

Press release

BENTELER gets exhaust systems ready for the EU-7 standard

- Almost 100% pollutant removal during cold starts thanks to an electrically heated catalytic converter
- BENTELER offers car manufacturers a solution in compliance with the strict pollutant requirements of the EU-7 standard
- Electrically heated catalytic converters can be used in all cars with internal combustion engines
- Also available as an optimally matched system with a control unit from electronics specialist Silver Atena

Munich/Salzburg/Paderborn, July 7, 2020. The European Union vehicle emission requirements are becoming increasingly stringent. The EU-7 standard, which will come into force at the latest in 2025, will require car manufacturers to make further significant reductions in pollutants. With electrically heated catalysts from BENTELER, car manufacturers can benefit from an almost complete reduction of pollutant emissions during a cold start.

The electrically heated catalyst ensures that the exhaust system quickly reaches its optimum operating temperature during a cold start. As a result, almost 100% of pollutants are removed from the exhaust gases. This plays an important role in the context of the pollutant tests, especially given future driving cycles where greater weight will be applied to the cold start phase. BENTELER's electrically heated catalytic converter consists of a stacked metal structure welded into the exhaust system between the turbocharger and the conventional catalytic converter. It is suitable for all cars with internal combustion engines – regardless of whether they are petrol, diesel or hybrid.

Manufacturing electrically heated catalysts calls for expertise in forming and high-temperature brazing – technologies that BENTELER counts among its core competencies. As an experienced partner to the automotive industry, the metal processing specialist can produce the product in large numbers – worldwide. "With our electrically heated catalysts we're paving the way for car manufacturers in the direction of low emission vehicles," explains Dr. Rainer Lübbers, Executive Vice President of BENTELER's Business Unit Engine and Exhaust Systems. "As a result, we're making a further contribution to sustainable mobility."

Cooperation with Silver Atena for a matched system solution

In cooperation with electronics specialist Silver Atena, BENTELER will also offer a coordinated system with a control unit. This regulates, amongst other things, the temperature in the catalytic converter. Car manufacturers benefit from the cooperation. The optimal interaction of the electrically heated catalyst from BENTELER and control units from Silver Atena means fewer interfaces – customers get pre-validated solutions that can be quickly adapted to their respective needs. The system from BENTELER and Silver Atena is modular and doesn't depend on a special system environment such as a specific installation space, a predefined catalyst type or higher-level control units.

"The cooperation with BENTELER shows once again how customers benefit from cooperations in the automotive industry," says Josef Mitterhuber, Managing Director of Silver Atena: "Together we offer car manufacturers a solution that means they don't need to worry about the EU-7 standard."

Background information:

EU-7 standard tightens CO₂ limits and reduces permissible exhaust emissions

Although the number of electric vehicles in Europe is increasing, the majority of cars still use combustion engine technology. To enable more sustainable mobility in this area, BENTELER also develops



environmentally friendly and future-proof products that already comply with the emission levels the EU intends to make mandatory in a few years.

Exact specifications from the EU-7 standard have not yet been established. Nevertheless, car manufacturers will once again be faced with the challenge of reducing exhaust pollutants by half. The new EU-7 standard will also require the car's exhaust system to perform a high level of pollutant cleaning immediately after the engine is started. According to current information, the EU-7 standard will be introduced by 2025 at the latest. Given the multi-year development time required for vehicles, this is already impacting automobile manufacturers.

Photos and captions:

BENTELER_catalytic_converter.jpg: The electrically heated catalytic converter from BENTELER (shown in the picture) consists of a stacked metal structure. It is welded into the exhaust system between the turbocharger and the conventional catalytic converter.

BENTELER_metal_processing_specialist.jpg: As a global metal processing specialist BENTELER offers its customers first-class engineering competence, innovative material and process technologies as well as expertise in metal forming and processing. (symbolic picture: production at a BENTELER Automotive plant)

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About BENTELER

BENTELER is a global, family-owned company serving customers in automotive technology, the energy sector and mechanical engineering. As innovative partner, we design, produce and distribute safety-relevant products, systems and services. Under the management of the strategic holding BENTELER International AG, headquartered in Salzburg, Austria, the Group is organized into the Divisions BENTELER Automotive and BENTELER Steel/Tube. Our around 30,000 employees at 100 locations in 28 countries offer first-class manufacturing and distribution competence – all dedicated to delivering a first-class service wherever our customers need us.

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About BENTELER Automotive

BENTELER Automotive is the development partner for the world's leading automobile manufacturers. With around 26,000 employees and more than 70 plants in about 25 countries we develop tailored solutions for our customers. Our products include components and modules in the areas of chassis, body, engine and exhaust systems, as well as solutions for electric vehicles. www.benteler-automotive.com/

About Silver Atena

Silver Atena offers comprehensive solutions as development partner and supplier of prototypes and small series in the field of safetyrelevant systems and power electronics. As a leading independent supplier in the automotive, aerospace, renewable energy and industrial sectors, Silver Atena offers solutions and variable business models to generate maximum benefit for its customers. www.silver-atena.com

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