Predictive maintenance
Predict and prevent problems with your site security
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1. From reaction to prediction

These days, products, equipment, tools and parts are increasingly connected to the Internet. This enables them to communicate with each other and with users. To a certain extent, this makes them smart. Using sensors, they can observe their environment or monitor the status of important parameters, for example.

In daily life, we see numerous applications of that increased connectivity and intelligence, such as monitoring players during sports competitions, tracking cargo during transport as well as updating the status and use of equipment. Are they on or off? Switches open or closed? And what is the total operating time? We can read the information from the sensors and use it to our advantage. To ensure that assets don’t break down, are adequately maintained and last longer, for example.

This changes the way we are accustomed to performing maintenance. Until now, maintenance was often reactive: an asset broke down and was repaired. Or preventive: the expected average lifespan of an asset was coming to an end and maintenance was performed as a precaution to ensure that the asset did not break down.

Modern smart technologies enable us to maintain assets more efficiently. We no longer need to rely on observations, averages or expectations. Instead, we base our maintenance on the actual condition of the assets. This enables us to perform proactive maintenance when monitored parameters show that an asset is starting to perform less well. We can then prevent assets from breaking down or malfunctioning and prevent the negative consequences. We call this approach predictive maintenance.

What do the new options mean for your site security?
2. Prevent problems with your site security

As the owner of a company or the manager responsible for the assets of your organisation, you naturally want to minimise any disruption to your business continuity. You want your operations to continue as planned. And you preferably want to minimise any sudden interruptions to your normal operations.

Control of asset management
Unfortunately, things often work differently in daily practice. You obviously cannot control external influences such as economic developments, competition and illness. However, you can control your own policy and assets, including your site security. And today more than ever.

Predictive maintenance enables you to prevent unexpected downtime of assets and to perform preventive maintenance. You reduce disruption to your business continuity, increase the security in your organisation, improve planning management, comply with applicable rules and standards, and save costs by preventing faults and defects.

Why use predictive maintenance for your site security?
With predictive maintenance, you prevent problems with your site security. Because you now continuously monitor the vital parameters of your access solution, such as sliding gates, barriers, speed gates and turnstiles. That enables you to take proactive and timely action before a fault or defective component causes a problem and affects your business continuity.

Avoid damage and safeguard your business continuity
A gate opens and closes more often than you think. Whenever it does, parts like sprockets and guide wheels are subject to wear and tear. The average automatic sliding gate also weighs around 700 kilos and can cause a lot of damage in case of faults resulting from poor maintenance. Economically, for example, because access to your site is temporarily interrupted and suppliers cannot enter or leave the site. But also by causing damage to cars or even causing physical injury.

Improve periodic maintenance
It is therefore important to maintain your gate properly. Predictive maintenance ensures that your access solution is always in optimal condition, regardless of the frequency of use. By continuously monitoring the number of movements of your gate, you can plan the required periodic maintenance accordingly.

Comply with regulations and prevent liability
Another advantage of predictive maintenance is that your access solution always complies with the applicable safety standards. If you fail to comply with the maintenance requirements of your gate, as the owner of the company or site you are often liable for any consequences.

So good reason to take the maintenance of your gate seriously and prevent potential problems. Predictive maintenance solutions make that possible.
3. Predictive maintenance pays off

Predictive maintenance has also been introduced in the field of site security. Locks, drives and moving parts are equipped with sensors, software and hardware which transmit status signals. These signals can be monitored remotely. For example, to check the frequency of use of an automatic gate and detect faults in time.

That is an advantage for many organisations for whom site security is crucial. Particularly for organisations whose access solution is used very intensively and which plays an important role in their logistics operations, such as transport companies and distribution centres. But also for sites with very stringent surveillance, like sites belonging to the country’s vital infrastructure.

**Advantages of predictive maintenance for your site security**

Making gates and fencing smart has numerous advantages for their maintenance. Firstly, users or the party responsible for maintenance receive a signal when parts are due for replacement, repair or maintenance. Secondly, periodic maintenance can be planned more precisely based on the actual use of the gate. Thirdly, if the sensors detect any faults, it is possible to respond immediately and fast. Faults might involve dirt on the lens of the infrared sensor or a defective safety edge due to a collision.

This all results in better and more effective maintenance. And consequently minimum disruption to the continuity of your business. Smart predictive maintenance also brings peace of mind. You can be assured that your automated access point, whether this is a gate, barrier or turnstile, remains optimally operational, functional and safe for the people and vehicles using it every day.

Predictive maintenance is a long-term investment. A sliding gate often operates on your site for decades. The better you maintain the gate, the longer its lifespan will be and the smaller the risk of faults and dangerous situations.
4. What should you look out for?

Smart monitoring systems offer you the opportunity to apply predictive maintenance for your site security. But what does using smart security solutions involve?

For this, it’s important to know how the system works.

- First your security expert installs hardware on an automated gate, for example. That hardware monitors vital gate parameters, like the gate status, safety function, electricity supply and the frequency of use. Choose a system which allows you to custom define ‘when’ and ‘to whom’ a warning message must be sent for all these parameters. Always decide this in consultation with an expert.

- The hardware must be wirelessly connected to a cloud portal. So that you or your maintenance contractor can read the data and get insight into the status of the gate. Such as the open or closed position of the gate. But also the status of security components like safety edges and photo cells.

- Make sure that the connections between gates, the online portal and the users’ devices are safe. For example, by using SSL coding, VPN tunnelling, secure passwords and firewalls. You can then be confident that it can be used safely and that no misuse can be made of the access to the site.

- It is desirable that the system works with all the different access solutions, such as sliding gates, speed gates, revolving gates, barriers and turnstiles, regardless of the supplier of the solution. Only then can you uniformly monitor the status of the overall security of your site.

- It is good to know that systems for predictive maintenance partly work based on the user data that they collect. If you wish to use predictive maintenance in the future, you would be sensible to install monitoring equipment now. This will collect the data on which the predictive models are based, benefiting you later.
5. Summary

Assets are increasingly equipped with hardware, software, sensors and connectivity. As a result, they are connected with each other and with users. These smart technologies change the way assets are maintained. Instead of reactive and preventive maintenance, it becomes possible to remotely monitor the actual status and condition of assets. Through these extra insights, we can predict the maintenance needs of assets: predictive maintenance.

Predictive maintenance is now also available for solutions for your site security, such as automatic gates. This enables you to prevent problems like disruptions to business continuity and liability for failure to comply with laws and regulations. By using predictive maintenance, gates are less likely to malfunction. Their lifespan is likely to increase, and maintenance costs will be lower. In addition, periodic maintenance can be planned based on actual frequency of use. Any problems which do occur can also be quickly detected and explained.

When looking for a predictive maintenance solution, you need to consider various factors. The flexibility, the security of the connections, the brand independence and integration options with various kinds of security solutions and the period in which you wish to benefit from predictive maintenance.

Predictive maintenance offers you the assurance that your site security is always in the best condition and your business continuity is optimally guaranteed in this respect.
Heras Connect

Heras can manage the maintenance and security of your site for you. And you can start by taking an initial step towards predictive maintenance, with Heras Connect. This system reveals the condition of your gate and sends a message when maintenance is required.

It is sensible to manage your site security well. An effective way to do that is by outsourcing the maintenance and service to your access solutions and fencing to Heras. This guarantees maintenance by professional engineers, extends the life of your security solution and saves costs in the long term.

If you choose service and maintenance by Heras, you can also use Heras Connect, our smart platform with which you put predictive maintenance into practice.

Get in contact: heras.co.uk/advice
Learn more at: heras.co.uk/connect

About Heras
Heras is a leading supplier of total solutions for your site security. We design, manufacture, install and service perimeter protection solutions for customers across business, community and industry sectors. Our perimeter protection solutions are comprised of products and services, including demarcation, entrance control and detection products along with project management, system integration, installation, commissioning service and maintenance services. Our aim is to be recognised as Europe's premium perimeter protection brand, proven by our reliability, commitment and expertise. More information: heras.co.uk