

## **Steam Boiler Monitoring Associations**

The predecessor of the German TÜV (Technischer Überwachungs Verein) was the DÜV, the steam boiler monitoring and auditing association. In 1871, in the high phase of the era of industrialization, the owners of steam engines used in factories founded independent regional monitoring organizations. These were organized as clubs, whose task was to avoid accidents caused by exploding steam boilers. Previously, there had been a large number of such explosions, with some devastating consequences. Steam technology revolutionized entire industrial sectors, but the safety of the new technology was not far off. Again and again severe misfortunes arose, because the unskilled technique failed. The industrial workers and the factory owners were equally affected - state supervision was inadequate. Voluntary mergers were made by "steam boilers monitoring and auditing associations" (DÜV). These privately organized clubs took over state examinations. From 1900, the inspectors of the supervisory associations also took over the inspections of motor vehicles.

Well-known is the TÜV in Germany for the technical inspection of cars - it began exactly 150 years ago with the control of steam boilers. And the industrial business is still today its largest work area since it has begun. Today, from the organization, which 150 years ago should tame the dangers of industrialization, the general technical TÜV became now a global group.

It was the doctrine of a serious industrial accident: one year after an explosion in a Mannheim brewery with one dead, 22 entrepreneurs founded the first local organization for steam boiler control in the industrial city of Baden-Württemberg. It was the birthdays of the technical monitoring associations - in short TÜV. Today, they have turned into globally operating security, testing and consulting companies. The impetus for the TÜV companies was the danger of the technical progress of the industrial revolution which, in the form of steam engines, was entering more and more German factories. The associated steam boilers were under high pressure and could burst in case of poor maintenance or incorrect operation.

Steam boiler accidents were frequent and the call for better safety precautions gradually became louder. The 22 Mannheimer factory owners took account of this with the founding of their "Society for the Supervision and Insurance of Steam Boilers", which was recently on its 150th birthday. They wanted to organize the safety checks for the hazardous installations in self-government.

In the following years, further steam boiler monitoring associations were added in the near future - around 1869 in Hamburg, 1871 in Magdeburg or 1872 for the circles Elberfeld and Barmen in the Bergisches Land. The basic idea was not necessarily new either. For example, in the mining industry, associations had already been researching safety issues for more than 100 years.

Even with the TÜVs in their current form, which on behalf of the state partly in a quasi-official mission examine the technical safety of plants, the societies had not much to do. Initially, they were voluntary self-help organizations of the economy offering services for members.

## **Change to globally operating holding companies**

It was only by the turn of the century that the clubs officially took over the tasks of the state trade supervision authorities and replaced their controls. At the same time, they also developed, due to their expertise, contact persons for further innovations, which required safety reasons for technical acceptance.

In this way, steam boilers gradually became more and more active, for example in the examination of electrical installations or elevators. In the beginning of the twentieth century, the advent of the automobile was one of the key features of the TÜV's position: the state now also passed the

inspection of vehicles and drivers in road traffic. The renaming into Technical Supervisory Boards (**TÜV**) and the national unification of the control system took place in 1938 during the Nazi period.

After the war, the TÜVs succeeded in most cases to regain their position as audit firms on the state order. The associations, which had meanwhile become larger TÜV groups, took over as a main pillar of their work later the obligatory main examination for cars, which is colloquially referred to as "TÜV". Added to this were monitoring tasks in all possible new areas from nuclear power plants to the booming market for consumer electronics.

At the same time, they were increasingly active as free companies and gradually became globally active holding companies. Today, TÜV Nord, TÜV Süd, and TÜV Rheinland, there are three large test groups, each with thousands of employees. Added to this are the smaller TÜV Saarland and TÜV Thüringen.

The range of services offered by the company networks ranges from the execution of the official MOT examinations as well as the medical-psychological examination (MPU) for conspicuous license owners through the creation of property valuations up to the planning of whole mining projects. They analyze the hygienic-relevant processes in hospitals and airline caterers, take over the quality control of solar modules or certify IT security products.