Fire protection for rolling stock

Dear Ladies and Gentlemen,

over the past few weeks, it initially seemed that we were well on the way to getting the invisible virus under control and reducing its spread to a controlled level. However, trivializer and corona hotspots in slaughterhouses, for example, show us just how thin the thread is on which the much-needed social, societal and economic loosening up that we are so eagerly awaiting and whose dependence we are becoming increasingly aware of every day.

The pandemic led to a dramatic slump in the number of passengers using public transport: on land, in the air and by rail. Cancelled timetables and empty buses and trains were the result. Even in the "new normality", as we call it, the sector is recovering only slowly, too slowly for many operators.

The industry still believes that the effects can be survived, that it will recover in the medium term and that the positive development of the past few years can then be continued. However, what the future will look like remains to be seen.

Stay optimistic, stay healthy and go by train!

With kind regards

Markus Kock, General Manager WAGNER Rail GmbH

DORTMUND'S LOCAL TRANSPORT SYSTEM MODERNISES TRAM FLEET FOR 200 MILLION EUROS

"Vamos" trains made by manufacturer Heiterblick receive fire protection from WAGNER Rail

130 million passengers use the tram system in Dortmund every year. Tendency without Corona: rising. In the heavily populated and congested Ruhr area, buses and trams are a popular means of transport. However, the railways are getting on a bit, stricter regulations on accessibility, fire protection and safety have to be taken into account. Now the operator, Dortmunder Stadtwerke AG, DSW21 for short, is investing almost 200 million Euros in the acquisition and modernisation of new tram vehicles. The city of Dortmund is thus setting the course for the implementation of the nationwide vision "Verkehrswende 2030" with the aim of saving a large proportion of the annual CO2 emissions in road traffic. An interesting fact on the periphery: Since 2007, the entire tram fleet of DSW21 has been running on 100% green electricity. So that passengers with the new trams are not only environmentally friendly, comfortable and fast on the move, but also safe, fire protection from WAGNER Rail was chosen.

The new light rail vehicles come from the Leipzig manufacturer Heiterblick, which specialises in the construction, modernisation and restoration of special rail vehicles. In Dortmund 24 new high-floor light rail vehicles of the type "Vamos" will be used. In addition, the existing fleet of 64 B80C high-floor light rail vehicles will be modernised. All the trains are standard gauge light rail vehicles in bidirectional operation, covering a network of eight lines with a total of 160 km of track. The Düsseldorf-based company KIEPE Elektric is responsible for the electrics and is also responsible for the installation of the fire protection technology from WAGNER Rail.

The new light rail vehicles consist of two and three-section high-floor articulated railcars. Their engine output is 2 x 235 kW with a maximum speed of 80 km/h. The car sections have space for up to 240 passengers (160 standing, 80 seats). To ensure a high level of safety and to detect possible fires at a very early stage, Heiterblick relies on TITANUS® aspirating smoke detectors in both the new "Vamos" and the old B80C trains.

KIEPE Elektric was given the task of finding a fire protection solution for the vehicle equipment that would be suitable for areas at high risk of vandalism. The TITANUS® aspirating smoke detectors from WAGNER Rail are particularly suitable for this purpose, as the system's aspiration points can be installed in the ceiling and are therefore barely visible to passengers. Thus the costs for the later operator due to damage caused by vandalism tend towards almost zero with this system. Added to this are the low maintenance costs. Strong arguments that convinced KIEPE.

The solution used by WAGNER Rail thus consists of TITANUS *MICRO·SENS*® detectors that are delivered to KIEPE pre-mounted on a mounting plate. One aspirating smoke detector is used per wagon in the stand-alone principle. A quick evacuation of the passengers in case of an emergency and at the same time safety from false alarms is the operator's highest protection goal. This is achieved by WAGNER's solution.

WAGNER RAIL SUPPLIES POLAND'S TRAIN MANUFACTURER FPS WITH FIRE PROTECTION TECHNOLOGY APPLICATION IN VARIOUS TRAIN PROJECTS

Application in various train projects

The factory H. Cegielski- Fabryka Pojazdów Szynowych Sp. z o.o. (FPS) has been producing rail vehicles since the 1920s, initially only for freight transport, mainly coal, later also for passenger transport. Today, the manufacturer of rolling stock supplies, among others, the Warsaw-based company PKP Intercity with new rolling stock. In terms of fire protection, they are supported by WAGNER Rail. The challenge: The completion of the installation of fire protection technology and commissioning is to take place in several projects in just the next few months. A tight schedule.

WAGNER Rail is currently supplying fire protection technology in various types of wagons and trains and a locomotive from FPS. The first project involves wagon types intended for passenger transport and comprises a total order of 99 vehicles. These are divided into eight different types: a restaurant type, two different military and five different passenger car types. In terms of fire protection, all eight will be equipped with the same solution: fire detection by means of point detectors which will be connected to a Rail 256 fire alarm control panel. This allows suitable countermeasures to be initiated as early as possible in an emergency. The end customer for the restaurant and passenger coaches is the Warsaw-based train operator PKP Intercity, which plans to use the coaches on routes in Poland and Europe, probably starting this year. The military coaches are for the armed forces of the Republic of Poland.

The second project comprises 13 diesel locomotives in which WAGNER Rail is installing not only point detectors but also an aerosol extinguishing system. The latter is coupled to linear heat detectors in addition to the point detectors. Both the fire alarm system and the extinguishing system are controlled via the Rail 256 fire alarm control panel.

The third project is a prototype project with a two-part and a three-part diesel-electric train. With its environmentally friendly drive technology, FPS is showing the way forward in the Polish market. As a fire protection solution WAGNER Rail also uses point detectors and an aerosol extinguishing system with linear heat detectors. A connection to a Rail 256 fire alarm control panel is also part of the solution. FPS would like to introduce the new hybrid train type from the end of the year on.

Point-type detectors and a fire control panel Rail 256 protect coaches by manufacturer FPS.

THE AUSTRIAN WESTBAHN REPLACES ITS INTERCITY TRAIN FLEET WITH 15 NEW KISS DOUBLE-DECKER TRAINS

Multisensor fire detectors form the basis of the fire protection solution

The Austrian WESTbahn sells its only a few years old intercity fleet of the Salzburg – Vienna line to Deutsche Bahn and invests in 15 new electric KISS double-decker trains from the manufacturer Stadler. WAGNER Rail supplies the fire protection solution adapted to the high standards of the Stadler double-decker. This is based on multisensor fire detectors.

The Vienna – Salzburg route is regarded as one of the most popular routes in Austria: The private railway company focuses on punctuality and comfort when travelling and the passengers thank it with frequent use, so that the WESTbahn now connects the cities of Vienna, St. Pölten, Linz and Salzburg every half hour. The new double-decker trains from Stadler should provide the usual comfort from 2021 on, but above all an optimised maintenance solution and lower running costs – while maintaining the same high availability.

Several areas had to be considered for the fire protection solution: Passenger areas, sanitary rooms and technical areas. Since the protection areas place different demands on the solution, different fire detection systems were used: The passenger areas and the technical areas are equipped with multi-sensor fire detectors to detect smoke. The sanitary rooms are also monitored for smoke and temperature changes with multisensor fire detectors. Linear heat detectors are used in the traction converter area.

Starting next year, the new KISS trains are to travel back and forth between the Austrian capital and Mozart's birthplace. With the usual travel comfort and even more safety – for passengers and the trains themselves.