

# IMO II / III SOLUTIONS

C32, 3508C, 3512C, 3516C

Cat® SCR System

## CAT IMO II MARINE ENGINES AND AFTERTREATMENT TECHNOLOGY.

Caterpillar continues to invest in the research and development of cleaner Marine engines and emissions-reduction technologies to meet today's most stringent Maritime emission standards.

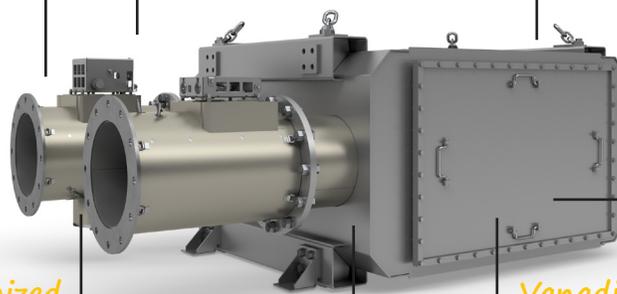
While meeting IMO II exhaust gas emissions is possible with engine internal solutions, Caterpillar has developed a robust exhaust gas aftertreatment technology compliant with International Maritime Organization (IMO) III emission standards.

## CAT CLEAN EMISSION MODULE (CEM) – SELECTIVE CATALYTIC REDUCTION (SCR)

Per IMO III regulations, Marine engines greater than 130 kW must conform with stringent NO<sub>x</sub> emission limits, which necessitate the use of an SCR system. The Cat SCR System is an exhaust gas aftertreatment solution to reduce significantly nitrogen oxide (NO<sub>x</sub>) emissions specifically designed for use with the current Cat C32, 3508C, 3512C and 3516C IMO II Marine engine models. This technology allows to switch off the urea dosing (from IMO III to IMO II mode) while operating outside the emission controlled areas. With the compact and easy-to-install CEM, our customers will benefit from an optimally matched system with minimum impact to the vessel design. The dosing cabinet connected to the SCR module controls the NO<sub>x</sub> reduction process and communicates with the engine control and monitoring system to ensure safe operation of the SCR system and engine.

**These systems are made available to be paired with newly built factory engines (IMO II) or with existing IMO II engines already in service to create an IMO III certified solution.**

## LOWEST EMISSIONS / HIGHEST BENEFITS



**IMO II/III SWITCHABLE**  
Depending on Emission Requirements in Operating Region

**Integrated**  
Diesel Exhaust Fluid (DEF) Mixing

**Optimized**  
Air Assisted Dosing Provides Highest Efficiency Mixing to Lower Operating Costs

**Flexible**  
Mount in all Directions

**Closed Loop Control**

- Lowest Consumption
- Extended Useful Life
- Ensures Compliance
- Flexible to Urea Concentration

**Catalyst**  
High NO<sub>x</sub> Conversion Efficiency

- Compact
- Ensures Compliance w/Extended Useful Life

**Vanadia Catalyst**  
High Fuel Sulfur Tolerance

**EIAPP Certificate**  
Included with Purchase of the Cat SCR System

**Sound Reduction**  
Up to 25dbA

**Ease of Service**  
One Door/One Person

**BUILT FOR IT.™**

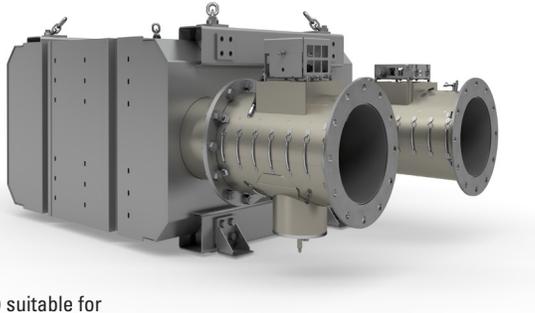


# TECHNICAL DATA

## Cat SCR System - IMO II / III Solutions

### STANDARD SCOPE OF SUPPLY

- Cat CEM
- Cat Dosing Control Module
- System Human-Machine Interface (HMI)
- EIAPP Certificate



Example:  
Cat CEM (16 Brick, U-flow) suitable for  
the 3512C Engine model



Dosing Cabinet  
(available in white and yellow)  
Image for illustration purposes only and  
may not reflect actual product.

### DIMENSIONS AND WEIGHTS

Engine Model IMO II	CEM			Dosing Cabinet		
	Model	Dimensions L x W x H (mm)	Weight kg	Model	Dimensions L x W x H	Weight kg
<b>C32 / 3508C</b>	12 Brick Z-flow	3,454 x 1,629 x 1,013	1,205	DME60	950 x 505 x 850	120
<b>C32 / 3508C</b>	12 Brick U-flow	2,713 x 1,629 x 1,013	1,205			
<b>3512C</b>	16 Brick Z-Flow	3,679 x 1,770 x 1,013	1,315			
<b>3512C</b>	16 Brick U-flow	2,946 x 1,770 x 1,013	1,315			
<b>3516C</b>	20 Brick Z-Flow	4,115 x 1,960 x 1,015	1,678			
<b>3516C</b>	20 Brick U-Flow	3,385 x 1,960 x 1,015	1,678			

Contact your local dealer for power ratings available and specific technical data.