

SANDEN and EXOES to develop Expanders for waste heat recovery in trucks.

SANDEN and EXOES announce their cooperation in the development of a scroll expander for Waste Heat Recovery (WHR) in automotive applications using Organic Rankine Cycles (ORC).

Waste heat recovery is one of the key solutions to reduce CO₂ emissions and comply with the coming worldwide vehicles emissions regulations.

ORC promises to be one of the most effective solutions in performance for fuel saving. However, the challenging difficulty to introduce this solution is the lack of existing components and mainly relating to the Expander. The Expander should be highly reliable and in the same time highly efficient and cost optimized to achieve a very short payback period.

Both companies decided to join their forces in order to make the expander technology compliant with OEMs constraints and available in a short term period.

Maria Wuensch-Guaraldi, COO at SANDEN INTERNATIONAL EUROPE Ltd:

“This project represents the policy of SANDEN to contribute to the health of our planet by bringing new technology to the market with our own large engineering expertise.

SANDEN has been in the Automotive air conditioning compressor industry for a long time. Especially for the scroll compressor technology, it was commercialized in 1981 and more than 50 million units have been delivered all over the world.

Powered by its engineering expertise and industrial experience, SANDEN started scroll expanders for low temperature heat source, and for the latest further needs from truck OEM customers, SANDEN believes the cooperation with EXOES can accelerate and strengthen the development of high temperature ORC expanders.

I am proud of this grateful cooperation with EXOES and believe it can serve to provide the most superior products in the market and contribute to our ultimate policy.”

Arnaud Desrentes, C.E.O at EXOES:

“This cooperation provides as much synergies as possible. SANDEN is indeed an important tier one in compressors with a long manufacturing and sale experience and EXOES brings its ORC technology and

know-how to create together a competitive advantage in the market. This expander is designed to minimize the constraint on the complete system and could be a game changer in ORCs for trucks.

Internal combustion engines will last for decades in long haul trucks, providing a strong market opportunity to introduce this technology in the upcoming years. CO₂ regulations will accelerate the adoption of ORC systems. EXOES is very proud to be part of these changes with its partner SANDEN.”

About SANDEN

World-class expert in heating and cooling technologies, SANDEN is a 75-year-old company and one of the leaders of the Automotive air conditioning suppliers.

The main activities, where SANDEN has a leading position, are automotive air conditioning and commercial refrigeration. In particular, the compressors, including piston and scroll types which continue to show high reliability and increasing performances in the automotive industry since more than 40 years.

In 2017, the company counted 17,000 associates, and 54 locations in 23 countries.

www.sanden-europe.com

About EXOES

EXOES Engineering has key competences and technologies in thermal management and fluid transfers dedicated to 2 markets: thermal engine emissions reduction and zero emission propulsion and storage. Based in Bordeaux, France, its engineers and scientists have developed unique competences for OEM and top suppliers in product developments, testing activities and engineering services.

www.exoes.com/en