

Note 8

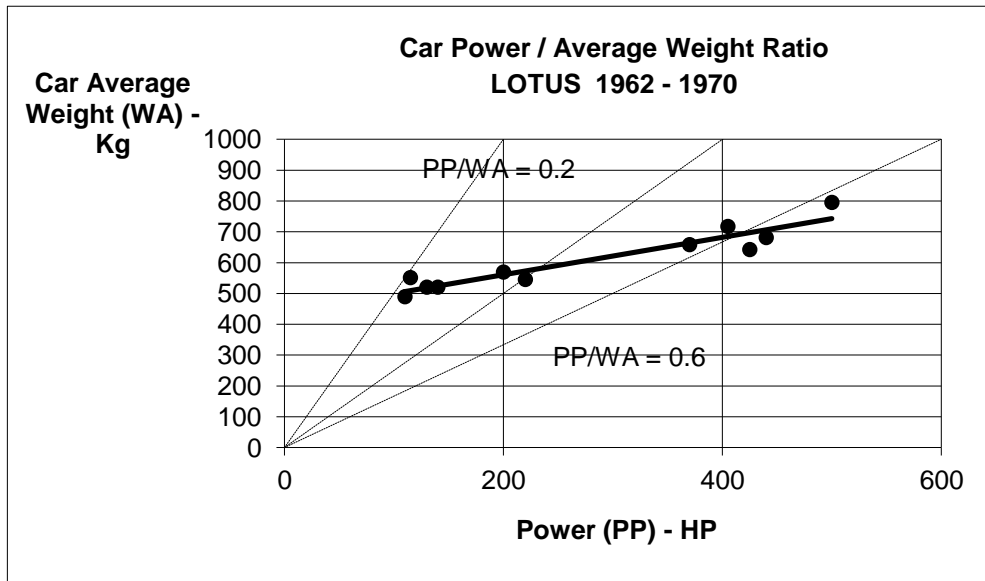
Car Power/Average weight ratio



LOTUS 1962 – 1970 Technology:- Al-alloy “Monococque” Chassis

Type	Formula	Power PP - HP	Weights			
			kg	1/2 Unladen*	Fuel*	Driver* Average (WA)
25	GP	200	451	42	76	569
27	FJ	110	400	13	76	489
29	Indy	370	513	69	76	658
32	F2	115	451	24	76	551
35	F2	130	420	24	76	520
38	Indy	500	612	107	76	795
43	GP	405	567	74	76	717
44	F2	140	420	24	76	520
48	F2	220	420	49	76	545
49	GP	425	500	66	76	642
72	GP	440	531	74	76	681

*It is assumed that Oil and Coolant are included, but effect would not be significant.
Some fuel loads are approximate, shown in *Italics*; Driver is assumed as 12 stone.



As can be seen, Power/Weight ratio rose with installed power because a proportion of average car weight does not scale up with power. The same pattern was observable with the Grand Prix and Voiturette cars built by Mercedes-Benz, Alfa Romeo and Maserati in the 1938 - 1940 period, each pair to the same technology. For example the Mercedes-Benz cars compared as follows in PP/WA ratio (both 2-stage Supercharged)

1939 W154/M163 3L: 464 HP / 1145 kg = 0.4

1940 W165 1.5L: 274 HP / 902 kg = 0.3