

(Refer to the [Short Glossary](#) for the meaning of parameters)



In the **Overview of Performance Update** Fig. 04 showed how PP/V rose over the years. The re-arranged basic formula for power in the "[General Design](#)" section, which is:-

$$\frac{P}{V} \propto \frac{(BMEP) \times (MPS)}{S}$$

explains how this was the rising product of **BMEP**, **MPS** and **1/S**.

[BMEP is identified here as **BMPP** and MPS as **MPSP** when these quantities are calculated at **Peak Power (PP)**. For convenience **1/S** is given as **100/Smm** with an appropriate constant of equation].

Figs. 05, 06 and 07 respectively on PP.2 and 3 give the variation of **BMPP**, **MPSP** and **100/Smm** versus date (Fig. 05B on P.2 gives **BMPP** for NA-only to a larger scale).

Figures 05 to 07

The key in [Overview of Performance Update](#) applies to all Figures:-

NA advances from 1906 to 2000

Over the period of the main review, 1906 to 2000 inclusive, the overall NA engine performance changes were:-

		<u>1906</u>	<u>2000</u>	Ratio
		<u>Renault AK</u>	<u>Ferrari 049</u>	
BMPP	Bar	5.17	13.57	x 2.63
MPSP	m/s	6.00	24.15	x 4.03
100/Smm		0.667	2.415	x 3.62
		so the overall improvement ratio of		
PP/V	HP/Litre	6.9	265.3	x 38.4

was the product of:- 2.63 x 4.03 x 3.62.

Figures 05 to 07 are given on the following pages.

Details of the Formulae applying to each year are given in [Table 1](#) of The Sporting Limits.



