

# MPC 59

(July 2004)  
(Rev.1  
Nov 2019)

## Resolution 2 of the 1997 MARPOL Conference Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines

(NO<sub>x</sub> Technical Code 2008, Chapter 4, Paragraphs 4.4.6.2 and 4.4.6.3)

**Chapter 4.4.5.2**

**Chapter 4.4.5.3**

Chapter 4.4 Application of the engine group concept

Chapter 4.4.5 Guidelines for the selection of an engine group

Chapter 4.4.5.2 reads as follows:

**Paragraph 4.4.6.2**

**Paragraph 4.4.6.3**

**Paragraph 4.4.6.2, Chapter 4 of the NO<sub>x</sub> Technical Code (NTC) 2008 reads:**

4.4.6.2 The following parameters and specifications ~~must~~ shall be common to engines within an ~~engine group~~ Engine Group:

.1 bore and stroke dimensions;<sub>1</sub>

.2 method and design features of pressure charging and exhaust gas system;<sub>1</sub>  
- constant pressure  
- pulsating system

.3 method of charge air cooling system;<sub>1</sub>  
- with/without charge air cooler

.4 design features of the combustion chamber that effect NO<sub>x</sub> emission;<sub>1</sub>

.5 design features of the fuel injection system, plunger and injection cam or gas valve which may profile basic characteristics that effect NO<sub>x</sub> emission;<sub>1</sub> and

.6 maximum rated power per cylinder at maximum-rated speed. The permitted range of derating ~~within the engine group~~ shall engine power (kW/cylinder) and/or rated speed are to be declared by the manufacturer and approved by the Administration.

Note:

1. This UI is to be uniformly implemented by IACS Societies from 19 May 2005.
2. Rev 1 of this Unified Interpretation is to be uniformly implemented by IACS Societies from 1 July 2020.

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**MPC** Chapter 4.4.5.3 reads as follows:

**59** Paragraph 4.4.6.3, Chapter 4 of the NO<sub>x</sub> Technical Code (NTC) 2008 reads:

(cont)

*4.4.6.3 Generally, if the ~~parameters~~ criteria required by ~~4.4.5.2~~ 4.4.6.2 are not common to all engines within a prospective ~~engine-group~~ Engine Group, then those engines may not be considered as an ~~engine-group~~ Engine Group. However, an ~~engine-group~~ Engine Group may be accepted if only one of those ~~parameters~~ criteria or ~~specifications~~ is not common for all of the engines within a prospective Engine Group provided the engine manufacturer or the shipowner can, within the technical file, prove to the Administration that such a transgression of that one parameter or specification would still result in all engines within the engine group complying with the NO<sub>x</sub> emission limits.*

#### **Interpretation**

For application of these sections it shall be interpreted that rated power ~~per cylinder~~ at rated speed is one parameter. Derating and uprating, in terms of power per cylinder and rated speed, outside the approved power or speed ranges shall be interpreted as deviations according to chapter ~~4.4.5.3~~ 4.4.6.3.

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