

MPC 30 Resolution 2 of the 1997 MARPOL Conference Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines

(July 2004)

Table 3 – Symbols and subscripts for terms and variables used in the formulae for the test-bed measurement methods

Table 3 gives:

Symbol	Term	Dimension
p_a	Saturation vapour pressure of the engine intake air (in ISO 3046-1, 1995: $p_{sy} = PSY$, test ambient vapour pressure)	kPa
p_B	Total barometric pressure (in ISO 3046-1, 1995: $p_x = PX$, site ambient total pressure; $p_y = PY$, 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	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 .

Interpretation:

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

Note:

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

