

# Corally & Co.

## How it all started

Back in the mid-eighties when Schumacher dominated the 1/12 scene, Constant Paul's father decided to design on paper the ultimate 1/12th car using high tech materials to improve on the strength and consistency of the cars used at the time. The designs looked good and so they had a few cars made, which were tried by Constant and a few other top 1/12 drivers in Holland. This was back in '86 and as the tests of the cars proved promising, they decided to use them at that years World Championships in Las Vegas. Only five cars were used at the Championships and Jose Rosas proved the cars special by making the Worlds A final, an amazing result for a group of privateers from Holland and France with a scratch built car. After the Worlds results interest in the car grew and several were sold at an extraordinary high price which reflected the superb engineering involved and the very small numbers made. At this point, it became clear that it was possible to make the sale of these cars a viable commercial venture and so Corally was born.

## Why Corally?

The name Corally evolved from the 'nick-name' given to the original development cars (did it come from the reaction on seeing the car for the first time of "Cor - ally"), which used a very high quality aircraft aluminium for the chassis and suspension components called 'Coral', hence the name Corally.

Although Corally now seldom use Coral as a chassis material, the same philosophy still applies — maximum quality and superb engineering is used as the route to the development of all Corally products.

## Development

Corally started with a stick pack car back in '86 which was the way to go at the time. The car used 'independent suspension' front wishbones, complete with an anti-roll bar and rubber sealed dampers. The tweak of the car was controlled by the front springs rather than the usual rear T-bar and due to the use of superior materials the car maintained very consistent handling characteristics. Before Corally cars were developed, 1/12 racers were seen going through a

de-tweaking ritual prior to every race!! Corally introduced a new era into 1/12 racing in Europe and since then has maintained a brisk development programme which has made them the most successful European model car company.

Corally were quick to see the advantages of using the saddle pack nicad configuration and their cars developed along these lines into the World Championship winning SP12GII used today. Gone are the complex and heavy front wishbones, replaced with a one piece anti-roll front beam which gives superior bump absorbs, active castor during cornering (which is now being used on all circuit cars), plus an extremely low centre of gravity which allows incredible cornering speeds.

The front suspension is controlled by easily adjustable coil springs and simple, easy to maintain front dampers. The rear suspension now uses a lightweight version of Corally's revolutionary fully sealed isotropic silicon damper. This damper arrangement is fully adjustable and is the most consistent on the market. This unique damper is now used in conjunction with the fully floating T-bar Corally rear suspension systems which are designed to give maximum traction, ideal for the 'low bite' Club tracks most drivers use week in-week out. When it comes to major meetings such as World Championships, the grip levels can reach extraordinary heights, and so the new Corally T-bar adjuster can be used to ensure the ideal handling balance in these conditions.

David Spashett for example, during his campaign to win the 1/12 World Championships, was able to find grip not available to drivers of other types of car by using the fully floating rear suspension during qualification. He then used the T-bar adjuster during the Finals to ensure the car was fast and efficient through the complex infield in the high grip conditions.



SP12 G2II production, if you're looking at the cars!

# AN INTRODUCTION TO THE COMPANY

## Corally Electronic Speed Control and Connectors

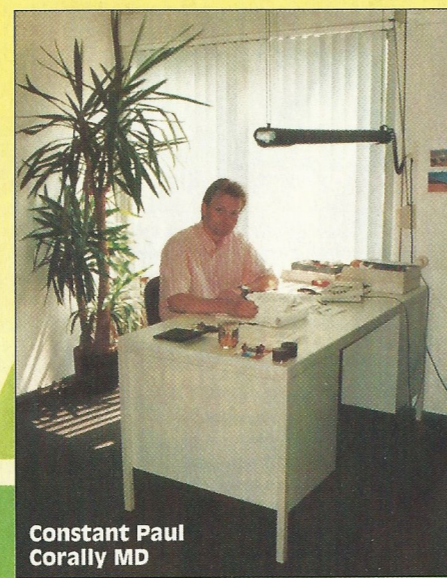
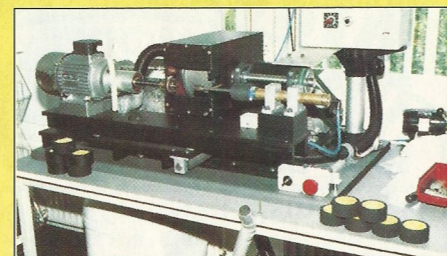
When Corally became a commercial organisation, they realised the importance of results at major meetings, but being a small European company they knew that it would be difficult to compete with the might of the large American Teams, whose resources were considerable and who at that time dominated R/C car racing.

Firstly Corally recognised that the pin connectors being used back in the mid eighties weren't man enough for the job and so they developed the now dominant Corally connector. This was their first step in making the electrics within the car more efficient, in an attempt to close the gap between the nicads and motors available to their small Team and those of the huge American organisations.

The next area they looked at was the electronic speed controller. Fets were being used at that time, but research showed that much valuable power was still being wasted by the controller. With this in mind they developed the Corally 'credit card' speed control, so called because of its shape, not the fact that to buy one you needed one, if you understand (!), which was the first high frequency controller on the market.

Its introduction was probably the most revolutionary step in the history of electric R/C model cars. This controller had a switching frequency of 5000 Hz, which still betters most controllers on the market today! It had an inbuilt current limiter plus regenerating braking, which at the time was quite earth shattering stuff...

## Automatic tyre truing machine . Does a tyre in 40 seconds, even 1/8th



Constant Paul Corally MD

This single development put the Corally team on a par with the very best around at the time, just by the more efficient use of their available power. The established speed control manufacturers moved quickly to catch up with this major development, and unfortunately for Corally they did so just before the '88 World Championships and so Corally's advantage was removed on this occasion.

The next area the Corally Team looked at was motors...

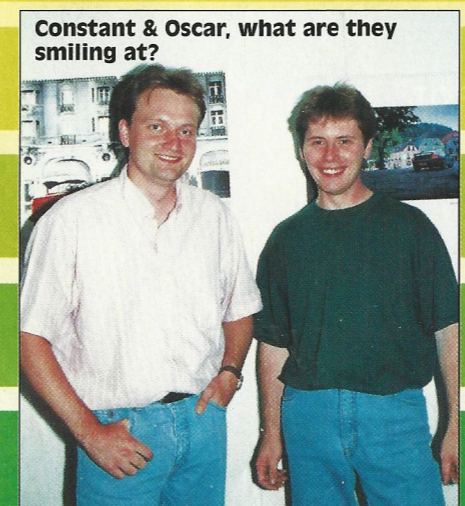
## Corally Motors

Corally started looking into motor design in 1988, when they began testing various combinations of motor types on their permanent indoor test track. Over the next three years they built up a thorough understanding of motors and their design thanks to continuous testing and the production of their own prototypes and modifications. Each aspect of a motor's design was looked into in great detail, and numerous mechanical and electrical tests were carried out to back up their track findings.

It wasn't until 1991 that Corally started to produce motors commercially, and, in normal Corally style, they did so to a standard of quality which surpassed anything that most people had seen before. The motors are produced slowly and much care is taken to ensure that each motor is identical, give maximum efficiency and the required power characteristics do the job. This philosophy has paid off because Corally have won every single 1/12 and 1/10 on-road European Championship with their motors since they were introduced and they are now very highly regarded by motor builders worldwide.



She true's and glues as well, but aren't they? Serpent wheels?



Constant & Oscar, what are they smiling at?

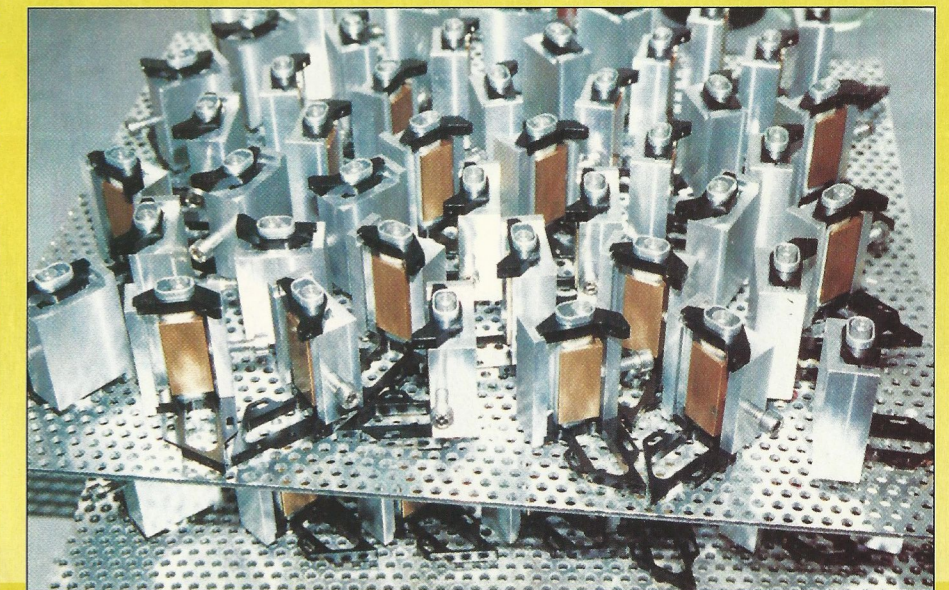
Corally now have a very strong presence in the 1/10 off road motor market, particularly in Europe where their motors perform very well. This is probably because their winds are designed for five minute racing and with 4wd in mind, unlike many of their competitors who design their motors around four minute, 6 cell racing with 2wd cars in the USA.

Probably the most impressive attribute of Corally motors is the quality levels and performance available on each and every motor over the counter to the general public.

## Results

Corally have of course recently won the 1/12 IFMAR World Championships but prior to this their domination in Europe has been unprecedented. They have won every 1/12 European Championship since 1990 and every 1/10 European Championship since 1991. All of these results since '91 have been gained using Corally motors. The most amazing fact is that Corally cars have won virtually all the 1/12 and Pro 10 Grand Prix's since 1988. The only meetings in these classes not dominated by the Corally team, were those that they couldn't attend.

## Production of rear motor pods



Oscar assembling motors

24hr nicad tester, keeps Team Orion's cells at their peak

