



MOBOTIX

CASE STUDY

Network Video: New Insight For The Automotive Industry

Intelligent, Attractive And Likeable

Intelligence, good looks, dedication – these professed brand values of the Czech automotive manufacturer Skoda a.s. have made a major contribution to the fact that this car brand is becoming increasingly popular in

Germany. While “intelligence” reflects the claim of developing products with outstanding functionality as well as customer-oriented detailed solutions at excellent value for the money, “good looks”

describes the pioneering design concept. “Dedication” stands for aspiring towards quality, the passion for the products, the Skoda-typical personal contact to the customer and the family-oriented design of the vehicles – just like the company founders Laurin & Klement envisioned it.

Cars With History

Skoda a.s. is one of the oldest still-producing car manufacturers in the world. This year, the brand looks back on 100 years of innovative car production. Today, Skoda Auto belongs to the Volkswagen Group, employs

some 23,000 people worldwide and is represented in 82 countries around the world. In Germany, the subsidiary Skoda Auto Deutschland GmbH in Weiterstadt is in charge of the marketing success of the entire company.

Increasing Market Share

Thanks to a clear vision, intelligent ideas and superior dedication, the 200 employees at the German Skoda premises have succeeded in continually increasing the importer’s market share. Last year, a total of 96,465 Skodas were licensed for the first time in Germany (market share: approx. 3 %) and sales of about Eur 1,087 million were made. The more than 1,200 partner companies, which are responsible for sales and service, can also be proud of this success rating.

Manufacturer-Support Repairs

To support the service partners and further increase customer satisfaction, Skoda Auto Deutschland has developed a new concept of manufacturer-supported repair service. MOBOTIX cameras play a special role in this concept.



Security Vision Systems





Show-and-tell: live communication between TSC and the competence center via image and sound.

Better Results With Repair Shop Cameras

Hotline Channel And Competence Center

The Skoda Auto Deutschland Technical Service Center (TSC) in Weiterstadt is the heart of the company's manufacturer-supported repair service in Germany. This is where seven diagnosis and repair experts specializing in different component groups work. The concept itself consists of several modules, which include the "hotline channel" and eleven so-called competence centers throughout Germany. These competence centers are selected Skoda partners, whose premises the import company has rented as the repair shops.

"However, the TSC only comes into play when the service partner on location needs help in solving a problem," explained Dirk Weber, responsible for technical customer care concepts at Skoda. As a rule, the service partner resorts to the hotline channel, i.e. via the Skoda Internet portal, to contact the TSC and to describe the problem. "Our people usually find the answer to the problem within just a couple of hours," Dirk Weber continued. This transforms an inquiry into a closed case, which is entered into the database with detailed documentation, to which the service partners have access.

If the problem cannot be solved in this way, the vehicle is taken to the nearest competence center, where the experienced experts work. "That is much quicker and much less expensive than taking the vehicle to Weiterstadt," explained Dirk Weber.

Repair Shop Web Cams

"We also find it important for the employees in the TSC to be able to get a visual impression of the problem," said Günter Ziegler, head of Technical Service at Skoda. "And since business trips are always quite costly, we wanted the competence centers to be equipped with Web cams." This enables the experts in Weiterstadt to "view" live the repairs done at the competence centers and to provide tips. It is also possible to provide a comparable vehicle and to demonstrate a sample repair – via a camera. The employees in the competence centers and in the TSC communicate with each other by image and sound and follow the moves via PC monitor or screen.

Tough Requirements

"We looked at a number of different camera solutions before we put this idea into actual practice," said Günter



Visual insight into repair services using MOBOTIX cameras



Ziegler. "And we had some pretty tough requirements to meet because we wanted the cameras to be easy to install and easy to use." At the same time, they had to accommodate the rough, oily environment of an auto repair shop. And, particularly for the diagnosis, very sharp images were required with a high resolution. "Keeping the motto of 'think big – start small' in mind, we set out to look for a camera, fully aware that no one camera would be able to fulfill all these requirements," stated Günter Ziegler.

All Expectations Exceeded

"ADS Networks GmbH, our network service provider, finally pointed us in the direction of MOBOTIX cameras," the head of Technical Services remembered. The MOBOTIX partner (www.ads.de) is located in Bad Homburg in Hessen and specializes in data networks, telecommunications and security. "We tested the cameras and found that they exceeded our expectations by far and came amazingly close to our 'think-big ideal'," continued Günter Ziegler.

"The camera is extremely robust and easy to use," explained Dirk Weber. "All we had to do was set it up in the repair shop, aim it and plug it into the ISDN outlet – done. Since the software is already integrated, no other installation was required. And we don't need an additional computer in the repair shop."

"With 1.3 million pixels, the camera gives us the high resolution we need," continued Stefan Junker from ADS Networks. "A wide-angle lens with a focal range starting from 0.3 m is useful for more detailed diagnoses. In addition, all such necessary functions as video management, speaker and microphone are integrated directly in the camera. The camera is easy to use with the standard Web browser of a PC, and the images can be viewed on any computer monitor."

Easy Decision

"Naturally, this was not a difficult decision to make," said Günter Ziegler. "Particularly because the price was also unbeatable. And ADS Networks was able to install the system quickly and very efficiently." The company is also very pleased with the after-sales service. "The customer care is excellent." Skoda Auto Deutschland is currently using the MOBOTIX cameras in the TSC and in six competence centers. They plan to increase the number of cameras to 20 by the end of 2005.



MOBOTIX Technology – Cost Savings in Every Aspect

High Resolution For Sharp Images

All MOBOTIX cameras are high-resolution cameras with integrated image storage and 960 lines (1280x960 pixels) resolution. The **stored image** thus contains 12 time more detail for creating zoomed sections of the image than regular cameras with 240 or 288 lines (CIF, 2CIF). This is why one single MOBOTIX camera with a 90° wide-angle lens is sufficient to monitor an entire room and yet provides more detailed images than traditional technology. The MOBOTIX Day/Night cameras feature zero maintenance with one color and one B/W image sensor.

Intelligent Storage Technology Uses Fewer DVRs

The new, decentralized storage technology pioneered by MOBOTIX reduces the number of recorders that store the smooth high-resolution video by up to 90%. 40 cameras store smooth video streams including audio on a single PC, each managing its own ring buffer and database. Intelligent search features provide swift access to the stored events. There is no software required for storing and managing video, eliminating license fees and the need for expensive software. Event-controlled recording and automatic increase of frame rates upon detecting movements drastically reduce the storage requirements.

Low Power Consumption Means Enormous Savings

Since MOBOTIX cameras are anti-fogging, do not require heating and only use 3 Watts each, power can be injected into the network cabling using standard PoE products, year round. This drastically reduces the amount of cables and the power requirements for backup power.

Integrated Telephone Features

All MOBOTIX IT and Secure models feature bidirectional audio support. The built-in microphone and loudspeaker are used for live audio transmissions and storage purposes. Voice messages with PIN confirmation and call forwarding via IP or ISDN telephony have been integrated as well. Using the switch outputs, you can switch lights or open doors from the phone or from the computer.

Robust and Well-Protected

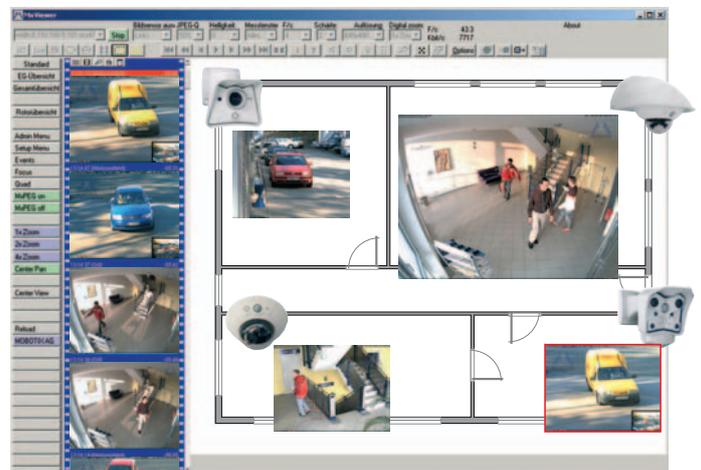
The fiberglass-reinforced housing is shockproof and the SecureFlex mount protects the network cabling as it completely conceals the cables (M12/D12 models). Weatherproof (IP65) from -30° to +60°C (-22° to +140°F).

High Return on Investment

Since the number of cameras and storage capacity are freely scalable and any kind of data connection can be used (ISDN, DSL, Ethernet, Wireless, GSM, copper, optical), MOBOTIX means high ROI, even years after installing.

State-Of-The-Art Technology

Developed and manufactured in Kaiserslautern, Germany, MOBOTIX produces image-storing weatherproof high-resolution cameras, including lens and wall/ceiling mount for as little as 598 EUR excl. VAT. To date, more than 100,000 cameras have been sold worldwide.



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