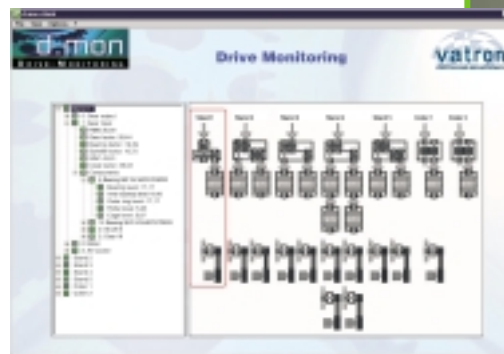


...access to precision

planet ?	species ?	technology ?
 ... earth	 ... human	d.mon

follow me...



Condition Monitoring
for Complex Machines & Drives ...



... developed by



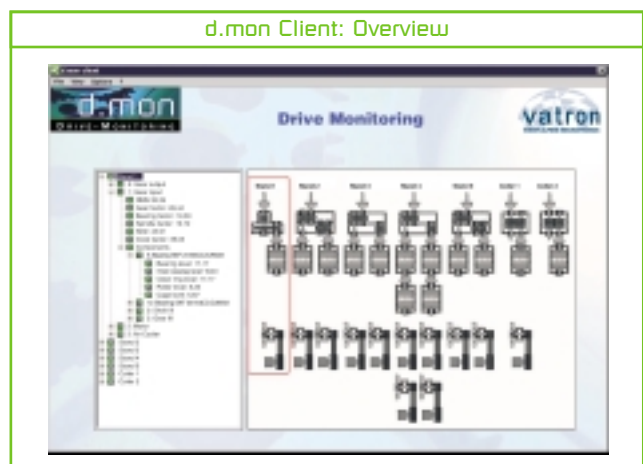
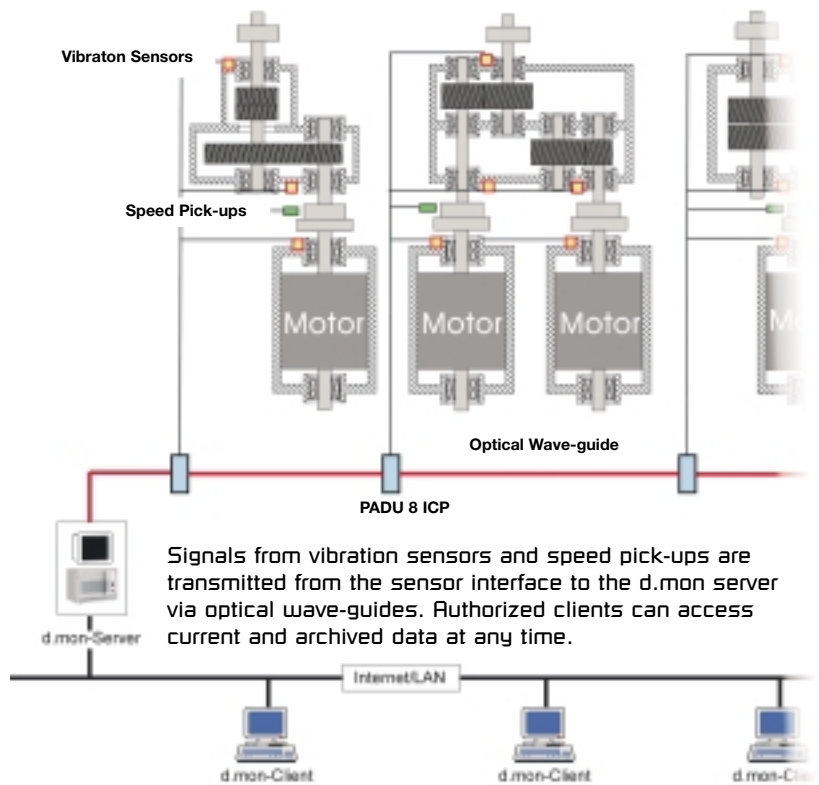
Day-in, day-out—everything under control ...

Look at any production plant and you'll find numerous complex gears in use, not to mention individual bearings, gear teeth, shafts etc.—generally at “neuralgic points” in the system. To keep things running smoothly, the maintenance team needs monitoring tools it can depend on.

The d.mon drive-monitoring system developed by vatron has “passed the test with flying colors”, on a wide range of plants in many different sectors of industry.

Based on permanent real-time vibration measurements and analyses, d.mon makes it possible to

- optimize maintenance activities
- determine the current condition of plants
- raise alarms in the event of acute changes in plant conditions
- detect damage developments/trends in good time.



Orientation and Detail ...

d.mon is the ideal synthesis of hardware, software and sensor systems:

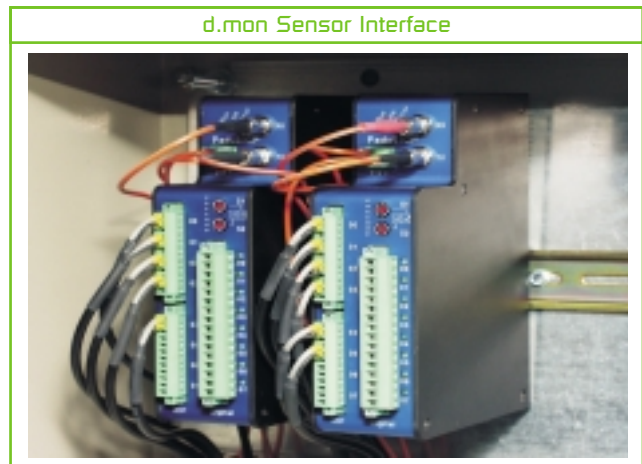
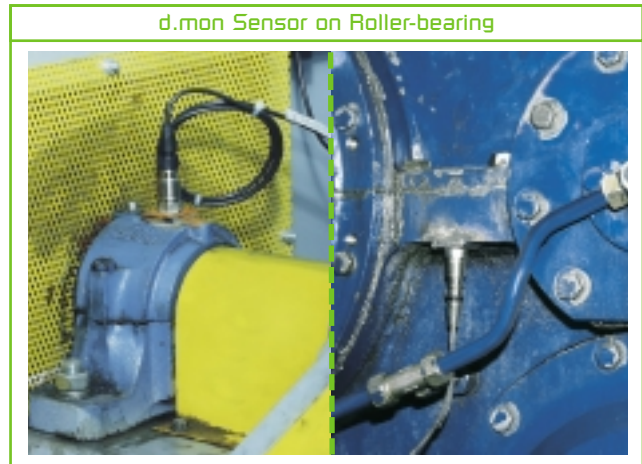
- Vibration sensors and speed pick-ups
- Sensor interface (Padu 8 ICP modules)
- Industrial-grade PC (d.mon server running WinNT 4.0)

Sensors are applied to vibrationally relevant locations on the housings of gear units or on individual roller-bearings.

The **sensor interface** supplies the **vibration sensors/speed pick-ups** and transmits the measured data to the **d.mon server**.

Here, algorithms based on frequency-selective analyses evaluate the storage-intensive time signals into a number of meaningful defect levels. Thanks to their direct access to the server database, the **d.mon clients** can visualize the current state of each component, and thus of the entire plant.

Whenever defined thresholds are exceeded, the d.mon server immediately sends an alarm (by e-mail, SMS, etc.) to the persons responsible.



- delivers reliable and up-to-the-minute status information on the entire plant and on individual drive components, 24 hours a day
- uses a tree structure (Plant—Assemblies—Components) so that the user can always “see what’s what” even when looking at detailed analyses; traffic-light indicators lead the user to critical components
- is based on tried-and-tested industrial-grade hardware (IBA data acquisition components, IMI vibration sensors)
- is easy to use and takes next to no time to learn, thanks to its Windows “look and feel”
- by self-monitoring both hardware and software, it greatly facilitates system maintenance
- supports remote diagnosis via clients, both in-house and via Internet
- generates long-term trends and identifies possible damage which may be developing, right from a very early stage



d.mon—System Information

Group Levels:

- The vibration diagnosis coefficient (SDZ) provides information on the status of the entire assembly.
- The group levels “RMS” and “Crest factor” give a frequency-independent description of the vibration at the measuring position in question.
- The “Bearing factor”, “Gear factor” and “Spindle factor” give information on all the components in the respective group.

Components Levels:

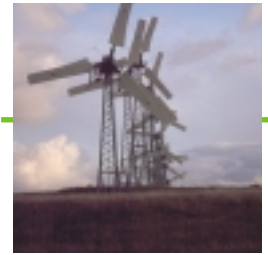
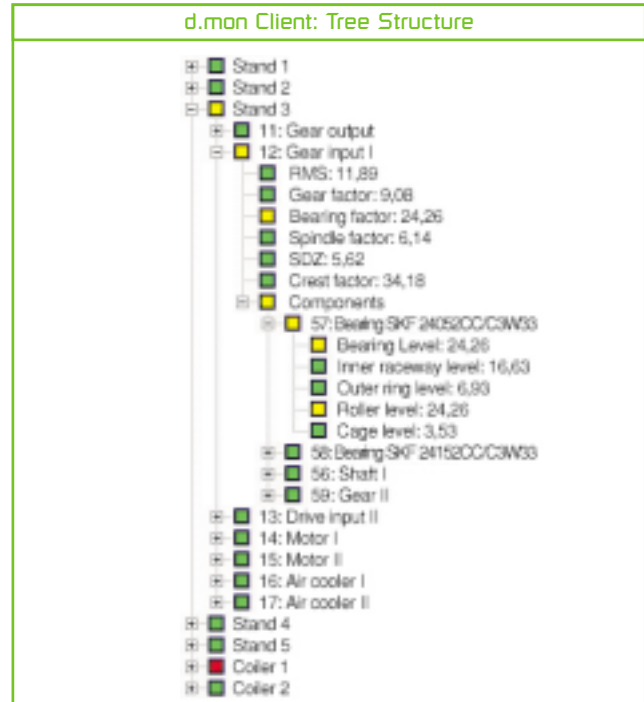
such as “Inner raceway level”, “Outer ring level” and “Gear teeth level” characterize the condition of individual components (bearings, gear teeth and shafts).

Trend Graph:

Group and component levels can be visualized in the form of long-term trends.

Events:

Sensor defects, limit violations, changes to the server settings and other events are always accessible for retrospective analysis.



Solutions for continually enhanced performance ...

As a member of the VOEST family, vatron combines the plant operating expertise of VOEST-ALPINE STAHL and the engineering know-how of VOEST-ALPINE Industrieanlagenbau...to develop and test intelligent, easy-to-integrate solutions and make them available to clients the world over.

Located at the heart of the Linz works, the 90 members of vatron have an effective infrastructure at their disposal:

- mechanical and electrical design workshops
- technical center with simulation units
- state-of-the-art EDP and measuring control equipment.

These high-tech facilities, and vatron personnel's many years of experience in the field, enable the company to carry out standard as well as specialized tasks in the fields of mechatronics, instrumentation engineering and testing technology, throughout the steel industry.



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