



PROGNOST[®]-NT V17

Enhancements to Version 16 and
PROGNOST[®]-SILver Firmware Upgrade



Component Orientation



Software Upgrade



Localized Text Input



Why upgrade your software?

It is essential that the monitoring technology of your rotating equipment is always up to date. The annual upgrade of your PROGNOST®-NT software delivers all advantages of our ongoing product developments.

In this brochure, we will introduce you to all of our important innovations and feature enhancements which will help you carry out your monitoring tasks faster and more effectively.

Please note: Some new functions require appropriate system capabilities. If you are using older Monitoring Units, some new functions may have to be deactivated or may only be used to a limited extent.

All upgrades at a glance

For the User

- Component Oriented User Guidance
- Enhanced Cursor Function
- New Drag&Drop Function
- Enhancement for OneClick Cockpit
- System Entry in Tree Structure: Opens Automatically
- Enhanced 3D Diagram

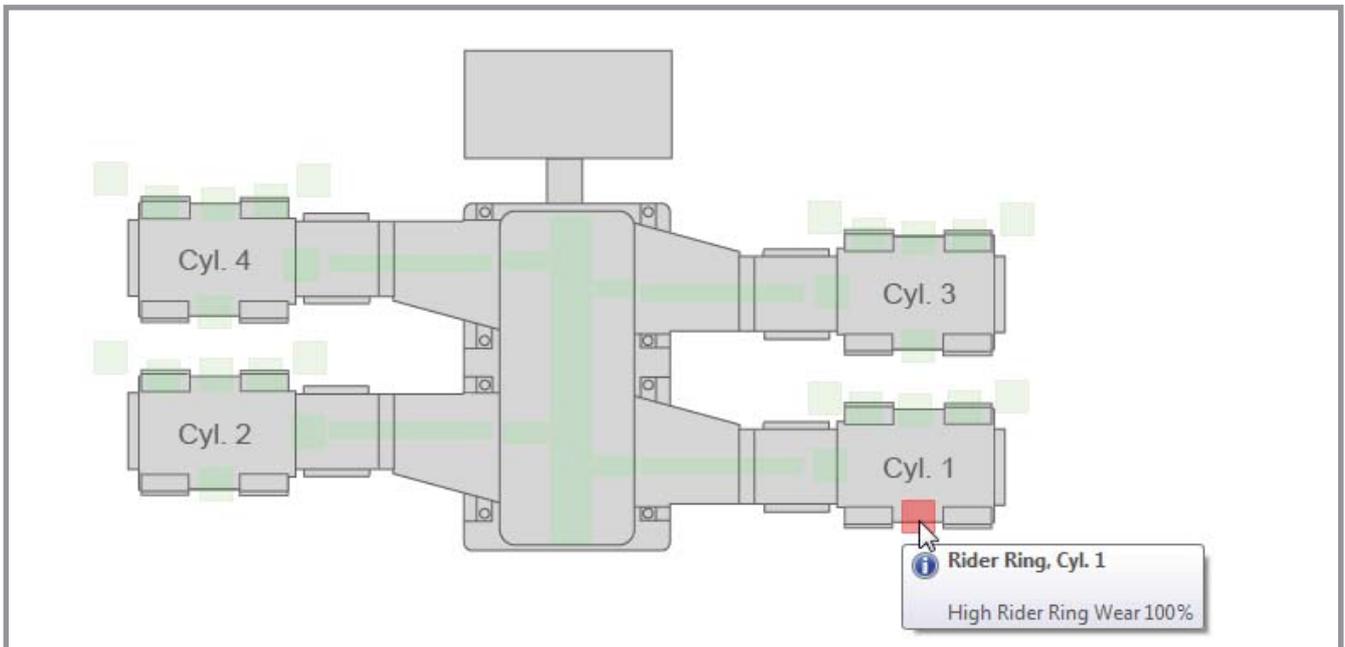
- New Analysis: "Pressure Absolute Peak"
- New functionality for Process Data listing (In & Out)
- One Trigger for a complete Machine Train
- Unicode & use of local language

For the System

- Windows® 10 supported
- Optimization of IT security and use of resources by conversion to "services"
- Uses IPv6

PROGNOST®-SILver Firmware Upgrade (Version 1.5)

- Optimized signal plausibility check
- Clear indication of loop faults



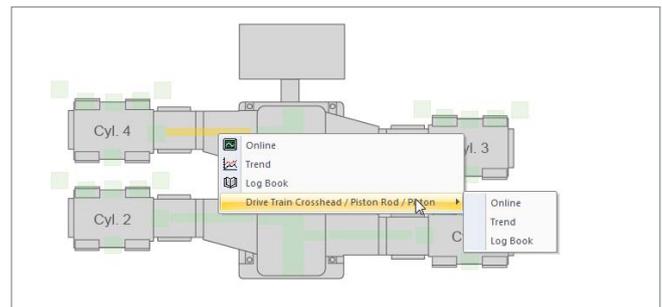
Sample of a component oriented view

For the User

Enhancements to improve the ease of use of your PROGNOST®-NT system.

Component Oriented User Guidance

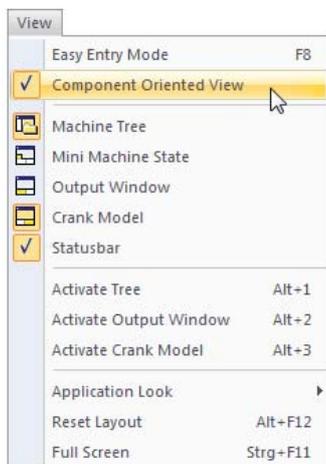
Starting with version 17 of PROGNOST®-NT, there is now an alternative way to visualize machine status. The component oriented view shows the condition of the monitored and protected machine components, depending on the detail level of the machine picture.

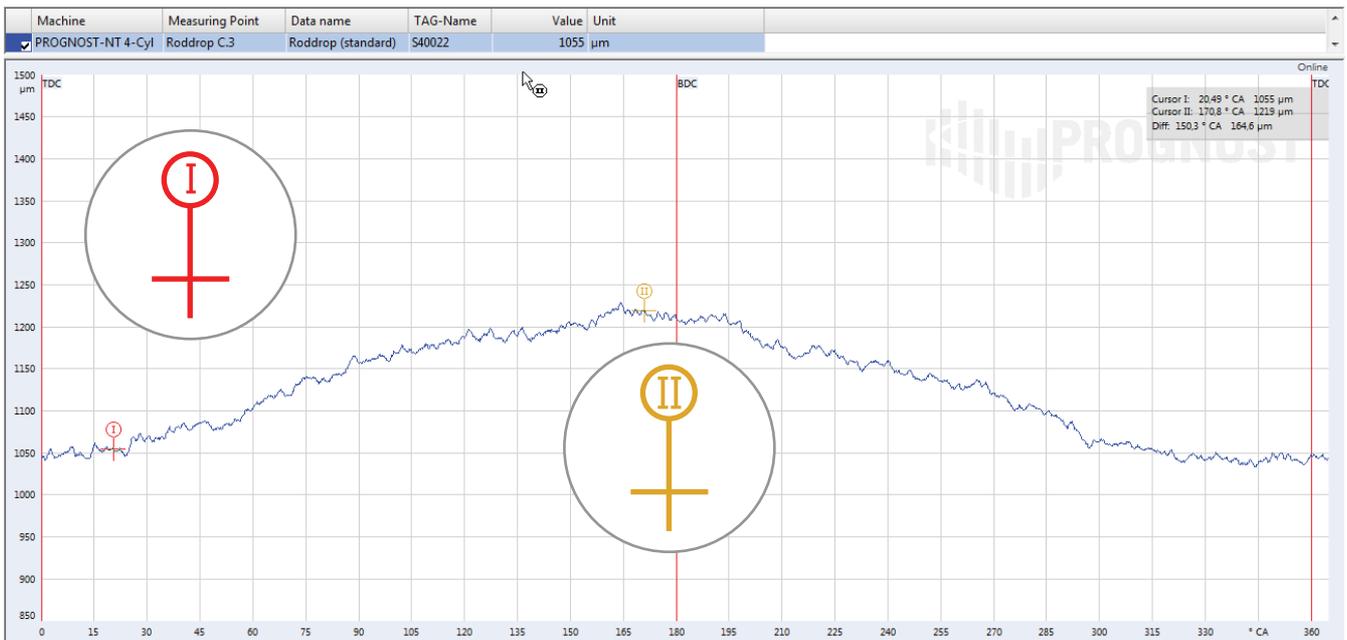


This new function enables you to see a quick status overview for all monitored machine components. You will see directly which components of your machine are functioning well and which ones require your attention.

The relevant analyses are just two clicks away. Through the context menu online-, trend or logbook views are available for the selected component or only for the detected damage pattern.

A tooltip function provides additional information. It shows information about the component, any detected damage pattern and its probability as a percentage.





Cursor and difference cursor within an online-view

Enhanced Difference Cursor Function

The visualization and the way in which it functions are improved. For example, to change the position of the first or second cursor, the distance between the mouse cursor and the relevant cursor position is vital. The difference cursor functionality is available for all 2D and 3D diagrams within version 17 and above.

New Drag&Drop Function

It is now possible to drag entries from the process data listing, online- or trendview and drop them into any other diagram. It is now easier to review process data and analysis values, for example within the trend view, thanks to drag&drop.

Enhancement for OneClick Cockpit

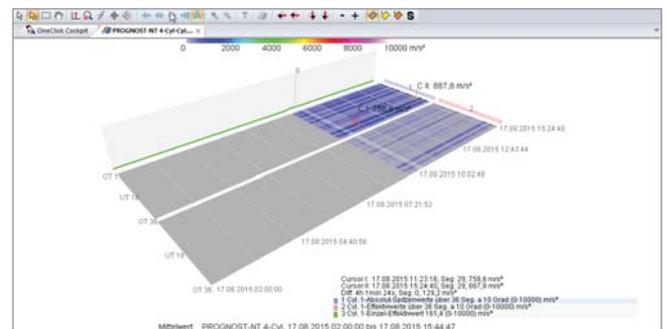
Just one click within the context menu and you can add any available signal composition individually or in groups. This helps quick and easily modify and extend your regular data analysis with existing signal compositions.

System entry in tree structure: opens automatically

A simple preset in the VISU options opens the entries for machine and system in the tree structure, each time when connecting. This enables you to see a quick overview of your current system condition.

Enhanced 3D Diagram

To improve navigation within the 3D diagram, functions of the 2D trend view are integrated. This helps to change the display period in the 3D diagram.

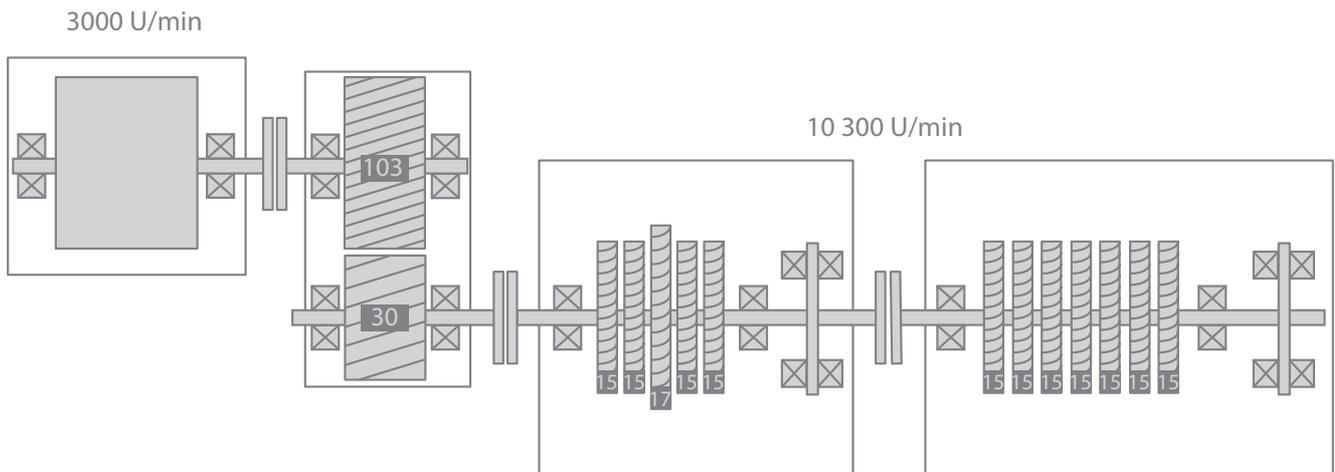


New Analysis: "Pressure Absolute Peak"

Following a customer request, this analysis was integrated to monitor the "absolute peak pressure value" and forward it to the DCS.

New functionality for Process Data listing (In & Out)

To enhance the overview within the process data view and separate signals which are sent by PROGNOST®-NT from the DCS and those which are sent to the DCS, this new functionality has been integrated.



Machine train with different rotation speeds

One Trigger for a complete Machine Train

The monitoring of a complete machine train with one trigger sensor is possible despite different rotation speeds (e.g. drive, gearbox, compressor). To calculate the correct harmonics of the rotation speed within the FFT diagram, the PROGNOST®-NT calculates the different speeds for you automatically.

Unicode & use of local language

Starting with version 17, the entire VISU program supports Unicode; this means that every character set worldwide is supported. This step also introduces the new national and international names. The national names can be used for your local common terms (e.g. local language) for components and sensors, whereas the international names can be used as a counterpart for the worldwide understandable language (english by default). This allows a use of systems around the globe across national borders and continents, independent of the language.

For the System

Enhancements for future-proofing the PROGNOST®-NT system.

Windows® 10 supported

The qualification of VISU for the Windows® 10 operating system was necessary for the installation on new user computers.

Optimization of IT security and use of resources by conversion to “services”

Starting with version 17 the “Communication” and “Monitoring applications” have been changed to “services”. This means that the system uses available resources optimally. Furthermore, the IT security has been improved and administration service have been simplified.

Uses IPv6

Due to limited availability of IPv4 addresses, the PROGNOST®-NT V17 also supports IPv6 addresses. This technical innovation is mostly important for your administrator, because it reduces the workload of the gateways and offers an increased safety level for encryption and verification of IP data packages, for example.



PROGNOST®-SILver Firmware Upgrade (Version 1.5)

Why upgrade the firmware?

With the upgrade to firmware version 1.5, PROGNOST®-SILver users gain:

- The possibility to monitor additional sensor types
- Optimized signal plausibility checks to avoid false alarms caused by electrical failures
- Improved indication of an “Unsafe” status and the root cause.

All new features have passed in-depth test routines, under different environmental conditions, and have received the IEC61508:2010 SIL 2 certificate at the first onset.

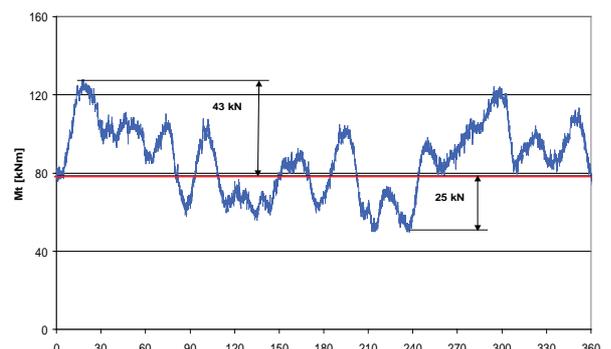
We further extend the capabilities of PROGNOST®-SILver to become your first choice supplier of protection systems for reciprocating machinery and other rotating equipment.

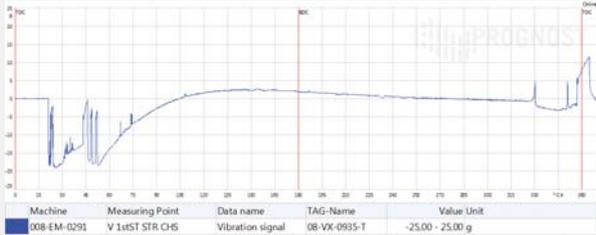


New sensor types for additional monitoring tasks

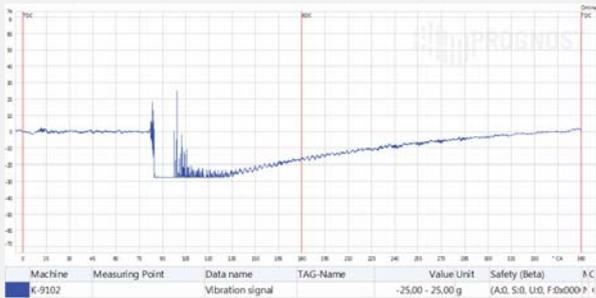
PROGNOST®-SILver monitors the signals of many different sensor types, e.g. vibration, displacement, temperature, pressure, phase reference, voltage. With this upgrade, PROGNOST®-SILver users are able to additionally analyze data from the following sensors:

- **Eddy Current based trigger for centrifugal machinery**
Keyphasor signals up to a machine speed of 65,000 rpm.
- **Torque sensor based on strain gauge measurement**
Valuable online torque analysis and protection for the main and critical rotating components, such as crankshaft or driveshaft.

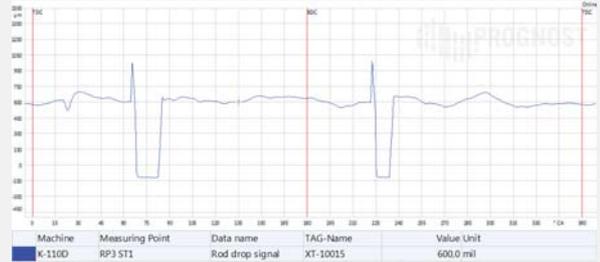




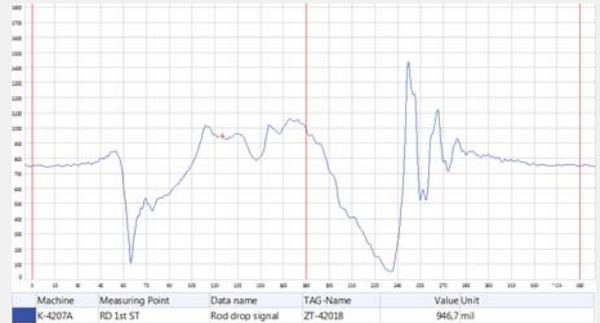
Faulty acceleration sensor – No Shutdown (Unsafe Output)



Real signal – Shutdown required



Faulty proximity sensor – No Shutdown (Unsafe Output)



Real signal – Shutdown required

Analyses improvements

Optimized signal plausibility check

One challenge for an SIL2 certified protection system is the ability to differentiate between a “real signal” indicating a true machine problem and a “faulty signal” which must not lead to a false alarm or unnecessary downtime. PROGNOST®-SILver offers specialized signal processing to address this challenge and to avoid false alarms caused by electrical or hardware failures.

With the firmware upgrade, even very rare signal faults, e.g. loose wires or connectors, loose rod position sensor brackets, are reliably identified as “Unsafe”. This provides maximum process uptime paired with reliable machine protection. Additionally, the management of very low signal amplitudes has been optimized to avoid a resultant “UNSAFE” status.

Monitoring centrifugal machinery

Signal plausibility checks for proximity signals have been further improved and now better accommodate monitoring tasks of centrifugal machinery as well as axial and radial bearing monitoring.

Clear indication of loop faults

Based on some user requests, the new firmware allows configuration of “Unsafe” messages based on a) single loop failures and b) channel or hardware failures. This feature provides users with a meaningful indication for short term repair.

Upgrade your PROGNOST®-SILver today!

For customers with an active service agreement including yearly Software Upgrade this important firmware upgrade is available free of charge.

We offer a convenient process to upgrade your protection system. Please contact your local PROGNOST Systems representative or get in touch with us.

Email: upgrade@prognost.com

PROGNOST Systems GmbH
Daimlerstraße 10
48432 Rheine
Deutschland

 +49 (0)59 71 - 8 08 19.0

 +49 (0)59 71 - 8 08 19.42

 info@prognost.com

PROGNOST Systems, Inc.
1018 Hercules Ave.
Houston, TX, 77058
USA

 +1 - 281 - 480 - 9300

 +1 - 281 - 480 - 9302

 infousa@prognost.com

www.prognost.com