

A SUCCESSFUL YEAR

WE PRESENT A REVIEW OF A HIGHLY SATISFACTORY SEASON, FEATURING IMAGES OF THE DRIVERS WHO WON WITH DALLARA IN 2011

WS RENAULT

ANDY SOUCEK REVEALS THE SECRETS AND SPECIFICATIONS OF THE NEW DALLARA FOR THE 2012 SEASON: A SINGLE-SEATER DESIGNED TO MAKE THE DIFFERENCE

$\mathbf{F.3}$

JOS CLAES, THE TECHNICAL MANAGER FOR THE CHAMPIONSHIP, EXPLAINS HOW DALLARA AIMS TO RENEW A GREAT TRADITION THANKS TO THE NEW CAR AND THE NEW MARKETS OPENING UP OUTSIDE EUROPE

A SUCCESSFUL

16

Andre Ande

Klenseni

E

assigne

FROM WICKENS TO FRANCHITTI, MACHADO, FONTANA, AND ALL THE OTHER "WINNERS", WE PRESENT THE IMAGES FROM THIS SEASON'S DALLARA HALL OF FAME

Drue

Reeses



GLAD'

10

17

24

1

ARCHIVE

6

15

CHAMPION WS RENAULT 3.5 Robert Wickens

1255

RENAULT

Chudleighs

HONDA

lyse

Energizer

MICCLES

0

IZOD

TOMTOM'

SERIES

10

PLISSIA

TSPORT

CHAMPION INDYCAR Dario Franchitti





CHAMPION F.3 SUDAM Fabiano Machado

Copy of the opposite of the op

15

ARCHIVE

6

C

ACCUPATION AND

16

Andreas Anders

3

1

1

8

. Crating

60

Oling

9

CHAMPION F.3 ITALIA Sergio Campana

CHAMPION F.3 AUSTRALIAN Chris Gilmour

IOI AM

Olitalia

WB-40

.....

ime

CILIANI

BILANO

CI.

SIGILIANI

UK'IB

15 3

KUMHO TYRES

LPROPERTIES

CI :ADAC Stiftung Sp

MAG





FORMULA BAR THE TRADITION CONTINUES

JOS CLAES, WHO IS RESPONSIBLE FOR DALLARA'S INVOLVEMENT IN THE CATEGORY, OUTLINES THE FUTURE SCENARIOS FOR THE VARIOUS CHAMPIONSHIPS, AND EXPLAINS THE CHARACTERISTICS OF THE NEW CAR SET TO DEBUT 2012. AT A DIFFICULT TIME FOR THE ENTIRE MOTORING INDUSTRY, F.3'S ABILITY TO DEVELOP TEAMS AND DRIVERS IS VOTE OF CONFIDENCE FOR THE RACING WORLD

> Aggressive drive by (from left to right) Sato, Raimondo and Juncadella

KUMHO TYRES



Jos Claes F.3 Project Manager Dallara

"The new F.3 is the product of a lot of time in the wind tunnel, as well as a fundamental rethinking of certain mechanical components"



Jos Claes, with the debut of the new car, 2012 promises to be an important and difficult year for F.3. What do you expect from the upcoming season? "It's still too early for a complete picture of all the championships, not just F.3, but also Gp, Gp3 and World Series. At the moment the teams are still contacting the drivers. We can't get away from the fact that not even motor sports are immune to the effects of the economic crisis, and that includes F.1, where at least a third of drivers bring their own sponsors with them. There are 12 difficult months ahead of us. but this is a sector that is better than most at reacting and adapting quickly to new market conditions. so I'm not unduly concerned: the passion for engines always finds a way".

Are there any positive signs from the new markets too?

"Absolutely. The situation has improved significantly in Brazil, where they have already been using our cars in an F.3 type championship for a number of years. Russia is producing new drivers, and China is creating wealth. There will be plenty of room for the motor industry in the future. Dallara has always been enthusiastic about opening up new markets, tomorrow's markets are as important to us as tomorrow's technology. We already started carrying out research in China six or seven years, while we are close to achieving important goals in both India and the Middle East. Above all, the fact that a country the size of India has decided to invest so heavily in motorsport is certainly a good sign".

India represents an important market that seems to have reacted well to the arrival of F.1...

"Yes, and while the circuits are rarely full for F.1 events in China, in India it was a sell-out. And this was a paying public. This is in part due to India's recent history; the British heritage certainly helped and the widespread use of English, together with the relatively small difference in time zones, tends to make exchanges much easier than with China ".

Let's talk about the new F.3 Dallara for 2012: what was the concept behind the design?

"The new F.3 is the product of a lot of time in the wind tunnel, as well as a fundamental rethinking of certain mechanical components: the front suspension is completely new, while the rear suspension has been thoroughly reworked in order to make it more rigid and enhance its performance. The new regulations covering bodywork have modified the car's appearance so that it resembles a "baby F.1". It was also the intention to fit the car with a more powerful engine, but this has been postponed until next year"

Why was it necessary to spend so much time in the wind tunnel? "Dallara didn't want to risk being

"Dallara didn't want to risk being overtaken by its competitors. For the time being there don't appear to be any other cars that are ready for F.3, but this doesn't change our outlook. You're always going to have stiff competition in the F.3 racing environment. For example, Lola has announced that it will have a car ready for the 2013 season".

You mentioned the challenging economic climate earlier. Will the new Dallara be cheaper to run?

"Yes, and this is thanks to the new regulations, which we supported in full. The new car will cost less, above all in terms of maintenance. Assuming that the annual budget in F.3 is approximately 500 thousand Euros, and that the car has a racing life of four years, then the overall budget is around *2 million Euros, this means that the cost* of the car itself – slightly less than 100 thousand Euros – represents just 5 per cent of the total cost. Also, at the end of the cycle, it retains at least half of its original value, therefore its true cost represents just 2.5% of the total. Hence, it is more important to reduce the running costs than the cost of the vehicle itself. Also, when the new engines are



phased in next year, running costs will be halved. With brakes, bodywork and gearboxes that are easier to manage, the running costs for the new car will be considerably reduced".

Will F.3 continue to be seen as the "queen" of the categories in the future?

"We believe strongly in the future of F.3. Because, thanks to the way it is regulated, F.3 is superior to so many other categories. It is relatively light, 550 kg including the driver, and boasts an engine featuring very high torque at low speeds. Its acceleration performance from 0 to 100 km/h lags just a few tenths of a second behind an F.1 car, and – thanks to the aerodynamic load and the competition between tyre manufacturers to supply F.3 with the best possible product – the F.3 boasts excellent performance on curves, achieving over 3G of lateral acceleration. F.1 features more power and greater performance, but it's not such a great leap from F.3. For a driver with the talent necessary to make the step up, the power of F.1 will certainly make an impression for a couple of laps, but by the time he's on his fourth lap, the driver will already be thinking: "not bad, but if it had another 100 horsepower..."

Or, to put it another way, a talented driver

will soon get used to the power if he's had the chance to drive an F.3 round a curve at high speed".

Which F.3 drivers impressed you the most the last season?

"Without a doubt Valtteri Bottas, the new GP3 champion, he only raced a few times in F.3 this year, but when he did he always made an impression. Then there are the champions of the various categories: Roberto Mehri, Felipe Nasr, Yuhi Sekiguchi in Giappone. They're all top quality drivers: F.3 always produces champions".

Stefano Semeraro



WILL WAKE THE DIFFE

RENAUI

٧.

mahr

PORT

Frank

TENNER

RED

J.

-

RENCES

The Spanish test driver of the New Dallara WSR 3.5 reveals the car's secrets: more demanding than in the past and equipped with DRS, but with the same flexibility that has always enabled young drivers to acquire the necessary experience. With a new, "cleaner" and more attractive line

A single-seaters. First in the Spanish F.3, then the World Series Renault 3.5, and most recently the GP2, before moving on to successes in other categories. Together with Romain Grosjean and Ben Hanley, the driver from Madrid test drove the new single-seater that will be used for the Renault 3.5 from 2012 to 2014. This is not a new role for Soucek, who was asked to test drive the Dallara for the 2008-2011 seasons back in 2007.

You were involved in the development of the last two Dallara Renault 3.5 models. Do you think that there is a well-defined philosophy behind the French manufacturer's project per its flagship category?

«Renault and RPM, who are the two promoters of this category, have always demanded high quality cars and engines for their championship, while insisting that they are the same for everyone, without the disparity in performance that is so common in other formulas. Moreover, the main aim has always been to create cars that are both powerful, but also ideal for providing young drivers who are still on a learning curve with the experience they need».

Is there much difference between the new single-seater and the one that has just been phased out?

«Let's just say that the 2012 model will be more demanding and require more experience. In fact, with the old car, there was a risk of reaching a plateau. In other words, new young drivers would soon start achieving the same times as the experts. For this reason it was necessary to introduce a greater difference between the values on the track. Nevertheless, the new Dallara is still a pleasure to drive, with a non-aggressive chassis that permits the driver to regain control after an error on a curve, and Michelin tyres that retain their performance even after three laps. This is positive, because it means that it is possible to prepare an adequate set-up with just one set of tyres».

Does the new Zytek engine, which has 50 horsepower more than the previous version, require a different driving style?

«It's a very powerful engine, perhaps too powerful. I personally requested slightly different mapping, in order to render it more aggressive. Consequently the manufacturer has prepared three different versions: Mine, which is highly sensitive: the engine already begins to respond when the accelerator pedal is pressed down by 15-20%. Then there's the version that we might refer to as the "Grosjean map" where the response is a little slower; and finally the third version where the progression is slower still».

What are the advantages from an aerodynamic point of view?

«The grip has been increased, but without too much drag, or speed resistance. The front wing is very big, and the rear wing is very small, although it is fitted with a generously-sized flap. The car has a cleaner line».

What do you think about the use of the DRS and what effect has it had?

«In my opinion, the DRS will separate the experienced drivers from the novices. It's important to use this feature correctly, and if you ask me, not everyone will get the best use out of it. We need to understand what Renault intends to do with it, whether it's meant to be used unrestrictedly, or only at certain moments. During testing the cars were around seven tenths of a second per lap faster, when using the DRS constantly, then when they were not using it».

Do you think that this new single-seater could be improved in any way?

«As far as I'm concerned, the 2012 is already at the limit, both from a mechanical and an aerodynamic point of view. Initially, it was very difficult to get all the components to function together correctly. During the first tests session, the gearbox, engine, pneumatic system and the brakes all worked correctly, but they didn't work together. Gradually, test after test, we found the correct balance, and the whole thing came together, as if by magic».

You've been driving Dallara cars for many years now. What are your lasting experiences? «I've always found Dallara cars to be perfect, high quality machines, beautifully designed and a joy to drive. I remember how professional Dallara's trackside technicians are when resolving any problems that arise, and how flexible they are. An example that comes to mind is the way they came up with a rapid solution to the difficulties caused by the excessive number of flaps on the 2008 Dallara Renault 3.5».

Alessandro Santini

Andry Sourcek



THE PICTURE OF SPEED

n a world of aggressive marketing, where our sensations and choices are increasingly conditioned by the images we see all around us, the graphic aspect has become a fundamental element in the product presentation process. This also applies to motorsports, where technique, presentation and costs have always been indispensable, and where – above all for a manufacturer like Dallara – it has now become essential to present the product in the best light, and as realistically as possible. For this reason, in addition to CAD models and axonometric projections, we now employ representations that permit us to apply colours, materials and textures to the product and display it in a scenario complete with light and shade: the socalled rendering. The most successful images are always those that grab the observer's attention and leave a lasting impression. At Dallara the person responsible for these aspects is Andrea Guerri, bodywork stylist and designer, and graduate of the European Design Institute in Turin. This change is further confirmed by Engineer Dallara's oft-repeated exhortation to Guerri: "you make it look good, the technicians and engineers will make it go fast ..." Ten years ago, probably only the second part of that phrase would have made any sense.

Alessandro Santini



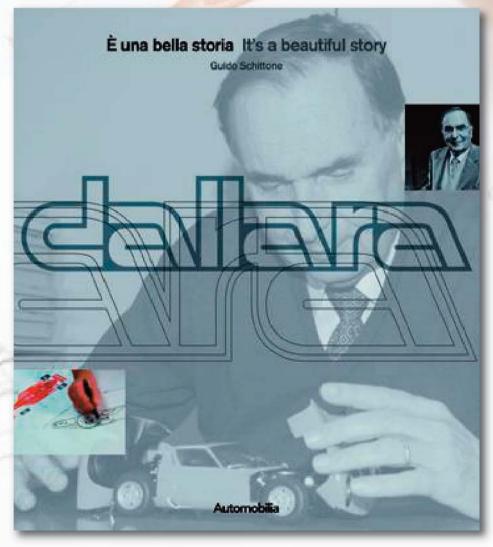
Three examples of rendering of the new Formula 3







"It's a beautiful story" The book that tells the story of Dallara and Dallara



t's beautiful story. A fine piece of work. "È una bella storia" ("It's beatiful story" published by Automobilia), is Guido Schittone's new book about Gian Paolo Dallara and the factory at Varano de'Melegari. Leafing through this volume, and admiring the numerous photographs, gives you a real taste of a special place and a philosophy of life and work. The place is Parma in the Emilia region, a city at once aristocratic and rustic, the industrious heart of Italy that is never afraid to use its traditions as the inspiration for progress.

The philosophy can be summed up as the pleasure of transforming the work of true craftsmen into world renowned industrial values, without ever forgetting your roots. Learning from your father's examples: simplicity, honesty, skill and courage. The ability to understand the times you live in and anticipate the future. And, as Engineer Dallara explains in the long and passionate interview that opens the book, and accompanies the reader from 1959, when he took up his first position as a shy but determined young engineer at Ferrari, right



up to the current day, and his success as an international businessman, none of this would be possible without authentic personal relationships, the fundamental importance of the "human factor", designing and building the first engine together with others who share a common vision for professional and industrial growth and development. It's an emotional read, full of anecdotes and stories about characters that are told with sensitivity and passion, without a hint of vanity but with a precision that brings them to life. The book also contains chapters dedicated to the categories that contributed to the national and then international success of the factory, from Formula 3 to the prototypes, from F.1 to IndyCar. The book features contributions from such famous figures as Eddie Cheever and Mario Andretti, Cesare Fiorio and Pino Allievi, and offers a revealing insight into what goes on inside Dallara, providing a "step by step" overview of how a project is born, the aerodynamic development phase and the transfer to the production stage. Attention is also given to the "centres of excellence" that are so important to Dallara's success, the

research and development department, the wind tunnel and the extraordinary new simulator. The appendices, including the Roll of Honour that lists all Dallara's victories, and the technical specifications of all the cars produced at Varano, will appeal to enthusiasts and the curious alike. The volume concludes with an interview with Engineer Pontremoli, the company CEO, and Lorenzo Ramaciotti's portrait of Dallara, either side of a collage of photographs of all the employees at the factory, which complete a composition made up of words and images that mirror the Dallara philosophy: passion and innovation, a life lived as though it were always work in progress, where affection for the past and one's roots must never compromise the desire to meet tomorrow's challenge. A challenge on Dallara's terms though: with humanity, without delusions of grandeur but with the pleasure of starting a new project every day. A fine piece of work. A book worth reading.

.

•

•

•

•

•

.

•

•

•

•

•

•

•

•

•

.

"I'ts beautiful story", by Guido Schittone. Automobilia, Milan, 2011 Gian Paolo Dallara started his business just beside the rather bald local football field, a stone's throw from the chuirch and the race track. Every now and then the bells would ring out, cutting, across the wine of the engines, inviting the faithful to quit the racing. It was a tiny place with just a couple of assistants helping out. But even by the late 1970s. Dallara's narrow little office was home to one of the first computers with CAD-CAM. This was a place in wich tubular technology was banned. A place where they built cars, monocoques and did consultancy work. A place of aerodynamic profiles and engine testing. A place English engineers flocked to each week to talk about the revolutionary new composite materials he was using for his chassis. It was a tiny hole-in-a-wall on one level, but also the place from which the yellow Dallara brand embarked on its triumphant journey, little knowing that, whitin a few years, it would turn the world of the big British single-seater constructors on its head, technically and commercially. It was little more than garage but one in which

secret weapons for the sports-prototype and rally tracks were readied in secret. Cars that would be show "to friends, not journalists" because although Dallara had created their very souls. they were built for the manufacturers competing in the world championships. The first Dallara "works" was just a few square metres in size but it gradually expanded. Gian Paolo took on his first employes, put in the first autoclave, the first wind tunnel and so on. The company got bigger and better al the time, but at the right pace, giving us what is now not only one of the most creative and esteemed facilites on the scene, but also of the youngest companies in the world in terms of the average age of its employees and interns.

It all started here in Varano de' Melegari.

(Extract from "È una bella storia") ("I'ts beautiful story")



www.dallara.it

THE PURSUIT OF EXCELLENCE



Consultancies, design and production of racing cars and high performance road cars.

Aerodynamics: wind tunnel and computational fluid dynamics (CFD).

Research & development: vehicle dynamics and driving simulator.



Dallara is a performance partner of DPTC