

We pioneer motion

Schaeffler at Future Mobility Asia 2022 Exhibits Overview

Schaeffler is showcasing a wide range of products in e-mobility, bearings, transmission & engine systems and chassis at the Future Mobility Asia 2022 in Bangkok, Thailand (20-22 July, 2022). System solutions that contribute to CO2 reduction, downsizing, weight reduction, and electrification.

As a leading global supplier to the automotive and industrial sectors, the Schaeffler Group has been driving forward groundbreaking inventions and developments in the fields of motion and mobility for over 75 years.

Hybrid



Planetary Gear Set
Cost effective solution for EV and HEV drivetrains, using state of the art processes and Schaeffler core technology. Developed with a Schaeffler optimized design – equal sheet metal parts and new shaft welding connection.

Smart Hydraulics Actuation System
For 1-speed e-Axles with additional functions and EVTs. The system allows easy integration both in physical and in system aspects. The combination of multiple functions significantly reduces actuation system complexity.



Pendulum Rocker Damper
Provides flexible torsional characteristics for hybrid powertrains. Optimized performance in noise, vibration, and harshness in all driving conditions based on flexible, non-linear damper characteristics.

Chassis



Trifinity Wheel Bearing
The TriFinity triple-row bearing offers greater rigidity and a longer service life than standard bearings with two ball bearing rows. The face spline design opens the way to significant reductions in bearing diameter.

ICE

Smart Overrun System

The electromechanical valve train system combines the eRocker with the electric cam phaser. The interplay of these components leads to an optimized start-stop system that is easier to use, a reduced workload for the catalytic converter and less drag torque.



E-Mobility



3-in-1 E-Axle
The 3-in-1 electric axle combines the electric motor, transmission, and power electronics in one system, blending performance electronics into the overall system. Signal processing and control of the drive is performed by proprietary Schaeffler software. Featuring a transmission with excellent torque density, the performance electric axle from Schaeffler makes a convincing case and is characterized, above all, by its compact dimensions, high performance density, high system efficiency, and excellent acoustic behavior.



Thermal Management Module for BEV
In order to achieve a high level of efficiency, the Schaeffler thermal management system continuously regulates the temperature – particularly of the battery but also of the electric motor, and the power electronics – which is adapted to the ambient and operating conditions. The system also controls the temperature in the interior of the vehicle and simultaneously ensures the best possible vehicle range



E-Motor
The Electric Motor for electric axles in BEV applications offers high power & torque density due to highly sophisticated heat dissipation characteristics of the winding. The innovative harmonic design with wave winding technology sets new milestone in the field of power density and efficiency: reduced process complexity and costs due to wave winding, shorter winding heads compared to hairpin winding, and optimal heat dissipation of stator winding.



High Speed Cylindrical Roller Bearing
A robust, quiet and strong cylindrical roller bearing for eApplications. High load capacity and robustness against overload due to line contact and therefore applicable to parking lock loads. The bearing features an optimized guided cage design which is suitable for high speeds. The optimized inner bearing geometry keeps noise low.