

# TSX5 Shaft Power Meter & EC08 ShaPoLi

PREPARE YOUR FLEET FOR EEXI COMPLIANCE



## EEXI EXPLAINED

On 17 June 2021, the International Maritime Organisation (IMO) adopted amendments to MARPOL Annex VI at MEPC 76, introducing regulations 23 and 25 – The Energy Efficiency Existing Ship Index (EEXI) and Operational Carbon Intensity Indicator (CII), which are the first steps for the shipping industry to move towards its target of a 50% reduction in carbon emissions by 2050, compared with their level in 2008.

Under EEXI requirements, the key aspect of the regulations is that all existing ships must achieve a required EEXI score, with the target score dependent on the type of ship. The initial work to be carried out by each ship is to calculate its attained EEXI score, in accordance with MEPC.333(76), and to establish if it meets the required EEXI score. If it does not, then the ship must take action before compliance is demonstrated. Compliance has to be demonstrated in accordance with MEPC.334(76), on or after 1 January 2023 at the date of the IAPP survey and during the annual, intermediate or renewal survey, whichever comes first. Compliance with the new regulation has to be completed by 31 December 2023.

Two methods have been prescribed by the IMO that the ship can take to improve its EEXI score for the main engines in accordance with MEPC.335(76):

- 1 Engine Power Limitation (EPL)
- 2 Shaft Power Limitation (ShaPoLi)

## ShaPoLi METHOD

The ShaPoLi method involves using a shaft power meter to measure the shaft power, torque, and speed. The meter is linked to an alarm device on the bridge that alerts the Captain or Officer of Watch (OOW) when the power delivered through the shaft exceeds the maximum limit allowed by EEXI. As a result, it helps the Captain or Officer promptly address the situation and reduce the power level to a permissible limit.

A ShaPoLi system also allows the Captain or OOW to access power reserves quickly in case of an emergency by overriding the alarms normally generated when the EEXI power limit is exceeded. All alarm and override events are recorded by storing the power, torque, and shaft speed readings within the system.

To meet the requirements of the MARPOL regulation, Trelleborg teamed up with EDIT Automation, Greece to develop a ShaPoLi system, which is both cost-effective and user-friendly. Within five months EDIT ECO8 ShaPoLi was introduced to the market.

**The ECO8 ShaPoLi is designed to integrate seamlessly with Trelleborg's TSX5 Shaft Power meter and is mounted on the bridge to provide visual and audible alarms when the maximum allowable power is reached. The ECO8 display can be linked to a ship's computer or laptop to view live and stored data, alarm events, and when the override function has been used.**

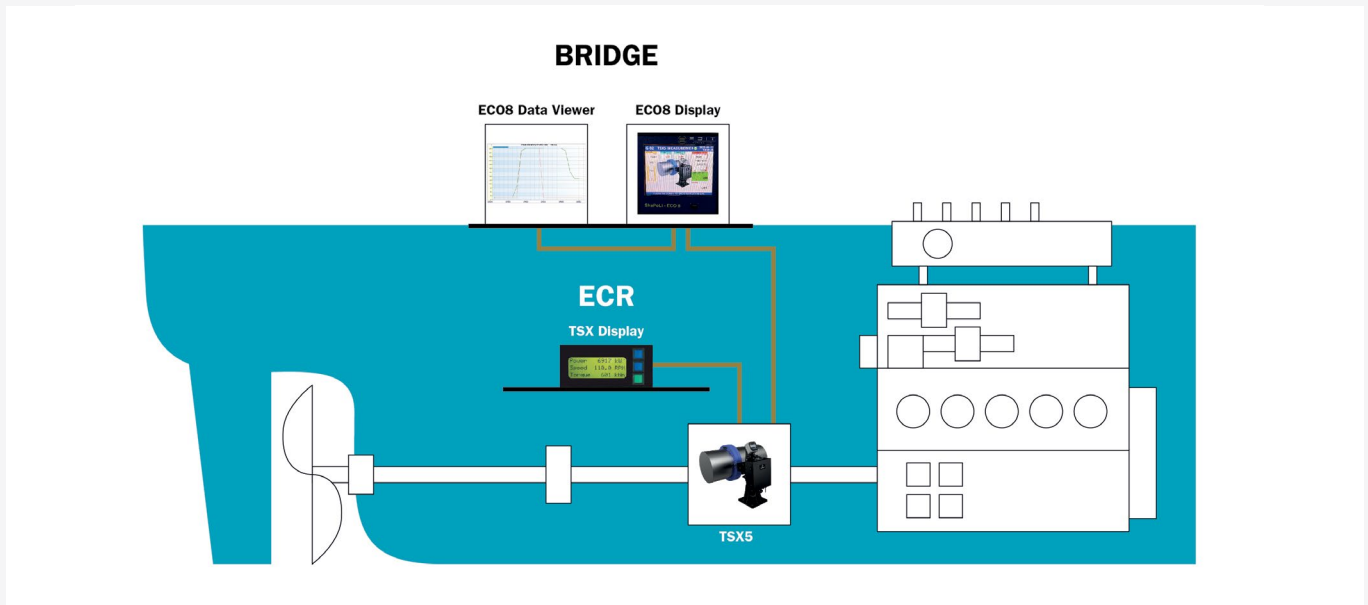
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LEARN MORE ABOUT  
TSX5 SHAFT POWER METER  
AND ECO8 SHAPOLI SYSTEM



# TSX5 Shaft Power Meter & ECO8 ShaPoLi



## FEATURES

- | Two different screen sizes available
- | User friendly graphics and touch screen display
- | A variety of display formats are available for customization
- | The display can be integrated into a console mounting unit
- | Simple password override to access power reserve without alarm
- | Override reason can be selected through the touch screen
- | Visual and audible alarm
- | Alarm delay - allows for a delay of up to 20 minutes, effectively smoothing out any power spikes
- | Pre-alarm is provided and can be programmed as a % of main alarm
- | Power failure alarm
- | Data and alarm events can be viewed on a ship's computer with ECO8 software pack

- | Data view in spreadsheet or graphical formats
- | Alarm events and use of override can be stored for reporting purposes
- | Auto alarm email function to a designated email address in office
- | Live data and alarm events for each ship can be viewed from office computer
- | Data storage for up to 7 years

## BENEFITS

- | Fully compliant with IACS 172, section 6.6
- | Simple plug and play philosophy
- | Up to 5 years warranty available
- | 4 Class approvals – LR, ABS, RINA & DNV
- | 2 days dispatch available if required
- | On-site installation services



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