
MPC 59 (July 2004)

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

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:

The following parameters and specifications must be common to engines within an engine group:

- .1 bore and stroke dimensions;
- .2 method and design features of pressure charging and exhaust gas system;
 - constant pressure
 - pulsating system
- .3 method of charge air cooling system;
 - with/without charge air cooler
- .4 design features of the combustion chamber that effect NO_x emission;
- .5 design features of the fuel injection system, plunger and injection cam which may profile basic characteristics that effect NO_x emission; and
- .6 maximum rated power per cylinder at maximum rated speed. The permitted range of derating within the engine group shall be declared by the manufacturer and approved by the Administration.

Chapter 4.4.5.3 reads as follows:

Generally, if the parameters required by 4.4.5.2 are not common to all engines within a prospective engine group, then those engines may not be considered as an engine group. However, an engine group may be accepted if only one of those parameters 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_x 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.

Note:

This UI is to be uniformly implemented by IACS Societies from 19 May 2005.

