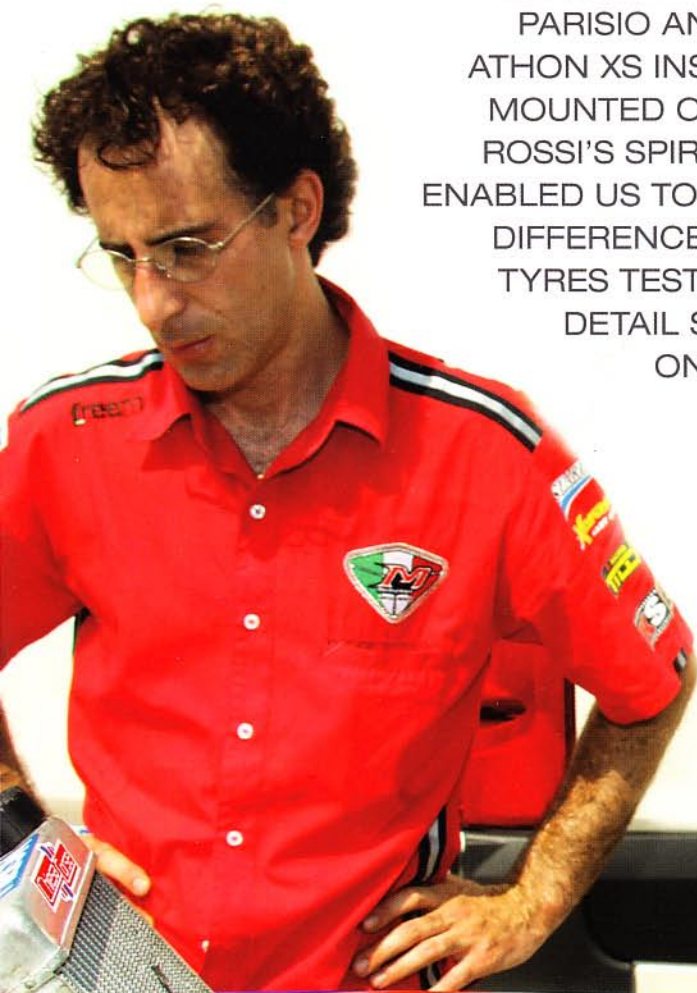




STARLANE TOO CONTRIBUTED TO OUR TEST, WITH HIS ENGINEER FRANCESCO PARISIO AND THE NEW ATHON XS INSTRUMENTS, MOUNTED ON GIACOMO ROSSI'S SPIRIT/X30, THAT ENABLED US TO CHECK THE DIFFERENCES BETWEEN TYRES TESTED IN MORE DETAIL SEE GRAPHS ON THE RIGHT.







## DESTINED FOR AMATEURS

The Vega SL6 used for our test are fairly hard on the scale of tyres made by the factory in Saronno: to give you an idea, only the TL, le SL8 and the XLL (these quite "extreme") have a harder compound, in the vast range of products made by Vega; excluding, obviously rental tyres... To technically characterize this model of kart tyre are in their geometric profile similar to the XM, green printing (but they must not be confused with the XH!), a carcass which is quite flexible and the tread compound at 55 degrees lrdh of hardness. Sizes used for this test are 10x4.60-5 front and 11x7.10-5 rear, but the SL6 are also made in narrower sizes. Tyre pressure suggested is about 0.56 bar. Already mad following the European "ecology" laws, practically speaking, they are long lasting tyres and, as Vega they say, they are suitable for semi-professional and amateur classes.

## CONCLUSIONS

### Split time drops by 50%

Summing up, what have we found out with this track test? As you can easily see in the graph with the various lap time stopped, the average lap time is slightly lower, in favour of the Vega SL6 by a few tenths. This because you gain a lot compared to some very "hard" tyres used particularly by Rotax and Champion. Also must bear in mind that we have nearly always used new tyres: the SL6, like most kart tyres with compound which basically hard, the first two or three laps are faster, then they drop a few tenths of a second but they stabilize. On the other hand, we must say that probably these few tenths would be acquired again by setting a more specific kart set, obviously each one

## TELEMETRY AND GRAPHS

### How G force varies

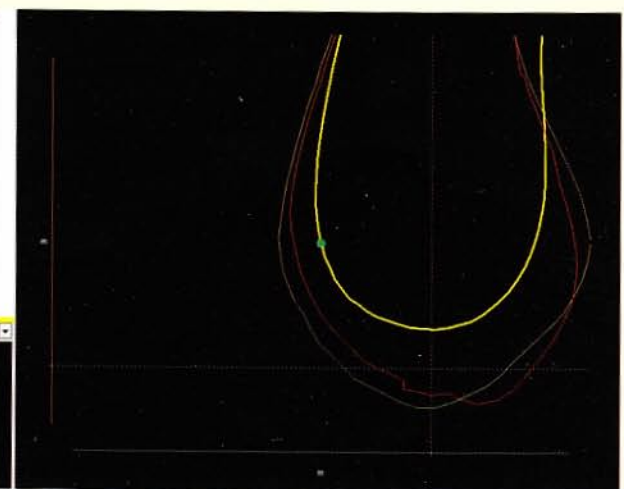
Geo	Sess	Concrete	Scavica Sess	Caicca Sess
1	00:23:40		00:32:62	
2	00:46:06		00:46:61	
3	00:45:83		00:45:65	
4	00:45:90		00:46:08	
5	00:45:80		00:46:00	
6	00:45:71		00:45:87	
7	00:45:87		00:46:20	
8	00:45:63		00:46:37	
9	00:45:68		00:46:03	
10	00:45:74		00:45:98	
11	00:45:64		00:30:69	
12	00:45:70			
13	00:45:78			
14	00:45:72			
15	00:45:89			
16	00:45:90			
17	00:29:99			

Unit	Value	Min	Max
RPM	14628.3	14622.5	
SpeedGPS	104.0	102.7	
Gavg			
GmaxGPS	2232.7	1302.7	
GminGPS			
Tx			
Water Temp			



Geo	Sess	Concrete	Scavica Sess	Caicca Sess
1	00:23:40		00:32:42	
2	00:46:06		00:46:61	
3	00:45:83		00:45:65	
4	00:45:90		00:46:08	
5	00:45:80		00:46:00	
6	00:45:71		00:45:87	
7	00:45:87		00:46:20	
8	00:45:63		00:46:37	
9	00:45:68		00:46:03	
10	00:45:74		00:45:98	
11	00:45:64		00:30:69	
12	00:45:70			
13	00:45:78			
14	00:45:72			
15	00:45:89			
16	00:45:90			
17	00:29:99			

Unit	Value	Min	Max
RPM	8344.9	8306.3	
SpeedGPS	104.5	104.1	
Gavg			
GmaxGPS	2079.5	1352.1	
GminGPS			
Tx			
Water Temp			



To look closer at the differences of the tyres mounted on these karts, we took the opportunity offered to us by Starlane instruments mounted on Giacomo Rossi's Zanardi/lame Challenge X30. In particular you can see the flow of G centrifugal force along the curve (SVG index). Looking at the first display (graph 1) you can see the two finer lines (yellow for the original Dunlop DEH original, red for the Vega SL6) that go along the paths followed (red line). Basically, the finer the line is the more distant it is from the circuit, there is more grip at that point. In this case we have the area after the finishing line, from the big turn at the "snail": in point 1, so in full turn, the Starlane MXX programme show Dunlop tyres offer more road ret. Differently, when you get to point 2 you can see how Vega tyres offer a decisive braking. Going on to graph 2, relative instead to the last turn before the finishing line, we can see kart behaviour better throughout the entire phase round the corner for both karts. Especially, on corner entry Dunlop (yellow line) show less directionality, regaining grip though while racing along the straight, while on the contrary for Vega, besides offering grip on entry, they offer grip throughout the final phase of the curve too.

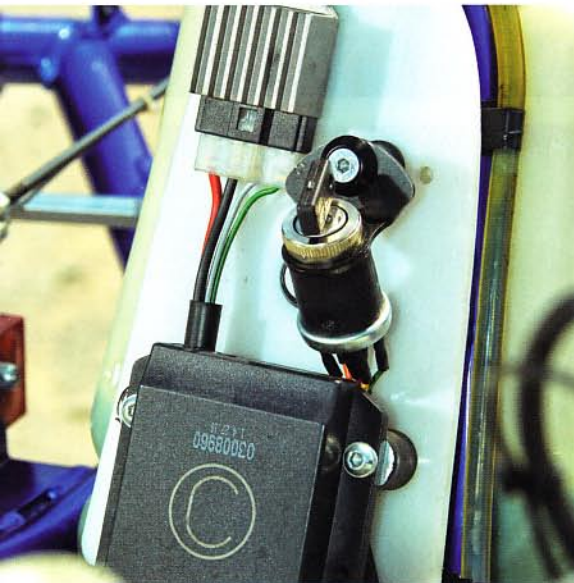


## INTERESTING CLASSES: DATA



CLASS	ROTAX MAX	ROK TROPHY	KART GP	X30 CHALLENGE	CHAMPION	UNDER18
WEIGHT	160 kg	160 kg	160 kg	162 kg	165 kg	160 kg
TYRES	Mojo D3	Bridgestone YLR	Vega XH	Dunlop DEH	Bridgestone YLZ	LeCont CIK M LH08
POWER	28.5 hp	2.5 hp	32 hp	30 hp	27 hp	36.2 hp
CARBURETTOR	Dell'Orto VHSB 34	Dell'Orto VSHS 30	Tryton HB27 ø26	Tryton HB27 ø26	Tillotson HL ø23	Dell'Orto VHSH 30
INTERNET	kartrotax.com	vortex-rok.com	bmbengines.it	x30.it	championkart.it	championkart.it
CHASSIS/ENGINE	CRG/Rotax	Tony/Vortex	Spirit/BMB	Zanardi/lame	Parolin/Leopard	Parolin/FIM
DRIVER	Alessandra Brena	Alessandra Brena	Christian Fossati	Giacomo Rossi	Chiara Poletto	Chiara Poletto
CHRONO 1	46"60	46"31	44"94	45"63	46"80	45"23
CHRONO 2	46"30	46"10	45"22	45"65	46"10	45"03

**Note:** chrono 1 is with original tyres, chrono 2 is with Vega SL6



Out of the characteristics common to the so-called Tag, we find electronics and electricity closely connected: perhaps with a key, besides electronic control units with rev limiter. To use everything properly, often you use the area behind the tank.

adjusted to make the most of the original tyres. However, this isn't the most important thing, that is, the average speed of the Prodriver Tag class if these (or other) tyres were made compulsory. Apart from the fact that we noticed that a harder tyre (the original are soft) isn't all that slower, because it also gives less drive and set up problems... However, what is really worth underlining, and the time graph does just this, is that discrepancies drop: with just one exception for the Parolin Under18, in fact, in all the other cases performances had levelled, drawn closer to the average. And not just a little. If we sum up mathematically the differences compared to the average, with the original tyres, we get a total of 3.91 seconds, while with the SL6 you drop to 2.60 seconds. This is quite a lot: two thirds; or, if we want to see it the other way round, with the original tyres the difference

between one kart and the other increases by more than if everyone used the same tyre. Well, if we want a Prodriver Tag class where the difference between the various karts is levelled off, imposing a single brand tyre for all karts is a good way to go about it. A good step forward. A way that is quite feasible. A good step in the right direction, even if it isn't sufficient to do away with all the differences: a powerful engine is not suffocated by this. Consequently, the next step could be to work on weight, perhaps, correlating them to the power of the engine (as they have already done in motor cars: we aren't inventing anything) and considering that we can think of (but it also depends on the track) dropping a tenth each lap per kilo extra. Testing this last thing, and checking in a general way correlation between weight and performance, moreover, will be the topic of our next track test.

## TIME STOPPED IN TEST



The graph shows quite clearly the time stopped with the original tyres (red) and with Vega SL6 (green)

