



Gabriele Colaoni

Lead Design Engineer

Chartered M.Eng and M.Sc.

Address: Seestrasse 90, 8806 Bäch, Schwyz (CH)
Work permit: C, EU/EFTA
Born in Udine (Italy), 1981
Phone: 0041.768185094
Email: gcolaoni@gmail.com
LinkedIn: www.linkedin.com/in/gabriele-colaoni
Website: www.colaoni.com



EXECUTIVE SUMMARY AND OBJECTIVE

Position: Business Owner and former Lead Engineer.

18 years of experience in Formula One as technical leader and senior engineer in the composites, mechanical and design departments and in the production facility, as well.

Major achievements are: design leadership for advanced composites suspensions for Formula 1 cars.
World Championship title won with Ferrari Formula One team.

Desired working location: Switzerland, Germany or France.
Available to travel and interested in hybrid and flexible working schemes.

PROFESSIONAL QUALIFICATIONS

Enovia Catia V6
Dassault Catia V5 and V4
Winchill PDM
PTC Creo 2.0
Fibersim
National Council of Engineers (IT)

SKILLS

Leadership
Composites design
Research and development
Innovation
Lightweight
Composites
Manufacturing
Troubleshooting
Technology awareness
Spoken languages
Communication
Persuasion
Curiosity
Microsoft Office 365

WORK EXPERIENCES

Company: Colaoni-VEGA

Location: Bäch, Switzerland

Position: Business Owner

October 2022

www.colaoni-vega.com

Advanced engineering for Aerospace/Automotive/Yachting

Company: Alfa Romeo Orlen F1 Team

Location: Hinwil, Switzerland

Position: Lead Design Engineer and materials manager

June 2014 – August 2022

- I successfully took the lead of complex design and structural checks for car components. The most relevant success is the coordination of a team of engineers with the purpose of developing calculation and design methodologies for Formula 1 car suspensions in 2021 season.
- I successfully led and supervised the car homologation (for both structural and non-structural components) during the last 5 racing seasons.
- I proposed many innovative designs and processes on many car components and successfully organized their testing. The mechanical assembly inside the car floor, for example, was fully re-engineered and





troubleshooted and a final score of 100% in reliability was achieved.

- Over the years, I have introduced and improved the design methodologies on many car assemblies, such as the chassis internals, allowing for an increase of 5% in chassis torsional stiffness and 15% in bending stiffness.
- An innovative bonding procedure for composites and metal assemblies was proposed with my group and homologated with the materials laboratory technicians. Tests proved an increase of operational loads up to 10% and no cohesive debonding failures.
- Across the years I have led and completely re-defined the management procedures for materials with positive impact on the whole company. A resounding reduction of operational costs of more than one third was obtained in a 5 years period.

Company: Vega Automobiles

Location: Udine, Italy

Position: Founder and CEO

January 2013 – January 2022

- Incorporation of my manufacturing company for the design and production of bespoke cars based on 1930's design. My family is now running this business.

Company: Ferrari Marlboro Formula One team

Location: Maranello, Modena, Italy

Position: Engine stress analyst

November 2011 – May 2014

- The challenging target of an intensive weight reduction up to 8% on many engine components such as transmission shafts, timing gears, engine shaft was reached by working on structural optimization.
- I have proposed and developed the first composite plenum for the Ferrari Supercharged Hybrid Formula One engine. The plenum was tested and passed successfully all the reliability and lightweight checks.
- Together with two aerodynamic engineers, we took the design leadership for the first high temperature exhaust with Coanda effect. On the wind tunnel this design showed a 5% of improvement in car downforce.

Company: Ferrari Marlboro Formula One team

Location: Maranello, Modena, Italy

Position: Senior composites design engineer

February 2007 – October 2011

- My task was to work on the design of chassis internals and laminate and, in a response to a weight trouble Ferrari had in 2007, with colleagues of mine, we proposed a lightweight chassis with a new split concept. With this experimental chassis, Ferrari won both Constructors' and Drivers' World Championships and it weighted 9% less than its predecessor but with comparable stiffness.
- I have introduced innovation in the design of brake ducts assemblies in terms of materials and modularity. Together with the suppliers we successfully tested

innovative composites materials from the aerospace industry achieving a mass saving up to 10% on the final assembly and a sounding increase of its operating temperature limits.

- In team, we introduced an innovative manufacturing technique in response to the necessity of increasing quality and weight consistency of chassis. We successfully tested the laser holograms for composites manufacturing and this accounted for a reduction of mass discrepancies among chassis at less than 3%.
- The laboratory procedures were managed by myself through the definition of testing campaigns for additive manufacturing materials with a reduction of 15% of the total costs compared to the external suppliers of laboratory data.

Company: Ferrari Marlboro Formula One team

Location: Maranello, Modena, Italy

Position: Composites production engineer

January 2005 – January 2007

- Participation to the management of the Clean Room. Planning of the personnel activities and task definition. The Clean Room production index was significantly increased among all the period.
- Working closely with the University in Modena, I have introduced an innovative concept for the manufacturing of foam-core sandwich structures that decreased (by 50%) the overall time of manufacturing through phases integration. This procedure is actually covered with industrial secrecy by Ferrari Auto.

EDUCATION**University La Sapienza in Rome (Italy)**

Master in Astronautical engineering, focus on launchers design.

Graduated 110/110.

University Enzo Ferrari in Modena (Italy)

Master in Material science, focus on carbon reinforced composites.

Graduated 110/110 with honors.

University Enzo Ferrari in Modena (Italy)

Bachelor in Materials engineering.

Graduated 110/110 with honors.

State University of New York (U.S.A.)

Technical degree in Aerospace technology.

LANGUAGES

English, full proficiency

Italian, native

French, B2

German, B1

