

# MPC 30

(July 2004)  
(Rev.1  
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## 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, Table 3 – Symbols and subscripts for terms and variables)

Table 3 – Symbols and subscripts for terms and variables used in the formulae for the test bed measurement methods (refer to chapter 5, chapter 6, appendix 4 and appendix 6 of this Code)

Table 3 gives:

Symbol	Term	Dimension <u>Unit</u>
$p_a$	Saturation vapour pressure of the engine intake air (in ISO 3046-1, 1995: $p_{sy} = P_{SY}$ , test ambient vapour pressure)	kPa
$p_B$	Total barometric pressure (in ISO 3046-1, 1995: $p_x = P_X$ , site ambient total pressure; $p_y = P_Y$ , test ambient total pressure)	kPa
$p_s$	Dry atmospheric pressure	kPa
$R_a$	Relative humidity of the intake air	%
$T_a$	Absolute temperature of the intake air <u>Intake air temperature determined at the engine intake</u>	K

### Interpretation

For application of the term " $p_s$ " it shall be interpreted that the dry atmospheric pressure is determined in accordance with the following formula:

$$p_s = p_B \frac{R_a \cdot p_a}{100}$$

It shall also be interpreted that the  $p_a$  term be determined using a temperature value for the intake air measured at the same physical location as the measurements for  $p_B$  and  $R_a$ .

For application of the term " $T_a$ " it shall be interpreted that the temperature of the intake air ~~temperature~~ intake air temperature determined at the engine intake is that determined at the engine / turbocharger intake suction filter.

Note:

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

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