



A visit to the Ford factory

A sunny future

Miscellaneous | With all car brands it is clear where they originate from. Mercedes-Benz, Audi and BMW are German all the way. Without a doubt Citroën, Peugeot and Renault are French. Toyota, Nissan and Suzuki obviously come from Japan. But where is Ford from? Is it American, German or perhaps British? One thing is certain: since 1974 the most important Ford factory has been in the Spanish city of Valencia. Autozine paid a visit.

The story of the Ford factory in Valencia dates back to 1973, the year of the oil crisis. Back then Ford was purely an American brand that sold huge, gas guzzling cars in Europe. To remain successful, Ford had to adapt to the change in demand. That meant: sell smaller, more economic cars.

Spain

Under the code name "Bobcat" a compact car was developed that would later be known as "Fiesta". Of course Ford wanted to sell the Fiesta all over Europe. The Spanish market turned out to be a special challenge. The then dictatorial Spain only allowed brands on its markets that bought their raw materials in Spain and manufactured their products in Spain.



Ford started negotiations with the Spanish government and reached an agreement. If Ford were to open a plant in Spain, it was allowed to sell all of its models (including the ones produced outside of Spain) in Spain. Ford wasn't the first to close a deal like this (Renault beat them to it with the model "5"), but Ford was the first American carmaker to set foot in Spain.

The city of Valencia was chosen for its abundance of building ground. Also, Valencia offered a good

infrastructure with a large harbour.

The first stone

In 1974 the first stone was laid for the plant in "Almussafes" by the second generation "Henry Ford". The set-up was based on the German factory in Saarlouis. Two years later, the first car was produced - of course a Fiesta. Since then the Ford Escort, Orion, Ka and Focus have been produced in Valencia as well.

Today the complex takes up 2.7 million square metres of land and offers employment to 6,018 people. Auxiliary companies like Johnson Controls, Benteler, Magna, Faurecia and Gestamp have their own buildings on the premises, so they can deliver "just in time".



At the moment of writing, the Ford C-Max, Grand C-Max and Kuga are being built in the Spanish plant. The latter poses a special challenge, because the Kuga has four-wheel drive and more electronics than any other model. This is why Ford recently invested another 812 million euros in the facilities.

Production

In Valencia, it all starts with bare steel. From this the basic shape of a car is pressed. The doors and bonnet are also stanced from a single piece. The "bare" car goes to a paint shop, which is not accessible for visitors, for good reason. The air pressure in the paint shop differs from the outside world. The smallest hair or dust particle could disturb the process, so as few

people as possible are allowed in.



Once painted, the doors are removed from the vehicle to follow their separate track through the building. The doors will be fitted with (power) windows, loudspeakers and upholstery amongst other things. The doorless car is easier to access for the robots and workers who have to fit the dashboard and other creature comforts.



Compared to other factories, Ford of Valencia uses many people and a relatively low number of robots. The philosophy behind this is that people are creative and can continuously help to streamline the process. The result is clearly visible: the factory floor is filled with one-off tools, bespoke seats and other trickery to improve efficiency.

One good example is the "Crab line" where cars move sideways over a conveyor belt so workers have easier

access to the engine bay. The "happy seat" is also very smart: it automatically catches and then lifts the worker up to prevent back injuries once he/she is done working underneath the vehicle.



Many workers bring their own music, so every area has its own unique atmosphere where workers feel at home. This radically differs from a sterile robot-driven production line where one person runs an entire department, like the Koreans run.

The most interesting step of the production process is the "marriage" of the engine and the almost finished car. In Valencia only large engines (one and a half litres or more) are being built. Diesel engines and the new "1.0 EcoBoost" petrol engines are delivered, ready to be installed. All engines are tested before use.



Once the car stands on its own wheels, it undergoes another series of tests. Ford doesn't randomly test some of the cars, every single vehicle has been tested and tried before it leaves the factory. Cars go into a

shower to check for leaks. A camera scrutinises the bodywork for irregularities or missing badges. Only after passing every single test, does a new Ford see daylight for the first time.

So far the Spanish factory has produced over 9 million Fords. 2011 was the best year ever, with a turnover of 229,000 vehicles. Right now this number has fallen to just 133,000 cars. Thanks to the introduction of the new Kuga this is expected to rise again.



Conclusion

In the early 1970s Ford transformed itself from an American to a European brand. Forced by high fuel prices there simply was no demand for big American heaps. So Ford started developing compact models, aimed at the European market. This all started with the Fiesta in the Spanish city of Valencia. Right now the factory produces many other models like the (Grand) C-Max and the latest addition: the Kuga.

The Spanish factory distinguishes itself from other plants by focussing more on human workers rather than robots. Ford encourages its personnel to come up with new ideas for improving the production process, making it more efficient by the day. By doing so every new Ford has a sunny Spanish start in life. ■

