

Bugatti Divo 'Lady Bug': A masterclass in customization and creativity

MOLSHEIM 02 03 2021

BUGATTI HAS WORKED WITH ONE CUSTOMER TO DEVELOP AN EXTRAORDINARY HYPER SPORTS CAR WITH MAXIMUM INDIVIDUALITY AND EXCLUSIVITY – THE DIVO 'LADY BUG'.

Bugatti customers appreciate the exceptional. With the recently completed Divo¹ 'Lady Bug', the French luxury brand has once again demonstrated its high level of expertise in outstanding bespoke application and hand craftsmanship. In the timeframe of around two years, a very special Divo was created in close collaboration with one Bugatti customer, tailored with a one-of-a-kind custom paint scheme among other truly unique features.

"Every Bugatti Divo is one of a kind. With the custom-made 'Lady Bug', Bugatti has demonstrated the full range of its customization expertise. What initially seemed impossible was executed to perfection by the designers and developers in collaboration with the customer," says Stephan Winkelmann, President of Bugatti. "We are proud to have matched the customer's personal taste and expectations with this unique Divo. The car really demonstrates what the marque is capable of in terms of creativity and craftsmanship." The work on this automotive masterpiece is a symbiosis of art, design and technology. Entirely in line with the philosophy of company founder Ettore Bugatti, who once said: "If it bears comparison with another car, it is not a Bugatti."

The story of a complex development process

Shortly after the world premiere of the Divo in August 2018, the idea for a geometric-dynamic algorithmic fading pattern on the bodywork emerged in collaboration with the customer. What the collector from the USA had in mind was a strict geometric pattern consisting of diamond shapes in a unique color contrast. In collaboration with the collector, the Bugatti design and development team then set about developing the special colors 'Customer Special Red' and 'Graphite' – both metallic tones – to achieve the contrasting effect. The diamond pattern was designed to run precisely from the front over the sides to the rear – matching the silhouette of the Divo.

It took the team over a year-and-a-half to find and implement the technical and graphic solutions. However, few could have predicted how complex and difficult it would be to paint the diamonds onto the car body with precision and exact definition. This was due to the fact that the digital patterns in the CAD program bear little resemblance to reality: owing to the three-dimensional, sculptural form of the Divo with its contours, curves and ribs, the 2D-printed diamonds became distorted on the surface of the exclusive hyper sports car. As a result, they had to be digitally modified. All it took was one millimeter's difference to ruin the entire visual effect. The diamonds also had to be positioned perfectly on the roofline, doors and rear fender edge in order to achieve a clean visual finish. Together with the customer, CAD modelers developed and simulated a diamond pattern design with around 1,600 diamonds. A highly complex and time-consuming task.

Weeks passed until the designers were satisfied with the result. Six meter long films applied precisely to the body of a test vehicle were used to check the pattern. With considerable patience, craftsmanship and skill, the designers finally found a way to match the CAD data with reality and pull the film over the deeply concave

surface without the diamonds becoming distorted or developing folds.

"The 'Lady Bug' was an exceptional challenge and at the same time an unforgettable experience. Due to the nature of the project, where a 2D graphic was applied to a 3D sculpture, and after numerous failed ideas and attempts to apply the diamonds, we were close to giving up and saying: 'We cannot meet the customer's request'," explains Jörg Grumer, Head of Color & Trim at Bugatti Design. "However, it is our profound conviction that we should never give up and that our foremost motivation should always be to make the impossible possible for the customer. We are proud of the expertise we applied in creating this Divo: a high quality and complex product based on pure craftsmanship and outstanding teamwork between design and development."

When Bugatti informed the customer that his vision would become a reality, he was impressed by the effort and process involved in creating it. "The thought of this project becoming a reality was not only exciting but a dream of mine. I was absolutely floored upon delivery. Working with the Bugatti design team on the Lady Bug's production was an exceptional experience, not only in the true dedication to the flawless execution of the one of a kind design but also in the dedication at all levels involved in the final presentation of the vehicle. Not only is the vehicle a true masterpiece and work of art, but it is the true height of my collection to date and the most intricate and well developed vehicle I have owned. This is true because the team at Bugatti are truly masters of their craft and only work at the highest level of detail in each masterpiece they produce."

The diamonds in the film are separated and transferred onto a transfer film, which is then stuck onto the body. Each one of the approximately 1,600 diamonds is checked and realigned if necessary. In early 2020, countless hours were spent on a test vehicle until the developers and designers were satisfied with the procedure. Shortly before the car was delivered to the customer, the final rehearsal took place on another test vehicle. "Every maneuver had to be exactly right in this painstaking task, therefore we decided to do another rehearsal before the final stage of work. Because there could only be one attempt on the customer's car. And that had to be perfect," says Dirk Hinze, expert in customization and surfaces at Bugatti. With considerable patience and instinct, the team first of all applied the film to the roofline with millimeter precision, constantly checking the positioning in relation to the door joint line and rear end.

Once the Divo 'Lady Bug' had been finally processed, there were no major complications. Employees checked each and every diamond over several days to ensure that they were positioned accurately, trimming them if necessary or replacing the shapes. The next task was to perform the actual painting and the painstaking and meticulous removal of each diamond. 'Graphite' and clearcoat were applied on top of the effect paint 'Customer Special Red' in order to invert the pattern. As part of this process, the paintwork was sanded, smoothed, checked, retouched and then re-sanded. It took the paintwork artist over two weeks until his work was completed to perfection.

"The particular challenge of the painting process was in not damaging the carefully applied pattern. This meant that our painting skill in the final phase was the crucial component in putting the finishing touches to the car, which were necessary for us to meet our standard of absolutely uncompromising and impeccable quality," explains Dirk Hinze. The multilayer paint structure now integrates the ruby diamonds evenly into an anthracite color gradient. The process of repeatedly smoothing out the pattern created an extraordinary depth and brilliance in the colors. Months of hand craftsmanship were brought to completion.

"We were conscious right from the start of the sensibilities relating to the customer car and of the particular challenge of implementing both a technically very sophisticated and artistic project. The attention to detail required and the fact that we had to pursue a zero-defect strategy on the final car gave us tremendous respect for the project. Our ethos in the Color & Trim department within Bugatti Design was and has always been to realize the customer's vision to perfection, which we achieved again in this project," says Jörg Grumer.

Highly customized, high-powered and exclusive. With the Divo, Bugatti has developed a hyper sports car that revives the luxury car manufacturer's coachbuilding tradition. It is powered by Bugatti's iconic 1,500 PS, 8-liter W16 engine, with a top speed restricted to 380 km/h. The Divo is limited to just 40 units in total, each priced at 5 million euros net plus options, and produced in the Atelier in Molsheim. The first deliveries of the hyper sports car were made in August 2020, and all Divo cars will have been handed over to their owners within the first few

months of 2021.

 1 DIVO: WLTP: Fuel consumption, I/100km: particularly high 43.33 / high 22.15 / medium 18.28 / low 17.99 / combined 22.32; CO $_2$ emissions, combined, g/km: 505.61; efficiency class: G

 $\ensuremath{\text{@}}$ 2021 BUGATTI AUTOMOBILES S.A.S.