01501	TruVu 360™ Fluid IQ for Pro (per site)
LICENSE	
100-00741	Additional TruVu 360™ user license
100-01146	Additional TruVu 360™ user licenses, 3 pack
100-00747	TruVu 360™ reader license pack (25)
SERVICE & SUPPORT	
SVC089	TruVu 360™ software integration for MiniLab
SVC138	Asset build for TruVu 360™
SVC093-A	TruVu 360™ Pro Support Agreement - 1 site, 1 year
SVC093-B	Support Agreement for TruVu 360™ Pro + TruVu 360™ Fluid IQ - per site, per year



TruVu360 Insight. On-site.

For more info visit: www.spectrosci.com

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