THE AIER MODEL: LEARNING SAFETY FROM THE BEST

IMPLEMENTING THE 4-CORE DISCIPLINES OF HIGH-RELIABILITY ORGANIZATIONS

DEKRA

INTRODUCTION

When it comes to safety in the workplace, every organization is at a different point in their journey. Some are in the infant stages of building their safety programs, some have programs in place, but have plateaued in performance, and others are established safety leaders in their industries. Regardless of where your organization might be in its journey, safety is not static. We have to continuously be learning, analyzing and adapting to our environment.

Organizations that have proven themselves capable of consistently maintaining the safest workplaces in inherently high-risk environments are known as **High-Reliability Organizations (HROs)** and they function under 4 core disciplines. These disciplines can be directly related to safety in any organization. Every safety journey should include, and ideally begin with, learning from organizations who are performing at the highest standards.

DEKRA

WHERE TO START IN SAFETY: COMMUNICATION

BUILDING THE FOUNDATION FOR SAFETY IN YOUR ORGANIZATION

ANTICIPATION

The first core discipline of Highly-Reliable Organizations and the foundation for keeping employees safe while on the job is *Anticipation*. This level of anticipation is established through communication in which risks and hazards can be proactively indentified and analyzed.

Developing effective communication within the workplace is the first step to driving safety and removing hazards before incidents occur. This has to start from the time employees are hired. From the begining, clear and concise expectations and standards have to be established, but communication also has to be allowed and received from employee to employer. The key to building a safety program begins with implementing processes that allow and require communication throughout the organization.

PROACTIVE COMMUNICATION

When it comes to building a strong foundation for safety in the workplace, a healthy relationship must be established between employees and the employer. The best way to positively and effectively create lines of communication is through proactive engagement and activities.

Proactive communication puts employees in the driver's seat and allows them to take ownership and engage in safety by communicating issues or observations openly in an effort to create a safer working environment. This type of communication requires strong levels of trust and accountability from management to front line employees.

TYPES OF PROACTIVE COMMUNICATION

- REPORTING FIRST AID INCIDENTS

- NEAR-MISS REPORTING

- SIF IDENTIFICATION

- BEHAVIOR-BASED SAFETY OBSERVATIONS

In order for an organization to anticipate risk, they must first collect data that indicates problems are imminent. Reporting first aid, SIF indentification and near-miss incidents, are considered "Proactive" because they are either not required by OSHA to be reported or are not serious incidents, but are indicators that a serious injury or incident **could have** happened. Reporting on these incident types gives organizatons anticipatory insight into issues that are occuring and can utilize information from these happenings to prevent more serious injuries from occurring in the future.

FIRST AID REPORTING

Getting employees to report all first aid incidents can be a tough task. If an incident or injury occurs that is not serious enough to require immediate medical attention, often times employees may be hesitant to report. This is where communication from management must support the importance of reporting even the most minor of injuries. The information collected from seemingly small injuries can be used to prevent future and more serious occurrences, but the act of reporting itself, supported by management, creates trust within the organization that safety is truly a priority.

Incentive programs that support low reporting numbers or benefit the employees by not reporting incidents over a period of time can be extremely detrimental to your safety initiatives. These types of programs create an environment of poor communication as well as tension among employees. The priority becomes the incentive and not safety.

NEAR-MISS REPORTING

Tracking near-miss incidents is essential to anticipating and removing potential hazards for future incidents. The idea of reporting something that "almost" happened can be hard to conceptualize, but it comes down to setting the expectation for employees to report situations where they felt unsafe. The true value of near miss reporting comes during the investigation. This is an opportunity for communication between the investigator and the employee to build a relationship of trust on top of removing risk. These touch points between management and employees creates a sense of ownership for employees over their work environment.

FOLLOW UP MUST HAPPEN: If employees are reporting near misses and follow up does not occur, they will fail to see any value and in return stop reporting. Follow up builds the relationship and lines of communication between management and employees.

SIF IDENTIFICATION

SIF potential, or Serious Injury or Fatality potential, is a way to indentify severity potential in near-miss or minor incidents. An incident with SIF potential means, even though it did not happen, serious injury or possibly a fatality could have occured. The importance of identifying SIF incidents is to proactively assess the risk within your work environment in efforts to remove hazards with fatal repercussions. This type of reporting gives much deeper insight into the level of risk exposure and allows organizations to prioritize risk removal accordingly.

ORGANIZATION IS KEY: Leveraging a safety management system that allows you to indicate severity potential, as well as automate follow up protocols, is essential to efficient and effective risk assessment and removal.

BEHAVIOR-BASED SAFETY OBSERVATIONS

Behavior-based safety and peer to peer observations of work is proactive communication in its truest form. When implemented and executed properly, behavior-based safety creates direct lines of communication about safe performance and the work environment before any type of incident ever occurs. Observations can identify unsafe work habits, reinforce healthy work habits and drive safety as your organization's top priority. When employees are willing to communicate with each other on something they've observed as unsafe and willing to accept the feedback from others, your organization is truly building a healthy safety culture.

FEEDBACK: The key to good observations is good feedback. Without feedback, the opportunity for communication is lost.   It's just as important to reinforce healthy behavior as it is to identify unsafe behavior.

Building a safety program is not easy work, but it starts with engaging your employees. Communication and reinforcing healthy activities at the workplace is essential to building the proper environment within every organization. When employees have been engaged to take ownership in the organization's safety programs, the proper data to effectively anticipate risk and remove hazards will result.

DEKRA

INQUIRY: THE IMPORTANCE OF AUDITING IN SAFETY

INSPECT WHAT YOU EXPECT

INQUIRY

The second core discipline is **Inquiry**, the skill of internally examining our own organization and processes in order to remove hazards, barriers, and other issues that create deficiencies in programs and put our employees at risk.

Inquiry within strong safety programs is represented by audits and inspections. The purpose of inquiry by audits is to proactively collect information that will help analyze, identify, and mitigate risk. Implementing this type of process creates a system of checks and balances organizationally, and also helps reinforce expectations. However, the key to success with an auditing program falls in the effective analysis and use of the information collected.

3 PURPOSES OF AUDITING:

- Proactive risk identification

- Foster compliance

- Educate and reinforce expectations to employees

WHAT SHOULD I AUDIT?

When developing an auditing process, the question of what to audit is common. The answer lies in what your expectations are. A good starting place for developing effective audits that yield the biggest impact is designing them to examine policies, procedures, and standards your organization must follow. These are the guidelines for safety within the organization, therefore they should be observed and inspected to ensure compliance. This also reinforces the expectation that these things are a priority to safety in the workplace.

Policies, procedures, and standards are the obvious priorities when it comes to auditing, but organizations can use audits to inquire about organizational programs as well. Any program where expectations are set can be audited, but collecting data on low priority issues can be futile and cause larger priority hazards and barriers to be overlooked. It's important to keep in mind what you want to accomplish with the information before creating an audit to observe.

AUDITING YOUR TRAINING: An innovative practice to ensure your training is being effective is to audit the knowledge of employees via interview after a given set of time following a safety training. This allows the organization to assess the training practices and in turn, reduce the risk of employee injury due to improper training.

TAKE ADVANTAGE OF TECHNOLOGY

Managing audits is a time-consuming and stressful task, and if not managed correctly can distract and diminish the effectiveness of the audit itself. Using tools like the Insight Via™ Safety Management System that streamlines data collection, storage, analysis, and follow-up is critical to running an efficient audit program.

The less time being spent manually pulling the needed information out of audit results, the more time the organization can spend removing risk and fixing barriers. Technology allows for a more organized approach to create max efficiency for risk mitigation. The most important aspect of auditing is following up with issues identified, so leveraging technology to streamline this process creates safer work environments.

How Insight Via can help manage your audits:

- Build, schedule, assign, and track audits and frequencies

- Customize audits specific to locations and operation

- Record all results

- Document and track compliance with established company policies and expectations

- Assign corrective actions based on findings

- Track corrective actions to completion

- Generate, sort, and track reports corporately or location based

- Perform audits from mobile device, including off-line settings

EFFECTIVELY USING DATA

The purpose of auditing is to proactively collect independent data from the organization on the effectiveness and efficiency of its processes and procedures in order to correct issues or reinforce protocols. The key, as stated earlier, to an effective audit program is in the follow-up and proper use of the data collected.

Technology and organization can play a major factor in how follow-up is managed. The more streamlined the process the quicker the organization can make positive changes. Quick follow-up from management communicates the importance of auditing to employees and the priority that safety has in the workplace.

Auditing gives an organization unbiased insight into the health and effectiveness of their safety programs. The opportunity for improvement lies in what is done with information once the data is collected. Not only does it provide the opportunity for hazard removal, but the follow-up process creates an environment of communication within the organization that fosters the priority of safety. It creates an awareness of issues that are occurring and reinforces the expectation of proper procedure and protocol.

AUDITING BY THE NUMBERS
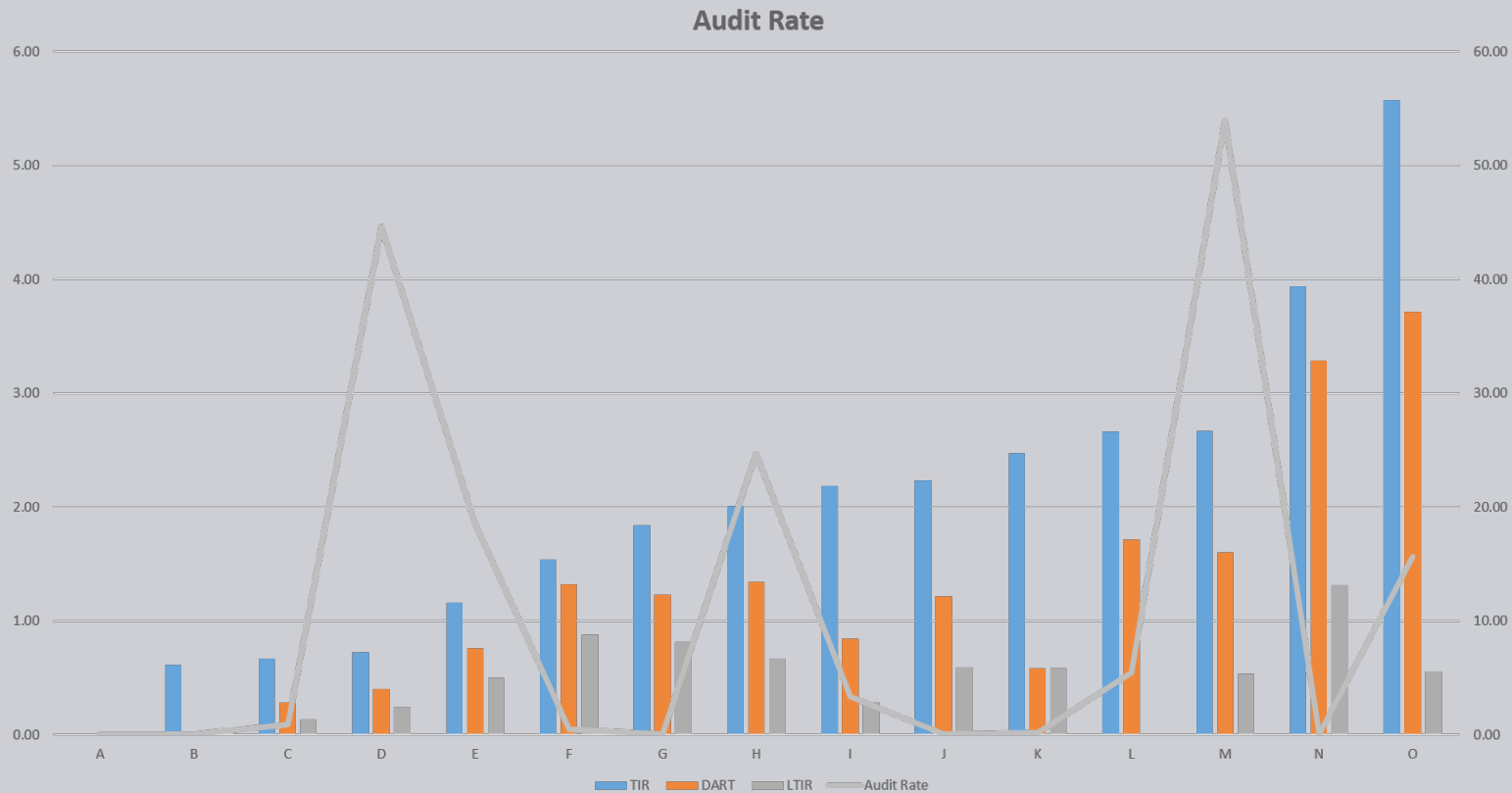
Audit Rate

Quality vs. Quantity: Above is a chart representing the audit rate(number of audits per 100 employees) compared to TIR, DART, and LTIR rates of fifteen companies in the same industry. This supports the hypothesis that effectiveness of audits lies in more than just the number of audits completed. As seen by company M, who completes the highest number of audits, but has the third worst TIR.

*Annual data provided from 15 like companies using the Insight Via SMS auditing application.

AUDITING BY THE NUMBERS

Audit Corrective Action Rate
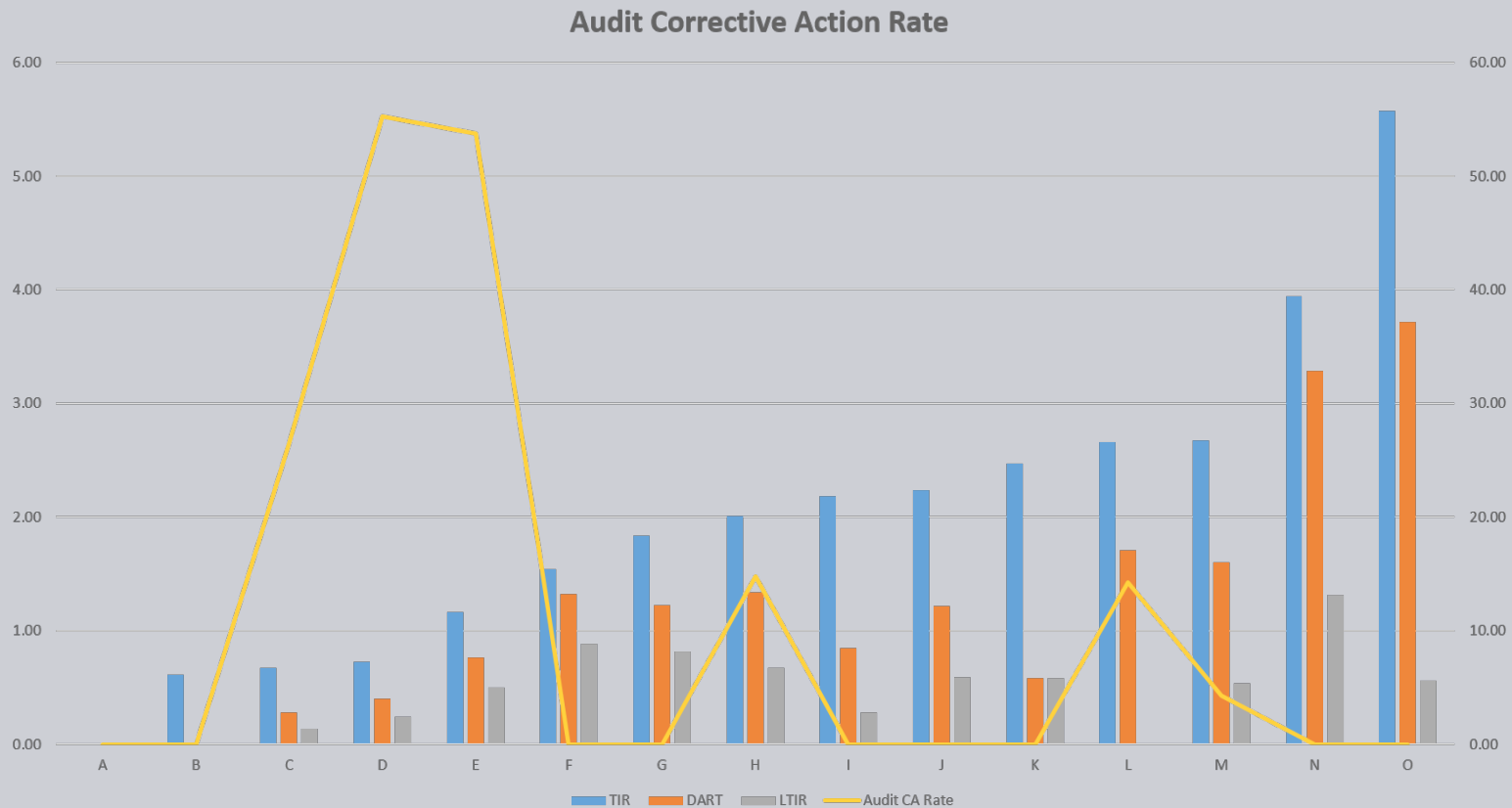
IT'S ALL ABOUT THE FOLLOW-UP: Above is a chart representing the same 15 like companies comparing the closed corrective action rate (number of closed corrective actions per 100 employees) to the TIR, DART, and LTIR rate. This chart supports the idea that following up with and closing corrective actions created from audits can positively affect the number of incidents that are occurring within the organization.

Auditing is one of the most effective tools for proactively creating a safe work environment when executed properly. This element of inquiry allows us to identify, organize, analyze, and remove issues, hazards and barriers from our workplaces before an incident ever occurs. Through this process, we strengthen the communication between management and employees and reinforce the expectations set in policies and standards.

DEKRA

EXECUTION: THE EFFECTS OF TAKING ACTION IN SAFETY

CLOSING CORRECTIVE ACTIONS

EXECUTION

The third core discipline is **Execution**, the practice of acting on the information that has been gathered through the process of inquiry.

Execution is a combination of using the data collected during inquiry and systematic follow up through implemented processes within your safety programs. This core discipline in the AIER model has the most direct impact on the safety of employees. It is the layer in the process where information becomes action and the physical removal of hazards and barriers to safety in the workplace takes place. Execution within a strong safety program materializes through what are known as corrective actions.

CORRECTIVE ACTIONS

During the process of inquiry, information is gathered through several avenues; audits, observations, walkthroughs, incidents, inspections, etc. When a deviation from the norm, a hazard, or barrier to safety is identified, the process should support recording the information and communicating it to the specific individual responsible for fixing or removing the issue as a task. This is considered being assigned a corrective action.

Corrective actions can be one of the most influential element to workplace safety if implemented in a process that supports their importance to the organization. All corrective actions should include the following key components when being created:
- Detailed description of the issue
- Location of the issue
- Assigned to specific individual or group of individuals for follow up/fix
- Set timeframe for completion

PRIORITIZING: A factor that needs to be taken into consideration when assigning and completing corrective actions is prioritization. Corrective actions within an organization can pile up fairly quickly, so having a system to organize and prioritize what actions need to be executed first is key to being the most effective and efficient with hazard removal.

TAKE ADVANTAGE OF TECHNOLOGY

Managing, organizing and tracking corrective actions is essential to the making sure the process of hazard removal is functioning efficiently. Using tools like the **Insight Via™ Safety Management System** that streamlines data collection, storage, analysis, and follow-up is critical to running an efficient safety program and effectively removing barriers to safety.

Being able to automate the process of assigning corrective actions directly to specific individuals with quick access to details creates efficient lines of communication for effective hazard removal. Also having the ability to run real-time reports throughout the entire process can give insight into where efforts can be shifted to create a safer working environment.

How Insight Via can help manage your corrective actions:

- Automated alerts for assigning to individuals
- Record all results
- Assign and close corrective actions via mobile app
- Assign corrective actions by through incident reporting, auditing, and walkthrough applications
- Track corrective actions to completion
- Generate, sort, and track reports corporately or location based

CHANGE THROUGH ACTION

The true purpose behind data collection is to give us insight on how we can better our organization and its processes. The most important factor behind collecting the information is how we **ACT** upon the identified issues and analysis in order to create safer and more efficient workplaces.

The process of remaining organized, creating priorities and providing concrete tasks in order to remove hazards is essential to running a successful safety program. The key is having the right tools and processes in place to guide that action in the most efficient way possible.

Tracking corrective actions from start to finish creates accountability in the process. Not only does this foster a culture of good safety practice within the organization, but establishes priority in hazard and barrier removal. In order to create safer workplaces, we must efficiently act on the knowledge we are gaining through data collection.

In conclusion, corrective actions are a high impact way to immediately remove hazards and barriers that have already been identified. The key to doing this in the most efficient way possible, is using the correct tools and processes to properly organize and prioritize actions while establishing accountability in safety.

DEKRA

SUSTAINING SAFETY:
RESILIENCE

ENSURING LONG TERM SAFETY IN YOUR ORGANIZATION

RESILIENCE

Resilience is the final stage of the AIER model, in that it requires the information and implementation of the first three disciplines to reinforce a strong safety culture. The resilience aspect of the AIER model is represented mainly in part by an organizations internal training programs, but it is truly being built throughout the process of the first three disciplines. Resilience takes place in the communication of safety expectations and goals generated from internal findings.

RESILIENCE

Resilience is the key to sustaining a healthy safety culture in the workplace. Through the process of implementing safety activities through anticipation, inquiry and execution, an organization is building the foundation of systematic communication and expectations. The process is also creating a database of information which can be analyzed and used to improve the safety program. Therefore it is pivotal to have a management system in place to efficiently collect, store and analyze the information. By having a management system to create efficieny, an organization can spend more time and resources on strengthening the programs by identifying weaknesses.

3 LEVELS OF RESILIENCE

- ## TRAINING

- ## COMMUNICATION

- ## SELF-OWNERSHIP

In order for an organization to create a sustainable safety culture that is resilient to change and other variables that may affect workplace safety, they must use the data collected in first three disciplines to continuously improve with emphasis in three key areas: training, communication and self-ownership.

TRAINING

As a new employee in any organization, training is one of the first tasks we complete to be properly prepared for the work at hand. These are the materials, whether they be slide show presentations, videos, or live classes that teach employees the proper ways to complete work in a safe and proper manner. The mistake often made with training is it is viewed from a compliance standpoint, as opposed to an opportunity to teach, learn and instill expectations. A "best practice" in training implementation is including a performance-based competency aspect to guarantee proper instruction and understanding of the training. This not only proves the job can be done properly, but also provides an opportunity for feedback and communication.

HOW DO WE KNOW WE'RE TRAINING EFFECTIVELY?

Let the data tell you. Resilience comes from the ability to adapt to different variables that we encounter and continuously improve the processes. By collecting data through anticipation and inquiry, we have information that we can evaluate to ensure our training procedures are being effective and more importantly, identify which ones are least effective. By "auditing" the training programs themselves, organizations can improve the quality and content of training. Training alone cannot be the single factor to keeping an organization resilient to workplace incidents, but it provides the groundwork for the second level of resilience: communication.

COMMUNICATION

In chapter 1, *Where to Start in Safety: Communication* we discuss the importance of building strong lines of communication up and down the organization. Through open communication with things like proactively reporting safety barriers, BBS observations, tool box talks, etc. A level of trust is built among the organization. In a healthy safety culture, this trust begins being built during the training portion. This is the opportunity to communicate the expectations that safety is a priority and that communication has to be reinforced DAILY through positive interaction. Once the line of trust has been built with open communication, employees will grow in taking ownership of safety.

POSITIVE REINFORCEMENT: A manager's best tool for communicating expectations is positive feedback. The trusting relationship builds much quicker during positive interactions as opposed to only encountering negative confrontations.

SELF-OWNERSHIP

Resilience has reached maturity and a healthy safety culture can be sustained when employees openly take ownership in the safety programs. By implementing the AIER model, you are empowering employees to make a positive impact on the safety of the workplace. Throughout the process you are arming your employees with the tools and knowledge to create a safe workplace and empowering them through strong communication and trust.

SUPPORT FROM THE TOP: This level of ownership by the employee has to be openly supported by management in order to continuously improve and foster the trusting relationship. With the proper training and communication of expectations generated from internal needs established from the process, a healthy safety culture can be sustained.

Listen to the data. The value in recording information across our safety programs lies in how it is used to improve moving forward. Data provides us with the opportunity to pinpoint weaknesses and adjust in a proactive manner. Resiliency comes from the ability to properly adapt. Make sure you have the right tools to help you identify the opportunities.

DEKRA CAN HELP

For more information about the Insight Via™ Safety Management System and how our experts can help implement the 4 core disciplines of safety and strengthen your safety programs, give us a call at **800-888-9596** or visit us at **www.dekra-insight.com**.

▷ DEKRA