UITP Global Public Transport Summit 2017: Voith presents efficient and sustainable solutions for urban transportation

Voith's solutions facilitate more attractive urban public transportation in metropolitan areas
Voith presents the next generation of the DIWA automatic transmission
Component exchange pools make maintenance and repair possible with minimum downtimes

Heidenheim/Montreal: Urban mobility and innovative transportation systems are the focus of this year's UITP Global Public Transport Summit in Montreal. At the conference, Voith will be presenting solutions that increase vehicle efficiency and make public urban transportation systems more attractive. From the rails to the road to water, the drive specialist is involved in virtually every form of public urban transportation. On site, visitors to Booth 2L122 can take a closer look at models of the next generation of the DIWA automatic transmission and the Tomlinson coupler.

More than half the world's population today lives in metropolitan areas. This creates enormous amounts of traffic in a city. In megacities such as Tokyo, São Paulo or New York, gridlock is increasingly becoming a threat – with some serious consequences for the economy even today. To boost their attractiveness and quality of life, cities are planning increased use of auto-free zones and high road tolls, in Oslo for example. However, this approach can only be implemented on a sustainable basis if the public urban transportation system is expanded at the same time.

Besides subways and metros, operators are increasingly making use of high-performance Bus Rapid Transit systems (BRT). Express bus lines, due to their marginal effects on city infrastructure and the relative ease and
cost-effectiveness of implementing them, represent an effective addition to the rail system. The concepts are generally based on a combination of dedicated lanes, short headway, special bus stops and buses being given right of way at intersections.

**The future of urban transportation with the DIWA automatic transmission**

For the first time in North America, Voith will be showing at the conference its study on the next generation of the DIWA automatic transmission for buses. The concept is still based on the proven differential converter principle but is supplemented with a central recovery unit that requires virtually no extra installation space. The 48-volt electric motor is integrated around the vibration damper. Consequently, no extra systems need be integrated into the driveline for partial hybridization.

With the central recovery unit, Voith is redefining the role of the transmission in the bus as a total system. In the future, the DIWA will not just control and transmit input torque. It will also support the engine during demanding route sections and supply additional components with power via the vehicle electrical system. Since the 48-volt technology is not high voltage, workshop personnel can still maintain the entire transmission without having to undergo extra training in electrical engineering.

**The Tomlinson coupler: Automatic coupling in North America**

As a system manufacturer, Voith offers solutions covering the entire driveline of rail vehicles. Operators benefit from additional reliability and efficiency as the components are optimally matched. Voith is exhibiting its Tomlinson couplers for railcars and subways in the North American market. This coupler is used, for example, on the Toronto Rocket, the current vehicle generation in the subway network serving the city of Toronto, Canada, and its population of more than 2.6 million.

**Service: Minimum downtime using exchange pools**

With its service network, Voith supports operators of buses and rail vehicles in reducing their downtimes even more during maintenance and repair. Using regional exchange pools, old units can be replaced simply and even at short notice with counterparts that have undergone general overhauling — anywhere in the world and often within one day. These "Reman" units are always up to the current state of engineering and pass the same quality test as a newly manufactured alternative.
Voith then completely overhauls the used components. Many components can be reused in this process following cleaning and intensive testing. In this way, operators don't just save money, they also contribute to protecting the environment.

**Focus session with Voith**

Operators today need to monitor performance data on a daily basis to be able to operate their road and rail vehicles efficiently and sustainably. They can prevent technical outages and optimize processes. This is exactly the topic that Dr. Henrik C. Bülaü, Vice President Product Management DIWA and Damper, will discuss in a focus session at the UITP.

As a long-time expert in drivelines, he will also offer insight into the world of innovative asset life-cycle management solutions for rail vehicles. Voith systems, such as OPRA, allow operators to retrieve economic and technical data, updated on a daily basis, and to follow trends. Benefiting from this transparency, operators can save money and optimize the availability of their vehicles.

You can find everything about the Voith presentation at the UITP Global Public Transport Summit 2017 at: [https://voith.com/uitp-en](https://voith.com/uitp-en)

Voith Turbo, a Group Division of Voith GmbH, is the specialist for intelligent drive solutions, systems and trendsetting services. Customers from numerous industries such as oil and gas, energy, mining and mechanical engineering, ship technology, rail and commercial vehicles rely on advanced technologies and the comprehensive competence of Voith Turbo.

Voith technologies have been inspiring clients, business partners and employees worldwide for 150 years. Founded in 1867, Voith employs about 19,000 people, generates Euro 4.3 billion in sales, operates in over 60 countries around the world and is today one of the largest family-owned companies in Europe. As a technology leader, Voith sets the standards in the markets of energy, oil & gas, paper, raw materials, and transportation & automotive.
Image: Voith Tomlinson Coupler

Image: Minimum downtime thanks to Voith Services.