

---

**Press release**

Copenhagen, 02.02.2022

---

**MAN Energy Solutions SE**  
Tegholmegade 41,  
2450 Copenhagen SV,  
Denmark[www.man-es.com](http://www.man-es.com)

---

**Group Communications**  
Nils Søholt  
P +45 33 85 26 69  
[Nils.Soholt@man-es.com](mailto:Nils.Soholt@man-es.com)

# Hyundai Signs Landmark Turbocharger Agreement for TCT Series

## HHI-EMD and MAN Energy Solutions sign first-ever, 10-year licence agreement for TCT turbocharger series for two-stroke engines

At a semi-digital ceremony in Busan, South Korea in late-December 2021, MAN Energy Solutions signed a licence agreement with Hyundai Heavy Industries (HHI-EMD) for MAN's new TCT axial-turbocharger series. Due to run for ten years, this is the first turbocharger licence agreement MAN Energy Solutions has ever signed with HHI-EMD.

Generally acknowledged as the largest, marine two-stroke engine builder in the world, HHI-EMD has been a low-speed licensee of MAN Energy Solutions for decades. MAN Energy Solutions reports that the turbocharger licence agreement was finalised after intense and comprehensive negotiations.

C.Y. Lyu, Executive Vice President, HHI-EMD, said: "In adding MAN Energy Solutions' latest axial-turbocharger product for two-stroke engines to our portfolio, this licence agreement starts a new chapter in the cooperation between our two companies. We believe that it will strengthen our market position significantly and enable us to fulfill requests from shipowners worldwide."

Dr. Daniel Struckmeier, Head of Sales & Licence Turbochargers, MAN Energy Solutions, said: "I would like to thank Hyundai for their part in this extraordinary achievement. We are convinced that our new TCT series brings the best, overall turbocharger attributes to the market and I am certain that HHI-EMD will reap the full benefit from this licence in the future."

Struckmeier continued: "This licence agreement provides a mutual basis for HHI-EMD to optimise its offerings within the two-stroke engine segment and for MAN Energy Solutions to showcase the TCT series. Simultaneously, it also highlights the competitiveness of TCT turbochargers and is an important milestone on our path to increasing market share in Korea and, indeed, worldwide."

### TCT series

MAN-ES launched the TCT turbocharger series in 2019, starting with the TCT40, and subsequently followed by the TCT30, TCT50 and TCT60. Ultimately, the series will comprise six frame-sizes including TCT70 and TCT80 units.

The newly developed radial compressor and axial turbine are key components of the series. Both have been developed with new design features, backed by the latest simulation technologies, resulting in a very compact and lightweight turbocharger design. Thanks to its superior charging efficiencies, wide compressor maps and ample matching options, TCT turbochargers can easily be matched to engines. Their variability covers not only a wide range of engine-tuning options and

fuel types, but also all new requirements of today's exhaust-gas after-treatment systems for IMO Tier III operations.

In general, TCT turbochargers offer the following features:

- long TBOs – high performance bearings
- maintenance-friendly service concept resulting in low life-cycle costs
- highest specific flow rates, resulting in a compact and lightweight design
- lowest noise emissions
- highest efficiency levels.

For two-stroke engines, TCT-series turbochargers are suitable for engines ranging from 5.5 MW up to 24 MW per turbocharger. Typical applications include prime movers for container vessels, large bulk carriers or tankers.



*Pictured at the signing ceremony in Busan (left) C.Y. Lyu, Executive Vice President HHI-EMD, and Manuel Stork, Head of Sales & Licence Turbochargers Asia, MAN Energy Solutions.*

*Other participants in the semi-digital event included (HHI-EMD): B.K. Kang – Vice President/HHI-EMD Sales; J.H. Kim – Senior Officer, Marine Engine Sales; S.Y. Yun – Team Leader Marketing; and (MAN Energy Solutions) Tommy Rasmussen – Managing Director, Korea; H.J. Kwon – Senior Manager Turbocharger Sales, Korea; Klaus Engberg – Head of Licencing; Marius Zasche – Head of Product Line Components; Dr. Daniel Struckmeier – Head of Sales & Licence, Turbochargers; Jochen Müller – Head of Sales & Contracting, Turbocharger*



---

MAN Energy Solutions enables its customers to achieve sustainable value creation in the transition towards a carbon neutral future. Addressing tomorrow's challenges within the marine, energy and industrial sectors, we improve efficiency and performance at a systemic level. Leading the way in advanced engineering for more than 250 years, we provide a unique portfolio of technologies. Headquartered in Germany, MAN Energy Solutions employs some 14,000 people at over 120 sites globally. Our after-sales brand, MAN PrimeServ, offers a vast network of service centres to our customers all over the world.