

## All-new 2015 Alfa Romeo 4C – Crafted in Modena by Maserati

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- All-new 2015 Alfa Romeo 4C combines the best technical and manufacturing competencies of two brands: Alfa Romeo and Maserati
- Built at Maserati's Modena, Italy workshop, the Alfa Romeo 4C takes advantage of more than 70 years of tradition, technology, know-how and passion
- Master craftsmanship, and high levels of technical competence, bring the Alfa Romeo 4C's technical and technological solutions to life

The all-new 2015 Alfa Romeo 4C combines the best technical and manufacturing competencies of two brands: Alfa Romeo and Maserati. Thanks to the internal synergies of Fiat and Chrysler Group, the two carmakers were able to collaborate from the perspective of integrating the Alfa Romeo brand's design and Maserati's manufacturing functions. In addition, the engineering and technological contributions of high-performance Italian component manufacturers were also instrumental in enabling the Alfa Romeo 4C.

### **Modena, Italy: epicenter of the world's technologically advanced sports cars**

With its traditions, access to state-of-the-art technology and generations of know-how and passion, Modena is the birthplace of some of the most famous sports cars – and the natural choice for crafting the all-new Alfa Romeo 4C.

Modena and its surroundings offer everything needed to manufacture a supercar – combining the highest technology and technological solutions that can only be provided by human attention. This manufacturing philosophy is an integral part of the Maserati DNA in the Modena plant.

Over the last 70 years, Maserati's manufacturing plant located in Viale Ciro Menotti, in the city of Modena, has produced several automotive engineering masterpieces, including on-road and racecars that have become legendary. In the last decade alone, Maserati's assembly lines have produced several technical and styling "jewels," such as the Quattroporte, Granturismo and Granturismo Convertible. More recently, the Maserati plant opened its doors for the first time to another brand, Alfa Romeo, sharing similar traditions and ambitions with the Alfa Romeo 8C Competizione and 8C Spider.

Unlike mass-production plants, in which the manufacturing speed needed to guarantee delivering is one minute or less per job; the assembly line for the Alfa



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Romeo 4C provides 20 minutes per job – highlighting the vehicle's high-level of innovation, discipline and craftsmanship. Moreover, the talented and passionate young men and women (average age is 29) who build the Alfa Romeo 4C are comprised of the highest levels of technical competence and master craftsmanship, including on average, more than five years of experience on Maserati vehicles.

Alfa Romeo 4C production takes place in dedicated workshops, including the areas for body fitting and assembly operations. Alfa Romeo 4C testing and finishing areas are shared with Maserati vehicles.

### **Body fitting area**

The Alfa Romeo 4C's primary structure is assembled in the body fitting area. Here, the first "skins" are applied to the newly created "body in white." In particular, station No. 10 operators fit the carbon fibre monocoque on the front- and rear-chassis, as well as at the crossmembers. This manual operation requires a continuous conformity check, which guarantees the permanent union of these connected elements in the most demanding driving conditions.

Moving down to station No. 30, the vehicle cell is closed using the windscreen frame and roof. This operation requires the use of special "masks" to obtain the exact passenger compartment geometry. Finally, couplings are produced with state-of-the-art polymers, and reinforced with mechanical joints.

### **Metrology and Quality Assurance Centre**

The Alfa Romeo 4C team leaves no room for tolerance. Once the body is fitted, the Alfa Romeo 4C's "body in white" undergoes a quality assurance check in the state-of-the-art Metrology Centre. Every day several sample Alfa Romeo 4C bodies are subjected to high-precision measurements. The dedicated Alfa Romeo 4C team audits more than 400 measurement points to ensure the body is perfect from a geometric and dimensional standpoint.

### **Painting and assembly**

Utilizing Modena's artisans and expertise, the Alfa Romeo 4C's body is painted outside of the Maserati plant. When the freshly painted vehicle returns to the plant, the Alfa Romeo 4C begins an assembly sequence with a "disassembly" operation before internal components can be assembled at station No. 1. The hood, doors, and some structural parts are removed, and the lightweight Alfa Romeo 4C is attached to a "rotating hook," or rotisserie for final assembly.



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Each final assembly work station, and the logistics needed to run each station, is structured around the operator to ensure the Alfa Romeo 4C is built with the highest quality. All the components are delivered to the various stations in the exact quantity, precise specification and location. To avoid any unnecessary or unnatural movements, station No. 2 utilizes the rotating hook to lift and turn the Alfa Romeo 4C to the operator's optimal position – allowing each operator to better apply their technical expertise, thus ensuring the highest quality.

To make sure that each Alfa Romeo 4C's perceived and effective quality is at benchmark levels, some operations, such as window installation, are performed by robots, but entrusted to the operators' attention – just another exclusive trait of the vehicle's manufacturing process. Other vehicle subassemblies, such as the headlights and dashboard, are assembled right at the plant, instead of being preassembled by the supplier.

#### **40km road test and final finishing**

Testing is the only phase in the Alfa Romeo 4C's manufacturing process that relies on technology as an objective means to assess performance quality. Every detail of the vehicle is strictly checked, from component settings, to the climate control system, and even the Alfa Romeo 4C's dynamic behaviour.

Similar to ultra-exotic supercars, an experienced test driver evaluates and road tests each Alfa Romeo 4C for 25 miles (40 km). The Alfa Romeo 4C team of test drivers is one the plant's jewels: all the expert drivers are leaders in their profession, each with a unique background in motorsports.

The finishing area ends the Alfa Romeo 4C's manufacturing process. Here, each Alfa Romeo 4C is subjected to final setup and prep before leaving the Modena plant for transit.