BY DALLARA

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THE PURSUIT OF EXCELLENCE

## PONTREMOLI

INNOVATE, BY INVESTING IN YOUTH AND TECHNOLOGIES THAT WILL CONTINUE TO IMPROVE SAFETY, GUARANTEE RESPECT FOR THE ENVIRONMENT AND INCREASE INTERACTIVITY WITH THE FANS. DALLARA'S CEO TALKS TO US ABOUT THE COMPANY'S FUTURE

## INDYCAR

PREPARATIONS ARE IN FULL SWING IN THE AMERICAN FACTORY. BY MARCH, THE FACILITY WILL BE FULLY OPERATIONAL AND THE CARS WILL ALL BE READY FOR AN EXCITING NEW SEASON, WHICH HAS ALREADY KICKED OFF WITH THE SUPERBOWL DISPLAY...

## **OPERATIONS**

RELIABILITY, FLEXIBILITY, PRECISION AND PASSION: THESE ARE THE SECRETS OF THE DALLARA DEPARTMENTS RESPONSIBLE FOR ENSURING THAT EVERYTHING BEHIND THE SCENES FUNCTIONS PERFECTLY. PURCHASING, WAREHOUSE AND QUALITY CONTROL, ANDREA VICINI EXPLAINS HOW IT ALL WORKS





# "THE FUTURE OF RACING LIES CLOSE TO THE PUBLIC"

Innovate, by investing in young graduates and technologies that will continue to improve safety, and guarantee respect for the environment in the world of motorsports. Dallara's CEO Andrea Pontremoli maps out the route that the company, and motorsports in general, will have to take if they wish to maintain their appeal in a world that is changing fast, and where, as demonstrated our experiences in America, the interactive aspect is rapidly becoming an integral part of the racing experience

#### Engineer Pontremoli, are you satisfied with Dallara's performance in 2011?

"Yes, I'm satisfied because, despite the difficult economic climate, we were still able to expand, as well as adapting our prices to meet the demands of the market. We continued to create quality products at competitive prices. This was made possible by internal reorganisation that is already yielding results, and will continue to do so, creating benefits both for us and our customers".

#### Which sectors were you most satisfied with?

"There wasn't one sector in particular, everyone pulled their weight and made a contribution".

#### And, with an eye on the future, which were your most important victories?

"The most important victory was probably the way we managed to overcome the crisis through innovation".

#### "Automotive and racing: how would you analyse your success and prospects in these two sectors?

As far as the racing sector is concerned, we are in the middle of a significant

transitional period, and the most important aspect of this is, of course, innovation: we have to change the way we do things in order to make sure that our results exceed our customers' expectations.

The fact that this year we produced three new cars, the new Indy, the new World Series Renault and the new F3, is an example of this. If we hadn't been able to create a high performance, quality product the market would never have permitted us to realise these new cars".

#### And the automotive sector?

"This sector is expanding rapidly.

A lot of the techniques used in the racing sector are also proving successful in the automotive world, such as the use of carbon fibre, aerodynamics, and dynamic vehicle simulation, which are the three areas we are investing in.

The move towards a green policy results in cars that are increasingly efficient, with good aerodynamics, and this enables us to reduce fuel consumption without compromising performance".

2011 was also important as it saw the expansion of the factory's American projects: could you give us an update on

#### the current situation and tell us what to expect from the coming year?

"The factory is complete and the first 15 Indycars have been delivered in the new building. We intend to hold the official opening on the same day as the Indianapolis 500. It's a very important milestone for us since, in addition to building the new cars for the Indy Series there and acting as a spare parts distribution centre, it will permit us to create an engineering consultancy service".

#### Expansion for the entire American operation then?

"Exactly, because there will be increased value for Dallara as a whole, but also because, thanks to the economic growth in the Speedway area, for those involved in the racing world. There are already tens of suppliers for the new Indy that are based in Indianapolis near our headquarters".

## During a serious, worldwide economic crisis like the current one, the search for new markets is of vital importance. What are Dallara's new horizons?

"Naturally, the United States is an area where we are always looking to expand.

Other areas include India, where, in contrast









to China, surprisingly passionate about motorsports during last year's F.1 event. The other area of interest is the Middle East, where motorsports are already very popular, as can be seen from the number of circuits in the Emirates. Our aim in these new countries is to create a development path for young drivers, starting with the training championships, with the ultimate goal of making it into F1 or Indycar".

With the birth of Mondiale Endurance will we see Dallara increase its consultancy commitments to this category, which seems to be able to attract interest from so many important International manufacturers?

"This is a very important area for Dallara. We are already involved as consultants and manufacturers with the big names. Increased interest in this type of activity can only mean greater commitment for us".

Let's talk about the simulator: are you satisfied with the technological boost and

#### the benefits it has brought to Dallara's image?

"We didn't really dwell too much on the aspects concerning our image. I'm very satisfied with the technology because it helps our engineers to improve their knowhow: we now have a much better idea of the interaction between the various components of a car (engine, weight, aerodynamics, etc.) The simulator provides us with realistic simulations before we start building the car, and this helps us to determine the best package, and hence reduce costs".

#### What's the verdict of people who have used it?

"Everyone remarks on the instrument's versatility, its similarity to real track conditions, and the negligible differences in the lap times between the two. It is also proving to be a useful tool for both the major OEMs (engine, electronics, tyre and car manufacturers) and the racing teams, enabling them to test different setups and/or solutions, and evaluate how

the vehicle reacts to modifications.
And let's not forget the drivers who now have the chance to train with new cars and on new tracks, and improve their understanding of the car's dynamics through interaction with the track engineers".

The dramatic incident at Las Vegas demonstrated that it is always possible to improve safety. What developments can we expect to see in this area, which has always been so important to Dallara? "Dan Wheldon's accident shocked us profoundly and reminded us just how much there is still to do in this sport, which is, by definition, dangerous. The new Indy car, which Dan helped to develop, includes a number of features designed to increase safety. Safety is a continuous commitment and should involve all the stakeholders; the circuit designers, the organisers, those regulators and the drivers themselves must share the same objective: to reduce the risks, which are always present".

"Dan Wheldon's accident shocked us profoundly and reminded us just how much there is still to do in this sport, which is, by definition, dangerous. The new Indy, which Dan helped to develop, includes a number of features designed to increase safety"



#### "The development of the company depends on new graduates, because, in a certain sense, we are also a school of motorsports, and we fully intend to consolidate this concept"

F.1 and the world motorcycle racing are currently restructuring in response to the global economic crisis. How do you view the overall future of motorsports?

"I believe that we need to rethink the models underlying motorsports, otherwise we will always be affected by such crises.

Motorsports must get closer to the new generations, and to everyday life, so that it is perceived as a research centre for motoring and source of entertainment. It is important to be aware of the tools favoured by the new generations, such social networks, electronics, video games, because no one is content to be just a spectator any more, people want interactivity. For this reason, motorsports must establish

solid alternatives, stimulating the interest of the public and attracting investment from the major producers".

Dallara is heavily involved in the development of young Italian drivers. What else can the Italian racing sector do?

"By definition we must all do more, given the number of Italian drivers involved at the highest level. We have talent, potential, and conditions: it's up to us to help Italy return to its rightful level".

Let's get back to the internal organisation, Dallara is one of the very few Italian companies in expansion; despite the crisis, we are continuing to hire people, particularly young graduates and other personnel through the university system. Do you plan to continue with this strategy? What initiatives are in place in order to ensure that young people develop within the company? "Yes, I can confirm that we will continue"

"Yes, I can confirm that we will continue with this strategy. The development of the company depends on new graduates, because, in a certain sense, we are also a school of motorsports, and we fully intend to consolidate this concept: in fact, our aim is to offer these young people a stimulating working environment, providing them with the necessary tools

(simulator, wind tunnel, CFD, FEM...) to test their innovative ideas, and a chance to make mistakes in a controlled way, in order to help them to develop and learn".

#### If you had to choose Dallara's top three priorities for the future, what would they be?

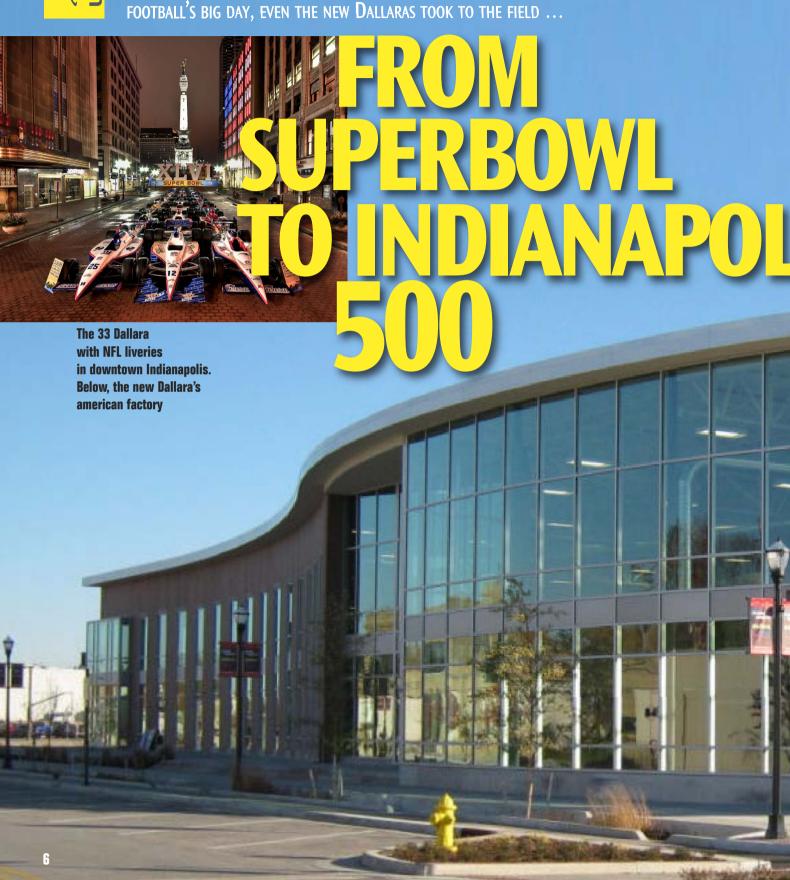
"My first priority would be to continue investing in our three development areas: design and production using carbon fibre composite materials, aerodynamics and computerised dynamic vehicle simulation. The second would be to continue improving our internal efficiency, in order to reduce costs for our customers. My third priority would be to continue investing in people, because that's what really makes the difference at this company. As Thomas Watson (the grand old CEO of IBM, ndr) used to say: "a company can only be extraordinary if it employs extraordinary people".

Alessandro Santini





Work at Dallara's american factory is continuing apace and at the end of March, when the last batch of cars is delivered, it will be fully operational. Everyone is looking forward to the start of the season and the Indianapolis 500, and here, Stefano De Ponti, CEO of Dallara in the US, tells us about the excellent relationship that has been established with the local administrators. Meanwhile, in order to celebrate American football's big day, even the new Dallaras took to the field ...



#### Stefano De Ponti, how is work on the new Dallara factory in Indianapolis proceeding?

"The work is complete, the assembly and body work departments in the new building are already operative, and we are starting to manufacture the parts the Indycar 2012. The composites department will be ready by the middle of March; after which, the quality control department, warehouse and offices will be transferred from the temporary building to their permanent home. We expect to 100% operative by the end of March".

#### Can you give us a road-map for the coming months?

"We have to be ready for the start of the championship at the end of March, and this means being prepared to manufacture, repair and distribute spare parts for the

cars, as well as providing technical support".

## How are the activities and the exchange of information with the headquarters in Varano de' Melegari managed? "The technical aspects are handled by two

"The technical aspects are handled by two engineers: Alex Timmermans is in constant contact with the Indy project manager and the technical department in Italy in order to keep abreast of the development of the car, while Sam Garrett handles all communications with the teams and Indycar.

We are in permanent contact with the production department in Italy: we will be delivering the third batch of fifteen cars on 15 February, while the final batch is scheduled for delivery on 15 March. Italy defines the strategy, and we are responsible for putting it into action, in

addition we ensure that information passes correctly between Varano, Indycar and the teams. We are laying the foundations for highly effective teamwork".

#### Can you give us a few figures regarding number of employees, number of cars that will be produced, and total investments?

"There are currently twelve of us. We are in the process of hiring additional personnel for the composites department, so we should be up to fifteen employees by the end of March. We have delivered all the cars that were ordered and we aim to keep five to ten units in stock in order to cover any requests during the Indy 500 period: this illustrates that, despite the current economic crisis, interest in this sport remains high.

We will be producing a total of 60 cars





and we have already sold 55, which demonstrates the accuracy of our sales forecasts and that, despite the current economic crisis, interest in this sport remains high.

The total investment amounts to 12 million dollars; after the Indy 500, which represents the highpoint of the Indycar manufacturing activities, and once the new building has been completed, we will decide what steps to take next: the intention is to evaluate other businesses where Dallara's unique skills can make the difference".

#### What developments are you planning for the entertainment sector with your partners at Indy Racing Experience?

"We have received numerous ideas, and it's important that we make a fast start. We should be ready for the inauguration of the building by the beginning of May. We have already contacted a number of catering firms: we would like to create an "Italian style Starbucks" offering made in Italy products (coffee, pizza, ice-cream etc...). And then there's the interactive museum project: we want to present how

an Indycar is born in an entertaining way, using images, sounds, multimedia displays and games to illustrate the dynamic principles of the car, as well as other aspects such as simulations, aerodynamics, design, structural analysis, quality control, and so on.

The content may vary and be updated so that, rather than remain static, it continues to offer an insight into the present and future of racing cars.

We expect it to be a big hit with the fans, there is a lot of enthusiasm for the idea".

## Since the first stone was laid, what have been the reactions from the American motor racing world that made the biggest impression on you?

"Without a doubt the way our neighbours at the Speedway made us feel welcome. We were already well-known in the motor racing environment, but we were also made to feel at home by ordinary people, and this makes it much easier to go about your daily business. The locals are cordial, spontaneous and natural: they go out of their way to make things easier for you".

## How is you relationship with the Speedway administrators and the local authorities in Indianapolis developing? "Excellently, there is a continuous exchange

of information. Mitch Daniels, the governor of Indiana enquires directly or indirectly about the current state of our activities on a weekly basis".

#### Did you organise anything to mark the 46th Superbowl, which was held in Indianapolis for the first time this year?

"Our partners at Indy Racing Experience came up with the idea of preparing 33 cars with the colours of the 33 teams that compete in NFL. These included the two Indy 2012 show cars, in the colours of the two finalists, the Giants and the Patriots. Initially, the cars were lined up on a starting grid in our building, then transferred to the centre of Indianapolis, before being distributed to 33 different points around the state of Indiana two or three days before the Superbowl. It was an enormous success with the public and fans, attracting large numbers of visitors throughout the day. The marriage of



NFL/football and Indycars worked really well. The two show cars were on display in the specially created Superbowl Village located next to the stadium: the city reacted very well to this event, which was planned down to the very last detail".

#### How are the tests on the new car going??

"Very well, the car has not demonstrated any significant problems with its reliability. The teams and the drivers are very pleased, and the better they get to know the car, the happier they are. There are more than fifteen drivers taking part in the tests and they are already competing amongst themselves to see who can go fastest. The vehicle offers technical and driving potential: Dallara's response to criticism of the car in the media has been to knuckle down and satisfy the demands of the teams and Indycar. Hard work and honesty are always the best answers".

Rubens Barrichello has also test driven the new IR12: what was his opinion as an ex F.1. driver?

"Barrichello test drove the car for the Kevin Kalkhoven Racing team, and he was very pleased with it. He had a very important message, which I would like to stress here: Indycar should not be seen as an alternative solution to Formula 1, but as a new challenge.

The car has a dignity of its own, races take place on relatively short oval tracks (short oval and super speedway) or on street circuits, there are less electronics than Formula 1, the races are faster and the surrounding environment is more relaxed, the cars are all very similar and the number of modifications that the teams are permitted to make are limited, so it's the driver that makes the difference. To be a winner in Indycar you have to be a complete driver because you will have to compete under a whole range of conditions and in various configurations".

#### What is the test schedule between now and the start of the new season?

"The teams are currently carrying out private tests on an individual basis. Open testing, where all the teams are invited to participate, will be held on the street circuit in Sebring, Florida at the beginning of March. Oval track testing will probably take place around the middle of March in Texas. We already have 28 "sure" cars, complete with engines and drivers, for all the races".

## Dan Wheldon's memory is still very much alive in the hearts of the sport's enthusiasts: are there any memorial events planned for 2012? "I wouldn't be surprised if they created an

"I wouldn't be surprised if they created an award in his honour for the Indy 500. Dan was a gentleman of the track, in the way he behaved, his attitude, his manners: he blended professionalism with a boyish enthusiasm, tempered by a dash of gallantry that made all the difference. Even though it's been a while, his memory is still alive, especially for those of us involved with the Indy 2012 prototype, which he had been test driving during the two months prior to the race at Las Vegas. Whenever I look at that car, I see Dan sitting in it".

Alessandro Santini





PAOLO COLONI IS THE MANAGER OF THE HISTORIC COLONI RACING TEAM THAT, IN 2011, WAS THE TOP PERFORMING ITALIAN TEAM IN THE GP2 CHAMPIONSHIP, WHICH IT HAS BEEN COMPETING IN SINCE 2005. THE OPEN TESTS FOR THE 2012 SEASON WILL BE TAKING PLACE AT JEREZ BETWEEN 28TH FEBRUARY AND 1ST MARCH. THE IDEAL OPPORTUNITY TO TALK TO COLONI, WHO WILL BE ON THE STARTING GRID TOGETHER WITH STEFANO COLETTI AND FABIO ONIDI THIS YEAR, ABOUT HIS RELATIONSHIP WITH DALLARA AUTOMOBILI.

#### Coloni, what's your assessment of a company like Dallara within the context of national and international motorsports?

"Their curriculum and awards speak for themselves. They have a truly worldwide profile, and are present at all levels, from the small training competitions right up to important champions such as IRL and GP2. Their efforts have mainly been concentrated on Formula 3, but this has not prevented them from producing cars like the GP3 that has been adopted as an intermediate solution for GP2. Their cars are always innovative, and they always keep pace with the latest technological developments".

How was the transition from the old F.3000 with Lola to the new Dallara GP2? "The teams have handled the transition very well. The first Dallara was already a highly sophisticated car, the only

difference being the engine heating, due to the change in supplier".

#### Is this why Dallara represents an evolution in this sense?

"The first step was the transition to carbon brakes, and this was followed by the introduction of sophisticated Mecachrome gearbox; this initially caused us a few problems but these were subsequently resolved. The Dallara has always been a simple car, but also a very fast one".

Coloni Motorsport organises an Auto GP championship. What role does it play in a driver's early career? How does it prepare young drivers for GP2? What are the differences between this category and the Dallara GP2, and what do they have in common?

"From a competitive point of view, Auto GP prepares drivers for GP2 because it features pit-stops and permits them to spend extended periods behind the wheel and participate in long races. The championship, which has been set up to complement GPs and not to compete with it, teaches young drivers to use a car that is similar in a certain sense. At Barcelona there were just two seconds between the two, although the handling is just as heavy and neither car is equipped with servosteering. In fact, Formula 1 is the only championship that offers its drivers this kind of technical assistance".

**Massimo Costa** 

## UOUS EVOLUTION»



# THERE'S A LOT GOING BEHIND THE SCENES

Behind the scenes at Dallara, we discover how the four departments coordinated by Andrea Vicini — logistics, warehouse, purchasing and quality control — provide the reliability and precision that guarantee everything goes smoothly on the track. The secret? Passion

very sporting team worth its salt has its "pillars of strength", players who are capable of giving technical and emotional support when things get tough: they embody the club's values, offer a wealth of experience, provide others with an example, and remain fiercely loyal throughout their careers. You could liken them to flags, they are increasingly rare, they love to flap and flutter in the wind, to feel the air beneath them rather than solid ground, and to represent something.

Some play up front: they're the ones with a high profile, they receive awards, give interviews. While others do their part "in the trenches"; you rarely notice them, but they never stop running, or tackling, they play for the team, and not just with their heads, but also with their hearts: "years of hard work, and bruises, and you might even win the World Cup". Such people are not confined to sports clubs though, you can also find them in any workplace. Companies are built on people,

the smart, efficient, determined, generous ones, the "pillars of strength", that drive the rest on. One of these people is Andrea Vicini, Dallara's Operations Manager. He is in charge of four different departments (purchasing, warehouse, logistics, and quality control) but when you enter his small office, almost hidden away at the end of a corridor, a few yards from the workshops, you are immediately struck by a feeling of simplicity and solidity. Andrea has been working for Dallara for twenty five years, he began his career here as a mechanical designer, in a time when draughtsmen used drawing boards and pencils and not the super computers we're used to today. From there he moved into purchasing, where order forms were still compiled by hand and order management systems were unheard of, before taking over the department on a full time basis and assuming responsibility for all

the operations.

and it's those people, especially







#### Mr. Vicini, you've been working behind the scenes at Dallara for many years now: tell us a little about the role of your departments.

"We take care of the non-productive activities that contribute to the smooth running of the company; we are responsible for purchasing, controlling and distributing the various materials and components, and despatching the finished product to our customers, in accordance with the agreed delivery dates. The most difficult part of our job is managing priorities that are modified on a daily basis".

#### How many people work with you? And what are their professional qualifications? Have your departments expanded over recent years?

"There are about fifteen of us. All the departments have grown over recent years, because the number and complexity of our products has increased. We have people that have learned on the job, specialised technicians, and we have recently hired two engineers: extensive understanding of process analysis techniques is increasingly important as it helps us to optimise our work flow".

#### What are the most important qualities for an operations manager in a frenetic world like motor racing? "Reliability, flexibility and precision in

everything you do".

#### Can you describe the typical series of

**operations used to process a part?**"Almost all materials are subjected to a series of phases, both internal and external (processing, treatment, assembly): for example, if the item is produced internally, the purchasing department sources the raw materials, which is checked and labelled as it enters the warehouse. It is then allocated to the production department where it is used to manufacture the component, which is then transferred to the quality control department for the final checks and laser marking; at this point the part is returned to the warehouse for labelling and allocation".



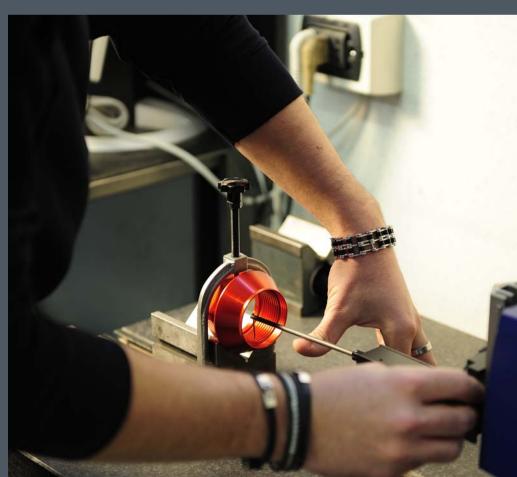
#### How short is the period between the moment a part is manufactured and the moment it is used?

"Very short. We often receive an order for a part in the morning and have it ready by the evening of the same day: this means a race against time to locate the raw materials, manufacture the part, assemble and despatch it. We are often required to produce results in a very short space of time. Costs are like dust: they accumulate on anything that doesn't move. For years we have been using the phrases just in time and

lean production, and applying these concepts to the way we run the warehouse".

#### How is the Dallara warehouse managed?

"The way we operate is not based on just in time, but on sales forecasts. It is important to keep stocks to a minimum, but it is equally important that the parts are always available when they are required. Every day thousands of warehouse transactions take place, and everything is documented down to the last detail, each passage is carefully controlled, and this means that the



warehouse and quality control activities are increasingly complex".

## How do you choose your suppliers? Do you prefer "zero kilometres", or are there other parameters that are more important when selecting which companies to do business with?

"Without a doubt the proximity of a supplier is significant and it's helpful if a supplier is conveniently located for our hauliers. However, the most important factors for us are on time delivery and the price/quality ratio: we are always looking for suppliers who can guarantee that their parts are checked and certified, in order to streamline our own internal activities. Lastly, it is fundamentally important to have a good working relationship so that, if and when emergencies arise, they can be dealt with as efficiently as possibly".

#### How do you help your suppliers to improve quality and contain costs?

"In the case of complex components, we can provide the suppliers with the fruits of our own experience with both mechanical manufacturing processes or composite components. Both parties will benefit if they keep an open mind and are willing to collaborate and share know-how. Our suppliers' personnel visit our factory on a regular basis, and vice versa, especially during the initial stages of a new project, or when there are problems to be resolved".

#### How does Dallara guarantee that parts are always good quality? What quality controls

#### do you implement, and how often so you carry them out?

"We perform functional tests (part corresponds to drawing, ease of assembly, quality conformity, etc.) and visual inspections: the part must look good. The checks are normally divided into two stages. The first is the acceptance check, which is carried out on the finished or partworked component: this is where the large scale problems are identified, and corrected. After the part has been finished, and before it is made available to the customer, it is subjected to a final check".

### You are also the company health and safety manager? What does this role involve?

""All departments and equipment are monitored on a regular basis in order to guarantee the best possible working conditions. We have recently been reorganising the offices and we are currently evaluating the possibility of installing an air conditioning system in the production areas. We have been conducting safety training courses, with particular onus on the production department, and we plan to keep personnel updated in the future".

The concept of a sustainable economy, insofar as it remains compatible with the local territory, the stakeholders' interests and the environment, is becoming increasingly important. What measures have been taken at the Dallara factory in order to respond to these requirements?

"We have installed a photovoltaic array on the roof and are taking steps towards obtaining ISO 14000 (Environmental Management) certification, although, if the truth be known, we were already moving in that direction anyway: differentiated waste disposal, scrap and non-reusable composite raw material recovery programs, energy consumption optimisation. With reference to this last point, the factory roof has been replaced with a special cover designed to contain heat losses".

#### How has the global economic affected your suppliers?

"The crisis has been kinder to our more virtuous suppliers. Those who have invested in technology, processes and organisation are able to provide us with quality products at an acceptable price".

## You've been working for Dallara for many years. Which car gave you the least satisfaction, and which one has given you the fondest memories?

"The one that gave me the least satisfaction was probably the Euroc: a low cost car with a front mounted engine, and rear-wheel drive that was designed to participate in a single brand championship which never got off the ground.

My fondest memory is probably the first F1 in 1998: we were a smaller company back then, and watching that car race on circuits all over the world, and achieve such good results, was a great satisfaction for me".

Alessandro Santini







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