SIEMENS



Condition Monitoring SIPLUS CMS

Intelligent maintenance ensures sustainable investments

Condition Monitoring SIPLUS CMS



SIPLUS CMS represents a platform which ensures vibration monitoring and quality data recording for individual or numerous machine components within a system or machine.













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Condition Monitoring SIPLUS CMS



- You want to avoid unpleasant surprises involving downtimes and associated costs?
- You want to know...
 - ...how your system is doing?
 - ...about the mechanical wear on your machine?
- Are you looking for assured investment protection?



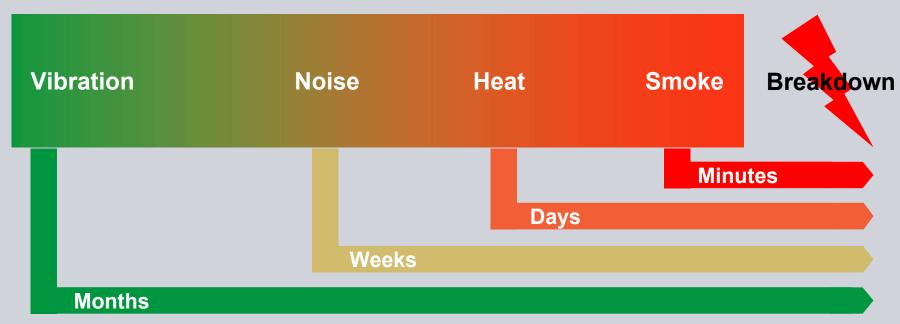
Then opt for a far-sighted solution and increase the availability of your machines and plants - with SIPLUS CMS.

Our Condition Monitoring System SIPLUS CMS facilitates detection of damage to machinery and equipment early on and allows targeted maintenance planning.



How Can Mechanical Components be Monitored?

Machine state



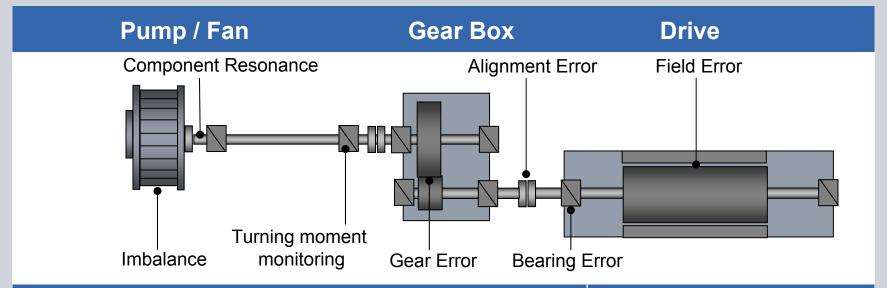
Time to react

Vibration Monitoring with SIPLUS CMS – the most reliable method for the early detection of mechanical damage

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SIPLUS CMS Detectable Damages





| Mechanical Damages | | Electrical Faults |
|---------------------|---------------------------|-------------------------|
| Component Resonance | Rotation Speed Monitoring | Drive Error (Rotor bar) |
| Bearing Damage | Imbalance | Field Error (Stator) |
| Alignment Error | Coupler / Belt fault | |
| Blade frequency | | |

SIPLUS CMS Product portfolio



SIPLUS CMS1000



Compact

- Easy Applications
- Easy Tasks
- Stand Alone

Basic analysis

SIPLUS CMS2000

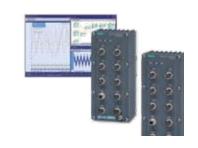


Modular

- Easy Applications
- Extensive Tasks
- Stand Alone
- Easy Integration

Basic analysis
Standard analysis

SIPLUS CMS4000



Projectable

- Demanding Applications
- Complex Tasks
- Stand Alone
- Easy Integration

User-specific analysis

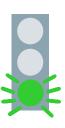
SIPLUS CMS Analysis Methods



SIPLUS CMS1000

Basic analysis



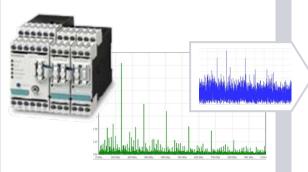


- Characteristic value monitoring
 - Machine vibration
 - Bearing
- Easy to display

SIPLUS CMS2000

Basic analysis

Standard analysis



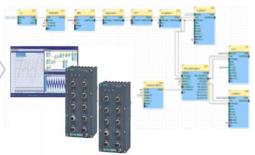
- Frequency selective Diagnostic
- Temperature monitoring
- Trend analysis
- Displayed via
 - Traffic light
 - Integrated message system
 - Spectrum-View via Browser

SIPLUS CMS4000

Configurable analysis

Detailed evaluations

Data recorder



- Freely configurable analysis models
- Know-How-Protection
- Process data recording via
 - Function Blocks
 - Profibus-Spy
- Displayed via
 - Traffic light
 - Integrated message system
 - Spectrum-view in CMS X-Tools

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SIPLUS CMS Advantages at a glance



SIPLUS CMS Portfolio







- Compact and easy to use
- Modular and configurable
- Projectable and powerful

| Lower costs | More efficiency | Better planning |
|-------------------------|------------------------------------|--------------------------|
| | | |
| Customized systems | Optimized utilization of resources | Higher productivity |
| Simple design | Effective spare part inventories | Longer life cycles |
| Easy system integration | Device diagnostics | Planned standstills |
| Open standards | Planned maintenance | Longer service intervals |
| Web Tools | Simple cabbling | High availability |
| Expandibility | Ruggedness/stability | Investment protection |



Your Investment in SIPLUS CMS ...

- ✓ Permanent monitoring for machine protection
- Effective monitoring of important processes and systems
- Assured energy efficiency through optimum bearing play
- Early detection of damage
- ✓ Planned maintenance instead of spontaneous repairs
- Reduced maintenance costs
- Increased system availability
- ✓ Optimum utilization of the power units' service life

... pays off!

SIPLUS CMS Product Information



Further information on SIPLUS CMS, e.g.:

- Brochures
- Manuals
- Data sheets
- FAQs
- Product-related slide sets



On the internet

www.siemens.com/siplus-cms

SIPLUS CMS Training and Support



Support



Online: <u>www.siemens.com/automation/service&support</u>

Phone: +49 (0) 911/895-5900 (8°° - 17°° CET)

Email: <u>siplus-cms.industry@siemens.com</u>

Training



SITRAIN: www.siemens.com/sitrain

SIPLUS CMS2000: currently being prepared

SIPLUS CMS / X-Tools: course on request



Thank you for your attention!

